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**ROMAN BRONZE MILITARY EQUIPMENT AND HARNESS IN THE
COLLECTIONS OF THE ALBA IULIA MUSEUM
II. PERSONAL EQUIPMENT AND HARNESS GEAR FITTINGS**

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Cercetător independent

Keywords: Apulum, municipium/colonia, necropolis, *canabae*, personal equipment, buckles, phalerae, armour, apron and harness fittings.

Cuvinte cheie: Apulum, municipiu/colonie, necropolă, *canabae*, echipament militar personal, cataramă, falere, garnituri de la armură, șorț și de harnașament.

The presence of a substantial amount of Roman military equipment and horse gear artefacts in the collections of the National Museum of Union at Alba Iulia is undoubtedly linked to the existence and functioning of the *XIIIth Gemina Legion* at Apulum.

In a recent study I reviewed the belt and baldric plates in these collections¹. This second part is dedicated to other equipment items such as buckles, strap terminals, pendants, scabbard stiffeners and harness mounts, bridle junctions, pendants or amulets and phalerae.

The analysis of the artefacts in these collections allows to conclude that they span all the sixteen centuries of the *XIIIth Gemina Legion* sojourn at Apulum, but also the subsequent ones. From a typological point of view, most of them have good parallels among the items recovered both in Dacia and other provinces of the Empire.

Military equipment and harness artefacts were unearthed first of all from different areas of the two cities at Apulum: **I. 1. Northern necropolis:** a) Stația de salvare (isolated items and grave assemblages); b) Stadium; c) Profii Mall; d) OMV oil station. **2. Southern necropolis:** a) Dealul Furcilor - Podei; b) Dealul Furcilor – Monolit (civilian environment). **3. Canabae** – North-Eastern Carolina residential district. **4. Partoș district** (Municipium Aurelium/Colonia Aurelia Apulensis): a) Adalbert Cserni's Excavations 1912 (Gh. Toth garden); b) ancient collections; c) Vasile Moga and Viorica Rusu-Bolindeț excavations 1988-1994; d) recent rescue excavations. **5. Praetorium consularis.** **6. The XIIIth Gemina Legion camp.** **7.** Rescue excavations in different areas of Apulum.

An important amount of military and harness fittings in the collections of the museum also resulted from:

¹ Ciugudean 2017, passim.

II. Former private collections: a) Sabin Olea Collection – acquired in 1967 (Roman epoch items from Homorod-Joseni, Hunedoara county); b) Gheorghe Alungulesei collection – acquired in 1994, 2002, 2004 (Roman epoch objects collected on the territory of both cities from ancient Apulum).

II.a. The collection of the priest Sabin Olea (1907-1984) from the village Cib (Alba county) comprised 1766 archaeological, historical and ethnographical items. Priest Olea participated in different religious conferences at Homorod and Geoagiu - *Germisara* (Hunedoara county), Almaşu Mare, Zlatna - *Ampelum* or Alba Iulia - *Apulum* – (Alba county), where he had good opportunities to amass his archaeological collection. Archaeological stuff from the Roman period included clay vessels, tiles and bricks with the stamp of *LEG XIII G*, inscriptions, fragments of altars, bronze and silver coins, and a lot of military equipment artefacts. Some military equipment bronze items were probably accidentally collected or bought from two villages in Hunedoara county: Homorod, which belongs to Geoagiu commune and Josani. According to Tabula Peutingeriana, the Imperial road between Sarmizegetusa and Apulum passed through Cigmău where a fort and a settlement of military *vicus* type were established. In the opinion of scholars, the fort itself and the prosperous civil settlement around it were called actually *Germisara*². Inscriptions and tiles bearing the stamp of *XIIIth Gemina Legion* were, for instance, unearthed in these locations³. In fact, it is considered that the *territorium* of the first city of Apulum and, by consequence, the military territory of the legion – *prata legionis*, spread to the south-west, extending almost as far as *Germisara*⁴. Soldiers of the legion and *auxilia* deployed in different areas of the province worked on military and civilian urban equipment to lay out roads or to set up aqueducts⁵. One can presume that artefacts of military equipment could belong to the soldiers of the *XIIIth Gemina Legion* who might accidentally have lost their garments during the duties they carried on there.

² EncCivRom 1982, pp. 186-187; Moga 1972, p. 154.

³ *TIR*, L. 34, 47; *CIL* III, 8064, 6 and 13751, b; Albu 1971, p. 75; Pescaru-Rusu 1995-1996, p. 326; Popa 2002, p. 88.

⁴ Ardevan 1988, p. 254; Moga 1975, p. 76.

⁵ Tudor 1968, pp. 130-131; EncCivRom 1982, p. 423.

I. Belt buckles

1. Ring buckles (Pl. I/6; II/4; III/1-5; IV/1-4)

Depictions of soldiers on 3rd century tombstones and sculptural representations reveal – given its predecessors – a different type of belt fashionable, especially in the Danube region of the Roman Empire. This is about the so-called "Ringschnallencingulum" – a broad waist-belt fastened by a ring shaped buckle and tapering leather ends held in place by a fungiform stud on each side. This type of belt worn by soldiers and civilians seems to be the most common one registered in the 3rd century AD.

Nonetheless, archaeological records are not that offering as long as – except the "Ringschnallencingulum" at Intercisa – there are few sets of belts produced by excavations. Systematic and rescue archaeological excavations carried out during the last century in the southern but especially in the northern necropolis from Apulum unearthed some burials containing personal military equipment fittings, i.e. the most popular "Ringschnallencingulum"-type⁶.

Their important presence at Apulum, both in burials or as isolated items deposited to emphasise the relationship of the buried people with the Roman army even after their death, and also in at least two sculptural representations⁷ lead us to the conclusion that this is the greatest concentration of this type of belt not only in Dacia, but possibly among the other provinces of the Empire.

In *Dacia*, two similar items to those from Apulum were unearthed in the fort at Porolissum⁸, while two others came from the bath of the Romita - *Certiae* fort⁹. In 1910, István Téglás discovered a bronze ring-buckle at Potaissa¹⁰. Half of a copper alloy frame, decorated with circular ribs – without a clearly identified use¹¹ - has been discovered at Ulpia Traiana Sarmizegetusa. Another similar artefact is also known from the fort at Gherla¹². None of the above mentioned pieces has been accurately identified – since those at Porolissum were interpreted as glass mirror frames, and the subsequent as circular frames, but not as possible "military" equipment items. A complete ring-shaped buckle was found with a rectangular openwork with peltate motifs mounted into the Grave no. 129 from

⁶ Ciugudean, Ciugudean 2000, pp. 341-349; idem 2000a, pp. 203-216; Ciugudean 2010, pp. 447-456; idem 2011, pp. 99-115; idem 2017, pp. 341-409, Pl. IX-X; Catalogue 2011, pp. 113-114, Cat. nos. 219-222.

⁷ Radu 1968, pp. 438-441, Fig. 2; Moga, Blăjan 1992, pp. 201-205, Fig. 1-2; Ciugudean 2011, Pl. V.

⁸ Gudea 1989, p. 699, Pl. CCXXXV/2-3.

⁹ Matei, Bajusz 1997, p. 13, Pl. XCIII/1-2.

¹⁰ Bajusz *et alii* 2005, p. 668, Fig. 44/75/3.

¹¹ Alicu *et alii* 1994, p. 57, 102, Cat. no. 647, Pl. 29.

¹² Protase *et alii* 2008, p. 88, Pl. XLIV/1.

the Northern necropolis at Romula¹³. These two artefacts are nearly identical to those from the funeral inventory of Grave no. 19/trench XXXII at *Apulum* and have been dated to the first half of the 3rd century AD by analogy with the finds from Intercisa¹⁴.

In other provinces of the Empire, the most convincing parallel was rescued in *Pannonia* where a belt-set with one ring buckle and two fungiform studs were unearthed into the Grave no. 40 from Intercisa, a very plausible and illustrative reconstruction of the making of the proper belt-set being proposed by Sági¹⁵.

Chronology

The belts belonging to the "Ring - or Rahmenschnallencingulum" type have been generally dated to the 3rd century AD¹⁶. The same dating is emphasised by recent research focused on the belts fashion during the 3rd century AD¹⁷. Besides, the earliest securely dated ring-buckle representation is on an altar from Eining, dated by consular year to 211 AD¹⁸. As concerns the funeral inventories from *Apulum*, this chronology is supported by the coin from Faustina II (161-175/post 175 AD), found in the Grave no. 19/trench XXXII, which represents a *terminus post-quem*, but which could have also been used for a longer period and placed into the grave at a later date, during the 3rd century AD. The coin from Otacilia Severa (244-249) from Grave no. 1/trench IX dates back the funeral assemblage to the mid- 3rd century AD at least.

2. Studs (Pl. I/1, 3; II/1-3; I/2; VIII/12-15)

Fungiform or double studs for leather fastening are common finds which frequently appear both in graves and settlements in all the provinces of the Empire¹⁹. Ten fungiform studs were unearthed both in graves from the Northern and the Southern necropolises at *Apulum* until now.

¹³ Babeş 1970, p. 185, Abb. 11/d-e.

¹⁴ Sági 1954, p. 84, Abb. 19.

¹⁵ *Ibidem*, p. 83, Abb. 18, Pl. XII/6-8, and Abb. 19.

¹⁶ Oldenstein 1976, pp. 222-3; v. Schnurbein 1977, pp. 88-90; Fischer 1988, p. 189-190; Petculescu 1995, p. 119; Bishop, Coulston 1993, p. 152.

¹⁷ v. Schnurbein 1995.

¹⁸ Wagner 1973, no. 477.

¹⁹ Oldenstein 1976, pp. 166-169, Taf. 46/485-489; von Schnurbein 1977, p. 88; Fischer 1988, p. 184; Bishop, Coulston 1993, p. 153, Fig. 108/9-12.

In the Western provinces, they are known from the cemetery at Regensburg²⁰, Kunzing²¹, Viminacium²², Volubilis²³. In *Dacia*, three such fungiform studs were found in grave no. 3 from Bruuiu²⁴ together with an openwork rectangular buckle. Similar items come from the camp of Legio Vth Macedonica at Potaissa²⁵ or a Roman military grave at Romula²⁶. A fungiform stud is part of the inventory of grave no. 6 at Morești²⁷. Other pieces were also found at Porolissum²⁸ and the settlement at Mehadia²⁹.

3. Ring buckles with ornamental extension (Pl. V/1-2)

This more elaborated type of buckle is quite well represented among the finds from *Apulum*. Despite some opinions that they were used as brooches, i.e. *fibulae*, it seems more likely that the larger specimens served as buckles for a broad waist leather belt. They are characterised by a peculiar adorned rectangular prolongation of the bow, with an opening for the pin or the double fastening button – as the scholars' reconstructions demonstrate³⁰. Artefacts of this type occurred especially in the provinces of *Noricum* and *Pannonia*³¹, *Germania*³², *Moesia*³³ and *Dacia*³⁴. They were dated to the 3rd – 4th centuries AD³⁵, but in fact, they come from levels dated from the aftermath of the Marcomanic wars, and were used until the first half of the 3rd century AD³⁶. As far as they occur in the military environment, the bearers appear, therefore, to be the soldiers³⁷.

As I am acquainted with the typological attempts realised up to present, from the accessible bibliography for me results that this type of buckles are

²⁰ Von Schnurbein 1977, Pl. 13/7, 50/3, 68/3, 91/7.

²¹ Fischer 1988, Fig. 9.

²² Zotović, Jordović 1990, Pl. CX/6.

²³ Boube-Piccot 1994, p. 13, Pl. 66/87 bis.

²⁴ Petculescu 1995, pp. 118-119, Pl. 3/1-4.

²⁵ Bărbulescu 1994, Fig. 16/7.

²⁶ Petculescu 1995, Pl. 2/10.

²⁷ Horedt 1979, p. 57, Fig. 26/17.

²⁸ Gudea 1989, Pl. CCII/22-3.

²⁹ Bozu 2000, Pl. III/1, 3.

³⁰ Sági 1954, p. 98, Abb. 32, A.B.; Oldenstein 1976, p. 219.

³¹ Jobst 1975, Pl. 51/368-372; Sellye 1990, pp. 17-102.

³² Böhme 1972, pp. 46-47, Taf. 31/1232-1233.

³³ Radman-Livaja 2008, Cat. nos. 29-32.

³⁴ Moga *et alii* 1997, p. 545, Pl. XIII/93; Amon 1997, p. 50, Fig. 1/3; 2004, p. 137, Pl. XXXIII/2; *Antiques Bronzes* 2003, p. 178, No. 340; Cociș 2004, pp. 129-130, Pl. CXI/1568-1572; Catalogue 2011, p. 119, Cat. no. 234; Bounegru 2017, p. 61, 109, Pl. XLIII/7.

³⁵ Sellye 1990, pp. 26-27.

³⁶ Cociș 2004, p. 130.

³⁷ Böhme 1972, p. 47; Cociș 2004, p. 130.

analysed such as brooches³⁸, or more appropriate as brooch-belts³⁹. In her study dedicated to the "Ringfibeln mit Ansatz" from Pannonia, Ibolya Sellye frames them in XV types, whilst in the typology proposed by Sorin Cociş one can identify the items from *Apulum* in his Type 27b1b⁴⁰. The first ring buckle with ornamental prolongation from *Apulum* (**Inv. no. R. 3607 – Pl. V/1**) is to be found generally in Sellye's Typ I, with parallels at Savaria⁴¹, Poetovio⁴² and Intercisa⁴³, except the fact that our specimen is ornamented in addition with two pelta-shaped openwork. However, a liken fragmentary item with a broken pelta-shaped openwork on the trapeziform extension was unearthed at Siscia⁴⁴. This design is for that extremely rare and it seems to be rather an *Apulense* pattern.

The second exemplar from *Apulum* (**Inv. no. Not registered – Pl. V/2**) found in the cremation grave 17/trench XV from the Northern necropolis has good analogies in *Dacia* at Celei⁴⁵ and Câmpulung-Pescăreasa⁴⁶. In other provinces of the Empire, this type of ring buckle of Sellye Typ IV was discovered particularly in Pannonia at Savaria, Ságvár, Brigetio⁴⁷, but also at Burgenae⁴⁸, Poetovio⁴⁹, Intercisa⁵⁰, Carnuntum⁵¹ and Saalburg⁵².

Chronology

Ring buckles with ornamental extension were generally dated to the 3rd – up to the mid 4th centuries AD⁵³.

³⁸ Sellye 1990, pp. 17-102.

³⁹ Cociş 2004, pp. 129-130.

⁴⁰ *Ibidem*, Cat. no. 1569, Pl. CXI/1569.

⁴¹ Sellye 1990, p. 24, Taf. 1/8.

⁴² *Ibidem*, Taf. 1/10.

⁴³ *Ibidem*, Taf. 1/12a-b.

⁴⁴ Radman-Livaja 2004, p. 134, Cat. no. 293, Pl. 44/293.

⁴⁵ Amon 1997, p. 50, Fig. 1/3; idem 2004, p. 137, Rep.B, VI, 11, Pl. XXXIII/2.

⁴⁶ *Antiques Bronzes* 2003, p. 178, No. 340; Amon 2004, p. 137, Rep. B, V, 15.

⁴⁷ Sellye 1990, p. 42, Taf. 3/1, 21, 23.

⁴⁸ Radman-Livaja 2008, Nos. 29-32.

⁴⁹ Sellye 1990, p. 42, Taf. 3/9; Tusek 1993, p. 411, Taf. 1/1.

⁵⁰ Sági 1954 in Intercisa I, pp. 97-99, Grave 79, Taf. 25/1; Intercisa II, p. 469, Cat. no. 114, Abb. 99/10; Oldenstein 1976, p. 218, Fig. 8 a-b.

⁵¹ RLO 1908, 9, Pl. 37/5; RLO 1909, 10, Pl. 30/6.

⁵² Sellye 1990, p. 42, Taf. 3/4; Böhme 1972, pp. 46-47, Taf. 31/1232; Bishop, Coulston 1993, Fig. 108/6.

⁵³ Sellye 1990, p. 26-27; Sagadin 1979, type 6, T. 11.

4. Zoomorphic belt-buckle – Inv.no. 3625 (Pl. VII/1)

It is a well-known fact that the appearance of the belt fittings entirely changes into the 4th century AD, unlike the previous ones. Animal decorations consisting of beast heads or confronting, head-to-head dolphins frequently appear on the curved buckles⁵⁴. Hawkes has suggested that these buckles were being manufactured during the last three decades of the 4th century, disappearing by the early 5th century AD⁵⁵. Curved buckles with confronting dolphins holding a pellet between their jaws were unearthed in other provinces of the Empire into the forts at South Shields⁵⁶ and Lisieux⁵⁷. From the province *Hispania* are known “non-Hispanic” buckles with confronting dolphins⁵⁸, dated to the 4th century AD from: La Olmeda⁵⁹, Sant Josep⁶⁰, Villarrubia de Santiago⁶¹, Castillo Billido⁶² and Can Bosch de Basea⁶³. Another specimen of buckles with confronting dolphins from belts of Vermand-Champdolent type⁶⁴ appears between the finds from Tamuda, in Morocco⁶⁵. At the same time, a variant of the buckle-loop to which the dolphins are not confronting to the top, but facing towards the hinge is also ascribed to the second half of the 4th century AD⁶⁶. Specimens of this variant were unearthed into the Graves no.1 at Azbburg II – Straubing⁶⁷, and no.7 from the necropolis at Fel⁶⁸. Another piece comes from Whinchester⁶⁹, while a more elaborated item decorated with pairs of confronting dolphins on both sides of the buckle’s frame is known from the same site⁷⁰. Examples of buckles with confronting dolphins were also unearthed in Bulgaria⁷¹.

⁵⁴ Boube-Piccot 1994, p. 14; Bishop, Coulston 1993, p. 174.

⁵⁵ Hawkes 1974, p. 386.

⁵⁶ Allason-Jones, Miket 1984, p. 192, Cat. no. 3.614-15.

⁵⁷ Pilet *et alii* 1993, p. 157, Pl. 2/2.

⁵⁸ Aurrecoechea Fernández 1999, pp. 55-56; Idem 2001, pp. 119, 121.

⁵⁹ *Ibidem*, Fig. 2/14; *Ibidem*, p. 75, Cat. no. 15, Fig. 42/1.

⁶⁰ *Ibidem*, Fig. 2/13; *Ibidem*, p. 75, Cat. no. 17, Fig. 42/2.

⁶¹ *Ibidem*, Fig. 2/12; *Ibidem*, p. 75, Cat. no. 16, Fig. 42/3.

⁶² *Ibidem*, Fig. 2/15.

⁶³ *Ibidem*, p. 76, Cat. no. 19.

⁶⁴ Boube-Piccot 1994, 15, Pl. N/1-2.

⁶⁵ *Ibidem*, Cat. no. 186.

⁶⁶ Bishop, Coulston 1993, p. 174.

⁶⁷ Prammer 1989, Abb. 128.

⁶⁸ Pilet *et alii* 1993, p. 157, Pl. 4/3.

⁶⁹ Bishop, Coulston 1993, Fig. 126/4.

⁷⁰ *Ibidem*, Fig. 126/6.

⁷¹ Traykova 2017, p. 45/ 387, 389, 390.

Chronology

Scholars' opinions converge to the fact that these buckles with confronting dolphins are to be dated between 350-380 AD⁷², to the last three decades of the 4th century AD⁷³, or the second half of the 4th century AD⁷⁴. Regarding the “non-Hispanic” examples, it was asserted that they were brought to Hispania by armed military posted on the Limes during the transition period from the end of the 4th to the beginning of the 5th century AD⁷⁵.

5. Buckles from Homorod-Joseni

Buckle Inv. no. 3604 (Pl. VII/7) has a good parallel at South Shields⁷⁶; **Buckle Inv. no. 3605 (Pl. VII/8)** has good analogies at Saalburg⁷⁷, Niederbieber⁷⁸, Straubing⁷⁹, Carnuntum and Novaesium⁸⁰. **Buckle Inv. no. 3603 (Pl. VII/10)** in letter “D”- shape is to be found at Zugmantel⁸¹; **Buckle Inv. no. 3606 (Pl. VII/11)** has analogies at South Shields⁸² and Saalburg⁸³. **Buckle Inv. no. 3602 (Pl. VII/12)** is to be found between the discoveries at South Shields⁸⁴, Wroxeter⁸⁵, Newstead⁸⁶, Richborough⁸⁷ and Saalburg⁸⁸. **Buckle Inv. no. 3610 (Pl. VII/2)** has a parallel at South Shields⁸⁹. **Buckle Inv. no. 3601 (Pl. VIII/1)** has parallels at Magdalensberg⁹⁰, Winchester⁹¹, Intercisa⁹² and Siscia⁹³.

⁷² Sommer 1984a; Böhme 1986, pp. 482-485.

⁷³ Hawkes 1974, p. 386.

⁷⁴ Bishop, Coulston 1993, p. 174.

⁷⁵ Aurrecoechea Fernández 1999, p. 59.

⁷⁶ Allason-Jones, Miket 1984, p. 195, Cat. 3.639.

⁷⁷ Oldenstein 1976, Taf. 79/1049.

⁷⁸ Oldenstein 1976, 1050-1; Bishop, Coulston 1993, p. 152, Fig. 108/8.

⁷⁹ Oldenstein 1976, 1048; Bishop, Coulston 1993, Fig. 108/5.

⁸⁰ Oldenstein 1976, p. 218, footnote 729.

⁸¹ *Ibidem*, p. 216, Taf. 77/1034, 36.

⁸² Allason-Jones, Miket 1984, p. 194, Cat. 3.626.

⁸³ Jacobi 1987, Taf. LIX, no. 19.

⁸⁴ Allason-Jones, Miket 1984, p. 194, Cat. 3.623.

⁸⁵ Bushe-Fox 1914, Pl. XXI, Fig. 1.5.

⁸⁶ Curle 1911, Pl. XCII.1.

⁸⁷ Cunliffe 1968, Pl. XXXV, nos. 97-98.

⁸⁸ Oldenstein 1976, Taf. 78/1040.

⁸⁹ Allason-Jones, Miket 1984, p. 194, Cat. 3.620.

⁹⁰ Deimel 1987, Taf. 76/3, 4.

⁹¹ Bishop, Coulston 1993, Fig. 126/4.

