## Appendix 1

# Provincial Roman jewellery of the 2nd-3rd centuries AD 


#### Abstract

Six brooches (cat. nos 93-98) are all of familiar types. Six are enamelled bronze brooches typical of the Middle Empire period (2nd3rd century AD), and particularly common in the north-western provinces of the Empire, while the seventh (cat. no. 99) is a silver fibula of cross-bow type, a Late-Roman form.

Though enamelling on gold was an ancient tradition in the Classical world, the use of enamel on base metal ornaments was established before the Roman conquest in many of the Celtic areas of Europe and continued to be popular in those regions when they became provinces of the Empire. Enamelled brooches and studs, as well as small bronze vessels with enamel decoration, were probably made at numerous centres in provinces from Britannia to Pannonia (Hungary), and certainly including many areas of Gaul. ${ }^{1}$

\section*{Note}

I Catherine Johns, former curator in the Department of Prehistoric and Romano-British Antiquities, British Museum. The notes and descriptions of cat. nos 93-99 below are also written with the benefit of her expertise and advice.


## 93 Brooch (Pl. 50)

Single piece of composite construction.
Copper-alloy brooch in the shape of a leopardess, enriched with enamel and glass inlays.
2nd-3rd century
Copper alloy, enamel, glass, iron
Prov.: unknown
Inv. no. GR 1924,5-2.I - transferred to Greek and Roman Department in I923 Old cat. no. I67
Size: L: 45 mm W: 20 mm Weight: 13.29 g
The copper-alloy brooch is three dimensional, cast. It represents a reclining pantheress or leopardess, its head raised and thus cast fully in the round. The three projections along the animal's belly indicate teats, identifying it as a female. The eyes are inlaid with small beads of yellow glass, while the body is ornamented with i4 circular spots of enamel, all apparently red. The figure is carefully executed with cast features, such as the ears, the forehead, the mouth, the paws and the incised twisting on the tail.

The back is flat.
The catchplate and the spring-holder are cast. The spring-holder is a pair of semicircular lugs, centrally perforated for an iron (?) pin-spring axis.
(H at body: $4-5 \mathrm{~mm}$, H at head: 15 mm ).
The catchplate and the pin-spring axis are fragmentary. The pin is missing.
Plate-brooches in a variety of shapes, including zoomorphic forms, were probably intended as much for pure decoration as for use in securing garments. Of the examples present in this collection, the spotted panther or leopard is a well-known form, and is one of comparatively few zoomorphic designs which have an obvious symbolic meaning in the context of Roman religion: leopards, panthers and tigers were all animals associated with the god Bacchus. Many zoomorphic plate-brooches are completely flat, with large areas of solid enamel colour, but the leopards belong to a distinctive group which are more three-dimensional, the heads in particular being rendered completely in the round and the enamel taking the form of small spots in the metal background. The body spots are generally in two colours, e.g. black and red, but appear here to be in red alone.

## 94 Brooch (PL. 50)

Single piece of composite construction.
Copper-alloy rectangular plate-brooch with enamel inlays.
2nd-3rd century
Copper alloy, enamel
Prov.: Olbia (Mikolayiv), Ukraine - I897
Inv. no. GR 1924,5-2.2 - transferred to Greek and Roman Department in

I923 Old cat. no. 196
Size: L: 49 mm W: 26 mm Weight: 7.74 g
Convex, rectangular, cast plate-brooch of copper alloy with a projecting, discoid lobe below each corner. There is a triangular plate projection at each of the two shorter sides with a similar discoid lobe at their top. There is a rectangular, raised panel in the centre of the front, inlaid with three different-coloured strips of enamel (red, blue and amber yellow). There is a notched, rectangular framing rib around the raised area. Each peripheral lobe is decorated with concentric, engraved circles.

The back is plain.
The catchplate and spring-holder are cast, the latter consisting of a pair of semicircular lugs centrally perforated for the pin-spring axis.
(H: 6mm, size of enamelled zone: $8 \times 20 \mathrm{~mm}$, D of lobes: 5 mm ).
The pin-spring axis and catchplate are fragmentary.

## 95 Brooch (Pl. 50)

Single piece of composite construction.
Copper-alloy lozenge-shaped plate-brooch with enamel inlays. 2nd century
Copper alloy, enamel, iron
Prov.: Olbia (Mikolayiv), Ukraine, 1897
Inv. no. GR i924,5-2.3 - transferred to Greek and Roman Department in 1923 Old cat. no. 26I
Size: L: 42 mm W: 32 mm Weight: 5.87 g
Lozenge-shaped, cast plate-brooch with a discoid lobe at each corner. There is a lozenge-shaped, central, raised panel divided into four lozenge-shaped zones of equal size. Each zone is inlaid with enamel, two opposed red and two opposed, vivid, hyacinth-blue enamels. There is a notched rib running between the enamelled zones, and a similar rib all around them. Each peripheral lobe is decorated with concentric, engraved circles.

The back is plain with a circular, central depression.
The pin-catch and spring-holder are cast, the latter consisting of a pair of semicircular lugs centrally perforated to secure an iron spring axis.
(H: 3mm, size of enamelled zone: $15 \times$ I5mm, $D$ of lobes: 6 mm ).
The surface of one of the red enamels has deteriorated to green. The catchplate and pin-spring axis are fragmentary. The pin is missing.

## 96 Brooch (PL. 50)

Single piece of composite construction.
Copper-alloy hexagonal plate-brooch with enamel inlays.
2nd-3rd century
Copper alloy, enamel, iron
Prov.: Kerch, Krym (Crimea), Ukraine - I900
Inv. no. GR 1924,5-2.4 - transferred to Greek and Roman Department in I923 Old cat. no. 233
Size: L: 35 mm W: 23 mm Weight: 7.88 g
Hexagonal, cast plate-brooch with a discoid lobe at each corner. There is a central, hexagonal zone decorated with enamel inlays of various colours and shapes: a central, orange disc surrounded by black and red dots on a turquoise background. One of these is damaged and it is neither red nor black. The fact of its complete decay suggests a different composition. The centre of each peripheral lobe is inlaid with a red enamel disc.

The back is plain and flat. The pin-catch and spring-holder are cast on the back, each being behind the lobe at either end. Fragments of the iron pin-spring axis are preserved. (H: 2.5 mm , D of lobes: 5.5 mm ).

The pin-catch is fragmentary. The pin is missing.

## 97 Brooch (Pl. 50)

Single piece of composite construction.
Copper-alloy disc-brooch with a central, riveted boss and millefiori enamel inlays.
2nd century
Copper alloy, millefiori enamel
Prov.: Olbia (Mikolayiv), Ukraine - I897
Inv. no. GR I924,5-2.5-transferred to Greek and Roman Department in 1923 Old cat. no. I97
Size: D: 37mm Weight: 10.44 g
Copper-alloy, cast disc-brooch with eight peripheral, discoid lobes. There is a raised, disc-shaped panel at the centre with a central,
projecting, riveted boss decorated with red enamel inlay on the top. The central, raised panel is decorated with two concentric, enamelled rings with copper-alloy borders. The inner ring is inlaid with red enamel, the outer one with millefiori enamel. There are three patterns of millefiori enamel as follows: (a) eight squares of turquoise with a ?red and black $5 \mathrm{x}_{5}$ chequerboard centre; (b) four squares of red with black and ?white $5 \times 5$ chequerboard; (c) four squares of white with a central, floral element consisting of a red dot and circle surrounded by eight black petals. Each peripheral lobe is decorated with concentric, engraved circles.

The back is plain and concave. The pin-catch and spring-holder are cast on the back, each behind a lobe at either end. The spring-holder consists of a pair of semicircular lugs centrally perforated to secure the pin-spring axis.

The pin-catch is fragmentary. The pin is missing
(D of raised panel: 2I.5mm, D of boss: 6mm, H with boss: Iomm, H without boss: 5 mm )
$\overline{\text { Millefiori enamelling is represented on this wheel-brooch. This }}$ intricate technique required specialised glassmaking and gem-cutting skills, as well as those of the bronzesmith and enameller, and was used on some highly specialised, small bronze vessels, as well as on personal ornaments. The very wide distribution of the rare, hexagonal ink-pots (pyxides) with millefiori enamelling extends as far as Palmyra and Kerch (the latter apparently from a Sarmatian grave), suggesting that they were seen as exotic curios.

## 98 Fibula (Pl. 51)

Single piece of composite construction.
Copper-alloy composite plate-brooch, inlaid with enamel.
2nd century
Copper alloy, enamel
Prov.: Kerch, Crimea (Krym), Ukraine - I900
Inv. no. GR 1924,5-2.6 - transferred to Greek and Roman Department in
I923 Old cat. no. 232
Size: L: $50 \mathrm{~mm} \quad$ Weight: 2 I .76 g
Cast, copper-alloy brooch with a lozenge-shaped upper section and lobed lower section, both inlaid with enamel. There is a projecting, cast, discoid boss in the centre of the upper section, with red and blue enamel inlays.