⁹² Intercisa II 1957, p. 460, Abb. 101/22-23, p. 471, Cat. nos. 149-150.

⁹³ Radman-Livaja 2004, Pl. 49-344.

Chronology

The specimens from the German-Raetisch limes are dated to the first half of the 2nd century AD⁹⁴. The buckle at Winchester dates from mid- to late 4th century AD. It is known as Soupault type Ib with plate type 1, variant 12aI. The mentioned example in Soupault was found in Callatis – Romania. Despite use by barbarian soldiers is considered Roman⁹⁵.

6. Buckles from Apulum

Buckle Inv. no. 3462 (Pl. VII/6)

The item has good analogies in other provinces of the Empire at South Shields⁹⁶, Saalburg⁹⁷, Weissenburg⁹⁸ and Zugmantel⁹⁹.

Buckle from Northern Necropolis – grave no. 8/trench IV, Inv. no. 9577/5 (Pl. VIII/3)

The buckle can be dated to the typical 2nd century AD oval buckles with internal volutes and trapeziform or rectangular shaped attachment loop. This extension served as the means of attaching the buckle to the belt plate. The buckle was positioned behind the belt plate so that the hoop was visible, but the extension was concealed. A strip of bronze passed from the back of the plate through the rectangular hole in the buckle's extension and was soldered or fastened by rivets at the opposite end of the plate, as show, for instance, different artefacts from Osterburken¹⁰⁰, Romula grave no. 2¹⁰¹, Lechința de Mureș¹⁰², the item from the fort and military *vicus* at Bumbești-Jiu "Vârtoș"¹⁰³. In Roman *Dacia*, the closest parallel for the item at Apulum is an identical buckle found in the fort at Buciumi¹⁰⁴. Two other buckles with trapeziform extension, considered as imports, were unearthed at Drobeta¹⁰⁵. Some variants of bronze buckles of the debated type

⁹⁴ Oldenstein 1976, p. 219.

⁹⁵ Bishop, Coulston 1993, p. 174; Soupault-Becquelin 1999, pp. 294-306.

⁹⁶ Allason-Jones, Milet 1984, p. 194, Cat. 3.622.

⁹⁷ Oldenstein 1976, Taf. 76/1006, 1008.

⁹⁸ *Ibidem*, Taf. 76/1007.

⁹⁹ *Ibidem*, Taf. 76/1009.

¹⁰⁰ Oldenstein 1976, pp. 214-215, Abb. 7, Taf. 75/997.

¹⁰¹ Petculescu 1995, Pl. 2.1.

¹⁰² *Ibidem*, Pl. 7/1-2.

¹⁰³ Marinoiu 2002, p. 76, Pl. LXIX/6.

¹⁰⁴ Gudea 1997, p. 16, Fig. no. 4 down right.

¹⁰⁵ Sîngă 1998, Pl. LXXII, 8-9.

with unknown discovery place (Porolissum?) are kept in the stores of the Museum of History and Art from Zalău¹⁰⁶. Two similar buckles with rectangular extension were unearthed into the camp at Micia¹⁰⁷ and another item was found in the Roman settlement at Cristești¹⁰⁸. From the *villa rustica* at Gârla Mare are known two buckles, one with rectangular extension and the second with trapeziform attachment loop¹⁰⁹. Amongst the rich archaeological material unearthed in this farm, there are almost 80 artefacts of personal military equipment, suggesting that it was the possession of a veteran of the Trajanic wars in *Dacia*.

The ancient collections of the National Museum at Alba Iulia include two almost similar items from the ancient *Apulum*. The first buckle (**Inv. no. 3462 - Pl. VII/6**) with oval hoop and trapeziform extension behind is smaller in proportions. The second buckle, embellished with inner and outward-curving volutes, was registered together with a detached folded bronze strip (**Inv. no. 3459 - Pl. VII/3 a-b**) very similar to that attached to the buckle at Lechința de Mureș. The long strip for fixing the buckle to the plate is folded near one end and secured with a bronze rivet. The opposite end preserves a round rivet hole.

The buckle from the grave no. 8, trench IV at *Apulum* has also good parallels in other provinces of the Empire at Iža¹¹⁰, Burgenae¹¹¹, Zugmantel¹¹², Saalburg¹¹³, Pfünz¹¹⁴, Neuburg an der Donau – grave no. 10¹¹⁵, Olympia¹¹⁶, South Shields¹¹⁷ and Caerleon¹¹⁸. An identical buckle still retaining its iron tongue from Caerwent – Venta Silurum¹¹⁹ was dated mid to late 2nd or early 3rd century AD¹²⁰. Similar buckles, dated to the middle of the 2nd century AD, were found on the actual territory of Bulgaria at Novae¹²¹ or an unknown location¹²². An identical buckle was found in the inventory of the grave no. 26 from the cemetery at

¹⁰⁶ Gudea 1989, pp. 675-676, Pl. CCXXII/12-25, 30-34. The brooches are part of the private collection of counts Wesellényi-Teleki from Jibou, donated to the Museum of History and Art from Zalău in 1958.

¹⁰⁷ Petculescu 1991, Fig. 1-2; *Dacia Augusti Provincia* 2006, p. 152, Cat. 140-141.

¹⁰⁸ Man 2011, Pl. CXLVIII/21.

¹⁰⁹ Stîngă 2005, Pl. XXXV/22-23.

¹¹⁰ Rajtár 1994, Abb. 8/6.

¹¹¹ Radman-Livaja 2008, p. 298, Nos. 14-16.

¹¹² Oldenstein 1976, Taf. 76/1003, 1013.

¹¹³ *Ibidem*, Taf. 76/1008.

¹¹⁴ *Ibidem*, Taf. 76/1018.

¹¹⁵ Hübener 1963-1964, p. 23, Abb. 4-5/151.

¹¹⁶ von Völling 1996, p. 443, Abb. 4/5-6.

¹¹⁷ Allason-Jones, Miket 1984, Cat. 3.619.

¹¹⁸ Evans, Metcalf 1992, Fig. 77-78.

¹¹⁹ Bishop, Griffiths 1993, Fig. 1/3.

¹²⁰ *Ibidem*, p. 20.

¹²¹ Gencheva 2009, Fig. 1/3-4.

¹²² *Ibidem*, Fig. 1/5-9, 11.

Carnuntum¹²³, together with a glass vessel, a clay lamp, a "Trompetenornament" plate, a fungiform button, a knee brooch with a semi-round head, but also with two coins, one from Nerva (AD 96-98) and the other from Hadrianus (AD 117-138). A second similar buckle, with a partially preserved strip for fixing it to the plate, comes from the grave no. 147 of the same cemetery¹²⁴, with a significant furnishing containing this time a coin from Alexander Severus¹²⁵ (AD 222-235). This situation pleads for the using of this type of buckle for at least one century long time, when it was worn and still in fashion. In his survey of auxiliary equipment in use on the Upper German-Raetian frontier in the second and early third centuries AD, Oldenstein assumes that these buckles originated there and were worn mainly by auxiliary forces, similar items from elsewhere being of continental derivation. Although their occurrence in the legionary context¹²⁶ is not large but noteworthy, many types of equipment were probably in common use throughout the army with no distinction between legionary and auxiliary usage.

Chronology

Oldenstein dates this type of buckles to the second half of the 2nd century AD, ascertaining that they were still in use until the falling of the German frontier in AD 260¹²⁷.

II. Belt and apron fittings

1. Strap ends – Apron fittings (Pl. IX/1-17)

In *Dacia*, bipartite strap terminals are common on virtually all military sites like Porolissum¹²⁸, Buciumi¹²⁹, Romula graves no. 1¹³⁰ and no. 2¹³¹, Ulpia Traiana Sarmizegetusa¹³², Gilău¹³³ and Copăceni.¹³⁴ In other provinces of the

¹²³ Ertel *et alii* 1999, p. 72, Taf. 25/8.

¹²⁴ *Ibidem*, Taf. 77/9.

¹²⁵ *Ibidem*, Taf. 77/7.

¹²⁶ Evans, Metcalf 1992, Cat. nos. and Figs. 75-78.

¹²⁷ Oldenstein 1976, pp. 211-214, Taf. 76/1011-1018.

¹²⁸ Gudea 1989, p. 1072, Pl. CCXIII/14-20, 28, 30-46; p. 1073, Pl. CCXIV/1-14, 17-18, 20-22, 24-35, 45-47.

¹²⁹ Chirilă *et alii* 1972, Pl. 71/2-3, 6, 9-10, 18-20.

¹³⁰ Petculescu 1995, p. 115, Pl. 1/3, 4.

¹³¹ *Ibidem*, p. 113, Pl. 2/2; Petculescu 1997, Fig. 1/2.

¹³² Dawson 1990, p. 7, Fig. 2/22-24, 27; Alicu *et alii* 1994, p. 105, Pl. 33/684-6; Alicu *et alii* 1995, Fig. 22/134-6.

¹³³ Diaconescu, Oprean 1987, p. 63, Fig. 5/43.

¹³⁴ Tudor 1982, p. 55, Fig. 2/13.

Empire, strap terminals were found at Novae¹³⁵, Pác¹³⁶ (in a building dating to the second third of the 4th century AD), and into the grave no. 53 at Gerulata¹³⁷, dated to the beginning of the 3rd century AD. From the western provinces of the Empire, similar items are known at Carnuntum¹³⁸ (the strap-end from the grave no. 26 together with coins of Hadrian and Nerva, the item from the grave no. 23 with a coin of Antoninus Pius), as well as the piece from the grave no. 201 at Viminacium, found with a coin of Lucilla, dating to the middle of the 3rd century AD¹³⁹. The lanceolate strap-ends at Homorod-Joseni from the collections at Alba Iulia have good parallels at Zugmantel¹⁴⁰, Kapersburg¹⁴¹ and Saalburg¹⁴². The finds at Apulum look like the pieces of the already mentioned type at Zugmantel, but also at Straubing¹⁴³, Weissenburg¹⁴⁴ and into the forts at Burgenae¹⁴⁵ and Iža¹⁴⁶. The bifurcated strap-ends at Apulum are similar to the items at Saalburg¹⁴⁷ and the piece from the grave no. 662 at Regensburg¹⁴⁸. The strap-ends of butt-shaped type at Apulum is to be found at Zugmantel¹⁴⁹, Saalburg¹⁵⁰ and into the graves no. 150¹⁵¹ and no. 227¹⁵² from the cemetery at Regensburg. A pair of butt-shaped strap terminals figure between the artefacts of the rich funeral assemblage of the grave at Lyon, Rue des Fantasques¹⁵³. In *Britannia*, strap-ends have been found in the sites at Richborough¹⁵⁴, Housesteads¹⁵⁵ and South Shields¹⁵⁶. Besides, a clay mould for making such strap-ends or tags was also discovered at South Shields¹⁵⁷. A further eleven lanceolate strap-ends were recovered at Caerleon from

¹³⁵ Gencheva 2009, Fig. 3/10-12.

¹³⁶ Krekovič 1994, p. 217, Fig. 6/1, 2.

¹³⁷ *Ibidem*, Fig. 5/13.

¹³⁸ Ertel *et alii* 1999, Taf. 24/5; 25/9, 10.

¹³⁹ *Ibidem*, Abb. 2, 5.

¹⁴⁰ Oldenstein 1976, Taf. 36/291.

¹⁴¹ *Ibidem*, Taf. 36/292.

¹⁴² *Ibidem*, Taf. 36/301.

¹⁴³ *Ibidem*, Taf. 36/295.

¹⁴⁴ *Ibidem*, Taf. 36/302.

¹⁴⁵ Radman-Livaja 2008, p. 298, 301, Nos. 48-65.

¹⁴⁶ Rajtár 1994, Abb. 8/4.

¹⁴⁷ *Ibidem*, Taf. 37/337-8.

¹⁴⁸ v. Schnurbein 1977, Taf. 82/5.

¹⁴⁹ *Ibidem*, Taf. 36/311-2.

¹⁵⁰ *Ibidem*, Taf. 36/316.

¹⁵¹ v. Schnurbein 1977, p. 147, Taf. 29/8.

¹⁵² *Ibidem*, Taf. 45/5, 6.

¹⁵³ Bullinger 1972; Bishop, Coulston 1993, Fig. 92/2 a-b; Feugère 1993, pp. 149, 10-11.

¹⁵⁴ Cunliffe 1968, Pl. 37, nos. 120-121.

¹⁵⁵ Rushworth 2009, p. 444-6, Fig. 14.9/97.

¹⁵⁶ Allason-Jones, Miket 1984, p. 189-191, nos. 3.597-603; Bidwell, Speak, 1994, Fig. 7.3/21.

¹⁵⁷ *Ibidem*, no. 9.7.

the Fortress Baths excavations¹⁵⁸, dated to the 3rd century AD, Prysge Field excavations¹⁵⁹ and Roman Gates excavations¹⁶⁰. The Caerleon strap-ends were found in contexts ranging from the mid 2nd century AD to the 4th century AD¹⁶¹.

Particularly common in all parts of the Empire which have produced military equipment between the 2nd-3rd century AD are the narrow, waisted pendants with a large aperture, through which a strip passes, is doubled back on itself, and attached to the strap-end at either side¹⁶². More than enough dating evidence exists to show that these are not found in the pre-Antonine contexts and there are even some hints that they belong with horse harness, rather than the equipment of men. In 3rd century, infantry equipment, the only functional role for strap terminals seemed to have been to finish the excess material from belts. These were usually worn in pairs and not articulated¹⁶³. The strap-ends were secured by means of a bronze tab consisting of a rectangular piece of sheet bronze passed through the eye of the strap-end and folded back on itself with the leather strap interleaved stud. In *Dacia*, bipartite strap terminals preserving by consequence the folded strip were recovered at Ulpia Traiana Sarmizegetusa¹⁶⁴, Copăceni – Praetorium I¹⁶⁵ into the graves no. 1¹⁶⁶ and no. 2 at Romula¹⁶⁷ and also into the graves nos. 1 and 2 at Tomis¹⁶⁸. Complete bipartite strap-ends from other provinces of the Empire are known at Kabile (Yambol district, Bulgaria)¹⁶⁹, Saalburg¹⁷⁰, Chester and Chichester¹⁷¹. Another means of attachment is represented by an item at Roman Gates Caerleon,¹⁷² where the strap-end with circular eye hangs from a pierced lug at the bottom of a leaf-shaped plate with an expanded stud behind.

In his survey of the military equipment from the upper German and Raetian frontier zones, Oldenstein distinguishes two types of “Riemenendbeschläge”: the first one “lanzettförmigen Anhänger” – lanceolate strap ends with an eye at the top of the fitting, for the suspension¹⁷³ and the second

¹⁵⁸ Brewer 1986, 177, Fig. 57/49-52.

¹⁵⁹ Nash-Williams 1932, pp. 85-86, Fig. 34, nos. 36-37.

¹⁶⁰ Evans, Metcalf 1992, p. 126, Cat. nos. 99-109, p. 127, Figs. 99-102.

¹⁶¹ *Ibidem*, p. 125.

¹⁶² Bishop 1992, p. 99, Fig. 17, 4-6, 9.

¹⁶³ *Ibidem*, p. 99, note 69.

¹⁶⁴ Dawson 1990, p. 7, Fig. 2/22, 24; Alicu *et alii* 1994, Pl. 33/684-685.

¹⁶⁵ Tudor 1982, Fig. 2/13.

¹⁶⁶ Petculescu 1995, Pl. 1/3-4.

¹⁶⁷ *Ibidem*, Pl. 2/2; Petculescu 1997, Fig. 1/2.

¹⁶⁸ Petculescu 1998, Fig. 1/1-2.

¹⁶⁹ Gencheva 2009, Fig. 8/4.

¹⁷⁰ Oldenstein 1976, Taf. 36/304.

¹⁷¹ Evans, Metcalf 1992, p. 125.

¹⁷² *Ibidem*, p. 126, Cat. no. 103, 127, fig. 103.

¹⁷³ Oldenstein 1976, Taf. 36/290-304.

one, with butt ends for fastening directly onto leather and with full round moulding – “keulenartige Riemenanhänger”¹⁷⁴. The scholar has proved that the minor objects, like fittings and pendants, were locally produced and the similarities of items should be explained as a matter of fashion¹⁷⁵, which is also the case of strap terminals, considered by himself of “Germanic” origin. Oldenstein’s first category, ending in a ring¹⁷⁶, is known only in *Germania libera*. His second type, with an annular extension near the mid-point with full round moulding¹⁷⁷ was found on military sites on the *limes*. But as a matter of fact, specimens of the first type were also recovered in other Roman provinces, as mentioned above. Despite Oldenstein’s opinion who considers the presence of these artefacts as an influence of the Germanic tribes on the Roman military equipment – against Raddatz, who presumes that they must have a Roman origin under Pontico-Sarmatian influence¹⁷⁸, archaeologists stated that it is less probable that both types of strap-ends have a Germanic origin as long as their distribution is far more extensive than Oldenstein knew¹⁷⁹. Besides the strap-ends unearthed in *Dacia* discussed above, there are to be mentioned items of Oldenstein’s second type at Potaissa¹⁸⁰, Răcari¹⁸¹, Drobeta¹⁸², Săpata de Jos¹⁸³, Barboși¹⁸⁴ and Mătășaru¹⁸⁵ in Barbaricum – in the outside provincial territory. Reviewing the discoveries in *Dacia*, the number of the strap-ends of both types rises at 100 pieces. This evidence enables to subscribe to the opinion that as long as they exceed the number of the artefacts from *Germania* and *Raetia*, they are to be thought typically for the whole Roman army, not of German origin, rather contrary, those from outside should be considered as imports from the Empire¹⁸⁶.

Chronology

Strap terminals from contexts which could be properly dated were the items at Săpata de Jos between AD 205-242¹⁸⁷, the piece at Niederbieber¹⁸⁸ to the

¹⁷⁴ *Ibidem*, Taf. 36/305-318.

¹⁷⁵ *Ibidem*, pp. 69-75.

¹⁷⁶ *Ibidem*, Taf. 37/337-338.

¹⁷⁷ *Ibidem*, Taf. 37/335-336, 339-340.

¹⁷⁸ Raddatz 1957, 18 Anm. 57 and Abb. 3; Oldenstein 1976, p. 148 and note 495.

¹⁷⁹ Diaconescu, Opreanu 1987a, p. 160.

¹⁸⁰ Bajusz 2005, p. 374, no. 206, p. 382, no. 575.

¹⁸¹ Tudor 1967, p. 249, Fig. 8/3, 4.

¹⁸² *Ibidem*, p. 128, nos. 45, 48, pl. IX/6, 9.

¹⁸³ Christescu 1935-1936, fig. 13/9.

¹⁸⁴ Sanie 1981, p. 181, no. 27, pl. 53/6.

¹⁸⁵ Bichir 1984, p. 57, no. 3, Pl. LI/17; Petculescu 1999, p. 897, Pl. 2/20.

¹⁸⁶ Diaconescu, Opreanu 1987, p. 63.

¹⁸⁷ Christescu 1935.

¹⁸⁸ Dorow 1826, Taf. 18.22.

end of the 2nd century AD and the one found at Strassburg¹⁸⁹ - dated to the close of the 2nd century AD too. The bifurcate strap-ends together with the whole funeral assemblage of the famous grave at Lyon are from the same period as long as the deceased was a soldier who died during the fight between Albinus and the army of Septimius Severus in AD 197¹⁹⁰. Oldenstein concludes that their main period of use was in the 2nd century and that they continued into the 3rd century AD with occasional later survivals¹⁹¹.

2. Scabbard-slide/stiffener – Inv. no. 9573 (Pl. X/1).

The method of fastening the slide to the scabbard and further to the *balteus* is discussed by Oldenstein¹⁹², referring to German scabbard runners and by Petculescu¹⁹³ for the specimens unearthed mainly in the forts from *Dacia*. According to the generally accepted typology, the item at Apulum belongs to the type I, case when the slide was attached to the scabbard by two rivets or nails placed to both ends of the central plain (*Schwertscheidenbügel zum Aufnageln, Nagelbügel*). Scabbard slides were manufactured of iron, bronze or bone. Some iron scabbard slides were decorated with *niello* inlay. The bronze examples belong to the type with rivets for the attachment to the scabbard. They usually have ornamented terminals and plain undecorated bodies. Often, they have knobbed, moulded spike or sometimes ring, crescent upper terminals and heart-shaped lower ends. The most elaborate bronze items were cast in the shape of a dolphin. A bone scabbard from Apulum can also be mentioned, in addition to the bronze artefact¹⁹⁴ discussed in this study.

In *Dacia*, scabbard slides with moulded spike upper terminals and fixing rivets were unearthed at Potaissa¹⁹⁵, Gilău¹⁹⁶, Răcari¹⁹⁷, Buciumi¹⁹⁸, Copăceni¹⁹⁹, Porolissum²⁰⁰ and Ulpia Traiana Sarmizegetusa²⁰¹.

¹⁸⁹ Hatt 1953, Abb. 9, 38.

¹⁹⁰ Bullinger 1972, p. 278; Wuilleumier 1950.

¹⁹¹ Oldenstein 1976, pp. 147-150.

¹⁹² *Ibidem*, pp. 95-109, Taf. 12/17.

¹⁹³ Petculescu 1983, pp. 451-466.

¹⁹⁴ Ciugudean 1997, p. 78, Cat. no. 463, Pl. XXX/5.

¹⁹⁵ Petculescu 1983, pp. 457-458, Fig. 1/2, 6; Bărbulescu 1994, Fig. 16/15.

¹⁹⁶ Petculescu 1983, p. 457, Fig. 1/3; Macrea *et alii* 1959, p. 453, Fig. 1/6; Rusu 1979, p. 160, Pl. I/7.

¹⁹⁷ Tudor 1964, p. 249, no. 19, Fig. 8/2; 1978, p. 295, Fig. 83/2; Petculescu 1983, p. 457, no. 4, Fig. 1/4; Amon 2004, p. 116, Rep. BXX, 17, Pl. XXIV/1; Bondoc, Gudea 2009, p. 210, Cat. no. 515, Pl. XCVI/515.

¹⁹⁸ Pop 1972, p. 92, Pl. 99/1; Petculescu 1983, p. 458, no. 5, Pl. 1/5.

¹⁹⁹ Tudor 1982, p. 57, Fig. 3/8; Amon 2004, p. 116, Rep. BVIII, 2, Pl. XXIV/2.

²⁰⁰ Gudea 1989, p. 292, Pl. CLXXX/1/11.

²⁰¹ Dawson 1990, p. 7, no. 10, Fig. 2/10.

This common runner form was found in all the north-western provinces in late 2nd – early 3rd century AD contexts. German parallels have been found at Niederbieber, Stockstadt, Zugmantel, Cannstatt, Saalburg²⁰². Other examples of scabbard slides with moulded spike upper terminal from sites in Britain include those from Prysg Field²⁰³, Caerleon²⁰⁴, Colchester²⁰⁵, South Shields²⁰⁶, Housesteads²⁰⁷ and Corbridge²⁰⁸. A similar scabbard slide was part of the funeral assemblage of the famous grave with “Vtere felix” belt plates at Lyon²⁰⁹ in Gaul, which was dated to AD 197.

Chronology

Scabbard slides recovered in *Dacia* are dated from the second half of the 2nd century to the first half of the 3rd century AD, dating supported by the chronology proposed for the items from the whole Roman Empire²¹⁰.

3. Armour scales

3.a. *Lorica plumata* (?) scale – Inv.no. 3519 (Pl. X/2)

The earliest reference to the *lorica plumata* in an ancient historical source is found in Marcus Junianus Justinus, as he describes the armour of the Parthians: “*Munimentum ipsis equisque loricae plumatae sunt, que utrumque toto corpore tegunt*” translated as: “*loricae plumatae* are the armour of man and horse, which protect the entire body”²¹¹.

Scale armour was worn by both legionaries and auxiliary infantry and cavalry²¹² as tombstones from Verona, Carnuntum, Adamklisi, Bonn or Colchester show it²¹³. The method of manufacturing *lorica squamata*, which appeared in the 1st century AD, is discussed by Robinson²¹⁴. This type of armour was widespread amongst the *auxilia* under the rule of Marc Aurelius, but

²⁰² Oldenstein 1976, p. 96, 231, Taf. 12/45-48, 13/49-50.

²⁰³ Nash-Williams 1932, Fig. 36, Nos. 2-5, 7-11.

²⁰⁴ Collingwood, Richmond 1969, p. 310, Fig. 108a; Evans, Metcalf 1992, p. 129, Fig. 117.

²⁰⁵ Webster 1958, p. 77, Fig. 4, no. 74.

²⁰⁶ Allason-Jones, Milet 1984, p. 198, no. 3.645.

²⁰⁷ Rushworth 2009, p. 449, Cat. nos. 115, 116, Fig. 14.11/115-116.

²⁰⁸ Bishop, Coulston 1993, p. 130, Fig. 90/6.

²⁰⁹ *Ibidem*, Fig. 92/5; Feugere 1993, p. 149.

²¹⁰ Petculescu 1983, p. 456; Oldenstein 1976, pp. 95-109; Bishop, Coulston 1993, p. 130.

²¹¹ Justin, *Epitoma Historiarum Philippicarum Liber XLI*, p. 2, sentence 10.

²¹² Bishop, Coulston 1993, p. 85.

²¹³ *Ibidem*, Fig. 49, 1; 50, 2.

²¹⁴ Robinson 1975, pp. 153-161.

disappeared in the middle of the 3rd century AD. Earlier scale armour was usually only wired horizontally and then attached to a flexible backing²¹⁵. According to the opinion of some experts, it seems, however, that each scale was individually attached to the backing by a thread or a bronze wire passing through the central, upper holes of the scale. In cases, elsewhere, where traces of the backing survived, this was composed of coarse linen stuffed with straw, and more rarely of leather²¹⁶. During the 1st and 2nd centuries AD, a hybrid form of body defence, the so-called *lorica plumata* consisting of mail with very small scales attached to its surface, was in use. Presumably very time-consuming to produce, it is not a common find²¹⁷. Actually, experimental reconstructions demonstrated that for *lorica plumata* manufacturing there were necessary between 20 to 30.000 scales and 160 to 350.000 rings made of iron or copper alloy, some scales being covered for a striking visual effect in white metal (probably tin). Despite their size of a few millimetres, the tiny rings of the mail weave served as a backing material for the scales, which rarely exceeded 11 millimetres in length. The scales were placed in an alternating manner creating an imbricated pattern. They had a medial rib that gave them a feather-like appearance, which is why hybrid armour has sometimes been referred to as *lorica plumata*, or “feathered armour”²¹⁸. Evidence of specimens belonging to *lorica plumata* are exceptional and seem to cluster around the Roman limes. Beside the almost complete example at Augsburg, the most spectacular artefacts came to light in Turkey, in 1938: the armour at Bizye (nowadays Vize) was unearthed in tumulus “A” that has been attributed to Rhoemetalkes III, the last king of Thrace (38-45 AD), or some member of his royal family. Together with the bronze feathered armour, in the sarcophagus, there were found a sword, four iron daggers, two golden rings, golden leaves, silver goblets and a silvered helmet²¹⁹. Another example of fragmentary hybrid armour was recovered into the Jupiter Dolichenus temple at Dülük Baba Tepesi in eastern Turkey. Otherwise, the cult of Jupiter Dolichenus was often associated with the Roman army²²⁰.

²¹⁵ Bishop, Coulston 1993, p. 117.

²¹⁶ Zienkiewicz 1986, p. 186, apud von Groller 1901.

²¹⁷ Bishop, Coulston 1993, p. 85.

²¹⁸ Wijnhoven 2013.

²¹⁹ Somay Onurkan, **East Thracian Tumuluses**, Thrace Aggregate Foundlings in Istanbul Archaeology Museum, cf. www.ttk.org.tr; idem 1978, pp. 47-55; Oppermann 1988, pp. 203-204.

²²⁰ Wijnhoven 2013.

3.b. *Lorica squamata* scales – Southern Necropolis Dealul Furcilor – Podei (Pl. X/3)

Recent excavations carried out in the Southern necropolis from "Dealul Furcilor – Podei" unearthed few fragmentary bronze scales tied up with a metallic wire, alongside with 10 (ten) iron hobnails from *calligae* into the inhumation grave no. 163²²¹.

Apart from those to cavalry, most of the funerary monuments which show scale armour are those to *centurions*, for instance, the one commemorating Q. Sertorius Festus at Verona. On some particularly carefully illustrated cuirasses, the scales have been engraved to make them look like bird's plumage, and one ornamented version (*lorica plumata?*) – examples of which have been found at Newstead, Ouddhorp, Augsburg and Besançon – shows a chainmail coat overlaid with tiny scales engraved with a dorsal fin²²².

Chronology

The isolated early scale armour at Apulum could possibly be dated to the beginning of the 2nd century AD.

III. Horse/harness equipment

1. Cross-shaped harness mount – Inv. no. 3622 (Pl. X/4)

In *Dacia*, a mount in the shape of an equal-armed cross with a (vulva-shaped?) central raised oval boss with a deep median groove and three disc headed shanks on the rear was unearthed into the barack no. 5 of the *fabrica* of the fort at Buciumi²²³. Smaller examples appear between the finds from other provinces of the Empire at Zugmantel²²⁴, Pons Aeni²²⁵, Eining²²⁶, Köngen²²⁷ and Regensburg-*canabae legionis*²²⁸. Among the harness gear recovered from two horse burials at Brigetio there are two cross-shaped mounts of smaller size than the specimen in the collections at Alba Iulia museum²²⁹.

²²¹ Bolog 2017, pp. 38-39, Pl. 52.

²²² Feugère 1993, pp. 41, 125, 127, 129.

²²³ Gudea 1972, p. 74, Taf. LXXII/2; LXXIV/2; 1997, p. 39, fig. 2, Benea *et alii* 2006, p. 190, Pl. XXIII/2.

²²⁴ Schleiermacher 2000, p. 186, Taf. 8/16.

²²⁵ Weber 2007, pp. 171-172, p. 217, Abb. 15/P32.

²²⁶ Gschwind 2004, p. 331, Taf. 47, C406.

²²⁷ Luik 1996, p. 206, Taf. 49/9.

²²⁸ Weber 2007, footnote no. 215, unpublished item.

²²⁹ Barkóczy 1948, p. 171, p. 178, Pl. XXX/6, 10; Pl. XXXIII/11.

Chronology

By analogy with similar harness mounts uncovered in the area of Rhenania, the two horse burials at Brigetio were dated between the middle of the 2nd century AD and the second half of the same century, at the latest.

2. Box-junction/ Bridle distributor – Inv. no. R10062 (Pl. X/5)

As a result of analysing the sculptural depictions of cavalymen, the researchers concluded that this type of smaller harness junction was placed at the crossing point of the browband with the cheekpiece of the horse's bridle. Two straps crossing at the right angle passed through the four apertures between the discs of the circular box junction²³⁰. Similar items were unearthed in Dacia into the forts at Micia²³¹, Porolissum²³², Gilău²³³, Potaissa²³⁴ and Mehadia – Praetorium²³⁵. Another box-junction with a decorated disc also originates from Potaissa²³⁶. In the collections of the National Museum of Transylvania at Cluj-Napoca, there are three likewise junctions with unknown discovery sites²³⁷. Two other mobile circular box-junctions with four apertures for the straps and the discs decorated with concentric circles originate at Romula²³⁸. Bridle distributors of this type were also found in the other provinces of the Empire at Siscia²³⁹, Ulpia Noviomagus Batavorum²⁴⁰, Ocaña (Toledo)²⁴¹, Feldberg-Kastell²⁴², Lussonium²⁴³ and Volubilis²⁴⁴.

Chronology

Mobile box-junctions bridle distributors are dated between the second half of the 2nd century to the first half of the 3rd century AD²⁴⁵.

²³⁰ Diaconescu, Opreanu 1987, p. 64 and footnote no. 109; Bishop 1988, Fig. 25.

²³¹ Dacia Augusti Provincia 2006, Cat. no. 148.

²³² Gudea 1989, pp. 591-592, Pl. CLXXXII/1-2.

²³³ Diaconescu, Opreanu 1987, p. 64, Fig. 6/49.

²³⁴ Bajusz *et alii* 2005, p. 748, Fig. 48/20.

²³⁵ Macrea *et alii* 1993, p. 107, Cat. nos. 20-21, Pl. XXV/20-21.

²³⁶ *Ibidem*, p. 677, Fig. 30/86/1.

²³⁷ Găzdac 1999, p. 746, Pl. V/5-7.

²³⁸ Amon 2004, p. 163, Rep.B XXI, pp. 45-46, Pl. XLII/5.

²³⁹ Radman-Livaja 2004, Pl. 56/395, 398.

²⁴⁰ van Enckevort, Thijssen 2001/2002, Fig. 6.

²⁴¹ Aurrecoechea Fernández 2007, Fig. 4/11.

²⁴² Schleiermacher 2000, p. 180, Taf. 5/8, 10.

²⁴³ Fazekas 2009, p. 54, Kat. no. 6, Taf. 2/6.

²⁴⁴ Boube-Piccot 1980, p. 122, nos. 117-118.

²⁴⁵ Petculescu 2003, p. 182.

3. Apron/Harness pendants/hangers

The difficulties of distinguishing between pendants for use with the military apron and those for use with horse-harness are well known²⁴⁶ since some items would be appropriate in either role.

By analysing the representational evidence, which is almost exclusively sculptural, M. Bishop focussed on the *stelae* from Rhineland and Metropolitan from the Tiberio-Claudian to Hadrian periods – which are a particularly rich source of detail on the apron²⁴⁷. As concerns the apron pendants, one can see that the teardrop-shaped terminals are predominant on 18 reliefs²⁴⁸, lunate terminals on 9 reliefs²⁴⁹ and ivy-leaf terminals on 8 reliefs²⁵⁰ from the total amount of 45 analysed examples.

Even though there are frequent misidentified objects as ‘‘apron’’ fittings, which were not found in pre-Antonine contexts – especially between the 2nd and 3rd centuries AD strap-terminals which belong with horse harness, rather than the equipment of men. In 3rd century AD infantry equipment, the only functional role for strap-terminals seems to have been to finish the excess material from belts – and they were usually worn in pairs and not articulated²⁵¹.

3.a. Heart-shaped harness pendant - Inv. no. 3636 (Pl. XII/1)

The heavy bronze heart-shaped pendants hang on a more or less elaborated openwork button-and-loop fastener – as archaeological evidence had recently noticed. Their weight makes them likely that they ornamented harness leather straps and not legionaries armour or belt – as scholars supposed some time ago.

This type of pendant is a little less known in *Dacia*. An example without a certain site of discovery, except the fact that it originates from Transylvania²⁵² and which is identical with the one at Apulum, is to be found in the collections of the National History Museum of Romania in Bucharest. A similar item with the lower terminal in the shape of a heart comes from the fort at Buciumi²⁵³. A

²⁴⁶ Oldenstein 1976, p. 124 sqq.

²⁴⁷ Bishop 1992.

²⁴⁸ *Ibidem*, table 1 and Figs. 1/1-4; 4/8-10; 5/13-14; 6/16-17; 7/21-23; relief nos. 1, 3, 4, 8-10, 13-14, 16, 17, 21-23, 34, 38, 43.

²⁴⁹ *Ibidem*, reliefs nos. 5, 6, 25, 27-8, 31, 36, 42.

²⁵⁰ *Ibidem*, reliefs nos. 26, 32, 33, 37, 38, 39, 44, 45.

²⁵¹ Cf. Webster in Evans, Metcalf 1992, p. 125; Bishop 1992, p. 99.

²⁵² *Dacia Augusti Provincia*, p. 151, Cat. no. 138, Inv. no. 54227; *Miles romanus*, p. 23, Cat. no. 134.

²⁵³ Chirilă *et alii* 1972, Taf. 71/40.

likewise pendant was found at Potaissa²⁵⁴, in 1904. Recent excavations at Porolissum produced important archaeological material found in Building B6 located in the *praetentura dextra* of the main auxiliary fort. There were unearthed assorted militaria – part of the harness fittings being fused into a "blob" – (**Figs. 3, 4/1**)²⁵⁵. The western chamber of the above building where they came to light functioned as storage for ammunition and probably for weapons and machinery²⁵⁶. The archaeological layer from which the accessories were recovered was dated to AD 160 – 180/190²⁵⁷. The heart-shaped pendant (**Fig. 2/3**) is the almost identical parallel for the pendant at Apulum, except for the trefoil terminal which represents a stylized *phallus* – in the case at Porolissum. The pendants were suspended from both circular and pelta-shaped fittings – as evidenced by the finds compacted in the conglomerate.

In other provinces of the Empire, there are parallels at Stockstadt²⁵⁸, Zugmantel²⁵⁹ and Dura Europos²⁶⁰. An analogous example is housed in the Carnuntinum museum²⁶¹. Two pendants of plain field, without a median baluster, are noticed from Feldberg and Zugmantel²⁶². A half-finished pendant was found between the items unearthed at Abusina-Eining²⁶³. Two items similar to the one at Apulum were also recovered from Burgenae²⁶⁴.

Openwork heart-shaped pendants were unearthed in Pannonia among the artefacts from the wagon graves ("Wagengräber") at Környe no. 1²⁶⁵ and no. 3²⁶⁶. A number of three heart-shaped harness pendants, which could be considered variants of the items from above, not identical but with massive bodies, are known at Vajta²⁶⁷. The pendants from Pannonia are hanged on the suspension loop of some clasps of hexagonal and rectangular shape with horizontal apertures for the straps – which are still preserved. On the other hand, the pendant with plain field and two openwork pelta-shaped ornaments on the top, unearthed into the *villa* at

²⁵⁴ Bajusz *et alii* 2005, I/2, p. 701, Fig. 30/21/5.

²⁵⁵ Gui 2015, pp. 231-237, Pl. 1B; idem 2016, p. 37.

²⁵⁶ Opreanu *et alii* 2013, pp. 84-88, Figs. 4-16.

²⁵⁷ *Ibidem*, p. 85-86, Fig. 13.

²⁵⁸ Oldenstein 1976, pp. 130-131, Taf. 32/230; Schleiermacher 2000, Taf. 7/4.

²⁵⁹ *Ibidem*, Taf. 32/232.

²⁶⁰ Cunliffe 1968, Taf. 38/136.

²⁶¹ Oldenstein 1976, p. 131.

²⁶² Schleiermacher 2000, p. 182, Taf. 7/1, 2.

²⁶³ Gschwind 1997, p. 612, Abb. 2/3.

²⁶⁴ Radman-Livaja 2006, p. 1501, Fig. 2/16-17.

²⁶⁵ Alapi 1913, p. 40, Abb. 9; Gschwind 1998, p. 120, Abb. 8/1-2.

²⁶⁶ Bónis 1982, p. 148, Abb. 19/1, 20/4; Sellye Lakos 1941, p. 68, p. 86, Pl. XIV/3, 5.

²⁶⁷ Radnóti 1939, p. 117, Pl. XLVII/2; Sellye Lakos 1941, p. 70, p. 88, Pl. XVI/4a-b; Fülep 1949, Taf. 29/1.

Selongey²⁶⁸ was hanging on the lower loop of a plate in the shape of a pelta with a rivet for attaching to the strap's leather, on the reverse.

Chronology

This type of harness pendants is dated to the second half of the 3rd century AD²⁶⁹. As regards the example at Selongey, it seems that it was buried at the same time with the destruction of the *villae* complex between AD 256-258²⁷⁰.

3.b. Leaf-shaped harness pendant – Inv. no. 10058 (Pl. XII/2)

Pendants are very powerful magical symbols, for there seems to be some reason at least for attributing an apotropaic role to the decorative elements of horse harness.

Also called *Peltaförmige Anhänger* – this type of pendant, known as Bishop's type 3c²⁷¹ – was recovered from Baden²⁷² and Petronell²⁷³, Augusta Raurica²⁷⁴, Vindonissa²⁷⁵, Siscia²⁷⁶, Rottweil²⁷⁷ or from Ocaña in Spain²⁷⁸.

Chronology

These items are dated to the 1st century AD²⁷⁹.

3.c. Lozenge-shaped pendant – Inv. no. R.10061 (Pl. XII/6); foliate/leaflet pendants – Inv. nos. 3149, 3367, 3608, 10065, 10069 (Pl. XII/3, 4, 5)

This type of narrow equine pendants can be seen on a relief from the Tombstone of T. Flavius Bassus – cavalryman, *ala Noricorum* from the Museum at Köln. They alternate with *lunulae* pendants: there are lunate pendants suspended from the breeching, the lower of the haunch straps, and two from the breast strap. There is also a narrow lozenge-shaped pendant between the two

²⁶⁸ Rabeisen 1990, p. 81, Fig. 172/8; Gschwind 1998, p. 120, Abb. 7/6.

²⁶⁹ Gschwind 1998, *passim*.

²⁷⁰ *Ibidem*, p. 120; Ruellet 1982-1983, p. 76.

²⁷¹ Bishop 1988, Fig. 44/ 3c type, Table 6.

²⁷² Unz 1971, Abb. 6, 55-59.

²⁷³ Stiglitz 1986, Taf. 5, 13-14.

²⁷⁴ Deschler-Erb 1999, pp. 56-57, Cat. nos. 578-579, Taf. 29/578-579.

²⁷⁵ Unz, Deschler-Erb 1997, p. 44, Cat. nos. 1580-1589.

²⁷⁶ Hoffiller 1912, S.1.45; Radman-Livaja 2004, p. 138, Cat. no. 472, Pl. 65/472.

²⁷⁷ Planck 1975, Taf. 35, 5.

²⁷⁸ Aurrecoechea Fernández 1997, p. 78, Abb. 5/3.

²⁷⁹ Deschler-Erb 1999, p. 56.

lunate ones on the breast strap, and another one on the lower shoulder strap²⁸⁰. Parallels are known from Potaissa²⁸¹ and Porolissum²⁸² in *Dacia*. Similar hangers were unearthed all over the provinces at Caerleon²⁸³, Augusta Raurica²⁸⁴, South Shields²⁸⁵, Dura Europos²⁸⁶, Siscia²⁸⁷, Richborough²⁸⁸, Zugmantel, Saalburg and Feldberg²⁸⁹, Singidunum²⁹⁰, Olympia²⁹¹ or Volubilis²⁹².

Chronology

The leaflet pendants from Augusta Raurica are dated to the late Augustan-Tiberian epoch (15-35 AD) and beginning of Flavian epoch²⁹³ (70-100 AD), or early 1st century AD²⁹⁴.

4. Phalerae/Round mounts (Pl. XI/1-8)

Simple, flat, concave, embossed or decorated with concentric circles, with one or two shanks on the rear— this type of harness artefacts are common and widespread finds all over the provinces of the Empire²⁹⁵. Sometimes, concave items with a prominent flange were interpreted as elements/plaques of the cymbals²⁹⁶, as it is the case of the roman *Bronzebeckens* from Heerlen and Tienen (Belgium)²⁹⁷.

The phalerae at Apulum **Inv. no. 3214 (Pl. XI/1)** can be framed in Bishop's type 2f²⁹⁸ and has parallels at Banasa and Volubilis²⁹⁹, instead the piece

²⁸⁰ Bishop 1988, p. 71, Fig. 15.

²⁸¹ Bărbulescu 1994, Fig. 16/9.

²⁸² Gudea 1989, Pl. CCXVII/29-40; CCXVIII/1-4.

²⁸³ Zienkiewicz 1986, p. 177, Cat. no. 46, Fig. 57/46.

²⁸⁴ Deschler-Erb 1999, Taf. 26/518-523, 30/588-594.

²⁸⁵ Allason-Jones, Miket 1984, p. 200-201, Cat./Fig. nos. 661-663.

²⁸⁶ Report 7, p. 92, nos. 230, 272.

²⁸⁷ Radman-Livaja 2004, Pl. 68/495.

²⁸⁸ Bishop 1988, p. 156, Table 6, Fig. 47, Type 8f; Cunliffe 1968, Pl. XXXIX, 146.

²⁸⁹ Schleiermacher 2000, Taf. 8/27, 29.

²⁹⁰ Vujović 2013, Pl. III/3.

²⁹¹ von Völling, pp. 435-436, Abb. 1/1-4.

²⁹² Boube-Piccot 1994, Pl. 13/141-142.

²⁹³ Deschler-Erb 1996, p. 92; idem 1999, p. 53.

²⁹⁴ Deschler-Erb 1999, p. 56.