It is enclosed by two lozenge-shaped strips with gilt-copper-alloy dividers. The pattern of the enamel is of alternating red and turquoise squares. The turquoise areas in the corners of both the inner and outer lozenges have had directly inset enamel spots of contrasting colourall lost, but their positions can clearly be seen. The border rib is notched transversely. The bottom part of the brooch consists of four zones of red enamel inlays: a central triangle with a tear-shaped zone below, flanked by a semicircular zone at each side. Each zone of enamel has a gilt-copper-alloy frame.

The back is plain. The pin-catch and spring-holder are cast, the latter consisting of a tube divided in two by a slot which accommodates the base of the pin. The pin-catch is cast on the back of the lower part of the brooch and is perforated to accommodate a chain, or string of beads, when worn as one of a matching pair. (L of top part: $28 \times 3$ Imm, L of bottom part: 22 mm , D of boss: 8 mm , H with boss: 8 mm , H without boss: 3mm).
Unlike the other enamelled brooches above, this is effectively a fibula rather than a plate-brooch, but its decoration is much influenced by the many geometric forms of plate-brooches. The closest parallels to this example would seem to be from Pannonia rather than Gaul.

## 99 Brooch (PL. 51)

Single piece of composite construction.
Silver crossbow-brooch with three knobs at the head-end and niello decoration on the bow.
late 3rd/early 4th century
Silver, niello
Prov.: Olbia (Mikolayiv), Ukraine-1896
Inv. no. GR 1924,5-2.7 - transferred to Greek and Roman Department in I923 Old cat. no. 193
Size: L: $58 \mathrm{~mm} \quad$ W (of head): 3Imm Weight: 7.82 g
Small silver brooch of crossbow type. The bow is decorated with a running chevron pattern inlaid with niello, and the relatively short, narrow foot has two pairs of cross mouldings and lightly chamfered
sides at the tip. The catchplate is a simple, open one. The simple tubular cross-bar terminates in very small rounded knobs, and the central knob terminal is also small, though slightly pointed.
(Thickness of the bow: 4mm).
It is a type which was found throughout the Empire in the 4th century AD , and, unlike most earlier fibula types, was quite often made in gold, silver or gilded bronze, as well as plain bronze. It was, indeed, the only fibula type which was commonly used in the Late-Roman period. The silver specimen in this collection has all the typical features of an early example in the type-series: it is small and slender, has a short, narrow foot, small knob terminals and a simple, open catchplate. Later crossbow-brooches are larger, often excessively so, with proportionately longer and wider feet, very large knob terminals, and often have elaborate decoration and an ingenious fastening mechanism.

## Late-Antique and Sarmatian material

## 100 Fibula (PI. 52)

Single piece.
Gold fibula.
2nd-3rd century
Gold
Prov.: Kerch, Krym (Crimea), Ukraine - I893
Inv. no. GR I981,9-5.I - transferred to Greek and Roman Department in 1981 Original Inv. no. 1923,7-16,2 Old cat. no. 65
Percentage of gold: 82
Size: W: $16 \mathrm{~mm} \quad$ L: $4 \mathrm{Imm} \quad$ Weight: 2.9 g
The fibula is made from a single wire of gold, shaped by hammering. The pin is of circular section with a pointed end, the other end coiled to form the spring. The spring itself is also of circular section and consists of two spirals outwards, a loop around the front, and forms three spirals inwards to the bow. The bow is a rectangular-section strip, bent to shape. It is hammered flat at the end to form a triangular foot-plate. At the back this is folded back and its edges are turned in to form the pin-catch. The end of the pin-catch is hammered to form a plano-convex-section wire, which is returned and wrapped seven times round the base of the bow.

There are three other similar fibulas in the collection (cat. nos 101, 102 and 103 below). The technique of making these fibulas from a single strip of gold is skilfully executed. There is no similarity between the four fibulas in their alloy composition. The circular-section wire of cat. no. Ioo is formed by hammering, but that of cat. nos 101 and 102 was made by twisting the strip tightly and rolling it between two hard, flat surfaces to smooth it. However, both of the above-mentioned methods were used for the construction of the fibula, cat. no. 103.
A similar gold fibula from Kerch is published by Rostovtsev ${ }^{1}$ and a pair also from Kerch is in the Louvre. ${ }^{2}$ There is one from south Russia, but with no exact provenance, published by Greifenhagen ${ }^{3}$ and one in the museum of Hamburg with no known provenance. ${ }^{4}$

## Comparative bibliography

I Rostovtsev i923b, io7 no. Io, pl. 4
2 De Ridder 1924, 82 nos 945, 946, pl.XV
3 Greifenhagen 1975, I, 47, pl. 24:10-I2
4 Hoffmann and von Claer I968, I55 no. 97

## 101 Fibula (PL. 52)

Single piece.
Gold fibula.
2nd-3rd century
Gold
Prov.: Kerch, Krym (Crimea), Ukraine - I893
Inv. no. GR I981,9-5.2 - transferred to Greek and Roman Department in 198I Old Inv. no. 1923,7-16,3 Old cat. no. 66
Percentage of gold: 9I
Size: W: 16 mm L: $36.5 \mathrm{~mm} \quad$ Weight: 2.65 g
Very similar to cat. no. 100 above, and made in the same way, though smaller. It is hammered from a single piece of block-twisted wire. The pin-spring consists of a single spiral outwards, a loop around the front, and forms two spirals inwards to the bow. This is of circular-section
wire only lightly flattened along two sides. The end of the pin-catch is a circular-section wire which is wrapped five times around the base of the bow.

## 102 Fibula (Pl. 52)

## Single piece.

Gold fibula.
End of the ist/beginning of the 2nd century
Gold
Prov.: Kerch, Krym (Crimea), Ukraine - 1897
Inv. no. GR 1981,9-5.6-transferred to Greek and Roman Department in 198I Old Inv. no. 1923,7-16,50 Old cat. no. 200
Percentage of gold: 88
Size: W: 9 mm L: 23 mm Weight: I .28 g
Very similar to cat. no. 100 above, and made in the same way, though smaller. It is also hammered to shape, but the wire itself was formed by twisting. The pin-spring consists of a single spiral outwards, a loop beneath the bow, and forms two spirals inwards to the bow. The end of the pin-catch is a circular-section wire which is wrapped only three times around the base of the bow.

## 103 Fibula (Pl. 52)

## Single piece.

Gold fibula with decoration on the bow.
Second half of the 2nd century
Gold
Prov.: Kerch, Krym (Crimea), Ukraine - 1900
Inv. no. GR 1981,9-5.9-transferred to Greek and Roman Department in
198I Old Inv. no. 1923,7-16,6I Old cat. no. 226
Percentage of gold: 66
Size: W: 15.5 mm L: 42 mm Weight:3.71g
The pin-spring consists of a single spiral outwards, a loop around the front, and forms two spirals inwards to the bow. The wire forming the spring is hammered to shape. The loop connecting the two outermost spirals of the spring is soldered to the bow. The foot-plate is narrow and almost rectangular. The end of the pin-catch is a hammered circularsection wire which is wrapped four times around the base of the bow.

The decoration consists of a single, circular-section gold wire, made by twisting. It is wound around the bow, forming a pattern of alternate transverse zones and wavy vertical lines along its whole length. There is no trace of solder which would support this decorative wire.
Both methods of shaping a wire by hammering and twisting are present, which suggests that they were in use at the same time and, presumably, in the same workshop.
cat. no. 102 is similar and made in the same way, but with no decoration on its circular-section bow.

## 104 Pendant (PL. 53)

Single piece of composite construction.
Gold, three-dimensional pendant in the form of a clenched fist.
Gold, enamel
Prov.: Kerch, Krym (Crimea), Ukraine-1899
Inv. no. GR 1981,9-5.7-transferred to Greek and Roman Department in 198I Old Inv. no. 1923,7-16,5I Old cat. no. 206
Percentage of gold: body: 83 loop: 8 I
Size: L: 4omm overall Weight: 2.57 g
The main suspension attachment is of circular-section wire, irregularly grooved and bent to form an oval loop at the top. The other end is bent to form a smaller loop with its end wrapped around the base of the wire. To it is attached a single loop of circular-section wire. This is fastened to a loop at the base of the pendant, a circular-section wire with both of its ends soldered to a disc which is attached to the base of the pendant by means of folding the edges of the pendant all around it. There is a beaded-wire border soldered around the edge. The wire is probably shaped by a two-edged tool.

The pendant itself is in the form of a closed hand and is hollow inside. It is constructed of two longitudinal halves of repoussé work, hammered into a former and joined together. The finger-nails and joints are indicated by incised lines. The thumb projects between the first and second fingers in a gesture of 'ficus'. Soldered onto the front of the wrist is a single wire bent into a leaf shape. It contains traces of enamel, which is now opaque and white (originally it may not have been white).