²⁹⁵ Oldenstein, p. 170-3, 186-187; Gshwind 1998, pp. 135-136; Schleiermacher 2000, p. 188, James 2004, p. 99, Cat. no. 345.

²⁹⁶ Diaconescu, Opreanu 1987, p. 65, footnote 113.

²⁹⁷ Tamboer 1999, p. 53-54, Figs. 92, 93.

²⁹⁸ Bishop 1988, Fig. 39.

²⁹⁹ Boube-Picot 1964, Nos. 15-16.

registered under the **Inv. no. 9060 (Pl. XI/4)** is similar with type 2d³⁰⁰ and is to be found at Newstead³⁰¹.

In *Dacia*, equine phalerae are frequent finds between the discoveries from Buciumi³⁰², Porolissum³⁰³, Gilău³⁰⁴, Sarmizegetusa³⁰⁵, Tibiscum³⁰⁶, Drobeta³⁰⁷ or Celei³⁰⁸.

Harness round mounts or phalerae are known at Niederbieber, Holzhausen and Saalburg³⁰⁹, Weissenburg and Straubing³¹⁰, Zugmantel³¹¹, or Degenfeld³¹². Other items came from Siscia³¹³, Iruna/Veleia - Spain³¹⁴, Augusta Raurica³¹⁵ and South Shields³¹⁶.

Chronology

Round phalerae are generally dated circa early- to mid- 1st century AD, or during the 1st century AD³¹⁷. Their rigorous dating is, in fact, very difficult as far as Oldenstein assumes that the concave mounts are to be placed especially in the first half of the 2nd century AD³¹⁸.

4.1. Phalera – Apulum – Partoș, not registered (Pl. XIV/3)

This new type of functional junction with concealed loops behind discs seemed to come into favour sometime during the reign of Claudius (41-54 AD), although some Augustan examples had loops mounted around the periphery of the

³⁰⁰ Bishop 1988, Fig. 40.

³⁰¹ Curle 1911, pp. 300-301, Pl. LXXIV/10.

³⁰² Chirilă *et alii* 1972, pp. 66-68, Pl. 69/33, 45-46, 53-54.

³⁰³ Gudea 1989, pp. 623-624, Pl. 197/1-41, p. 638, Pl. 203/1-5, 14, 16, 18.

³⁰⁴ Diaconescu, Opreanu 1987, p. 65, Fig. 6/51.

³⁰⁵ Daicoviciu *et alii* 1983, p. 257, Fig. 10/8; Alicu *et alii* 1994, Pl. 32/676-678, 44/752.

³⁰⁶ Németh 1991, p. 206, Fig. 1/15-17.

³⁰⁷ Tudor 1976, p. 131, Nos. 68-83, Fig. 11/1-14, 12/1, 2; Amon 2004, pp. 155-156, Rep. B, 24-39, Pl. XL/1-5.

³⁰⁸ Tudor 1937-1940, p. 374, no. 30, Fig. 9/u; Amon 2004, p. 155, Rep. BVI, p. 223, Cat. no. 47, Pl. XL/6.

³⁰⁹ Oldenstein 1976, Taf. 47/509, 511-515, 56/686-694.

³¹⁰ *Ibidem*, Taf. 48/535-541.

³¹¹ *Ibidem*, Taf. 49/542-562.

³¹² *Ibidem*, Taf. 47/510.

³¹³ Radman-Livaja 2004, p. 116, Pl. 73/519, 525.

³¹⁴ Aurrecoechea 1996/1999, pp. 90-100, 115, Cat.no. 87; Gil *et alii* 2000, p. 22, Fig. 7/1.

³¹⁵ Deschler-Erb 1999, p. 58-59, Taf. 33/643-653, 34/654-659.

³¹⁶ Allason-Jones, Miket 1984, Cat. nos. 3.815-3817, 862-864. 935, 947-948, 956-959, 975-991.

³¹⁷ Deschler-Erb 1999, p. 59.

³¹⁸ Oldenstein 1976, pp. 166-167, 173-174.

disc³¹⁹. I did not find good parallels for the item at Apulum, neither in *Dacia*, nor between the discoveries in other provinces of the Empire, so far. However, a phalera with two rectangular peripheral apertures on the body of the disc, one of them still preserving the folded metallic strip provided with a rivet for fixing the leather strap, came from Gherla³²⁰. A phalera with five circular loops at the periphery of the disc, which seem to be jointed to it, is known at Feldberg-Kastell. From one of the loops is hanging a fragment from the riveted leather strap³²¹.

Chronology

As long as this type of phalera with concealed loops behind discs begun to be manufactured starting from the middle of the 1st century AD, is it possible that it arrived at Apulum sometime to the first or the second decades of the 2nd century AD, at once with the first soldiers.

5. Phallic pendants (Pl. XI/9-12)

Also included in the category of military equipment are phallic amulets, usually associated with the Roman army. This type of smaller size pendants was worn by soldiers both as a symbol of fertility and manliness and as an amulet which offered protection against evil powers and bad luck³²². On the other hand, more elaborated and massive pendants with flat rear where the *phallus* appears associated with varied representations (a hand with “*fica*-Gestus”, a bull head, a *lunula* with an eagle, and so on) are mainly known as horse harness³²³. In the Roman world, the god Fascinum had tasks as plants’ germination, sterile females’ fertilisation or fading the “evil eye”³²⁴. The phallic symbol is known from India, Minor Asia, Egypt to Greece – where was related especially to the life after death – as the Eleusinian and Dyonisian creeds accredited it. Phallic representations are common in places like balconies and doors, baths, defensive precincts of towns which explain their apotropaic power of collective protection³²⁵. The Latin writer Varro relates that children bore phallic amulets for personal protection against the evil eye³²⁶. Witchcraft and superstition manifestations using phallic representations seem to cease or at least decline at once with the assimilation of

³¹⁹ Bishop, Coulston 1993, p. 105.

³²⁰ Găzdac 1999, Pl. V/3.

³²¹ Oldenstein 1976, Taf.87/1127; Schleiermacher 2000, p. 178, Taf. 5/1.

³²² *DA*, 1877, p. 256-257: *amuletum*; Cabrol-Leclercq 1924, pp. 1786-1859: *amulettes*; Pauly-Wissowa 1894, pp. 1984-86: *amulett*.

³²³ Riha 1990, p. 74; Deschler-Erb 1999, pp. 54-55, Taf. 27/539-551.

³²⁴ Plinius *Hist.nat.* XXVIII, 28, 39.

³²⁵ Johns 1982, p. 64; Jashemski 1977, pp. 218-220, Fig. 3.

³²⁶ Varro, VII, 97; Johns 1982, p. 63.

the Christian morality. Phallic pendants of a wide morphological variety were unearthed in many provinces of the Empire. Simple phallic pendants at Apulum have good parallels in *Dacia* at Porolissum³²⁷ and Romula³²⁸. Another simple phallic pendant of broken suspension ring which got into the Brukenthal Museum in Sibiu collections at the same time with some other items bought into the XIXth century by the cultural society “Siebenbürgischer Verein für Naturwissenschaften zu Hermanstadt” also originates from *Apulum*³²⁹. Yet, one can specify that similar amulets are not to be found in funerary context as concerns *Dacia* province, until present-day. Similar examples are known from other provinces of the Empire at Oberstimm³³⁰, Saalburg³³¹, Zugmantel³³², Stockstadt³³³, Augst and Kaiseraugst³³⁴, Camulodunum³³⁵, Hedderheim³³⁶ and Olympia³³⁷. Another bronze example comes from *Ulpia Noviomagus Batavorum*³³⁸. From *Britannia* are published other phallic pendants unearthed in South Shields³³⁹, Verulamium³⁴⁰, Colchester³⁴¹ and Aldborough³⁴². Another parallel is known at *Novaesium*³⁴³. From *Hispania* province are known some examples at Ocaña – Toledo³⁴⁴, El Quinto – Seseña, Toledo³⁴⁵. Phallic pendants are also mentioned at Blicquy and Wichelen³⁴⁶, Mandeure³⁴⁷, Besançon³⁴⁸, Trier³⁴⁹, Neuss³⁵⁰ and Köln³⁵¹. Three similar pendants come from Nijmegen³⁵². Other simple phallic pendants were also unearthed at

³²⁷ Gudea 1989, p. 670, Pl. CCXIX/5-6.

³²⁸ Amon 2004, p. 128, Rep. B XXI, 23, Pl. XXX/7.

³²⁹ Rodean 2002, pp. 259-260, Fig. 1; Schneider, Stamp 1980, p. 37.

³³⁰ Schönberger 1977, p. 174, Taf. 22/170.

³³¹ Jacobi 1897, Taf. 67/12; Oldenstein 1976, Taf. 42/403.

³³² *ORL B*, 8, Taf. 10/43, 45.

³³³ *ORL B*, 33, Taf. 8/21.

³³⁴ Riha 1990, p. 74, p. 149, Cat. nos. 720-721, Taf. 31/720-721.

³³⁵ *Arch. Journal* 115, 1958, p. 81, Abb. 5/84.

³³⁶ Kropatschek, 1909, 25, Abb. 10.

³³⁷ von Völling 1996, p. 439, Abb. 2/3-4.

³³⁸ van Enckevort, Thijssen 2001/2, Fig. 7, down, right.

³³⁹ Allason-Jones, Miket 1984, p. 186, Cat. no. 3.586-3.587.

³⁴⁰ Waugh, Goodburn 1972, Fig. 33/47.

³⁴¹ Webster 1958, p. 78, Fig. 5/84.

³⁴² Bishop 1996, p. 8, Cat. no. 12, Fig. 4/12.

³⁴³ *BJ CXII*, 1904, Taf. XXIV/49-50.

³⁴⁴ Zarzalejos Prieto *et alii* 1988, Fig. 2/12.

³⁴⁵ *Ibidem*, Fig. 1/3-7.

³⁴⁶ Faider-Feytmans 1979, p. 160, fig. 117/313, 311.

³⁴⁷ Lebel 1982, p. 30, fig. 35/37-38.

³⁴⁸ Lebel 1959, no. 150.

³⁴⁹ Menzel 1986, p. 86, fig. 39/209.

³⁵⁰ *Ibidem*, p. 155, fig. 136/418.

³⁵¹ *Ibidem*, p. 159, fig. 139/439.

³⁵² Zadocks 1973, pp. 58-60, nos. 97, 100-101.

Siscia³⁵³ and into the frontier fort at Burgenae³⁵⁴. A phallic pendant made of black glass, unearthed in the area of the Southern necropolis at Apulum on Dealul Furcilor – Podei (Viilor street, no. 64) in the year 2008 is also to be mentioned³⁵⁵.

Chronology

The bronze pendant unearthed in a building at Colonia Aurelia Apulensis is dated to the 3rd century AD³⁵⁶. The example at Verulamium is dated around AD 130-150, while the one at Colchester to the 1st century AD. The pendants at Neuss and Köln are dated beginning with the first half of the 2nd century until the 4th century AD. The pendants at Augst and Kaiseraugst, together with the complexes they originate from, are dated to the second half of the 1st century AD³⁵⁷, respectively, to the first half of the 2nd century AD³⁵⁸. The items from Olympia are dated to the 2nd century AD³⁵⁹.

6. Enamelled studs

6.a. Enamelled round studs (Pl. XIII/1a-b, 2)

The first item originates from the Roman layer under the Mediaeval layers dated to the 18th century and the grave pits from the 16th – 18th centuries in the proximity of the legionary camp (south-eastern area), where Bronze Age remnants also stand out³⁶⁰. Smaller round enamelled studs (1.0 – 3.0 cm) which ornamented both military equipment and harness gear³⁶¹ are frequently found items, especially in *Dacia Superior* at Porolissum³⁶², Buciumi³⁶³, Ilişua³⁶⁴ or Ulpia Traiana Sarmizegetusa³⁶⁵. On the other hand, examples of larger than 3.0 cm diameter are exceptional, being recorded only at Ilişua³⁶⁶. In other provinces of the Empire,

³⁵³ Radman-Livaja 2004, Pl. 45/306-310.

³⁵⁴ Idem 2008, p. 298, Nos. 40-47.

³⁵⁵ Catalogue 2011, p. 69, Cat.no. 82; Inv.no. R10630.

³⁵⁶ Timofan 2005, p. 206.

³⁵⁷ Riha 1990, Tabelle 88-89, Cat.no. 721 – Region 7C.

³⁵⁸ *Ibidem*, Cat.no. 720 – Insula 50.

³⁵⁹ von Völling 1996, p. 439.

³⁶⁰ Ciugudean 1988, p. 16, Fig. 1.

³⁶¹ Oldenstein 1976, p. 171-173; Zwart 1998, p. 77-84; Benea *et alii* 2006, p. 66-67.

³⁶² Gudea, Tamba 1992, Pl. I/1, 3-10, 12-16; II/1-16; III/1-12; Benea *et alii* 2006, p. 68-75, Pl. VIII/1, 3-10, 12-32; IX/1-16, 18-28; X/1-7, 9-12, 14-5, 17-27; XI/1, 3-10, 13.

³⁶³ Chirilă, Gudea 1973, p. 121; Benea *et alii* 2006, p. 68, p. 70, Pl. VIII/2, 11.

³⁶⁴ Gaiu 2007, p. 183, Cat.nos. 63-64, 68-90, 92, 97-98, Fig. 4/63, 67-88; Pl. X/63-4; XI/68-78; XII/79-90; XIII/92, 97-98; Protase *et alii* 1997, Pl. LXXVIII/3-4.

³⁶⁵ Alicu *et alii* 1994, p. 103, Cat.no. 660, Pl. 30/660.

³⁶⁶ Gaiu 2007, p. 204, p. 210-211, Fig. 4/65, 66, 91; Pl. X/65, 66, 91.

larger enamelled round studs were unearthed at South Shields ³⁶⁷, Lydney³⁶⁸, Chesters³⁶⁹, Caerleon³⁷⁰, Newstead³⁷¹ and Saalburg³⁷². As regards the larger enamelled studs, M. Schleiermacher asserts that they cannot be for certain attributed to the equine harness as far as they are not provided with two shanks as usually, but only one³⁷³. From our point of view, this argument is not reasonable, rather speaking about the diameter and the thickness eventually too large for the breadth of the harness themselves.

Chronology.

In *Dacia*, this type of items is dated from the second half of the 2nd century to the first half of the 3rd century AD³⁷⁴. The example at Lydney is dated to the early 2nd century AD³⁷⁵.

6.b. Enamelled almond-shaped mount (Pl. XIII/4)

The almond-shaped buttons or mounts frequently appear in the forts where were stationing cavalry troops, the reason for which they are considered accessories for equine harness³⁷⁶. Interpreted as a stylized representation of a *vulva*³⁷⁷, the almond core motif has an apotropaic role of protecting both the horse and the rider at the same time³⁷⁸. On the Dacian territory, this type of pieces seems to cluster on the northern limes of *Dacia Porolissensis*, where numerous examples were unearthed at Ilișua³⁷⁹, Porolissum³⁸⁰, Porolissum – Roman custom

³⁶⁷ Allason-Jones, Miket 1984, p. 92-93, Cat. nos. 3.4, 5.

³⁶⁸ Wheeler, Wheeler 1932, Fig. 20, no. 94.

³⁶⁹ Budge 1903, p. 377, no. 842, p. 381, no. 1117.

³⁷⁰ Evans, Metcalf 1992, p.134, Cat. no. 135; p. 135, Cat. no. 138.

³⁷¹ Curle 1911, p. 331-332, Pl. LXXXIX/Figs. 4, 9, 10, 15, 16, 17, 19, 21, 24.

³⁷² Jacobi 1897, Taf. LXVIII, nos. 11, 14; Schleiermacher 2000, p. 190, P333, Taf. 9/1; Without No., Taf. 9/2.

³⁷³ Schleiermacher 2000, p. 171.

³⁷⁴ Benea *et alii* 2006, p. 67.

³⁷⁵ apud Allason-Jones, Miket 1984, p. 92.

³⁷⁶ Gaiu 2007, p. 182; Benea *et alii* 2006, p. 114.

³⁷⁷ Oldenstein 1976, pp. 139-140; Raddatz 1957/1958, pp. 149-150.

³⁷⁸ Gaiu 2007, p. 182; Benea *et alii* 2006, p. 113,

³⁷⁹ Gaiu 2007, p. 183, Cat. no. 1-51, Fig. 1/1-40; 2/41, 45-51; Pl. I/1-9, II/10-18, III/19-26, IV/27-31, V/32-40, VI/41-46, VII/47-51; Benea *et alii* 2006, 117, Pl. XIX/13-15; Nemeti 2001, p. 98, Cat. nos. 22-25, Pl. II/11-13.

³⁸⁰ Gudea 1989, p. 648, Pl. CCVIII/31-40; Benea *et alii* 2006, 115-7, Pl. XVI/14-19, 21-22.

house³⁸¹, Buciumi³⁸², Gherla³⁸³ and Gilău³⁸⁴. Almond-shaped mounts made of bronze but not enamelled are known in other provinces of the Empire at Weissenburg³⁸⁵, two additional items being published from Morocco, at Banasa³⁸⁶. Oldenstein mentions similar mounts into the auxiliary forts where stationed cavalry troops, such as those at: Weissenburg – *Ala Hispanorum Auriana*, Cannstadt – *Ala I Scubulorum* or Pforing – *Ala I Singularorum*³⁸⁷. An enamelled mount with trefoil terminals originates at Aldborough³⁸⁸. From Pannonia is published an almond-shaped mount of unknown provenance³⁸⁹, the author mentioning two other similar examples unearthed at Brigetio³⁹⁰, as well as an item at Weissenburg, stored into the museum at Carnuntum³⁹¹, which can probably be the mount referred in Oldenstein's comments.

Chronology.

Not enamelled artefacts from the Rhenan limes are chronologically placed into the 3rd century AD³⁹². As concerns the items in *Dacia*, the group unearthed into the workshop at Ilișua which was functioning into the second third of the 2nd century AD, at least, there was assumed the hypothesis that they were manufactured from the second half of the 2nd century AD already³⁹³. The analysis of the enamelled artefacts from *Dacia* leads to the conclusion that their dating can be done in a larger interval comprised between the second half of the 2nd century and the first half of the 3rd century AD, in a time of important fashion and spreading of the enamelled products all over the Empire³⁹⁴.

³⁸¹ Gudea 1996, p. 266, Pl. LXXX/5.

³⁸² Gudea, Tamba 1992, p. 317-318, Pl. X/7; Benea *et alii* 2006, p. 116, Pl. XVI/20.

³⁸³ Găzdac 1995, Fig. 12/121.

³⁸⁴ Diaconescu, Oprean 1987, p. 66, Fig. 6/56-57.

³⁸⁵ Oldenstein 1976, p. 141, footnotes 467-470, Taf. 35/287.

³⁸⁶ Boube-Piccot 1980, p. 264, nos. 436, 440.

³⁸⁷ Oldenstein 1976, p. 140, footnote 465; Raddatz 1957/1958, pp. 149-150.

³⁸⁸ Bishop 1996, p. 74, Fig. 39/456.

³⁸⁹ Sellye 1939, p. 68, Pl. VII/12.

³⁹⁰ *Ibidem*, p. 68, Inv. nos. 384, 75/1890, 19.

³⁹¹ *Ibidem*, p. 68, footnote 164; *ORL* 72, Pl. 6/22; Jacobi 1897, Pl. 52/19, 21-3, Pl. 53/4-6.

³⁹² Oldenstein 1976, pp. 141-142.

³⁹³ Gaiu 2007, p. 183.

³⁹⁴ Benea *et alii* 2006, p. 164.

7. Pelta-shaped mounts – Inv. no. 9298 (Pl. XII/8); Inv. no. R.10056 (Not illustrated)

The peltate fittings have recently been attributed to horse equipment, with a somewhat higher degree of certainty. This type of accessories occurs in the Roman archaeological context through a longer period – from the 1st to the 4th centuries³⁹⁵, which is not surprising considering the popularity of this motif in the Roman world³⁹⁶. Their ornamentation varies during the centuries: exemplars with concentric circles are dated from the second half of the 1st century AD, until the middle of the 2nd century AD³⁹⁷. Pelta-shaped type mounts with crescent openwork decorations was found in Siscia³⁹⁸, Augusta Raurica³⁹⁹, Olympia⁴⁰⁰, an unknown location in Bulgaria of nowadays⁴⁰¹ and Burgenae⁴⁰² - pieces which represent identical parallels for the mount at Apulum (Pl. XII/8). Several smaller or larger peltiform studs or mounts were unearthed in different provinces of the Empire. The second item at Apulum (Inv.no.R.10056) has parallels at Burgenae⁴⁰³, Zugmantel, Saalburg and Feldberg⁴⁰⁴.

Chronology

As mentioned above, the dating of such type of items is very large, from the 1st to the 4th centuries AD. The larger flat specimens are dated earlier – from the second half of the 1st century AD to the mid 2nd century AD⁴⁰⁵.

8. Amphora-shaped strap-end – Inv. no. 3630 (Pl. XIV/1)

Amphora-shaped strap-ends from Late Roman *cingula* were catalogued into more categories: those under discussion, with subvariants⁴⁰⁶; lanceolate strap-ends; circular strap-ends; rectangular strap-ends⁴⁰⁷. Many artefacts are decorated

³⁹⁵ Oldenstein 1976, pp. 178-185; Deschler-Erb 1999, pp. 68-70; Gschwind 1998, pp. 120-122.

³⁹⁶ Radman-Livaja 2004, p. 109.

³⁹⁷ Koscevic 1991, p. 74; Deschler-Erb 1999, p. 70, Taf. 43/822-828; Aurrecoechea Fernandez 2007, pp. 321-344, Fig. 3/10.

³⁹⁸ Radman-Livaja 2004, Pl. 64/463, 465.

³⁹⁹ Deschler-Erb 1999, Taf. 43/832-835.

⁴⁰⁰ Von Volling, pp. 440-441, Abb. 3/1-4.

⁴⁰¹ Gencheva 2009, Fig. 6/5.

⁴⁰² Radman-Livaja 2006, p. 1501, Fig. 2/15.

⁴⁰³ *Ibidem*, Fig. 2/18.

⁴⁰⁴ Schleiermacher 2000, Taf/7/25.

⁴⁰⁵ Oldenstein 1976, pp. 181-182, Cat. nos. 641-642; Unz 1971, p. 50, Cat. no. 54; Deschler-Erb 1999, pp. 68-70, Cat. nos. 822-835; Rabeisen 1990, pp. 84, 88.