The suspension attachment and the beaded wire are both heavily worn.
There is a similar pendant in the British Museum from Olbia (Ukraine) ${ }^{1}$ and another in the Hermitage. ${ }^{2}$

## Comparative bibliography

I Marshall i9ii, 353 no. 2964, pl. LXVIII
2 Comptes Rendus 1872, pl. 3:II

## 105 Pendant (PL. 53)

Single piece of composite construction.
Miniature gold pendant of pyramidal shape with suspension loops. Gold
Prov.: Kerch, Krym (Crimea), Ukraine - I900
Inv. no. GR I98I,9-5.8 - transferred to Greek and Roman Department in 198i Old Inv. no. 1923,7-16,56 Old cat. no. 218 Percentage of gold: pyramid: 97 suspension loop: 73 loop: 69 Size: L: 29mm overall Weight: I.28g
There is a suspension loop of circular-section, beaded wire at the top. To its base is soldered a hinge, which consists of two loops with a rod passing through it securing a ribbed strip with a median groove. Both ends are bent round to form a loop and between the two ends is soldered a large granule. To the lower loop is hooked a loop of plain, circular-section wire which has another similar strip attached. A small loop of beaded wire is hooked through the lower section and from it a miniature pendant of pyramidal shape is suspended by a soldered-on loop of beaded wire.

The suspension loop is heavily worn on the top inside edge. The pyramid is covered with platinum group metallic inclusions, which suggest an alluvial source for the gold.

The XRF analyses of the pendant show that the metal-composition of the pyramid is quite different from that of the rest of the component parts. It is therefore possible that the pyramid has been re-used from another item of jewellery.

## 106 Earring (Pl. 53)

Single piece of composite construction.
Gold hoop with a pyramidal pendant of gold spheres enriched with granules.
2nd-3rd century
Gold
Prov.: ?I894
Inv. no. : GR 1981,9-5.I6 - transferred to Greek and Roman Department in 198I Old Inv. no. 1923,7-16,IO9 Old cat. no. I55
Percentage of gold: body: 72 cylinder attachment: 74 hoop: 76 Size: W: I4mm L overall: $35 \mathrm{~mm} \quad$ Weight: 1.9 g
The hoop consists of a ring of circular-section wire, made by twisting and rolling. It narrows towards the ends. One end is bent to form a hook, the other is bent to form a loop then twisted cylindrically around itself in a return. The two ends together form a hook-and-eye fastening.

The pendant is a pyramid of spheres and granules. Each of the five spheres is hollow and constructed of two hemispheres soldered together. The three at the top and the one at the bottom each have a pyramid of four granules soldered to their base and there are two granules soldered between each of the spheres at the top. There is a twisted wire soldered around the top of the lowermost sphere, and a beaded wire to its base directly above the pyramid of granules. To its top is soldered a cylindrical, ribbed strip which is in turn soldered to a loop of ribbed strip with a groove along the middle by means of which the pendant is attached to the earring hoop.
There is an earring with a similar pendant from Dura Europus (Syria) now in Yale University Art Gallery, New Haven, ${ }^{1,}$ and a pair of earrings of the same type in the Brooklyn Museum. ${ }^{2}$ A pair from south Russia is published by Greifenhagen. ${ }^{3}$

## Comparative bibliography

I Bauretal. 1933, 246, pl. IX:2
2 Davidson and Oliver, JR 1984, II7 no. I26 A-B
3 Greifenhagen I975, I, 46, pl. 23:I4, I5

## 107 Earring (PL. 53)

A pair, each of composite construction.
Cabochon garnet inlay on the hoop and pyramidal pendant of granules.
3rd century

Gold, garnet
Prov.: 'Eltine' according to register (probably to be identified with Eltigen, Heroyivske (Geroyevskoye), the antique Nymphaion, a Greek town in the Krym near Kerch) - I899
Inv. no. GR I981,9-5.I4 and I5-transferred to Greek and Roman Department in 198I Old Inv. no. 1923,7-I6,90 and 9I Old cat. no. 204 Percentage of gold: base-plate: 83 body: 84
Size: W: 19mm Loverall: 34mm Weight: no. 14:4.78g no. 15:4.74g
The hoop consists of a ring of circular-section wire, narrowing towards both ends. One end is bent to form a hook. The other end is soldered to the base-plate of the setting, flattened and folded double to create a projecting loop. The two ends together form a hook-and-eye fastening. The base-plate is circular with a circular cabochon garnet at its centre. The collet is a gold strip soldered onto the base-plate, bent around the garnet. There is no solder-joint visible on the collet. It is bordered by beaded wire soldered onto the base all around its edge. It is uneven, so possibly formed with a single-bladed tool.

The pendant is a bunch of granules eight deep which are soldered to each other forming a hollow, inverted pyramid with a circular base. To its base is soldered a cylindrical strip decorated with a double grooved line all around. It is soldered to a loop of ribbed strip with a median groove by means of which the pendant is attached to the earring hoop.

The beaded wire is very worn. There is considerable evidence of wear on these earrings.
There are earrings with a similar type of pendant (so-called Bulgarian type) from Bulgaria and south Russia, published by Ruseva and Slokoska.

## Comparative bibliography

I Ruseva and Slokoska 1991, nos 32-5, 40

## 108 Earring (Pl. 54)

Single piece of composite construction.
Gold hoop with a carnelian inlay and pyramidal pendant of granules. 2nd-4th century
Gold, carnelian
Prov.: Kerch, Krym (Crimea), Ukraine - I895
Inv. no. GR I981,9-5.3 - transferred to Greek and Roman Department in 198I
Old Inv. no. 1923,7-I6,5 Old cat. no. I40
Percentage of gold: body: 76 loop: 76
Size: L: 50mm overall 34 mm upper part, 16 mm pendant-part Weight: 2.7 g
The hoop is of circular-section wire, which forms an elongated hook at the upper end for suspension from the ear. It passes behind the setting and its other end is a round loop which secures the pendant. Is is flattened where a thin, gold, oval sheet is soldered above the lower loop. This serves as a base-plate for a setting with its collet formed of a single strip soldered on and curved around the inlay with overlapping ends. It contains an oval, faceted inlay of carnelian with a flat top and a central, wheel-cut intaglio. The intaglio depicts a pedestal-vase with corn, or leaves, projecting from either side of its top as possibly a symbol of vegetation. At least two different sizes of wheel were used for cutting it. The depth of the stone extends to the bottom of the setting. There is a double-twisted wire - in a herring-bone patternforming a broad border around the collet, soldered onto the base-sheet all around its edge.

The pendant is a bunch of granules seven deep forming an inverted pyramid. The granules were made individually and soldered together. To its base is soldered a cylindrical, ribbed sheet which is soldered to a circular loop of circular-section wire, by means of which the pendant is attached to the earring hoop.

The inverted pyramidal pendant is a long-lived feature, which was popular all over the classical world.

The engraved gem decoration on such an earring is an unusual combination. The gemstone itself is of the middle Roman period, but it was associated with the earring possibly at a later time, around the 2nd to 4th centuries. ${ }^{1}$
Comparative bibliography
I C. Jones, pers. comm.

## 109 Earring (Pl. 54)

A pair, each of composite construction.
Gold hoop and a pendant decorated with a garnet inlay and enriched with wires, rosettes and three pendants.

Ist century вс
Gold, garnet
Prov.: Kerch, Krym (Crimea), Ukraine - 1900
Inv. no. GR i98I,9-5.IO and II - transferred to Greek and Roman Department in 198I
Old Inv. no. 1923,7-I6,62 and 63 Old cat. no. 230
Percentage of gold: back sheet: 92 twisted wire: 95 hoop: 93
Size: no. Io: W: I9mm Weight: 3.38g
no. II: Loverall: $48 \mathrm{~mm} \quad$ Weight: 3.44 g
The hoop is an elongated hook of circular-section wire with a small, dome-headed knob at its end. The other end is flattened where it is soldered to the hexagonal base-plate of the pendant, onto which is soldered a central, box-shaped setting. The four sides of it are constructed from a single strip with a soldered join adjacent to the suspension hoop. Around its top edge a rectangular sheet is fixed by wax with a rectangular opening cut into the centre and its edges turned in to hold the inlay. The setting contains a rectangular garnet plate. There is no foil visible behind the garnet, although it is difficult to see through. The garnet and its surround are now held in place by a white, waxy paste, which is unlikely to be part of the original construction (it blocks and has squeezed out of the small holes in the sides of the box, which must once have anchored some missing attachment). The garnets are too small for their settings and would fall out without the adhesion of the white paste. To the top of no. 1981,95,10 is soldered vertically a thin sheet bent to form a cylinder containing a small, circular-section wire with a rosette of granules soldered onto the end. No. 1981,9-5,II has remains of a similar construction, but its cylindrical sheet is held in place by the wax. There are three similar wires (but with no sheet around them) soldered onto the base-plate, each of them enriched with similar rosettes. The lower edge of the base-plate is bent in to secure a beaded wire formed by a multiple-bladed tool. It serves to support three pendants. Each of these is suspended by a loop, one end of which is flattened where it is soldered on, while the other is free. On no. 1981,9-5, io the central pendant has a replacement suspension loop. Each pendant consists of a single wire bent round at the top to form a suspension loop, with the return wrapped cylindrically around the body for three-quarters of its length. The wires were all made by twisting strips or rods of gold and rolling them to form a round section. Each pendant terminates in a circular sheet with granules soldered onto it in the form of a rosette.