⁴⁰⁶ Simpson 1976, pp. 73-78.

⁴⁰⁷ Bohme 1974, pp. 73-78.

in the "Kerbschnitt" technique, others by stamping. In the Western provinces, this type of simple or decorated strap-ends were unearthed at Aquilea⁴⁰⁸, Ságvár⁴⁰⁹, South Shields⁴¹⁰, Winchester⁴¹¹ or the *canabae* in Singidunum⁴¹² and in Bulgaria⁴¹³. Two other Amphora-shaped strap-ends were recovered in Slovenia at Ptui and Cepna⁴¹⁴.

Five Amphora-shaped strap-ends from Late Roman military belts are known in *Dacia Superior* and *Inferior*. Two strap-ends of this type are known from *Dacia Superior*:

The first one is from the old collections of the Alba Iulia National Museum (Inv. no. 3622). In his survey of the cultural history of Transylvania from the end of Antiquity to the migration period, the author is questioning the actual origin of the specimen – given their scarcity in the province – mentioning it as coming from Homorod (Braşov county) or Joseni (Harghita county)⁴¹⁵. This misunderstanding comes from the toponymy since, in Romania, there are traditionally numerous communes and villages with the same name across different counties in the country. A locality named Homorod does really exist in Braşov county, and another one named Joseni is indeed located in Harghita county. As concerns the strap-end in question, the truth is that we are talking about totally distinct villages located in our neighbouring Hunedoara county: Homorod – in the proximity of the fort of Cigmău and *Germisara* baths, and the second one, called Josa(e)ni, situated in a triangulation with *Germisara* and *Aque* (present-day Călan town). These two villages are, in fact, those where the priest Sabin Paul Olea (1907-1984) collected and bought a lot of objects constituting his large and diverse collection (more than 2000 objects)⁴¹⁶. In 1967, the Museum at Alba Iulia acquired Olea's entire collection, a part of it belonging to the Roman period. In the first study⁴¹⁷ dedicated to Roman bronze Military Equipment and Harness in the collections of Alba Iulia museum, I mentioned the private Olea Collection and the provenance of the artefacts, the links between them and *Apulum* on the ancient Roman road and possibly *prata legionis* etc. This peculiarity is also reiterated at the beginning of this second part of the study, so I hope that the problem of the

⁴⁰⁸ Bishop, Coulston 1993, Fig. 126/7.

⁴⁰⁹ *Ibidem*, Fig. 126/9.

⁴¹⁰ Alason-Johnes, Miket 1984, p. 192, Cat. no. 3.611, fig. on pp. 191/611.

⁴¹¹ *Ibidem*, Fig. 126/8, 12.

⁴¹² Vujovic 2013, Pl. II/10.

⁴¹³ Traykova 2017, pp. 504, Pl. 141-146.

⁴¹⁴ Sagadin 1979, p. 324, Cat. no. 164, T.10/4; Cat. no. 166, T. 10/6.

⁴¹⁵ Opreanu 2003, pp. 144-145; besides, under the Inv. no. 3622 figures another item – a cross-shaped harness mount – analysed in this actual study (see Cat. no. 71).

⁴¹⁶ For more information about Olea collection see: Popa 1961; Moga, Mărza 1990-1993; Olea, Dumitran 2001; Băruţă *et alii* 2002.

⁴¹⁷ Ciugudean 2017, pp. 343-344.

origin of the Amphora-shaped strap end is settled, the mystery about it was solved and inadvertencies will no longer be perpetuated in the future.

1. The Amphora-shaped strap-end from Apulum/ Homorod-Joseni was first published by R. Florescu⁴¹⁸ and then discussed in other larger studies⁴¹⁹. It is 5.5 cm long, with obvious damage to the upper side: one of the handles is partially broken, while the second one is totally missing. The superior attachment part is also broken, but half of it is bifurcated and measures 0.8 cm. The opposing terminal ends in a knob. Whereas the first publisher mentions it as an "element of a hinge" – Al. Diaconescu classifies it rather as a hinged variant⁴²⁰. This is risky to assume since the upper side is compromised/corroded, and there are no marks of the rivets or their holes at all, not to mention loops or a hinge.

2. The second specimen is registered in the collections of The National Museum of History in Cluj-Napoca (Inv. V 809) and was recovered from Micia⁴²¹. This item is complete and longer than the previous one (6.8 cm in length) and is decorated with a median circle-and-dot motif by stamping. The profile of the *ansae* placed it in Keller's form "A"⁴²². The upper V-shaped side preserves two rivets for attachment to the narrow and long terminal of the belt.

In Southern (*Inferior*) Dacia, three other Amphora-shaped strap-ends were unearthed:

3. A strap-end⁴²³ comes from Celei – *Sucidava* Roman-Byzantine fort set up on an ancient Dacian fortification – which was initially transformed by Gallienus or Aurelianus into a necropolis – and restored by Constantine the Great afterwards. After the retreat and the abandonment of Dacia (271 AD) in the 4th century AD, Legio *I Italica* sent troops from Novae and Almus⁴²⁴, two *cohors* of the *V Macedonica* and fractions from Oescus, Varinia and Utus stationed here until the middle of the 4th century AD to Sucidava⁴²⁵. Sucidava was also the seat of *praefectus Legionis quintae Macedonica* in the 4th century AD⁴²⁶, and *auxilia* – one of each *cuneus equitum Dalmatorum* from Varinia, *Constantinorum* from Utus and *Stablesianorum* from Almus, another *cohors* and a *numerus*⁴²⁷. Stamps

⁴¹⁸ Florescu 1980, no. 108.

⁴¹⁹ Opreanu 2003, pp. 144-145, Fig. 30/3; 2001, p. 470, Abb. 5/3; Diaconescu 1996, pp. 98-99 (probably inv. no. 3630), Fig. 11/4.

⁴²⁰ Diaconescu 1996, p. 99.

⁴²¹ Opreanu 2001, p. 470, Abb. 5/2; 2003, p. 145, Fig. 30/2; Diaconescu 1996, p. 98, Fig. 11/3.

⁴²² Keller 1971, p. 45.

⁴²³ Petolescu, Onea 1973, p. 126, Fig. 5/4; Amon 2004, p. 218, 4, Pl. XXIX/9.

⁴²⁴ IDR II, 204; IGLR, 294.

⁴²⁵ IGRL 284, 286, 289, 289A, 293.

⁴²⁶ *Not.Dign.Or.*, XXII, 39; Tudor 1978, p. 206; Toropu, Tătulea 1982, p.100.

⁴²⁷ Tudor 1973, p. 158; idem 1978, pp. 100-101; Toropu, Tătulea 1982, pp. 103-105; Petolescu 1971, 109; Toropu 1976, pp. 19-20.

of *Legio VII Claudia* and *XIII Gemina* were also recovered in this fort, dating to the end of 3rd–beginning of the 4th century AD⁴²⁸.

The bronze Amphora-shaped strap-end from Celei is complete and is 5.0 cm long, its handles outline two pierced crescents, and a rivet hole could be noticed in the upper part.

4. The second bronze specimen comes from the stone fortification at Bistreț (Dolj county), it is also complete and has 5.9 x 2.5 cm. The area above the *ansae* describing two crescents is shorter than on the item at Celei, and has two fragmentary hinge loops⁴²⁹ – possibly making it articulated and thus belonging to the hinged variant.

5. The third bronze Amphora-shaped strap-end from *Dacia Inferior* was unearthed into the fort at Răcari during the old excavations carried out by Gr. Tocilescu and P. Polonic between the years 1897-1898⁴³⁰. The item is 7.8 cm long and has two holes for the rivets to the upper bifurcated part.

Chronology.

The Amphora-shaped strap-ends were generally dated by association with crossbow brooches and coins – to the end of the 4th century AD⁴³¹. The exemplars in *Dacia* were dated between the years 340-380 AD⁴³², or even a little bit later, around the year 400 AD, given that they were discovered a long distance from the Pannonian limes – where they belonged, and probably reached Transylvania with individuals or different groups of barbarian population linked to the Roman garrisons or who had served in the Late Roman army as militaries⁴³³.

9. "Propeller" sword belt mount (Pl. XIV/2)

The 4th century AD "propeller" belt stiffeners first appear decorating a woman's belt on a 2nd century gravestone from Intercisa⁴³⁴ – suggesting a Danubian origin, and are seen later in military use on the Arch of Constantine and on the Piazza Armerina mosaic⁴³⁵.

⁴²⁸ IGRL 288, 257.

⁴²⁹ Vlădescu, Zahariade 1984-1986, p. 31, Fig. 2; Stoica 1997, p. 60; Amon 2004, p. 214, Pl. XXIX/8.

⁴³⁰ Vlădescu 1974-1975, p. 43, fig. 21/1; Bondoc, Gudea 2009, p. 211, cat. no. 521, Pl. XCVI/521.

⁴³¹ Simpson 1976, p. 208.

⁴³² Diaconescu 1999, p. 99.

⁴³³ Opreanu 2003, p. 145, 147; idem 2001, p. 471; for Amphora-shaped strap-ends in Pannonia see Lányi 1972 and 1981.

⁴³⁴ Bullinger 1969, Pl. LXVII/1, LXIX.

⁴³⁵ Bishop, Coulston 1993, p. 173; Sommer 1984, Pl. 29, 32-5, 40, 42, 54; Carandini *et alii* 1982, Fig. 118.

This type of stiffeners were found across the Roman Empire from Western to Eastern provinces and North Africa.

In *Dacia*, propeller stiffeners were recovered from a grave at *Carsium* (Hârșova) not yet integrally published. The rich grave belongs probably to a Roman officer. It consists of a gold brooch of Keller type 2 (L = 10.2 cm), a silver belt set of four propeller stiffeners (propellförmige Beschläge), a circular with floral openwork with two *ansae* strap end, few buckles, a sword handle which bears the inscription *Vale/riane/vivas*⁴³⁶.

In the collections of The National History Museum in Cluj-Napoca figures another propeller stiffener in bronze –acquired from Saschiz⁴³⁷ near Sighișoara (Mureș county), which is 4.3 cm long (Inv.no. I 9300). It exhibits two rivets on the reverse and pointed incisions and circle-and-dot central incised motif on the obverse⁴³⁸. Unfortunately, until nowadays, it is not yet known or mentioned any Roman military grave in the 4th century AD at Saschiz.

From *Dacia Inferior* comes a propeller-stiffener found at Celei⁴³⁹ decorated with a "circle-and-dot" motif on the rounded central area.

"Propeller" stiffeners occur as funerary deposition in graves as long as in cemeteries outside forts – such as Intercisa and Oudenburg, and near towns – like Winchester and Ságvár – where soldiers were commonly buried with their clothes, military belts, brooches, knives etc. This type of mount decorated broad waist belts, being disposed vertically on sets up to ten specimens or alternating with circular plates as at Pécs (*Sopianae*)⁴⁴⁰ - associated with coins, from which the last ones from Constantius issued in 341-346 AD - and Köln⁴⁴¹. These items were spaced along the belt to keep the side belt from bending under the weight of the sword. Parallels can also be found at Richborough⁴⁴², Neuss⁴⁴³ and on the territory of Bulgaria⁴⁴⁴. From *Hispania* are known few items of "non-Hispanic" stamped propeller-shaped stiffeners at Hornillos, Pamplona and Castro Ventosa – Cacabelos, Bierzo⁴⁴⁵. Three such stiffeners were found in a grave with a complete belt set in Hornillo del Camino⁴⁴⁶. As far as the area of distribution of these types of fittings consists of the central eastern part of Gaul, The Upper Rhine and Mosel,

⁴³⁶ Păunescu 1994, pp. 220-225, nos. 89, 91, 94; Petculescu 1991, p. 211.

⁴³⁷ The item comes from the Resch collection in Brașov.

⁴³⁸ Diaconescu 1996, p. 98, Fig. 11/2.

⁴³⁹ Tudor 1945-1947; Amon 2004, p. 154, Rep.B VI, 40, Pl. XXXVIII/10.

⁴⁴⁰ Füllep 1977, p. 40, no. 41, Pl. 30, 32.

⁴⁴¹ Füllep 1984, Pl. XXXI/1; Bullinger 1969, Pl. XXVII/1; XXIX/2.

⁴⁴² Bishop, Coulston 1993, Fig. 125/13.

⁴⁴³ *Ibidem*, Fig. 125/7.

⁴⁴⁴ Traykova 2017, p. 474, Pl. 11-115.

⁴⁴⁵ Aurrecoechea Fernández 1999, pp. 57-58, and footnotes nos. 97-98.

⁴⁴⁶ *Ibidem*, Fig. 5/1-3.

the occasional discovery of them in Britannia, North of Gaul, Pannonia and Dalmatia is connected with the dispatch of troops from the Upper Rhine zone⁴⁴⁷. Examples of "propeller" belt sets with confronting dolphin buckles and terminal in the form of an Amphora-shaped strap-end are well known from Zenkövarkony⁴⁴⁸, Champdolent, Tamuda and Zilil⁴⁴⁹. These archaeological evidences allowed scholars to realise very useful essays of reconstruction of the Dominate belts⁴⁵⁰.

Chronology.

By analysing this type of artefacts, Al. Diaconescu stated that the earliest attestation on Constantine's Arch in Rome dates back to 315 AD, the year of its inauguration. The propeller stiffeners ornamented, in this case, the belt of the Emperor⁴⁵¹ himself. There follow the graves at *Carsium* and at Kestzhely-Dobogo⁴⁵² – the last one including coins issued by Constantine and Crispus (320-321 AD) – associated in addition with brooches of Keller type 2. The scholar mentions then the propeller belt from the grave R/212 at Pécs-*Sopianae* with coins from Constantius II (341-346 AD). Finally, the last dated grave comes from Intercisa with coins issued by Valens (364-368 AD). By consequence, the scholar concluded that propeller belts are to be approximately dated between years 310/320 AD and 375-380 AD, being associated besides with brooches of Keller types 2 and 4⁴⁵³.

Both sculptural evidence and artefactual record led to the conclusion that these *cingula* were worn - like *ornamenta dignitatis* – by the Emperor as well as by high rank officers, high civil employees, or *curiales* – the case of the belt exhibited on the mural painting in the burial from Durostorum⁴⁵⁴ - and by militaries.

"Propeller" stiffeners belts are dating thus from the 4th century AD, but they continued to be in use into the early 5th century AD, increasing their length up to 10.5 cm to accommodate broader belt fashions⁴⁵⁵.

⁴⁴⁷ Sommer 1984, p. 103; Böhme 1986, fig. 24, p. 501.

⁴⁴⁸ Bishop, Coulston 1993, Fig. 125/1-6.

⁴⁴⁹ Boube-Piccot 1994, p. 15, Cat. nos. 191, 197-200.

⁴⁵⁰ Bishop, Coulston 1993, Fig. 130/1; Boube-Piccot 1994, Pl. N/1-2.

⁴⁵¹ Keller 1971, Liste 12, pp. 219-220.

⁴⁵² Böhme 1986, p. 38, Abb. 13.

⁴⁵³ Diaconescu 1996, p. 98.

⁴⁵⁴ Frova 1943.

⁴⁵⁵ Bishop, Coulston 1993, p. 174, and footnote 53; Boube-Piccot 1994, pp. 14-15.

10. Junction loop from the yoke or bridle/tie-ring (Pl. XII/9, 10).

This type of fittings are usually circular but may also be U-shaped or square and are guiding the lines and preventing them from becoming tangled or snagged on the harness.

I did not find an identical parallel for the fragmentary item at Apulum (**Inv. no. 3577 - Pl. XII/10**), but there are numerous similar pieces with a circular ring to the upper side. These joints belong to the upper structural part of the wooden yoke and leather was pulled through them. They were placed on the carved part of the yoke above the horse's neck. The terret or rein guide? (**Inv. no. 8658 – Pl. XII/9**) has good parallels discovered into the forts from Romita - *Certiae*⁴⁵⁶ in *Dacia*, South Shields⁴⁵⁷ and Zugmantel⁴⁵⁸.

A bridle link unearthed at Ulpia Traiana Sarmizegetusa⁴⁵⁹, in *Dacia*, looks like the complete item regardless of the junction loop at Apulum. It is composed of two tie-rings – one rectangular and the second one, circular, linked by a rod to a disc-shaped median part. A similar but fragmentary item is known from Copăceni – where it is interpreted as a key⁴⁶⁰.

Many fittings came from graves at Sómódor, Zsámбек, Inota and Nagytétény⁴⁶¹, as well as from Várder Valey⁴⁶², the fortresses of Zugmantel, Saalburg and Feldberg⁴⁶³ and from Moesia⁴⁶⁴.

11. Hinged harness pendant - Inv. no. 10060 (Not illustrated).

The hinged pendants in the form of a heart with a phallic terminal are known in the literature as *hertzförmigen Phallusanhänger*⁴⁶⁵. The most similar items to the one at Apulum were unearthed at Dura Europos⁴⁶⁶ and Zugmantel⁴⁶⁷, together with three other pendants without button-and-loop fasteners⁴⁶⁸ from the same kastell and a specimen from Cannstadt⁴⁶⁹. One can mention at the same time

⁴⁵⁶ Matei, Bajusz 1997, Taf. LXXX/5.

⁴⁵⁷ Allason-Jones, Miket 1984, pp. 187-188, Cat. no. 3.591.

⁴⁵⁸ Oldenstein 1976, pp. 202-203, Taf. 68/885; ORL 8, Taf. X, no. 59.

⁴⁵⁹ Alicu *et alii* 1994, p. 107, Cat. no. 701, Pl. 35/701; Dawson 1990, p. 7, Cat. no.3, Fig. 3/3.

⁴⁶⁰ Tudor 1982, Fig. 2/10.

⁴⁶¹ Palagy, Nagy 2002, T. XXI.

⁴⁶² Schleiermacher 2000, Taf. 4.

⁴⁶³ Schleiermacher 1996, Cat. nos. 91-92, Abb. 78; 2000, Taf. 4/7, 10.

⁴⁶⁴ Ratković 2008, p. 799, Cat. no. 17/Fig. 17.

⁴⁶⁵ Oldenstein 1976, pp. 137-139.

⁴⁶⁶ Bishop, Coulston 1993, Fig. 112/12.

⁴⁶⁷ ORL 8, Taf. XII, nos. 52, 61; Oldenstein 1976, p. 137, Taf. 34/262-263; Bishop, Coulston 1993, Fig. 112/16; Schleiermacher 2000, Taf. 6/7-14.

⁴⁶⁸ Oldenstein 1976, Taf. 44/264-266; Schleiermacher 2000.

⁴⁶⁹ Oldenstein 1976, p. 137, Taf. 34/265.

that there are variants of this type of hinged pendants with hexagonal button-and-loop in the shape of a *vulva*, with prominent shanks on the reverse. Such button-and-loops, without pendants, came from Saalburg⁴⁷⁰ and Niederbieber⁴⁷¹.

In *Dacia*, a smaller similar pendant without button-and-loop was discovered at Drobeta⁴⁷² and others come from Porolissum⁴⁷³.

Mundane examples are amply attested at Mainz⁴⁷⁴, Novaesium⁴⁷⁵, Carnuntum⁴⁷⁶ and Lauriacum⁴⁷⁷. From *Britannia*, hinged heart-shaped with phallic end pendants are known at Cirencester⁴⁷⁸, Caerleon Amphitheatre⁴⁷⁹, Fremington Hagg⁴⁸⁰ and from the fort at South-Shields⁴⁸¹.

Chronology

The finds from the tumulus (grabhügel) from Celles-des-Warenes are dated to the first half of the 3rd century AD⁴⁸². The fastener mount from Niederbieber and the item at Lauriacum are earlier dated, around the years 180/190 AD⁴⁸³. Finally, the generic dating is from early to mid - 2nd century AD⁴⁸⁴.

12. Harness fittings with stylised *phallus* terminals – Inv. no. 3472 (Pl. X/6); Inv. no. 11019 (Pl. XII/7)

These small plates or pendants with stylised phallus representations and even the larger one discussed above constitute typical examples of items from the end of the 2nd and from the 3rd centuries AD. It seems that such pieces were used exclusively with horse harness and represent the best attested part of them⁴⁸⁵. The

⁴⁷⁰ *Ibidem*, Taf. 34/267; Jacobi 1897, Taf. LIII, no. 10; Bishop, Coulston 1993, Fig. 112/14.

⁴⁷¹ Oldenstein 1976, Taf. 34/268.

⁴⁷² Amon 2004, P. 128, 230, Rep. B, 11, Pl. XXX/5.

⁴⁷³ Gudea 1989, p. 668, Pl. 217/36-37.

⁴⁷⁴ Lindenschmidt 1870; Behrens 1917, Abb. 8/18; Oldenstein 1976, p. 137; Bishop 1992, Fig. 17/9.

⁴⁷⁵ Lehner 1904, Taf. 34/56; Oldenstein 1976, p. 137.

⁴⁷⁶ *RLO* 9, 1908, Abb. 8/10; Carnuntum Civilstadt 1958, Abb. 1/7; Oldenstein 1976, p. 137.

⁴⁷⁷ *RLO* 15, 1925, Abb. 65/3; Oldenstein 1976, p. 138.

⁴⁷⁸ Webster 1958, Fig. 3/31; Allason-Jones, Miket 1984, p. 200.

⁴⁷⁹ Arch. LXXVIII, 1928, Pl. XXXIII, nos. 7-8; Allason-Jones, Miket, p. 200.

⁴⁸⁰ Ders. 1971, Fig. 17/95; Oldenstein 1976, p. 138.

⁴⁸¹ Allason-Jones, Miket 1984, p. 200, Cat. no. 3.660, Fig. no. 660 on p. 201.

⁴⁸² Oldenstein 1976, p. 138 and note 457 with literature.

⁴⁸³ *Ibidem*, p. 139.

⁴⁸⁴ *Ibidem*.

⁴⁸⁵ Oldenstein 1976, pp. 137-139, Cat. nos. 260-262, 264-267; Palagy 1989, pp. 133-134; idem 1990, p. 18, 21, 23, Cat. nos. 1.1, 1.26, 2.8, 3.2; Koscević 1991, p. 45, Pl. 241; Bishop, Coulston 1993, p.

closest parallels for the plate/mount (Inv. no. 3472) are the specimens from the fort at Gilău⁴⁸⁶ in *Dacia*.