The garnets are probably replacements; the white paste is not original.
The heavy wire scrollwork of this earring is similar to the decoration of several pieces of late Hellenistic (Ist century bс) jewellery such as an earring in the Jewellery Museum, Pforzheim (Germany), ${ }^{1}$ an armband from Palaiokastro (Greece), ${ }^{2}$ and the armbands in the Museum of Fine Arts, Boston. ${ }^{3}$
Comparative bibliography
Deppert-Lippitz 1985, ill. 225
Op. cit. ill. 217
Op.cit. pl. XXXII

## 110 Earring (PL. 54)

Single piece of composite construction.
Gold hoop and a pendant of a lunate gold sheet decorated with three cabochon garnets, and enriched with bordering wires and granules. 2nd century?
Gold, garnet
Prov.: Olbia (Mikolayiv), Ukraine
Inv. no. GR i981,9-5.I3 - transferred to Greek and Roman Department
in i98I Old Inv. no. 1923,7-I6,74 Old cat. no. 3Іо
Percentage of gold: base-plate: 95 body: 93
Size: W: 22 m L: $26 \mathrm{~mm} \quad$ Weight: 2.89 g
The hoop consists of a circular-section wire formed by twisting. It is bent to form a hook at one end. The other end is bent to form a loop then twisted cylindrically around itself in a return. The two ends together form a hook-and-eye fastening.

The lunate pendant is soldered to the hoop and also secured by a triangular projection from the base-plate, which is folded over it. The base-plate is a single sheet of lunate form with seven triangular projections around its outer edge. Each projection contains three soldered-on granules in a triangular arrangement. The edge of the base-plate is folded up, except where the groups of granules are. Within the edge of the base-plate is soldered a strip forming a vertical
collar. It has two twisted wires in a herring-bone pattern all along the inside edge. A thin, plain, circular-section wire is soldered onto the plate within the twisted wires. All the wires are made by twisting. There is a hemispherical sheet at each point of the base-plate covering the wires with a granule soldered onto the centre of each. The main field is decorated with three cabochon garnets in a triangular arrangement, each in an individual collet. The two smaller ones have their collets squashed to size, since the latter were originally tearshaped, but the present stones are circular and may be replacements. The collet of the bigger cabochon is notched around the edge and folded around it. This has a twisted-wire border with a granule soldered onto the base-plate above the centre of it.
There is a very similar pair of crescent-shaped gold earrings decorated with garnet inlays in the Collection of Burton Y. Berry. ${ }^{1}$

## Comparative bibliography

I Rudolph and Rudolph 1973, 92 no. 7rb, pl. 7 I

## 111 Earring (Pl. 55)

Single piece of composite construction.
Gold hoop and a pendant of triangular gold sheet containing a tearshaped garnet enriched with granules and beaded wire, and three garnet bead pendants.
2nd-Ist century вс
Gold, garnet
Prov.: Kerch, Krym (Crimea), Ukraine - 1893
Inv. no. 1923,7-16,I3 Old cat. no. I47
Percentage of gold: body, side: 95 base-plate: 93 base-plate abraded: 94
Size: W: 20 mm L: 38 mm Weight: 5.65 g
The hoop consists of a circular-section wire with one end bent to form a hook. The other end is flattened and soldered to the base-plate of the pendant. This consists of a triangular sheet with a box-shaped setting soldered on. The sides of the setting are formed by a broad strip bent to a tear shape. From the limited access available, there is no evidence of any material inside the box-shaped setting. To the top of the box is soldered a ribbed strip bent to form a cylinder, soldered to the top surrounding a small perforation where the two ends of the strip meet. The broken ends of at least three gold wires can be seen through the perforation. They appear to be twisted together in a rope-like fashion and presumably formed another decorative feature, similar to the protruding wire decoration of cat. no. 109 above. The tear-shaped strip has a thin strip soldered around its top edge supporting a line of granules soldered on. There is a further strip soldered at right angles to the top inside edge of the side-strip, which is bent along its central line around the garnet to secure it. The garnet is of a three-dimensional tear shape (?face-like or representing an ivy leaf, very similar to that of cat. no. 28 above). There is a small loop of beaded wire soldered to each lower corner of the base-plate, directly next to the setting. The beading is uneven and poorly executed. It was probably made with a single-bladed tool. The lower edge of the base-plate has a strip soldered on, which is bent to a semicircular section in order to secure a line of granules soldered on top.

There are three loops of ribbed strip soldered to the base-plate, each with a median groove. One end of each is flattened where it is fastened to the base-plate. The other end is free. From each of these is suspended a pendant by a circular-section wire, the top end of which is bent to form a loop. The wire passes through the centre of an ovoid garnet bead, which has a flower-shaped sheet washer at the top and bottom. The washers are held in place by pressure from the burred end of the suspension wire.

The lower edge of the base-plate has been overheated during the solder work and has melted in several places.
Earrings of this type are published by Ondŗejová and dated to the 2nd3rd century. ${ }^{1}$ There is an earring with similar ovoid garnet pendants from Palaiokastro (Greece) in the Museum of Hamburg.
See cat. no. 28 above for similar three-dimensional garnet inlays.
Comparative bibliography
I Ondŗejová 1975

## 112 Buckle-loop (Pl. 55)

In two pieces.
Copper-alloy, elongated buckle-loop with animal-head decoration on the tongue.
Ist-3rd century. Sarmatian

Copper alloy
Prov.: Olbia (Mikolayiv), Ukraine
Inv. no. 1923,7-I6,84 Old cat. no. 320
Size: loop: $55 \times 27 \mathrm{~mm}$ tongue L: 40mm Weight: 13.77 g
The loop is cast, oval. It has an oval-section head, which is opened at the base, each end of which is decorated with an openwork spiral inwards and elongated into a rectangular-section rod for accommodating the tongue. The elongated part has a pattern of three circles on the top of each arm followed by a rectangular projection with a central circular perforation for attachment of the tongue. There is a circular projection at both ends of the loop with a circular perforation for attachment to the plate.

The tongue is of semicircular section with a T-shaped base by means of which it is hinged into the perforations on the arms of the loop. The base of the tongue is decorated with an elaborate, cast, projecting animal-head (dog, or wolf?). The tongue is further decorated with four deep lines crosswise and an animal-head (bird ?) terminal in profile.

The tongue is loose. One of the perforations preserves fragments of the plate-attachment and another one of the tongue. The plate is missing.

## 113 Buckle-loop (Pl. 56)

## In two pieces.

Copper-alloy loop with openwork decoration, and tongue.
ist-3rd century. Sarmatian.
Copper, copper alloy
Prov.: Olbia (Mikolayiv), Ukraine
Inv. no. 1923,7-I6,83 Old cat. no. 320
Size: $29.5 \times 34 \mathrm{~mm} \quad$ Weight: 13.94 g
The cast, copper-alloy loop is oval with an openwork, rectangular projection at its base for attachment to the plate. The oval part is decorated with two openwork scrolls at the base, below which is a small, cast bar for the attachment of the tongue.

The narrow tongue is of copper with an elongated, rectangular base decorated with a carved, zig-zag pattern on the top. It has a circular opening at the back of the base with both of its ends flattened to form a closed, circular fitting around the bar of the loop.

The tongue is probably a replacement. The plate is missing, or the loop may belong to the attachment-plate (cat. no. 114) below.
Similar buckle-loops were found in Kerch ${ }^{1}$ and Cherson. ${ }^{2}$ They are attached to buckle-plates of the type cat. no. 114. They are considered to be Sarmatian and dated to the Ist-3rd centuries by Shkorpil ${ }^{3}$ and also by Solomonik. ${ }^{4}$ There are two buckle-loops of this type from Kerch in the Ashmolean Museum, ${ }^{5}$ and one of unknown provenance in the Odessa Museum. ${ }^{6}$

## Comparative bibliography

I Shkorpil i9ıob, 32 ill. 8; Solomonik 1959, I32, 133, nos 7I, 76, 78no. 7I is of gold
2 OIAK I893a, 34 no. 18
3 Shkorpil I9Iob, 32
4 Solomonik 1959, I32
5 Inv. nos i909.805 (with a plate attached) and I909.809. Both acquired by Sir John Evans in 1886 and presented to the Ashmolean by Sir Arthur Evans in 1909.
6 Pósta 1905, 433 ill. 244: 4

## 114 Buckle-plate (Pl. 56)

Single piece.
The copper-alloy buckle-plate is a rectangular frame containing an openwork tamga.
ist-3rd century. Sarmatian.
Copper, copper alloy.
Prov.: Olbia (Mikolayiv), Ukraine - 1909
Inv. no. 1923,7-16,85 Old cat. no. 320
Size: $43 \times 22 \mathrm{~mm} \quad$ Weight: 7.58 g
Published: Sulimirski 1970, 152, pl. 37 left
The copper-alloy (brass) plate is cast in one and has a folded flap attachment at one end to secure it to the loop or to a plate, like cat. no.
115 below. Two copper attachment-rivets survive in two perforations drilled through the end of the plate.