Chronology.

This type of fittings were dated to the first half of the 3rd century AD⁴⁸⁷. The equine items at Gilău are considered to be earlier, likewise the Dura Europos discoveries, dated post the year 165 AD⁴⁸⁸.

CATALOGUE

Abbreviations used in the catalogue

All the measurements of the items are in centimetres (cm).

L = Length

W = Width

Thk = Thickness

D = Diameter

H = Height

I. Ring belt buckles

1. Ring-shaped buckle (Pl. I/6)

Ring-shaped flat buckle of reddish copper alloy distorted by the fire, decorated with a central circular rib on both sides.

D = 6.3 cm.

Inv. no. Not registered.

Provenance: Apulum – Stația de Salvare – Northern necropolis. Part of the inventory of the cremation grave no. 19/trench XXXII.

References: Ciugudean, Ciugudean 2000; Ciugudean, Ciugudean 2000a, p. 341-2, Fig. 1/6; Ciugudean 2011, p. 100, Pl. I/6; Ciugudean 2017, Pl. IX/5.

2. Ring-shaped buckle (Pl. II/4)

Ring-shaped flat buckle decorated with a central circular rib on both sides.

157, Fig. 112/12, 14, 16; Gschwind 1998, pp. 120, 125-126, Abb. 7/1-6; Schleiermacher 2000, p. 180, 182; Buora 2001; James 2004, p. 99, Cat. nos. 357-360; Radman-Livaja 2004, Pl. 74/541.

⁴⁸⁶ Diaconescu, Opreanu 1986, p. 66, Cat. nos. 53-55, Fig. 6/ 53-55.

⁴⁸⁷ Oldenstein 1976, pp. 137-139.

⁴⁸⁸ Diaconescu, Opreanu 1986, p. 66; Oldenstein 1976, p. 139.

D = 6.1 cm.

Inv. no. Not registered.

Provenance: Apulum – Stația de Salvare – Northern necropolis. Part of the inventory of the flat inhumation grave no. 29/trench IX.

References: Ciugudean 2010, p. 449, Fig. 1/4; Ciugudean 2011, p. 100, Pl. II/6; Ciugudean 2017, Pl. X/4.

3. Ring-shaped buckle (Pl. III/1)

Fragment of a flat ring-shaped buckle of reddish copper alloy with a central rib on both sides.

D = 6.1 cm.

Inv. no. 3565.

Provenance: Apulum. Old collections. A. Cserni (?) excavations 1913.

References: Cserni 1913, p. 29; Ciugudean 2011, p. 101, Pl. III/1.

4. Ring-shaped buckle (Pl. III/2)

Fragment of a flat ring-shaped buckle of reddish copper alloy with a central rib on both sides.

D = 6.5 cm.

Inv. no. 9304.

Provenance: Apulum – Stația de Salvare – Northern necropolis. It could belong to the inventory of a destroyed grave and was found in the filling of a pit in the south-eastern part of the cemetery.

References: Ciugudean 2011, p. 101, Pl. III/2.

5. Ring-shaped buckle (Pl. III/3)

Ring-shaped flat buckle of reddish copper alloy decorated with a central groove on both sides.

D = 5.0 cm.

Inv. no. Not registered.

Provenance: Apulum – Stația de Salvare – Northern necropolis. The inventory of the burial grave no. 17/trench XVIII with rectangular pit.

References: Ciugudean 2011, p. 101, Pl. III/3.

6. Ring-shaped buckle (Pl. III/5)

Fragmentary ring-shaped flat buckle of copper alloy, with circular rib on both sides.

D = 6.3 cm.

Inv. no. Not registered.

Provenance: Apulum – Southern necropolis Dealul Furcilor – Monolit. Rescue excavations 2003, trench IV, Square 7, depth 0.8 m.

References: Ciugudean 2011, p. 101, Pl. III/4.

7. Ring-shaped buckle (Pl. III/4)

Bronze ring-shaped flat buckle of copper alloy ornated with a central circular rib on both sides.

D = 5.7 cm.

Inv. no. R.10150.

Provenance: Apulum – OMV oil station – Northern necropolis. An item from the inventory of the cremation (?) grave no.1/trench IX, together with a bronze stud, a bronze ring-shaped buckle with iron fragmentary hinged tongue, an iron pyramidal *pilum* head, and a coin from Marcia Otacilia Severa (244-249 AD). Excavations 2001.

References: Necropolele 2003, 94; Catalogue 2011, p. 114, Cat. no. 221; Ciugudean 2011, p. 101, Pl. III/5.

8. Ring-shaped buckle (Pl. IV/1)

Ring-shaped buckle of copper alloy of round section bar, preserving the iron remains from the hinged tongue.

D = 6.1 cm; D of the bar = 0.8 cm.

Inv. no. R10157.

Provenance: Apulum – OMV oil station – Northern necropolis. An item from the inventory of the cremation (?) grave no.1/trench IX, together with the previous buckle, a bronze stud, an iron pyramidal *pilum* head, and a coin from Marcia Otacilia Severa (244-249 AD). Excavations 2001.

References: Necropolele 2003, p. 31, Cat. no. 91.

9. Ring-shaped buckle (Pl. IV/2)

Ring-shaped buckle of copper alloy of round section bar with corroded traces of the iron hinged of the fastening tongue.

D = 6.0 cm; D of the bar = 0.8 cm.

Inv. no. 3446.

Provenance: Apulum. Old collections.

References: Catalogue 2011, p. 114, Cat. no. 220.

10. Ring-shaped buckle (Pl. IV/3)

Ring-shaped buckle of round section bar covered with light green patina. There are no remains of an iron tongue, but the bar looks distorted on both lateral sides, with obvious marks of wear, maybe from the fastening leather of the belt.

D = 5.9 cm; D of the bar = 0.9 cm.

Inv. no. R10814.

Provenance: Apulum – Southern necropolis – Dealul Furcilor Podei. Rescue excavations 2008. It is part of a belt assemblage consisting of a bronze fungiform stud (Inv. no. R10827), and two squared openwork bronze plates from the *cingulum* (Inv. nos. R10817, 10818).

References: Catalogue 2011, p. 114, Cat. no. 222.

11. Ring-shaped buckle (Pl. IV/4)

Ring-shaped buckle of copper alloy with central circular rib on both sides. Traces of silvering on the outer surface.

D = 7.1 cm.

Inv. no. R9489.

Provenance: Apulum – Northern necropolis – Stația de Salvare. Excavations 1984.

References: Catalogue 2011, p. 113, Cat. no. 219.

12. Fungiform stud (Pl. I/3)

Double yellow copper alloy stud, with hollow domed head and a small flat disc-headed shank terminal.

D head = 2.3 cm; H = 2.1 cm.

Inv. no. Not registered.

Provenance: Apulum – Northern necropolis – Stația de Salvare. Cremation grave no. 19/trench XXXII.

References: Ciugudean, Ciugudean 2000, p. 341, Fig. 1/1; idem 2000a, p. 206, Fig. 2/1.

13. Fungiform stud (Pl. I/1)

Double yellow copper alloy stud, with hollow domed head and a small flat disc-shaped shank terminal.

D head = 2.3 cm; H = 2.1 cm.

Inv. no. Not registered.

Provenance: Apulum – Northern necropolis – Stația de Salvare. Cremation grave no. 19/trench XXXII.

References: Ciugudean, Ciugudean 2000, p. 341, Fig. 1/3; 2000a, p. 206, Fig. 2/3.

14. Stud (Pl. I/2).

Double yellow copper alloy stud, with hollow domed head and flat disc-shaped shank terminal.

D head = 1.4 cm; H = 1.1 cm.

Inv. no. Not registered.

Provenance: Apulum – Northern necropolis – Stația de Salvare. Grave no. 1/trench XXXVIII.

References: Ciugudean, Ciugudean 2000, p. 341, Fig. 1/2; idem 2000a, p. 206, Fig. 2/2.

15. Fungiform stud (Pl. II/1)

Double copper alloy stud, with hollow domed head and flat disc-shaped shank terminal.

D head = 2.3 cm; H = 1.7 cm.

Inv. no. Not registered.

Provenance: Apulum – Northern necropolis – Stația de Salvare. Inhumation grave no. 29/trench IX.

References: Ciugudean, Ciugudean 2010, p. 449, Fig. 1/1.

16. Stud (Pl. II/2)

Double copper alloy stud, with buffer disc head and flat disc-shaped shank terminal.

D head = 1.8 cm; H = 1.7 cm.

Inv. no. Not registered.

Provenance: Apulum – Northern necropolis – Stația de Salvare. Inhumation grave no. 29/trench IX.

References: Ciugudean, Ciugudean 2010, p. 449, Fig. 1/3.

17. Fungiform stud (Pl. II/3)

Double copper alloy stud, with hollow domed head and disc-shaped shank terminal.

D head = 2.1 cm; H = 1.9 cm.

Inv. no. Not registered.

Provenance: Apulum – Northern necropolis – Stația de Salvare. Inhumation grave no. 29/trench IX.

References: Ciugudean, Ciugudean 2010, p. 449, Fig. 1/3.

18. Fungiform stud (Pl. VIII/12)

Double yellow copper alloy stud, with hollow domed head and flat disc-shaped shank terminal.

D head = 2.3 cm; H = 2.0 cm.

Inv. no. R9490.

Provenance: Apulum – Northern necropolis – Stația de Salvare. Excavations 1984.

References: Catalogue 2011, p. 115, Cat. no. 223.

19. Fungiform stud (Pl. VIII/13)

Double copper alloy stud, with hollow domed head and flat disc-shaped shank terminal.

D head = 2.9 cm; H = 2.4 cm.

Inv. no. R10827.

Provenance: Apulum – Southern necropolis – Dealul Furcilor – Podei. Excavations 2008. Inhumation grave no. 409: the stud was found together with two square-shaped openwork plates (Ciugudean 2017, p. 383, Cat. nos. 46-47) and a ring bar buckle (Catalogue 2011, p. 114, Cat. no. 222; Bolog 2017, Pl. 160, image 4).

References: Catalogue 2011, p. 115, Cat. no. 224; Bolog 2017, p. 73-74, Pl. 72/M. 409, Pl. 160, image 3.

20. Fungiform stud (Pl. VIII/14)

Fragmentary double copper alloy stud, with hollow domed head. The flat disc-shaped shank terminal is damaged by corrosion.

D head = 2.3 cm; H = 2.1 cm.

Inv. no. R10671.

Provenance: Apulum – Southern necropolis – Dealul Furcilor – Podei. Excavations 2008.

References: Catalogue 2011, p. 115, Cat. no. 225; Bolog 2017, Pl. 160, image 2.

21. Stud (Pl. VIII/15)

Double copper alloy stud, with hollow domed head and flat disc-shaped shank terminal.

D head = 2.5 cm; H = 1.4 cm.

Inv. no. R10151.

Provenance: Apulum – Northern necropolis – OMV oil station. Excavations 2001.

Item found together with a bronze ring buckle (Inv. no. R10150).

References: Catalogue 2011, p. 115, Cat. no. 226.

22. Ring buckle with ornamental extension (Pl. V/1)

The bronze buckle of convex section consists of a circular bow provided with a trapeziform extension ornated by two knobs to the base, two pelta-shaped /crescent openwork and six notches to the larger terminal. The pin is missing, but there is a remnant from the mobile hinge made of iron, perpendicularly consolidated on the bronze frame of the ring.

L = 7.9 cm; W = 6.0 cm; Thk = 0.3 cm.

Inv. no. R3607.

Provenance: Homorod-Joseni (Orăștie, Hunedoara County). Acquisition 1967.

Olea Collection.

References: Moga *et alii* 1997, p. 545, Cat. no. 93, Pl. XIII/93; Cociș 2004, p.

129-130, Cat. no. 1569, Pl. CXI/1569; Catalogue 2011, p. 119, Cat. no. 234.

23. Ring buckle with ornamental extension (Pl. V/2)

Bronze buckle with ring bow of triangular section. There is a rectangular extension ornated with two scrolls under the octagonal pierced end, which is crowned by a palmette. A part from the iron hinge of the pin is still preserved on the outer surface of the bow.

L = 6.9 cm; W = 5.0 cm; Thk = 0.4 cm.

Inv. no. Not registered.

Provenance: Apulum – Northern necropolis, Grave no. 17/trench XV; Cremation grave – to the *ustrinum* (oval pit 0.75 x 0.45 m, depth 0.50 m, N-S orientation).

The buckle was deposited along with pottery sherds.

References: Bounegru 2017, pp. 61-62, 109, Pl. XLIII/7.

24. Zoomorphic belt-buckle – Inv.no. 3625 (Pl. VII/1)

Oval belt-buckle of cast bronze with hemispherical section. It is adorned with confronting dolphins holding a pellet between their jaws. The pin and the buckle plate are missing.

L = 3.9 cm; W = 1.7 cm; Thk = 0.3 cm.

Inv. no. 3625.

Provenance: Homorod-Joseni (Orăștie, Hunedoara County). Acquisition 1967. Olea Collection.

References: Unpublished.

25. Buckle (Pl. VII/2)

Bronze buckle, cast in one-piece mould; the back is flat. The hoop is ovoid, with the ends curved back in the form of scrolls to either side of the tongue. The tongue itself is of iron. There is a rectangular extension behind the hoop which serves as the means of attaching the buckle to the belt plate.

L = 3.4 cm; W = 3.3 cm; Thk = 0.3 cm.

Inv. no. 3610.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

26. Buckle (Not illustrated)

Bronze buckle of flat back, cast in one-piece mould. The hoop is ovoid, with the ends curved back in the form of scrolls to either side of the tongue. The tongue itself is of iron. There is a trapeziform extension behind the hoop which serves as the means of attaching the buckle to the belt plate.

L = 3.7 cm; W = 3.0 cm; Thk = 0.2 cm.

Inv. no. R10265.

Provenance: Apulum. Acquisition 2004.

References: Unpublished.

27. Buckle and strip (Pl. VII/3 a-b)

The buckle is made of copper alloy and the folded strip for fixing it to the plate of reddish copper alloy. Complete, with the exception of the tongue, which is missing. The hoop is ovoid, with the ends curved back in the form of scrolls. The long sides of the rectangular extension are embellished, each with an outward-curving volute. The long strip for fixing the buckle to the plate is folded near one end and secured with a bronze rivet. The opposite end preserves a round rivet hole.

Buckle: L = 3.6 cm; W = 2.8 cm; Thk = 0.3 cm.

Strip: L = 7.3 cm; W = 1.2 cm; Thk = 0.1 cm.

Inv. no. 3459.

Provenance: Apulum. Old collections.

References: Ciugudean 2012, p. 115, Pl. IV/1a-b.

28. Buckle (Pl. VII/6)

Bronze buckle cast in a one-piece mould. The hoop is oval and has a trapeziform extension behind. The tongue is heavily corroded and partially broken.

L = 2.7 cm; W = 1.9 cm; Thk = 0.3 cm.

Inv. no. 3462.

Provenance: Apulum. Old collections.

References: Ciugudean 2012, p. 115, footnote 52.

29. Buckle (Pl. VII/4)

Rectangular belt buckle made of copper alloy, cast in a flat one-piece mould. There is a rectangular extension behind, with a bar securing the missing tongue.

L = 2.3 cm; W = 2.2 cm; Thk = 0.3 cm.

Inv. no. 3611.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

30. Buckle (Pl. VII/5)

Squared bronze buckle cast in a flat one-piece mould. The trapeziform extension preserves the bar, which accommodated the back end of the missing tongue.

L = 2.4 cm; W = 1.6 cm; Thk = 0.2 cm.

Inv. no. 3612.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

31. Buckle (Pl. VII/7)

Trapeziform splayed bronze buckle with an inner triangular projection and two circular-section hinge sockets. The tongue is missing.

L = 2.8 cm; W = 3.2 cm; Thk = 0.2 cm.

Inv. no. 3604.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

32. Buckle (Pl. VII/8)

Round bronze buckle. Complete.

D = 2.6 cm.

Inv. no. 3605.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

33. Buckle (Pl. VII/9)

Round bronze buckle. Complete.

D = 3.4 cm.

Inv. no. 3907.

Provenance: Apulum baths (?). Old collections.

References: Unpublished.

34. Buckle (Pl. VII/10)

D-shaped bronze buckle. The buckle plate and the tongue are missing.

L = 3.5 cm; W = 3.8 cm; Thk = 0.4 cm.

Inv. no. 3603.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

35. Buckle (Pl. VII/11)

Sub-rectangular, curved, bronze buckle pierced through two sides by a small rectangular hollow to hold the missing tongue.

L = 5.0 cm; W = 3.9 cm; Thk = 0.8 cm.

Inv. no. 3606.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

36. Buckle (Pl. VII/12)

Rectangular bronze buckle with two spherical corner projections/knobs.

L = 3.3 cm; W = 3.9 cm; Thk = 0.3 cm.

Inv. no. 3602.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

37. Buckle with plate (Pl. VIII/1)

Complete bronze buckle with plate. Oval buckle of hemispherical section with a hinged tongue. The square hinged plate is made of a thin sheet of bronze folded back and held in place by two rivets.

Buckle: L = 1.8 cm; W = 3.5 cm; Thk = 0.4 cm.

Plate: L = 3.0 cm; W = 3.0 cm; Thk = 0.3 cm.

Inv. no. 3601.

Provenance: Homorod-Joseni (Orăştie). Olea collection. Acquisition 1967.

References: Unpublished.

38. Buckle (Pl. VIII/11)

Fragmentary trapeziform bronze buckle distorted and broken, with an inner scroll.

L = 2.5 cm; W = 2.3 cm.

Inv. no. R10332.

Provenance: Apulum – Dealul Furcilor – Monolit, S047J Villa romana.

Excavations 2004.

References: Catalogue 2011, p. 110, Cat. no. 211.

39. Buckle (Pl. VIII/4)

Long rectangular bronze buckle. The tongue and the hinge survived.

L = 5.0 cm; W = 1.8 cm.

Inv. no. 3912.

Provenance: Apulum. Old collections.

References: Unpublished.

Parallel: Magdalensberg, Deimel 1987, Taf. 74/1.

40. Buckle (Pl. VIII/5)

Fragmentary trapeziform bronze buckle cast in a flat one-piece mould. There is a curved scroll extending from the upper corner, but the pendant is missing, as well as the tongue itself. One of the circular pierced lugs - to accommodate the pivot bar whereby it was hinged to the belt plate - survived, the other one is broken.

L = 2.5 cm; W = 3.6 cm; Thk = 0.3 cm.

Inv. no. 3461.

Provenance: Apulum. Old collections.

References: Unpublished.

41. Buckle (Pl. VIII/6)

Fragment of a square bronze buckle cast in one-piece mould. Very similar to above, but half preserved.

L = 3.2 cm; W = 1.7 cm; Thk = 0.3 cm.

Inv. no. 3469.

Provenance: Apulum. Old collections.

References: Unpublished.

42. Buckle (Pl. VIII/9)

Bronze buckle cast in one-piece mould. The hoop is ovoid, with the ends curved back in the form of scrolls. On both sides of the rectangular extension, there are external volutes. The pin is missing.

L = 3.4 cm; W = 3.0 cm; Thk = 0.3 cm.

Inv. no. R10882.

Provenance: Alba Iulia – Parcul Unirii. Rescue excavation 2006.

References: Catalogue 2011, p. 110, Cat. no. 209.

43. Buckle (Pl. VIII/10)

Complete oval bronze buckle, ornamented with grooves between the two knots on one of the long sides. The pin with the loop is still in place.

L = 3.0 cm; W = 1.8 cm; Thk = 0.3 cm.

Inv. no. R10883.

Provenance: Alba Iulia – Parcul Unirii. Rescue excavation 2006.

References: Catalogue 2011, p. 110, Cat. no. 210.

44. Buckle (Pl. VIII/8)

Openwork bronze buckle decorated with two peltae motifs over another big one in the form of an anchor. The tongue is missing and the hinge is partially preserved.

L = 3.9 cm; W = 3.3 cm; Thk = 0.2 cm.

Inv. no. 3530.

Provenance: Apulum. Old collections.

References: Unpublished.

45. Buckle (Pl. VIII/3)

Incomplete copper alloy buckle cast in a flat one-piece mould. The hoop is ovoid with the ends curved back in the form of flat scrolls to either side of the tongue, which is missing. At the opposite end to the bow of the buckle, there is a rectangular expansion for attachment to a bronze folded strip.

L = 3.0 cm; W = 2.4 cm; Thk = 0.3 cm.

Inv. no. R9577/5.

Provenance: Apulum, Northern necropolis, grave no.8/trench IV. Excavations 1981.

References: Ciugudean 1997, p. 685-690; Ciugudean 2012, p. 111, pp. 114-116, Pl. II/5; Ciugudean 2017, Pl. XI/5.

46. Strap-end (Pl. IX/1)

Bronze lanceolate pendant from a bipartite strap-end, with a terminal knob. The head is spatulated and has a semi-oval eye, flat across the top. The back of the fitting is flat, the front is slightly raised, with chamfered edges.

L = 4.5 cm; W = 1.0 cm; Thk = 0.3 cm.

Inv. no. 3616.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

Parallels: Zugmantel (Oldenstein 1976, Taf. 36/291-295, 301).

47. Strap-end (Pl. IX/2)

Bronze lanceolate pendant from a strap-end, without a terminal knob and wider than above. The head is spatulated, with a semi-oval eye and triangular on the top. The back of the item is flat, the front is raised to the bottom.

L = 4.5 cm; W = 0.5 cm; Thk = 0.6 cm.

Inv. no. 3617.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

Parallels: Zugmantel (Oldenstein 1976, Taf. 36/298).

48. Strap-end (Pl. IX/3)

Bronze lanceolate pendant from a bipartite strap-end, without a terminal knob. The spatulated head, flat across the top, has a semi-oval eye.

L = 3.2 cm; W = 0.8 cm; Thk = 0.3 cm.

Inv. no. 3618.

References: Unpublished.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

Parallels: Zugmantel (Oldenstein 1976, Taf. 36/299).

49. Strap-end (Pl. IX/4)

Bronze lanceolate pendant from a bifurcated strap-end, without a terminal knob and cruder than the precedents. The flat head and the eye inside are squared. The back of the piece is flat, the front is slightly raised.

L = 2.9 cm; W = 0.6 cm; Thk = 0.3 cm.

Inv. no. 3619.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

50. Strap-end (Pl. IX/5)

Bronze lanceolate pendant from a strap-end, with a terminal knob. The spatulated head is partially broken and heavily corroded. The back is flat.

L = 3.0 cm; W = 0.8 cm; Thk = 0.4 cm.

Inv. no. 3620.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

51. Strap-end (Pl. IX/6)

Bronze pendant from a bifurcated strap-end, with partially broken head and bottom. The half preserved head was spatulated, with a semi-oval eye.

L = 2.9 cm; W = 0.8 cm; Thk = 0.2 cm.

Inv. no. 3621.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

Parallels: Saalburg (Oldenstein 1976, Taf. 36/301).

52. Strap-end (Pl. IX/7)

Bronze lanceolate pendant from a bipartite strap-end, with a small terminal knob. The spatulated head, flat across the top, has a large semi-oval with a D-shaped loop eye.

The rear is flat and the front is slightly raised, with chamfered edges.

L = 5.5 cm; W = 1.0 cm; Thk = 0.2 cm.

Inv. no. 3483.

Provenance: Apulum. Old collections. Excavations A. Cserni – Roman baths.

References: Catalogue 2011, p. 111, Cat. no. 213.

Parallels: Zugmantel (Oldenstein 1976, Taf. 36/291-295).

53. Strap-end (Not illustrated)

Bronze lanceolate pendant from a bipartite strap-end, with a small terminal knob. The ovoid head is broken on the upper top and has an almost round large eye.

L = 4.0 cm; W = 0.8 cm; Thk = 0.2 cm.

Inv. no. 3246.

Provenance: Apulum. Partoş. Gh. Toth garden. Excavations 1912.

References: Unpublished.

Parallels: Straubing (Oldenstein 1976, Taf. 36/295).

54. Strap-end (Pl. IX/8)

Bronze lozenge-shaped pendant from a bipartite strap-end, without a terminal knob. The spatulated head with a semi-oval eye is broken at the top. The rear is flat.

L = 3.2 cm; W = 0.8 cm; Thk = 0.2 cm.

Inv. no. R8790.

Provenance: Apulum. Partoş. Temple of Liber Pater. Excavations 1990.

References: Unpublished.

Parallels: Weissenburg (Oldenstein 1976, Taf. 36/302)

55. Strap-end (Pl. IX/9)

Bronze strap-end in the form of a "spigot", with a semi-circular head and bifurcated shank secured by a single rivet for fastening onto the leather of the belt.

L = 3.5 cm; W = 0.8 cm; Thk = 0.3 cm.

Inv. no. 3481.

Provenance: Apulum. Old collections.

References: Unpublished.

56. Strap-end (Not illustrated)

Bronze strap-end with bifurcated shank. One sheet is broken, the other is pierced by a circular hole for the rivet. At the bottom, there is a terminal ring partially broken, from which may have hung a pendant. Since the ring is destroyed, it is difficult to say what was its shape or if it had an extension.

L = 3.8 cm; W = 0.8 cm; Thk = 0.3 cm.

Inv. no. 3482.

Provenance: Apulum. Old collections.

References: Unpublished.

Parallels: Saalburg (Oldenstein 1976, Taf. 37/337-338).

57. Strap-end (Pl. IX/10)

Bronze bifurcated strap-end with a surviving bronze rivet for fastening to the leather. The lower part is now broken.

L = 3.6 cm; W = 0.6 cm; Thk = 0.3 cm.

Inv. no. 3485.

Provenance: Apulum. Old collections.

References: Unpublished.

58. Butt-shaped strap-end/Bludgeon-shaped strap-end (Pl. IX/11)

Bronze butt-shaped strap-end with long bifurcated shank secured by a single rivet for fastening directly onto the leather. The terminal part has incised ridge-and-groove decoration and a spherical knob.

L = 4.8 cm; W = 0.7 cm; Thk = 0.5 cm.

Inv. no. 3245.

Provenance: Apulum. Partoş district. Excavations A. Cserni 1913 – garden of Toth property.

References: Unpublished.

Parallels: Zugmantel (Oldenstein 1976, Taf. 36/311)

59. Butt-shaped strap-end/Bludgeon-shaped strap-end (Pl. IX/12)

Bronze butt-shaped strap-end of circular section. The top of the square section is broken near the bottom of the bifurcated shank. The item is decorated with mouldings in the mid area and with a small knob at the lower end.

L = 4.8 cm; W = 0.5 cm; Thk = 0.4 cm.

Inv. no. 3479.

Provenance: Apulum. Old collections.

References: Unpublished.

60. Butt-shaped strap-end/Bludgeon-shaped strap-end (Pl. IX/13)

Bronze elongate bulbous terminal of circular section. Decorated with mouldings and incised grooves to the hollow upper part, now broken. The broken bottom is trilobate.

L = 3.5 cm; W = 0.6 cm; Thk = 0.4 cm.

Inv. no. 3487.
Provenance: Apulum. Old collections.
References: Unpublished.

61. Strap-end (Pl. IX/14)

Complete strap-end of reddish copper alloy, with a median ring and a hole for the missing rivet to the upper side.

L = 6.2 cm; D ring = 1.9 cm.

Inv. no. R8661.

Provenance: Apulum – *municipium/colonia Aurelia Apulensis*. Excavations 1988-1994.

References: Moga *et alii* 2000, p. 158, no. 5, Pl. 2e; Catalogue 2011, p. 112, Cat. no. 215.

62. Strap-end (Pl. IX/15)

Complete strap-end of copper alloy, with a median ring and a rivet to the upper side.

L = 9.0 cm; D ring = 1.7 cm.

Inv. no. R10842.

Provenance: Apulum – *municipium Septimium*. Rescue excavations 2009, Timotei Cipariu street no. 25.

References: Bounegru, Ota 2010, p. 439, no. 5, Fig. 5/8; Catalogue 2011, p. 112, Cat. no. 216.

63. Strap-end (Pl. IX/16)

Complete strap-end of copper alloy, with a median ring and a hole for the missing rivet to the upper side.

L = 6.5 cm; D ring = 1.3 cm.

Inv. no. R10247.

Provenance: Apulum – Southern necropolis – Dealul Furcilor – Podei. Rescue archaeological excavations 2004: S0473 – Roman building.

References: Catalogue 2006, p. 28, Cat. no. 95; Catalogue 2011, p. 112, Cat. no. 217.

64. Strap-end (Pl. IX/17)

Fragmentary bronze strap-end broken under the ring, with a rivet to the upper side.

L = 5.4 cm; D ring = 1.5 cm.

Inv. no. R10848.

Provenance: Apulum – *municipium Septimium*. Rescue excavations 2009, no. 25, Timotei Cipariu street.

References: Bounegru, Ota 2010, p. 439, no. 6, Fig. 5/7; Catalogue 2011, p. 112, Cat. no. 218.

65. Strap-end (Not illustrated)

Bronze lanceolate pendant from a bipartite strap-end, without a terminal knob. The spatulated head, flat across the top, has a semi-oval eye through which usually passes a double folded strip held by the rivet from the upper side to the leather strap.

L = 3.2 cm; W = 0.8 cm; Thk = 0.3 cm.

Inv. no. R11026.

Provenance: Apulum – Southern necropolis – Dealul Furcilor – Podei. Rescue excavations 2010 – Asist Consult. Part of the inventory of the incineration Grave no. 509 alongside a belt plate, a buckle and a clay lamp of Loeschcke X type and CASSI stamp.

References: Bolog 2017, p. 88, Cat. no. 3, Pl. 79.

66. Strap-end (Pl. I/10)

Fragmentary bifurcated strap-end with a surviving bronze rivet for fastening to the leather. The lower part is now broken, which makes it impossible to presume if it has also had a ring to the median area.

L = 5.0 cm; W = 0.8 cm; Thk = 0.5 cm.

Provenance: Apulum – Northern necropolis – Stația de Salvare, Grave no. 19/trench XXXII.

References: Ciugudean, Ciugudean 2000, p. 206, Fig. 2/8; idem 2000a, p. 342, Fig. 1/8.

67. Strap-end (Pl. I/8)

Fragmentary bifurcated strap-end with a surviving bronze rivet for fastening to the leather. The lower part is broken and bent.

L = 4.0 cm; W = 0.8 cm; Thk = 0.4 cm.

Provenance: Apulum – Northern necropolis – Stația de Salvare, Grave no. 19/trench XXXII.

References: Ciugudean, Ciugudean 2000, p. 206, Fig. 2/10; idem 2000a, p. 342, Fig. 1/10.

68. Scabbard slide/stiffener (Pl. X/1)

Scabbard slide with undecorated central plain. The top terminates in a moulded spike. The decorative lower terminal is lost. A fragment of the upper bronze shank emerges from the rear of the slide.

L = 7.5 cm; W = 1.2 cm; Thk = 0.3 cm.

Inv. no. R9573.

Provenance: Apulum, *porta principalis dextra* of the legionary camp, Eastern tower; depth – 2.80 m; found together with a clay antefix. Excavations 1996.

References: Moga 1999, p. 218, Fig. 4.

69. Armour scale (Pl. X/2)

Silvered bronze armour scale provided to its upper side with two holes pierced horizontally for attaching it by thread or wire to an organically backing. The lower edge is rounded and in the central area has a medial rib.

L = 1.7 cm; W = 1.1 cm; Thk = 0.1 cm.

Inv. no. 3519.

Provenance: Apulum. Old collections.

References: Unpublished.

70. Armour scales (Pl. X/3)

Bronze scales, approx. 6 fragments provided to the upper side with two to six horizontally pierced holes for attaching it by a remnant metal wire to an organically backing. The lower edge is rounded. Found together with 10 iron hobnails – as a grave's inventory.

L = 1.1 cm; W = 1.0 cm; Thk = 0.1 cm.

Inv. no. Not registered.

Provenance: Apulum. Southern necropolis, Dealul Furcilor – Podei. Inhumation grave no. 163. Excavations 2008, Sp. 4.

References: Bolog 2017, p. 38-39, Pl. 52/11.

71. Cross-shaped harness mount (Pl. X/4)

Harness mount in the shape of an equal-armed cross with expanded terminals and central rhombical mound/boss. Two disc headed shanks for fastening to the leather strap extend from the rear of the fitting.

L = 4.6 cm; W = 4.5 cm; Thk = 0.2 cm.

Inv. no. 3622.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Catalogue 2011, 101, Cat. no. 175.

72. Rectangular harness mount (Pl. X/8)

The fragmentary item is deprived by its lower part. The narrow central area suggests a pelta-shaped motif or possible scrolls.

L = 3.5 cm; W = 3.7 cm; Thk = 0.3 cm.

Inv. no. 3643.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

73. Openwork plate with pelta-shaped motives and scrolls (Pl. X/9)

The upper field is decorated with two horizontally incised lines and laterally notches. The narrow middle area exhibits pelta-shaped motifs surrounded by two inner volutes/scrolls. The central lower part is ornated with a pelta-shaped lobe. The scrap of a fastening rivet projects from the rear.

L = 4.0 cm; W = 3.4 cm; Thk = 0.3 cm.

Inv. no. R8296.

Provenance: Apulum. Old collections.

References: Catalogue 2011, p. 108, Cat. no. 204.

74. Phallic Pendant (Pl. XI/9)

The pendant in the form of a phallus has a circular projecting loop for suspension to the upper side.

L = 4.0 cm; W max. = 2.0 cm.

Inv. no. R10425.

Provenance: *Colonia Aurelia Apulensis*. Rescue archaeological research Gemenilor street – Partoș district, 2005.

References: Timofan 2005, pp. 205-215, fig. 1-2; Catalogue 2008, no. 26; Catalogue 2011, p. 69, Cat. no. 79.

75. Phallic Pendant (Pl. XI/10)

The pendant in the form of a phallus has a circular projecting loop for suspension to the upper side.

L = 3.5 cm.

Inv. no. R9998.

Provenance: Apulum. Ancient collections.

References: Catalogue 2011, p. 69, Cat. no. 80.

76. Phallic Pendant (Pl. XI/11)

The pendant in the form of a phallus has a circular projecting loop for suspension to the upper side.

L = 1.9 cm; W = 1.0 cm.

Inv. no. R10885.

Provenance: Alba Iulia – Parcul Unirii. Rescue archaeological research 2006.

References: Catalogue 2011, 69, Cat. no. 81.

77. Phallic Pendant (Pl. XI/12)

The pendant in the form of a *phallus* has a rectangular projecting loop for suspension to the reverse.

L = 2.8 cm; W = 1.2 cm; H = 1.0 cm.

Inv. no. R11020.

Provenance: Apulum. Southern Necropolis – Dealul Furcilor – Podei. Excavations 2008, Sp. 15; Incineration grave no. 640 of *ustrinum* type. The pendant is part of the inventory also consisting of an enamelled hexagonal brooch, an almond-shaped mount and a bronze bell – *tintinnabulum*.

References: Bolog 2017, p. 110, 245, Pl. 90/2.

78. Bridle-junction/Bridle distributor (Pl. X/5)

Circular bridle distributor in the shape of a box with four rectangular apertures for the straps. The upper side of the flat disk is decorated with concentric incisions of a "circle-and-dot" pattern.

D = 2.2 cm; Thk = 0.9 cm.

Inv. no. R10062.

Provenance: Apulum. Alungulesei collection. Acquisition 2002.

References: Unpublished.

79. Harness pendant (pl. XII/1)

Winged heart-shaped pendant with circular suspension loop on the top. The mid openwork area is decorated with two scrolls/volutes on both sides of a rhombical, stemming rod. The lower part ends in a knob ornamented with triangular incisions, suggesting a shell.

L = 4.8 cm; W = 3.7 cm; Thk = 0.4 cm.

Inv. no. 3636.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

80. Enamelled round stud (Pl. XIII/1)

The circular disc with sloping edge is decorated with two sunken, concentric fields separated by a bronze rib. The first field bears a *millefiori* ornament consisting of small pale blue flowers on a white background. The second band is filled with red enamel, divided into four panels by cross/transversal bronze ribs. In the middle square - or rhomb-shaped area - depending on positioning it - bordered by a bronze frame come out the same *millefiori* ornament. Onto the recessed centre, the item bears a round decoration filled with dark blue enamel. From the rear extends a short, circular-sectioned, disc-headed shank for attaching to the leather belt.

D = 3.5 cm; Thk = 0.2 cm; L shank = 0.8 cm; D disc = 0.8 cm.

Inv. no. Not registered.

Provenance: Alba Iulia. Excavations 1986-1987, no. 5, Sinaia Street, on the South-Eastern area of the Roman fort and the Mediaeval citadel, on Saint Francis de Paola bulwark.

References: Unpublished.

81. Enamelled round stud (Pl. XIII/2)

Incomplete stud, similar to above. The circular disc with sloping edge is decorated with two sunken, concentric fields separated by a bronze rib. The first field bears an ornament consisting of small points ordered in a chequer-board shape filled with white enamel. The second band is filled with red enamel and is divided into four panels by cross/transversal bronze ribs. The central, probably identical to the above specimen area, together with the attaching shank, did not preserve.

D = 3.6 cm; Thk = 0.15 cm.

Inv. no. Not registered.

Provenance: Apulum, unknown place of discovery.

References: Unpublished.

82. Enamelled almond-shaped mount (Pl. XIII/4)

The oval mount has two sunken fields for inlaid enamel and twin terminal knobs to the longitudinal axis. It was attached to the leather belt by two disc-headed shanks from the rear. The enamel held by the fields mostly vanished, but vaguely traces of green, red and white enamel set to the extremities are still surviving. The item submitted intense burning.

L = 3.2 cm; W = 1.4 cm; Thk = 0.2 cm; L shank = 0.6 cm.

Inv. no. Not registered.
Provenance: Apulum, unknown place of discovery.
References: Unpublished.

83. Harness pendant – Inv. no. 3470 (Pl. VIII/7)

Splayed bronze pendant cast in a flat one-piece mould. There is an outward triangular projection terminal at the bottom. At the top, there is a circular pierced lug above a moulding rib.

L = 3.8 cm; W = 1.3 cm; Thk = 0.3 cm.

Inv. no. 3470.

Provenance: Apulum. Old collections.

References: Unpublished.

84. Harness pendant - Inv. no. R10058 (Pl. XII/2)

Openwork copper alloy leaflet/heart-shaped pendant decorated with two pairs of peltae placed to the upper and lower extremities. To the upper side, there is a folded back loop for hanging the pendant.

L = 3.9 cm; W = 2.7 cm; Thk = 0.2 cm.

Inv. no. R10058.

Provenance: Apulum. Alungulesei collection. Acquisition 2002.

References: Unpublished.

85. Harness pendant – Inv. no. 3149 (Pl. XII/3)

Fragmentary leaflet bronze pendant with a bulbous end. The upper side with the suspension lug is broken.

L = 3.0 cm; W = 1.5 cm; Thk = 0.4 cm.

Inv. no. 3149.

Provenance: Apulum. Old collections.

References: Unpublished.

86. Harness pendant - Inv. no. 3608 (Pl. XII/5)

Bronze foliate pendant, broken in the area of a rectangular open aperture (1.5 x 0.4 cm). The surface of the item has traces of gilding. The lower end is rounded and the upper is a folded back eyelet for suspension.

L = 6.5 cm; W = 1.5 cm; Thk = 0.2 cm.

Inv. no. 3608.

Provenance: Homorod-Joseni (Orăștie). Olea collection. Acquisition 1967.

References: Unpublished.

87. Harness mount – Inv. no. 3579 (Pl. XI/2)

Circular convex mount with a spherical calotte and two emerging flat disc-shaped shanks on the reverse.

D = 3.7 cm.

Inv. no. 3579.

Provenance: Apulum. Old collections.

References: Catalogue 2011, p. 107, Cat. no. 201.

88. Harness mount – Inv. no. 3538 (Pl. XI/3)

Round mount ornamented with circular mounds and a central hole for the missing rivet.

D = 3.1 cm; Thk = 0.2 cm.

Inv. no. 3538.

Provenance: Apulum. Old collections.

References: Unpublished.

89. Harness mount - Inv. no. 3517 (Pl. XI/8)

Fragmentary mount with circular incisions and one surviving rivet on the rear.

D = 1.7 cm; Thk = 0.2 cm.

Inv. no. 3517.

Provenance: Apulum. Old collections.

References: Unpublished.

90. Harness mount – Inv. no. 3472 (Pl. X/6)

Rectangular "*au repoussé*" mount with trefoil extremities ornamented with circles and dots. Two attaching rivets expand from the rear.

L = 2.3 cm; W = 0.7 cm.

Inv. no. 3472.

Provenance: Apulum - Roman baths. Excavations A. Cserni 1912-1913.

References: Catalogue 2011, p. 108, Cat. no. 203.

91. Harness mount – Inv. no. R10446 (Pl. XI/5)

Circular mount decorated with concentric incisions, with a central hole for the missing rivet.

D = 2.8 cm.

Inv. no. R10446.

Provenance: Apulum – Partoș district. Rescue archaeological excavations on no. 4, Dacilor street, 2007. The 1st inhabitation level was dated by a denarius from Faustina Minor, issued post 161 AD and the second one – that of building CI – resulted finds, i.e. the mount and two coins issued during the Severes 222-235 AD.

References: DAU 2008, p. 46, Cat. no. 38.

92. Phalera – Inv. no. 3214 (Pl. XI/1)

Massive round mount ornamented with circular mounds.

D = 5.5 cm; T = 0.7 cm.

Inv. no. 3214.

Provenance: Apulum – Partoș district. Old collections. Excavations A. Cserni in the garden of Toth property, 1912.

References: Unpublished.

93. Harness mounts– Inv. no. R9293 – (Pl. XI/7)

Two circular convex mounts with attachment rivet on the rear:

a: D = 1.9 cm; b: D = 1.5 cm.

Inv. no. R9293.

Provenance: Apulum – Northern necropolis – Stația de Salvare. Excavations 1980.

References: Catalogue 2011, p. 107, Cat. no. 200.

94. Harness mount/pendant (?) (Pl. XII/4)

Leaflet mount provided with two rivets on the reverse and a hole to the upper part through which passes a metallic wire.

L = 3.5 cm; W = 1.5 cm; Thk = 0.5 cm.

Inv. no. 3367.

Provenance: Apulum. Old collections.

References: Unpublished.

95. Harness mount (Pl. X/7)

Cross-shaped fragmentary mount with a projecting shank from the rare.

L = 2.3 cm; W = 2.1 cm; Thk = 0.1 cm.

Inv. no. 3471.

Provenance: Apulum. Old collections.

References: Unpublished.

96. Harness mount /Phalera (Pl. XI/6)

Boss-shaped round mount with a partially preserved shank on the rear.

D = 2.0 cm.

Inv. no. R10447.

Provenance: Apulum – Partoș district. Rescue archaeological excavation on no. 4, Dacilor street, 2007.

References: DAU 2008, p. 46, Cat. no. 37.

97. Harness mount (Pl. XI/4)

Circular mount decorated with a boss and with a central large hole for the missing rivet.

D = 3.7 cm.

Inv. no. R9060.

Provenance: Apulum – *Pretorium consularis*. Rescue archaeological excavations V. Bolindeț 1992, Munteniei street, profile S, depth – 2.40 m.

References: Unpublished.

98. Pelta-shaped mount (Pl. XII/8)

Pelta-shaped mount with two pierced crescents to the upper side, and remnants of a central rivet on the reverse. The item is covered with a noble green patina.

L = 3.5 cm; W = 4.5 cm; Thk = 0.3 cm.

Inv. no. R9298.

Provenance: Apulum – Northern necropolis – Stația de Salvare. Excavations 1980. The item was found in the Medieval (?) grave no. 426 near the right ear/neck of the deceased. It is possible that it belonged to a disturbed Roman grave overlapped by the Medieval one – being thus in a secondary position of the padding.

References: Catalogue 2011, p. 107, Cat. no. 199.

99. Amphora-shaped strap-end (Pl. XIV/1)

Fragmentary leaflet bronze strap-end in the form of an Amphora. The item is damaged to its upper side: one of the handles of the vessel representation is partially broken, while the second one is totally missing. The superior attachment

part is also broken, but half of it is bifurcated and measures 0.8 cm. The opposite side ends in a knob.

L = 5.5 cm; W = 2.7 cm; Thk = 0.2 cm.

Inv. no. 3630.

Provenance: Apulum. Old collection.