Thickness of plate: 2mm; W of folded flap attachment: II.5mm; D of rivet-heads: 3 mm .

The folded flap attachment is imperfect. There are traces of corrosion on the plate and the loop is missing.

There are many similar Sarmatian buckle-plates from the Black Sea region. ${ }^{1}$ In some cases they bear different tamga-motifs, ${ }^{2}$ or they may be attached to various kinds of loop, including loops like that of cat. no. 113 above. ${ }^{3}$ One such plate was attached to a belt-mount identical to cat. no. 115 below. ${ }^{4}$ In some cases they are made of gold. ${ }^{5}$

At Chorna/Chernaya Rechka (Crimea, Ukraine) a similar buckle was found with objects considered to be of the second half of the 3rd century by Aibabin. ${ }^{6}$ Solomonik ${ }^{7}$ and Shkorpil ${ }^{8}$ dated them to the Ist3rd centuries, while according to Aibabin they should be dated to the 2nd and 3rd centuries. ${ }^{9}$

In view of the joint appearance of this type of object with cat. nos 113 and 115 in the collection, the information above should apply to them too.

## Comparative bibliography

I OIAK I893a, 34, ill. I8; OIAK I893b, 53, ill. 29; Shkorpil I907, I4, ill. 5; Shkorpil ı9ıоb, 23-35, ills 8-I2; Pósta 1905, 55 ill. 244; also in: Solomonik I959, I33 no. 5; Solomonik I959, I32-7 also list of similar buckles with literature, ills 7I; 72; 76;78-8o; 84-6; Babenchikov 1963, io8-9, pls VII:II and XV:3
2 OIAK ı893a, 34, ill. 18-Cherson; Shkorpil i9ıob, 32, ill. 8-Gulf of Kerch together with coins of Choti I (ist century); Solomonik I959, 78-Kerch
3 Shkorpil I9Iob, 32, ill. 9-in Gulf of Kerch gulf together with buckle under footnote 2
4 Solomonik 1959, I32, nos 7I-2; Römisch-Germanisches Museum, Cologne - Inv. nos: D ioo and D 99
5 Babenchikov 1963, ro8-ro9, pls VII:II and XV:3
6 Aibabin i990, pl. 2:I-2
7 Solomonik 1959, I32-7
8 Shkorpil i9ıob, 3I-4
9 Aibabin below

## 115 Belt-mount (Pl. 56)

Single piece.
Copper-alloy, tongue-shaped frame with openwork decoration based on the pelta and volutes.
ist-3rd century. Sarmatian.
Copper alloy.
Prov.: Olbia (Mikolayiv), Ukraine-1909
Inv. no. 1923,7-I6,86 Old cat. no. 320
Size: 52 x I5mm Weight: 6.IIg
Unpublished
The mount is a single casting in the form of an elongated, tongueshaped frame containing openwork decoration. There is a rectangular attachment slot at the base. The openwork comprises a lunate cut-out below the base, followed by a rectangle with an opened circle on either side. Below is a circular section containing an openwork rectangle in the centre surrounded by four segments. There is a tear-shaped section below, containing an openwork, lunate shape, two circles next to each other below that, and a triangle at the end above a small disc terminal. The front and back are both flat. (Thickness of plate: 2.5 mm ).

The rectangular attachment slot is broken
An almost identical mount was found near Kerch in I909 and is dated to the Ist-3rd century by Shkorpil ${ }^{1}$ and Solomonik. ${ }^{2}$ There is a similar mount in the British Museum ${ }^{3}$ and a further two mounts of the type in the Römisch-Germanisches Museum, Cologne ${ }^{4}$, all from Kerch and attached to openwork plates similar to cat. no. 114 above by means of rectangular attachment slots at the base.

Aibabin dates this group of Sarmatian belt-mounts to the 2nd-3rd century. ${ }^{5}$

## Comparative bibliography

I Shkorpil I9ıo, 3I; ill. 9
2 Solomonik I959, I33; ill. 76
3 Inv. no. 56,10-4,56
4 Inv. nos: D 99 and D ioo
5 Aibabin below

## 116 Sword-sheath slide (Pls 57-58)

Single piece.
Rectangular jade bar with attachment slot at the back, decorated with scrollwork carved in low relief.
Late 2nd-end of ist century bс Chinese. Late Han Dynasty (?) - date of manufacture
3rd century. Sarmatian-later use

Jade.
Prov.: Kuban area-I894
Inv. no. 1923,7-16,88 Old cat. no. 29
Size: $94.5 \times 26.5 \mathrm{~mm} \quad$ Weight: 59.79 g
Published: Rostovtsev i923a, 38 note 2; Rostovtsev 1930, 339-40 no. 2, figs 256-7; Werner 1956, 27 note; Trousdale 1969, 6I, fig. 8; Trousdale 1975, 25, 102-3, 237-8, 264 table 2, pl. 19c; Khazanov 197I, 25, 149, pl. XV:7
One end of the bar is flat and expanded, the other narrows to a rounded terminal. (Thickness of one end: imm; other end: 2mm).

The front surface is decorated with incised, low-relief scrollwork. See Pl. 58 for details of the design.

From the back projects a large, cuboid block. It is perforated by a transverse, rectangular slot for attachment, 17 mm from one end and 4Imm from the other end of the bar. (Size of the slot: $8 \times 35 \mathrm{~mm}$; the bar is 3.5 mm thick under the slot.)

There are traces of metal on the back (iron corrosion).
A very similar Chinese jade slide was found in Kerch in the Messaksoudi find, which is dated to the second half of the 3rd century. ${ }^{1}$ Beck, Kazanski and Vallet date it to the first half of the 4th century. ${ }^{2}$ A sword found in Pokrovsk (Voshkhod, Russia) dating to the Hunnic era has a similar slide made of nephrite, and a hilt decorated with garnet inlays. ${ }^{3}$ Another slide of the same type from Alt-Weimar (lower Volga region, Russia) is said to be late Sarmatian. ${ }^{4}$ According to Werner this fashion was spread from the East by the Alans coming from the Volga region in the period of the late Roman Empire. ${ }^{5}$ Maksimenko and Bezuglov date the nephrite sword slide from the Sarmatian kurgan of Sladovsky (Rostov district, Russia) to the end of the 2nd-first half of the 3 rd century. ${ }^{6}$ Ginters associates the origin of this type of object with the Iranian people, while the ornaments and the use of jade are Chinese characteristics. ${ }^{7}$ A similar nephrite slide from the Perm area (Russia) is published by Spitsin. ${ }^{8}$

Trousdale's monograph on sword and scabbard slides surveys a large number of this type of object discussing their history, origin, development and bibliography. ${ }^{9}$ According to his idea the long sword and scabbard slide were first used by the equestrian people of the southern Ural steppe during the 7th-6th centuries Bс, antedating the earliest appearance of the Chinese jade slides in the 5 th century вс. The scabbard slide was brought westwards from China by the Yüehchih, a nomadic people living on the north-northwest frontier of China until the third decade of the 2nd century вс, who occupied Russian Central Asia in the third quarter of the same century. The BerthierDelagarde piece was carved in China in the late 2nd/end of the ist century вс and was found in a Sarmatian grave of the 3rd-4th century AD. In the 3rd and 4th centuries AD the scabbard slides manufactured in south Russia imitate the Chinese ones.

The scabbard slides were then imported to the Ural steppe from south Russia. The history of this type of object therefore began in the southern Ural steppe and ended some thousand years later in the same region. Trousdale rules out the possibility that the scabbard slides could be associated with the Huns. ${ }^{10}$ But Zasetskaya, as a proponent of this theory, dates the slide from Pokrovsk to the 2nd half of the 5th century. ${ }^{11}$

The 'in situ' finds of two sword slides of this type, one from the Han period from Korea, ${ }^{12}$ the other from the above-mentioned kurgan in Alt-Weimar, solved the problem of how these objects were used (see Pl. 58 right side).

## Comparative ibliography

Rostovtsev i923a, io-II, ills 3-5
2 Beck, Kazanski and Vallet 1988, 63 et seqq. - with further literature and references.
3 Werner 1956, 26-7, pl. 40:3; Bóna 1991, 1993, ill. 22/ı; Menghin 1994/95, I78, I85, ill. 35-with further literature and references. Rau 1927, 39
Werner 1956, 26-7, 42, pl. 38:4
Maksimenko and Bezuglov 1987, 183-92, 187-8, ill. 2:7
7 Ginters 1928, $173-\mathrm{pl}$. 29a is wrongly attributed to the BerthierDelagarde Collection
8 Spitsin 1902, 28, pl. II:I
9 Trousdale 1975, I-332
io Trousdale 1975, II2
iI Zasetskaya 1986, 79-91, 85-6, ill. I:55
i2 Yetts i926, 197-20I

## 117 Earring (PL. 59)

Single piece.
Ribbed wire hoop with a flat, tear-shaped terminal.
3th-4th century? Sarmatian.
Silver.
Prov.: 'Ecaterinos tertre' (in register; 'tertre' is French for 'mound' or 'barrow') - 1893
Inv. no. 1923,7-16,II6 Old cat. no. 158
Percentage of silver: 93
Size: $44 \times 30 \mathrm{~mm}$ Weight: 6.35 g
Unpublished
The earring is made from a single piece. The hoop consists of a spirally ribbed wire. It narrows towards a hook at the end which is plain. The terminal is a thin, flat, tear-shaped plate, with a perforation at the tip. There are traces of a tear-shaped setting having been soldered in the centre of it.

Size of sheet: L: 34mm; W: I8mm; thickness: 0.2 mm ; size of central tear shape: $12 \times 7 \mathrm{~mm}$; D of hole at the tip: 2 mm ; thickness of hoop: 3.5I. 3 mm .

The terminal is damaged.
The original photograph of the collection does not show this object.
According to Aibabin these earrings are typically Sarmatian, of the second half of the 3 rd/early 4 th century. ${ }^{1}$ They are made of gold, silver or bronze, and are often decorated with a central, tear-shaped glass, or semi-precious stone inlay.

Similar earrings of gold with a central sard inlay have been found in Chorna/Chernaya Rechka (Crimea, Ukraine), and are dated to the 3rd century by Babenchikov. ${ }^{2}$ A bronze variant of this type from the site Kaborg IV (Ukraine) is dated to the same period by Magomedov ${ }^{3}$ and a pair of silver earrings with glass inlay from Balka (Ukraine) is published by Savovs'ky. ${ }^{4}$ Bichir dates a similar pair of earrings from Tîrgşor (Romania) to the 2nd-3rd century. ${ }^{5}$ They are made of silver and inlaid with a violet-coloured cabochon. A similar earring has been found at Dnipropetrovsk (Ukraine). ${ }^{6}$ It is made of bronze, and contains a central glass inlay.

## Comparative bibliography

I Aibabin below
2 Babenchikov 1963, 93, 98; pl. II:I3-I4
3 Magomedov 1979, 59, 6i; pl. X:3
4 Savovs'ky 1977, 65-6; ill. 5:2
5 Bichir 1977, 193; pl. 24:12
6 OIAK ı893b, 87, ill. 68

118 Brooch (Pl. 59)
Single piece of composite construction.
Base silver bow brooch.
3rd-4th century? Chernyakhovsk culture.
Base silver, iron.
Inv. no. 1923,7-16,12I Old cat. no. unknown
Percentage of silver: pin: 65 body: 69
Size: L: 5.6 mm Weight: 5.68 g
Unpublished.
The body of the brooch is made from two pieces. The spring and pin are made of the same piece of circular-section wire with a pointed end. The bow, foot-plate and pin-catch are made from another, separate piece of metal. The bow is a strip of square section. At the head-end it is bent over to form a loop to secure the pin-spring axis, which is of iron. The foot-plate consists of a rectangular sheet, formed by hammering flat the end of the bow. The pin-catch element is missing, but its end is a plano-convex-section wire which is returned and wrapped six times round the base of the bow.

W of bow: 3mm; thickness: 2mm; pin: L: 4omm; D: 2mm; foot-plate: $6 \times 20 \mathrm{~mm}$.

It is broken in two. The pin-spring is fragmentary and the pin-catch is missing.

The pin-catch has not been restored properly and a fragment of it has been fixed to the foot-plate.
The main feature of this type of brooch is that its spring and pin are made of a separate piece of wire and the pin-spring axis is secured by a loop created by bending the head-end of the bow. They were made either of silver, or copper alloy.

According to Aibabin many brooches of this type were found in 3rd-4th-century cemeteries of the Chernyakhovsk culture and also in late Sarmatian burials of the 3rd-beginning of the 4 th century. ${ }^{1}$ According to Skripkin they appear in the second half of the 3rd century, ${ }^{2}$ but Ambroz dates the pieces from the Caucasus and Volga regions into the 4th century. ${ }^{3}$

Brooches of this type were found e.g. in Budjeşti (Romania), ${ }^{4}$ in the Lower Don region, ${ }^{5}$ in Kislovodsk (south Russia), ${ }^{6}$ in the Lower Volga region, ${ }^{7}$ and in Sîntana de Mureş (Marosszentana, Romania). ${ }^{8}$

## Comparative Bibliography

I Aibabin below
2 Skripkin 1977, 102-3
3 Ambroz 1966, 52
4 Rikman I975, I09, ill. 28:4 (Chernyakhovsk culture)
5 Bezuglov and Kopylov 1989, 176, ill. 2:4-6 (Sarmatian)
6 Kuznetsov 1990, 253, ill. I:14-I6 (Sarmatian)
7 Skripkin 1977, 102-IO3, ill. 3:10-17 (Sarmatian)
8 Bóna i986a, ıı6, ill. 6:I-3 (Chernyakhovsk culture)

## Appendix 1 - Provincial Roman



Cat. No. 93


Cat. No. 94


Cat. No. 96


Cat. No. 95


Cat. No. 97

## Appendix 1 - Provincial Roman



Cat. No. 98


Cat. No. 99

Appendix 1 - Late Antique and Sarmatian


Cat. No. 101


Cat. No. 102


Cat. No. 103

## Appendix 1 - Late Antique and Sarmatian



Cat. No. 106


Cat. No. 107


Cat. No. 107

Appendix 1 - Late Antique and Sarmatian


Cat. No. 108


Cat. No. 109


Cat. No. 109


Cat. No. 110

Appendix 1 - Late Antique and Sarmatian


Cat. No. 111

$1: 1$


Cat. No. 112

## Appendix 1 - Late Antique and Sarmatian



Cat. No. 113


Cat. No. 114


Cat. No. 115

## Appendix 1 - Late Antique and Sarmatian



Cat. No. 116

Appendix 1 - Late Antique and Sarmatian


Reconstruction of Slide
Attached to Sword Sheath

Cat. No. 116 - continued

Appendix 1 - Late Antique and Sarmatian


Cat. No. 117


Cat. No. 118

Cat. No. 118

## Appendix 2

## Other early material

## 119 Pendant (Pl. 60)

Single piece of composite construction.
Silver lunate pendant decorated with three gold studs.
ist century?
Silver, gold
Prov.: Kerch, Krym (Crimea), Ukraine - I893
Inv. no. GR i969,II-I.I - transferred to Greeek and Roman Department in I969

## Old Inv. no. 1923,7-I6,38 Old cat. no. 16o

Size: 3I X $27 \mathrm{~mm} \quad$ Weight: 5 g
The pendant is cast and of flattened rectangular section, narrowing towards the terminals. There is a gold (or gilt-silver?) stud soldered to each terminal and to the centre, where the suspension loop is attached.

The suspension loop is oval and of flat, rectangular section.
The surface of the pendant is very corroded.

## 120 Coil (PI. 60)

Single piece.
Silver coil decorated with granules and S-scrolls.
c. 400 BC?

Silver
Prov.: Olbia (Mikolayiv), Ukraine
Inv. no. GR i969,II-I. 2 - transferred to Greek and Roman Department in 1969
Old Inv. no. 1923,7-16,75 Old cat. no. 317
Size: $30 \times 22 \mathrm{~mm} \quad$ Weight: 14.64 g
The coil is a double spiral of oval shape, made of a silver wire of circular section. Both ends have a cylindrical silver strip soldered on to support the decoration. Each is decorated with a soldered-on rim of beaded wire followed by opposed pairs of S-scrolls and a similar beaded wire below. Each terminal consists of a pyramid of granules, soldered on. (D of wire: 4 mm ).
There are two pairs of gold earrings of this type in the Hermitage, one found in Kerch (Crimea), ${ }^{1}$ and the other pair said to be from Kyme. ${ }^{2}$ The earrings from Nymphaion (Crimea, Ukraine) are also similar. ${ }^{3}$
According to Silantyeva 'there were probably several centres of production of this type, including one in the North Pontic region.' ${ }^{4}$

## Comparative bibliography

I Williams and Ogden 1994, I52, ill. 93
2 Silantyeva 1976, 126, ill. 3b, 95, ill. 47
3 Vickers i979, pl. IIC
4 Silantyeva op. cit., I23-I27

## 121 Coil (PL. 60)

Single piece.
Silver coil, similar to cat. no. I2O above.
c. 400 BC ?

Silver
Prov.: Olbia (Mikolayiv), Ukraine
Inv. no. GR i969,II-I.3 - transferred to Greek and Roman Department in I969
Old Inv. no. 1923,7-16,76 Old cat. no. 317
Size: $30 \times 20 \mathrm{~mm} \quad$ Weight: 12.79 g
Similar construction, shape and decoration to cat. no. 120 above, except it is slightly more open. It is possibly its pair. (D of wire: 4 mm ).

One of the two terminals is missing. The object has been damaged by a cleaning agent.

## 122 Coil

Single piece.
Siver coil decorated with patterned strip of silver and pyramid of granules.
c. 400 вс?

Silver
Prov.: Olbia (Mikolayiv), Ukraine
Inv. no. GR i969,II-I.4-transferred to Greek and Roman Department
in i969 Old Inv. no. 1923,7-I6,77 Old cat. no. 318

Size: $23 \times 18 \mathrm{~mm} \quad$ Weight: 8.659
Similar to the coils above, but slightly smaller and with different decoration. Both ends have a soldered-on, cylindrical silver strip decorated with two lines of transverse grooves all round and a median rib between them. To each end is soldered a pyramidal terminal of granules. (D of wire: 4 mm ).

One of the two terminals is missing.

## 123 Coil (PL. 60)

Single piece.
Silver coil, similar to cat. nos I2O and I2I above.
c. 400 BC ?

Silver
Prov.: Olbia (Mikolayiv), Ukraine
Inv. no. GR i969,II-I.5 - transferred to Greek and Roman Department in 1969 Old Inv. no. 1923,7-16,78 Old cat. no. unknown
Size: L: $27 \mathrm{~mm} \quad$ Weight: 3.39 g
Construction, shape and decoration are very similar to cat. nos I20 and I2I above, except it is made of a thinner wire. The pattern of decoration is slightly different: it consists of a plain wire rim with single S-scrolls below, and a pyramid of granules. (D of wire: 3 mm ).

Approximately half of the coil is missing.

## 124 Coil (PI. 60)

Single piece.
Silver coil decorated with granules and beaded wire.
c. 400 BC ?

Silver
Prov.: Olbia (Mikolayiv), Ukraine
Inv. no. GR i969,II-I. 6 - transferred to Greek and Roman Department in 1969 Old Inv. no. 1923,7-16,79 Old cat. no. unknown
Size: $26.5 \times 18 \mathrm{~mm} \quad$ Weight: 3.9 g
Silver coil with the ends decorated differently from cat. nos 120-123 above. All that remains of the pattern of beaded wires and granules is soldered directly onto the wire. To it is soldered a pyramidal terminal of granules. (D of wire: 2.5 mm ).

One end of the coil is missing, the wire is damaged, and the decoration is fragmentary.

## 125 Armlet (Pl. 61)

Single piece.
Silver armlet of circular section.
4th century вс?
Silver
Prov.: Olbia (Mikolayiv), Ukraine
Inv. no. GR i969,II-I.7 - transferred to Greek and Roman Department in 1969 Old Inv. no. 1923,7-16,80 Old cat. no. 319
Size: D: 5Imm Weight: 13.75 g
The armlet has a circular section tapering towards the ends. It is constructed of two parts: a solid silver core of wire and a strip wound round it. The strip is constructed of four wires soldered alongside each other. (D at the centre: 7 mm , at the ends: 3 mm ).

The armlet is fragmentary.

## 126 Amulet (PL. 61)

Single piece.
c.I350-I250 bC Egyptian - I8th to I9th Dynasties

Quartzite
Prov.: Chersonesus (Hersonès), Krym (Crimea), Ukraine - I908?
Inv. no. 1923,7-I6,93 Old cat. no. 275
Size: $40 \times$ I8mm Weight: 5.Ig
Unpublished
Amulet called a tit or Girdle of Isis. It is in the form of a standing human figure with carved features. The back is flat. There is a suspension loop at the top.

The suspension loop is broken.
According to a later note in the register: 'Examined by Dr. F.A. Bannister, Dept of Mineralogy, Brit. Mus. Nat. Hist., Nov. 1946, and substance identified as quartzite.
According to Carol Andrews, Department of Egyptian Antiquities in the British Museum: 'An Egyptian funerary amulet called the tit or Girdle of Isis. It takes the form of a loop of material from whose bound lower end hangs a long divided sash flanked by two folded loops,
perhaps representing a cloth worn during menstruation. Chapter ${ }_{156}$ of the Egyptian Book of the Dead prescribed that this amulet be made from red jasper, the colour of the blood of the goddess Isis, but any similarly coloured material, such as red quartzite, was an acceptable substitute. According to Chapter 156 if a tit was placed on the neck of the mummy 'the power of Isis will be the protection of his body'.
Comparative bibliography
I Andrews 1994, 44-45

## 127 Figure of a hare (PL. 61)

‘Gold embossed figure of a hare, oval outline’ according to the register. Present location of the object within the British Museum is untraced. Prov.: 'Tertre Coul Obas, Kerch' according to register, i.e. Kuloba ('tertre' is French for 'mound' or 'barrow')
'ist century в.с.' (register)
Inv. no. 1923,7-I6,I
Size: L: 12.5 mm
128 Figure of an animal (PL. 61)
Single piece
Gold figure of an animal (horse ?)
3rd century вс Scythian
Gold
Prov.: Maikop (south Russia) - 1909
Inv. no. 1923,7-I6,95 Old cat. no. 95
Size: $17 \times$ I9mm H: $3 \mathrm{~mm} \quad$ Weight: 6.7 g
Gold figure of an animal cast in low relief. The back is plain and slightly concave. There is a cast attachment loop on the back. (Thickness of loop: 3mm).

## Late material, 9th-13 centuries AD

## 129 Cross (Pl. 62)

Single piece of composite construction.
Gold pendant cross decorated with filigree wires and a central, circular, amethyst cabochon inlay.
r2th century? Byzantine
Gold, amethyst
Prov.: Cherson (Hersonès), Krym (Crimea), Ukraine - 1895
Inv. no. 1923,7-I6,89 Old cat. no. 33
Size: L: $46 \mathrm{~mm} \quad$ W: 37.5 mm Weight: 5.4 g
The cross is constructed of three gold sheets, each bent to form a cylinder. A central, vertical cylinder supports the soldered-on arms at either side. Each arm of the cross is decorated on the whole of its surface with four longitudinal zones decorated with two concentric, filigree wire rings that are soldered on separately. Between each zone is a filigree wire soldered on. There are two further filigree wires soldered around the end of each arm of the cross: one running across the last row of rings, the second one along the end of each cylinder. Five plain wires are attached equidistant from each other to the end of each arm of the cross. Both ends of each of these wires are bent to form a loop, and are hooked into either filigree wire mentioned above. They are also soldered to the surface of the cross. Each arm of the cross terminates in an openwork basket of bent, plain wires in the form of a hemisphere. Around the top of each hemisphere is soldered a ring of filigree wire. The cross is further decorated with a central, circular amethyst cabochon within a cylindrical collet. The collet is a single strip of gold notched around its upper edge, soldered on where the arms of the cross meet. (D of each arm: $5.5 \mathrm{~mm}, \mathrm{H}$ of collet: 2.5 mm , D of cabochon: 4.5 mm , thickness of filigree wires: 2 mm , thickness of plain wires: 8 mm ).

The suspension loop of the pendant is soldered onto the terminal of the top arm of the cross. It is a strip of gold bent circular with the ends overlapping. (D of loop: 2.5 mm ).

Some wires, especially around the ends, are missing. Otherwise it is in good condition.

## 130 Cross (PL. 62)

Single piece of composite construction.
The obverse of a cast, silver reliquary pectoral cross, decorated with niello and five busts in relief.
I2th century? Byzantine

Silver
Prov.: Cherson (Hersonès), Krym (Crimea), Ukraine - 1908
Inv. no. 1923,7-16,94 Old cat. no. 276
Size: L: $58 \mathrm{~mm} \quad$ W: 39 mm thickness: 2.5 mm Weight: II.77g
This half of the cross is cast in one piece. It is flat and rectangular in section, and has rectangular arms, each with a circular end. The end of each arm and the centre of the cross are decorated with a circular, cast bust in relief, each within a narrow, circular rib border. There is a small lobe projecting from either side of this circular border, at the end of each arm. Between the busts the cross is decorated with geometrical niello ornament. (D of circular fields of bust reliefs: immm).

The back is plain with a narrow, raised edge all around.
Traces of the cast loop attachment are on the top, projecting from the rib border of the uppermost bust.

There is also a cast hinge attachment at the bottom of the pendant. It consists of a pair of lugs, each perforated through its centre to secure a rod, which holds the remains of the reverse side of the cross.

Damaged at the top. The niello is hardly visible. The reverse side is missing.

## 131 Earrings (Pl. 63)

A pair, each of composite construction.
Silver earrings with bead pendants decorated with twisted wires and granulation. The hoop is enriched with spherical beads.
9th-irth century.
Silver
Prov.: unknown, but found in 1893 according to register.
Inv. no. I923,7-16,II4 and II5 Old cat. no. I57
Percentage of silver: large sphere of no. II4:95 hoop: 96
no. II5: 95
Size: no. 923,7-I6,II4 L: 6omm overall Weight: 4.75 g
no. I923,7-I6,II5 L: 56 mm Weight: 4.48 g
Unpublished
The earring hoop is made of a circular-section wire with pointed end. It is decorated at the top with a small, hollow bead capped by a granule. The hoop is further decorated with a similar bead pierced by a D-sectioned wire, which also encircles another small bead pierced by the earring hoop. All these small beads are constructed of two hollow hemispheres. (D of hoop: 21mm, thickness: I.5mm, D of beads: 6 mm ).

The pendant is a large bead made of two hollow hemispheres. The join of the two halves is covered by three horizontal strips of twisted wire. A circlet of similar twisted wire is soldered at the top and bottom of the bead. There are granules soldered to this wire forming a terminal at the bottom, and in a circular arrangement at the top. The pendant is attached to the hoop by four columns each consisting of two granules, the tops of which are soldered to the bead of the hoop. Each column is enriched with a ring of circular-section wire soldered to the middle, between the granules. (D of bead: I3mm, thickness of twisted wires: 0.5 mm , D of granules: 2 mm ).

There is a blob of solder stuck on the hoop of no. 1923,7-16,II5 and two small beads are missing from the same earring. The bead at the top of no. 1923,7-16,II4 is repaired with soft solder.

The original photograph of the collection does not show these earrings.
Similar earrings of gold and silver were found in the North Caucasus area (in Kuban, Lizgor, Kumbulta, and Makhchesk). ${ }^{1}$

## Comparative Bibliography

I Uvarova i900, 222-3, 260; pls XLVIII:5, LXXXII:5; 6, LXXXIX:22, CVII:5; 6, CIX:3- all said to be in the collection of Uvarova

## 132 Earrings (Pl. 63)

A pair, each of composite construction.
Copper hoop with shell-shaped bead enriched with a gilt-silver overlay and repoussé decoration.
inth-i3th century
Gilt-silver, impure copper
Prov.: Caucasus area-I909
Inv. no. 1923,7-I6,96 and 97 Old cat. no. 283
Percentage of silver: no. 6 gilding: 22 no. 7 inside: 67
Size: no. 96:38 x 24 mm Weight: 4.52 g :
no. 97: $23 \times 20 \mathrm{~mm} \quad$ Weight: 3.16 g
Unpublished
The hoop consists of a circular copper wire of circular section. One of
its ends is bent to form a hook; the other is slightly pointed and is either corroded, or broken off (remains of a hook-and-eye fastening?).

Each bead is made of two hollow shells of impure copper onto which is pressed a gilt-silver overlay. It is decorated with triangular groups of repoussé circles on the surface, and a pseudo-filigree wire border. There is a threefold pseudo-filigree wire around each perforation where the hoop passes through the pendant, and a double wire of the same type masks the join around the centre of the shell, one around the edge of each half.
(Size of bead: D: 2Imm; W: 20mm; D of circle motifs: 2.5 mm ; W of filigree: 0.7 mm ; D of hoop: 20mm).

No. 1923,7-16,97 is fragmentary and its hoop is missing.
The original photograph of the collection shows no. 923,7-16,97 with a hoop.
A very similar pair of earrings has been found at Kerch.
Comparative bibliography
I OIAK i906, I55-I56, ill. 3ııa-b

133 Armlets (Pl. 64)
Two Penannular silver armlets made of twisted wires.
I2th-I3th century?
Silver.
Prov.: unknown; according to register found in 1894.
Inv. no. 1923,7-16,II7 and II8 Old cat. no. I56
Percentage of silver: no. пı7: 89 no. ıı8: 96
Size: no. 923,7-I6,II7: $58 \times 49 \mathrm{~mm} \quad$ Weight: 22.58 g
no. 923,7-16,II8: $54 \times 5 \mathrm{Imm} \quad$ Weight: 2 I .03 g
Unpublished
Each piece is made from a single wire bent double, and twisted together with another wire to form a triple-twisted wire. Both ends are bent and flattened into circular terminals, which are decorated with a line of punched dots along the central line of each wire. Each end of the third wire is clearly visible within the loop.

Thickness of the wires: three together: 5.5 mm ; each: 2.5 mm ; D of terminals: 16 mm .

Both are damaged.
The original photograph does not show these armlets.
Similar bracelets were found in the towns of Kievan Rus. Sedovadated them to the ${ }^{2}-$ I 3 th century. ${ }^{1}$
Makarova gives a typology of this kind of bracelet. ${ }^{2}$
Kepeska gives a bibliography for pieces listed from Macedonia, Serbia and Bulgaria. ${ }^{3}$
For armlets of this type, see also articles by Korzukhina, ${ }^{4}$ Levashova ${ }^{5}$ and Ryndina. ${ }^{6}$

## Comparative bibliography

I Sedova 1981, 97, pl. 34:4, 8
2 Makarova i986, 33-8, ills I3-I4
3 Kepeska 1995, 35, 62-62, ill. 16b:8-I2, pl. VI:38/8-12
4 Korzukhina 1954, 62-71
5 Levashova 1967, 207-52
6 Ryndina 1963
134 Finger-ring (PL. 64)
Single piece.
Copper-alloy finger-ring with an oval bezel engraved with a
pentagram.
ioth century.
Copper alloy
Prov.: Kerch, Krym (Crimea), Ukraine - 1909
Inv. no. 1923,7-16,70 Old cat. no. 284
Size: $20 \times 2$ I.5mm Weight: 2.8Ig
The bezel and hoop are made of a single piece cast and hammered to shape. The bezel is oval. It is decorated in the centre with an engraved pentagram with a carved dot at each tip. There are smaller carved dots all around the edge of the bezel.

The hoop is a flat strip decorated with engraved, transverse lines.
(Size of bezel: L: I3.5mm; W: Iomm; H: 2mm; hoop: W: 3mm;
thickness: $\mathrm{I}-2 \mathrm{~mm}$ ).

## 135 Finger-ring fragment (Pl. 64)

Single piece
Silver hoop of a finger-ring with one expanding shoulder remaining.
Silver
Prov.: Kerch, Krym (Crimea), Ukraine - I900

Inv. no. 1923,7-16,72 Old cat.no. 287
Percentage of silver: 9I
Size: $20 \times$ Iomm
Weight: 1.378
Unpublished
The fragmentary hoop consists of a band of rectangular section expanding at the shoulder, which has two engraved V-shapes, one inside the other. All that remains of the bezel is part of a plain, thin plate, integral with the hoop. (Thickness of hoop: 2mm; thickness of shoulder: imm).

The original photograph of the collection does not show this object.

## Objects of unknown date

## 136 Mount or buckle-plate? (Pl. 65)

Single piece of composite construction.
Trapezoidal plate.
Silver, copper alloy
Prov.: unknown
Inv. no. I923,7-I6,I45 Old cat. no. unknown
Percentage of silver: 96
Size: $32 \times$ 4Imm Weight: II. 6 g
Unpublished
Trapezoidal copper-alloy plate with an applied silver sheet on the front
The edge of the latter is wrapped around the edges of the plate. There are three attachment shanks in a triangular arrangement soldered onto the back. (Sides: $32 \mathrm{~mm}, 9.5 \mathrm{~mm}, 2 \times 4 \mathrm{Imm}$ ).

The silver sheet is imperfect.

## 137 Bindings or mounts? (Pl. 65)

Three.
4th-6th century.
Silver.
Prov.: unknown
Inv. no. 1923,7-I6,146 to I48 Old cat. no. unknown
Percentage of silver: no. 46:90 no.47:94 no.48:90
Size: no. I46: 3I X 25.5mm Weight: I.73g
no. I47: $29 \times 26 \mathrm{~mm}$ Weight: I.53g
no. I48: L: 23 mm ; 18 mm surviving Weight: o.9g
Unpublished
Each is a narrow silver strip bent to form a square frame with overlapping ends. (W of strip: 2mm; thickness: 1 mm ).

No. 1923,7-16,I48 is broken in two.

## 138 Bead (Pl. 65)

Single piece.
Oval, perforated.
Agate.
Prov.: Unknown
Inv. no. 1923,7-I6,150 Old cat. no. unknown
Size: $12 \times 25 \mathrm{~mm}$ Weight: 4.5 mm
Unpublished
Elongated oval with polished surface. It has been perforated
longitudinally, drilled from both ends, and the two holes are slightly misaligned where they meet. (D of perforation: 2.5 mm ).

## Objects without numbers, apparently Berthier-Delagarde Collection

a. Base silver penannular loop. (23mm).
b. Bronze fragment of wire, bent one end. ( 15 mm ).
c. Bronze overlaid with silver. Silver rivet. (L: I7mm); from 1923,7-16,71?
d. Two silver fragments with filigree.

## Appendix 2 - Early Material



Appendix 2 - Early Material

1:1


Cat. No. 125


Cat. No. 126

2:1


Cat. No. 127


Appendix 2 - Late Material


Cat. No. 130

Appendix 2 - Late Material


Cat. No. 131


Cat. No. 132



Objects of Unknown Date


Cat. No. 136


Cat. No. 137


1:1


Cat. No. 138