References: Opreanu 2001, p. 470, Abb. 5/3; idem 2003, pp. 144-145, Fig. 30/3;

Diaconescu 1996, pp. 98-99, Fig. 11/4; idem 1999, p. 224, Abb.12/4.

100. "Propeller" mount (Pl. XIV/2)

The "propeller" belt-stiffener has a central rounded part and two opposing trapeze-shaped projections. Four rivets for attaching to the leather extend from the reverse. The bronze stiffener is not decorated.

L = 6.9 cm; W = 2.6 cm.

Inv. no. Not registered.

Provenance: Apulum – Southern necropolis – Dealul Furcilor – Podei. Isolated find, without precise archaeological context/unstratified.

References: Bolog 2017, p. 224, Cat. no. 1749, Pl. 156/1749.

101. Harness phalera with pendants (Pl. XIII/3)

Fragmentary enamelled phalera with pelta-shaped body, ending in a trefoil ornament in the middle upper side and three circular eyelets in the lower part. Two mobile pendants with a pelta-shaped body, ending in the trefoil pattern similar to the one from the superior terminal of the artefact hang from two of these loops. One of the pendants is missing. The ground of the phalera exhibits a semi-circular band filled with blue enamel bearing small circles of white glass. The enamel field decayed, especially in the lower part of the phalera. In the upper end, the same ornamentation with white glass on the recessed blue ground enamel is to be distinguished. To the left and right symmetrical laterals, the item is decorated with two metallic twisted cords ending in two rosettes filled with red enamel. The two mobile pendants from the bottom have inlaid white enamel, and are decorated with blue glass roundels. Each of the pendants has two fixing rivets on the reverse. The phalera is provided with two rectangular loops on the rear, through which passed a leather strap not larger than 1.4 cm – recte the width of the eyelets.

L = 8.3 cm; W = 4.7 cm; L pendant = 3.7 cm; W pendant = 1.2 cm; L rivet = 0.6 cm.

Inv. no. MNIT v 999 (new) 4866 (old).

Provenance: Apulum – *Colonia Aurelia Apulensis* – Partoș district.

References: Riegel 1904, p. 197, Pl. V/3; Bonis, Sellye 1987; *Miles Romanus* 1997, p. 23, Cat. no. 138, Pl. VII/138; Benea *et alii* 2006, pp. 107-108, Pl. XVI/10, 6/6, Dacia Augusti Provincia 2006, pp. 158-159, Cat. no. 152.

102. Lozenge/leaflet-shaped pendant (Pl. XII/6)

Lozenge/leaflet-shaped pendant made of a sheet of bronze, with a suspension loop to the upper side.

L = 4.7 cm; W = 1.8 cm; Thk = 0.2 cm.

Inv. no. R10061.

Provenance: Apulum. Alungulesei collection. Acquisition 2004.

References: Unpublished.

103. Rectangular junction loop from the yoke or bridle (Pl. XII/10)

Fragmentary rectangular junction loop made of cast bronze ending in a domed roundel with a knob which bears a circular median mound. This lower part of the item is broken but probably has been fixed to the wooden yoke of the horse, functioning as a tie-ring for the leather straps. One can also presume that it could be a junction from the bridle if it has had a corresponding to the other terminal.

L = 3.5 cm; W = 2.5 cm; Thk = 0.5 cm.

Inv. no. 3577.

Provenance: Apulum. Old collections.

References: Unpublished.

104. Harness pendant (Pl. XII/7)

Complete pendant with pierced eyelet to the upper part and a trilobate (phallus-shaped?) ending.

L = 4.8 cm; W = 1.3 cm; Thk = 0.2 – 0.5 cm.

Inv. no. R11019.

Provenance: Apulum, Southern necropolis – Dealul Furcilor – Podei, Sp. 21. Excavations 2012.

References: Bolog 2017, p. 224, Cat. no. 1746, Pl. 156/1746.

105. Terret or rein guide (Pl. XII/9)

Piece of junction made of cast bronze with two loops – a rectangular one and a semi-circular/crescent shaped one – connected by a rod. To the upper side, there is a broken rod.

L = 5.0 cm; W = 2.0 cm; Thk = 0.4 cm.

Inv. no. R8658.

Provenance: Apulum – *Colonia Aurelia Apulensis* – Partoș district. Excavations 1991, V. Bolindeț, V. Moga.

References: Unpublished.

106. Pelta-shaped harness mount (Not illustrated)

Openwork large pelta-shaped mount preserving the remains of a rivet on the rear. Two inner volutes on both sides of a central flared stem outline the entire peltate body.

L = 3.5 cm; W = 3.7 cm; Thk = 0.3 cm.

Inv. no. R10056.

Provenance: Apulum. Alungulesei collection. Acquisition 2002.

References: Unpublished.

107. Harness pendant (Not illustrated)

Complete narrow leaflet hanger with eyelet for suspension and a knob to the lower side.

L = 5.0 cm; W = 2.0 cm; Thk = 0.2 cm.

Inv. no. R10065.

Provenance: Apulum. Alungulesei collection. Acquisition 2002.

References: Unpublished.

108. Harness pendant (Not illustrated)

Fragmentary flared pendant in the form of a shield (?), with lug for suspension to the upper side. The lower part is broken.

L = 3.9 cm; W = 1.5 cm; Thk = 0.3 cm.

Inv. no. R10069.

Provenance: Apulum. Alungulesei collection. Acquisition 2002.

References: Unpublished.

109. Hinged harness pendant (Not illustrated)

Complete harness pendant with a fastening mount/stud. To the upper side, there is a button-and-loop fastener with a bent rivet on the rear and a hoop for suspension to the bottom. From this lug suspends a pendant with hanging eyelet to the superior part and heart-shaped body with a phallic ending.

L = 6.8 cm; W = 2.8 cm; Thk = 1.3 cm.

Inv. no. R10060.

Provenance: Apulum. Alungulesei collection. Acquisition 2002.

References: Unpublished.

110. Phalera (Pl. XIV/3)

Bronze phalera of fragmentary disk decorated with concentric circular incisions. There is a mid hole through which passes a bulbous headed rivet for fastening the crosswise bar provided with two concealed circular loops for the straps.

D disk = 6.5 cm; D loops = 1.0 cm.

Inv. no. Not registered.

Provenance: Apulum – Partoș district. Survey Al. Diaconescu, C. Găzdac 1996, North to the Temple of Liber Pater.

References: Găzdac 1999, p. 744, p. 746, III, Cat. no. 20, Pl. V/1.

Conclusions.

This study concentrates on some important military artefacts: circular belt buckles, other common types, apron fittings, armour scales, different pendants, simple or enamelled horse gear – from the collections of the Museum at Alba Iulia. Their substantial presence is undoubtedly linked to the existence and functioning of the XIIIth Gemina Legion at Apulum. They are part of the classical accessories of the entire Roman world and can be dated not only on the basis of the analogies but also because the mentioned types circulated in the same patterns all over the Empire, even though some of them could be locally produced. As concerns the specimens from Apulum, one can distinguish two particular cases which seem not to be standardised products – meaning the circular buckles – *Ringschnallencingulum* -, or the so-called ring buckle-fibulae, with ornamental extension and a more spectacular design.

The important amount of circular buckles from graves or found isolated at Apulum lead to the conclusion that this is the greatest concentration of this type of belt not only in Dacia, but possibly among the other provinces of the Empire – at least up to the present day. The socio-political importance of Roman military belts also pleads their residual regard and retention as insignia of power and/or legitimacy in sub-Roman contexts.

The first part of the study focuses on the typology of items: buckles, apron fittings, armour and harness fittings in the museum collections, their significance and manufacturing techniques, the parallels and chronology they have both in *Dacia* and other provinces of the Empire. The second part of the study is dedicated

to the catalogue of the accessible artefacts and some general remarks drawn after this attempt.

The morphological and functional analysis of the exemplars in the collection of the Museum from Alba Iulia tried to discern on their destination as well as personal equipment or horse gear fittings – where possible.

Likewise, I have to emphasise that this attempt is far from being comprehensive, or from shedding full light on the item's presence, due to the fact that some of them – unearthed during the last years' excavations i.e. into the Southern necropolis or rescue isolated investigations on different areas of ancient Apulum, are not yet published. However, part of them were displayed in some exhibitions and I consequently benefitted from their catalogue presentations, upon publication.

At the same time, the analysis of this type of artefacts allowed to ascertain that they are scanning and spanning all the 16th centuries long stationing of the XIIIth Gemina Legion sojourn at Apulum but also the Late Roman period – 4th - 5th centuries AD. As J. C. N. Coulston recently mentioned "the conclusion is that the whole history of Roman military equipment involved cultural inclusivity, and specifically that Late Roman equipment development was not some new form of "degeneration", but positive acculturation". The majority of the specimens in the collections of the museum in Alba Iulia have good analogies also in Dacia and other provinces of the Empire.

**ECHIPAMENT MILITAR ROMAN PERSONAL ȘI DE HARNAȘAMENT DE
BRONZ DIN COLECȚIILE MUZEULUI DIN ALBA IULIA
II. GARNITURI/ACCESORII DE ECHIPAMENT PERSONAL ȘI
HARNAȘAMENT**

REZUMAT

Acest studiu se concentrează asupra unor categorii importante de artefacte de echipament militar din bronz: cataramele circulare de *cingulum*, alte tipuri – relativ comune, accesoriile de șorț, solzii de armură, diverse pandantive, garniturile de harnașament simple sau emailate – aflate în colecțiile Muzeului Național al Unirii din Alba Iulia, a căror prezență semnificativă este legată indisolubil de existența și funcționarea Legiunii a XIII-a Gemina la Apulum. Cataramele de centură sunt parte a garniturilor de echipament clasice ale lumii romane, care au circulat în aceleași tipare ornamentale peste tot de-a lungul Imperiului, chiar dacă unele dintre ele puteau să fie produse local. În ceea ce privește speciemenle de la Apulum se pot sesiza două cazuri particulare care nu par să fie produse standardizate de masă, respectiv exemplarele circulare – *Ringschnallencingulum*, sau cataramele-fibulă mult mai spectaculoase ca design. Cantitatea semnificativă de catarami circulare de la Apulum, descoperite atât în morminte, cât și izolat – ne conduce la concluzia că, cel puțin până la ora actuală – aceasta constituie

cea mai mare concentrare de acest tip nu doar în Dacia, dar posibil chiar printre descoperirile din alte provincii ale Imperiului.

Prima parte a studiului este dedicată discuțiilor privind tipurile de piese: cataramă de centură, accesorii de șorț, armură și harnașament semnalate în colecțiile muzeului, semnificația și tehnologia lor de fabricare, paralelele care se regăsesc printre exemplarele descoperite în Dacia, dar și în celelalte provincii ale Imperiului, precum și reperele cronologice în care acestea au putut fi încadrate. Cea de-a doua parte o constituie catalogul propriu-zis al pieselor la care am avut acces până la ora actuală, urmat de câteva concluzii generale care se pot contura în urma acestui demers.

Artefactele supuse discuției au fost analizate atât din punct de vedere morfologic cât și funcțional, încercând în același timp să determinăm – în măsura în care a fost posibil, destinația lor – ca accesorii de echipament personal sau de harnașament.

La fel ca și în cazul primului studiu publicat acum câțiva ani – trebuie subliniat faptul că nici acesta nu se consideră a fi exhaustiv și nu clarifică integral existența și varietatea accesoriilor de echipament militar personal și de harnașament de la Apulum din cauza faptului că piese descoperite în ultimii ani în săpăturile arheologice sistematice sau de salvare sunt încă inedite. Cu toate acestea, unele exemplare au fost etalate în diverse expoziții temporare și am putut beneficia în consecință de prezentarea lor în cataloagele aferente publicate.

De asemenea, analizarea acestui tip de garnituri ne-a permis să concluzionăm că ele scanează și acoperă cronologic toată durata de 16 secole a staționării legiunii a XIII-a Gemina la Apulum, dar și a perioadei post-romane, respectiv secolele IV-V p.Chr. Din punct de vedere tipologic, majoritatea pieselor din colecțiile muzeului din Alba Iulia își găsesc analogii printre exemplarele descoperite atât în Dacia, cât și în alte provincii ale Imperiului.

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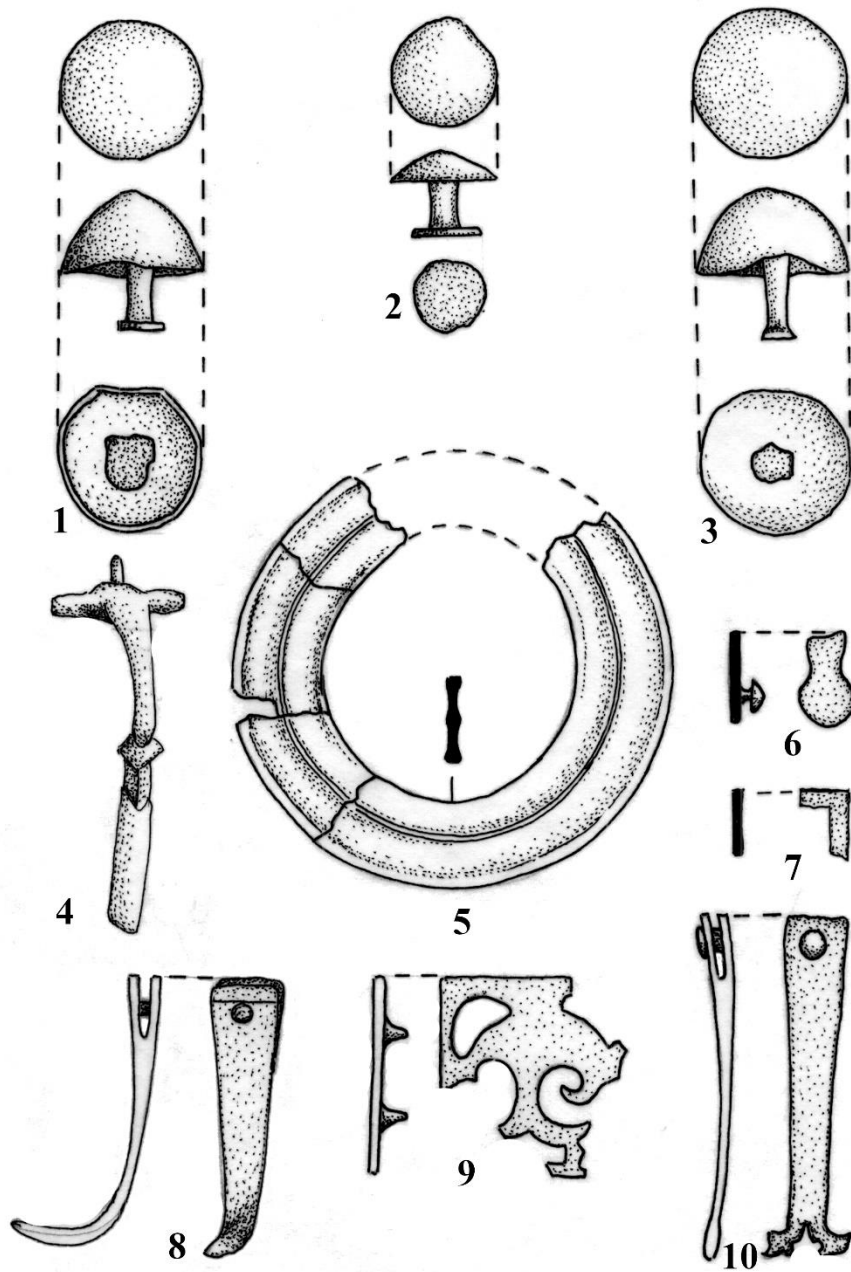
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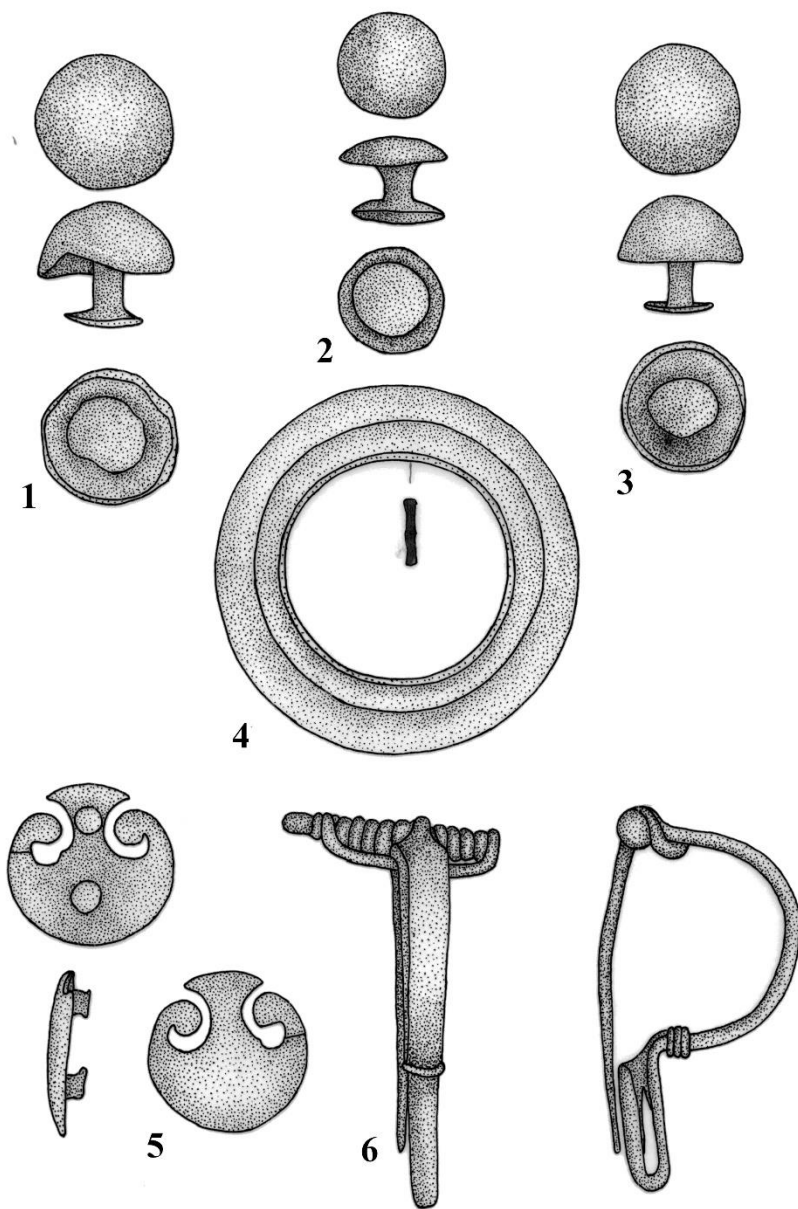
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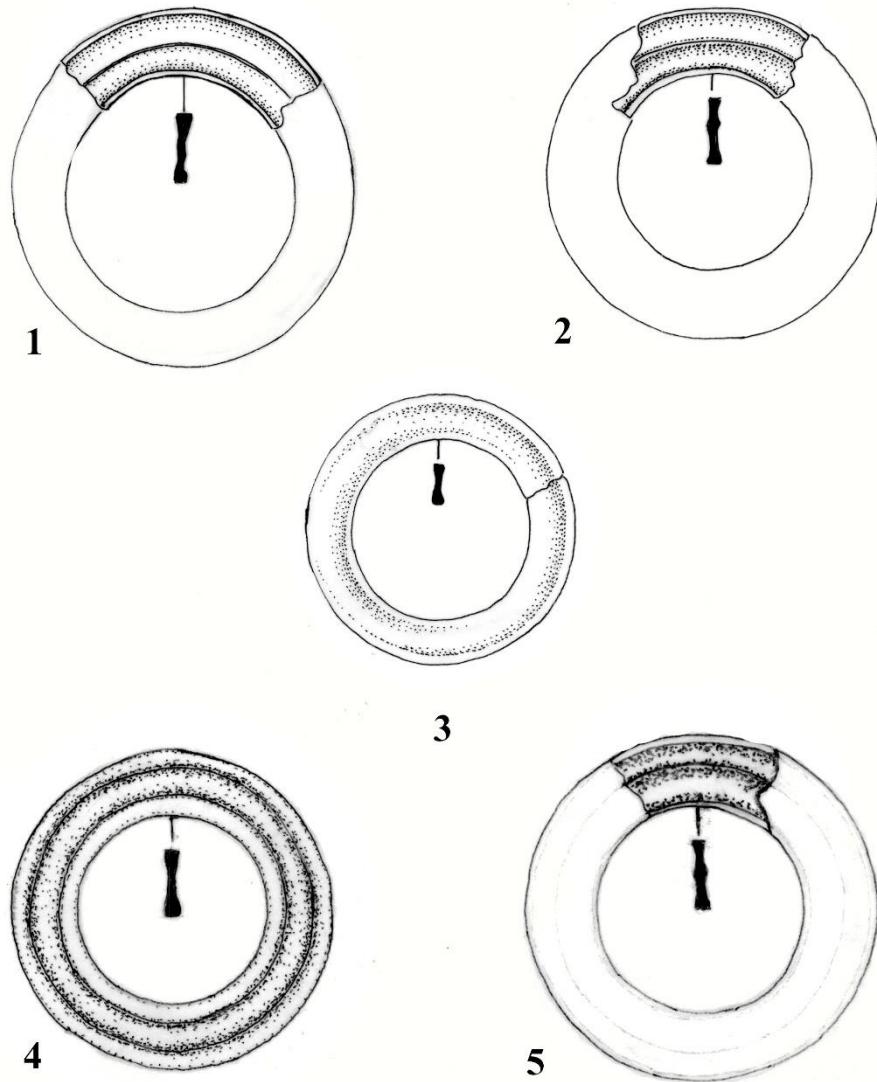
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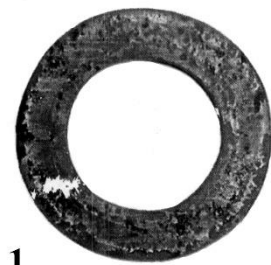
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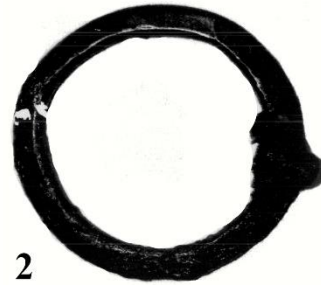
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Pl. III.



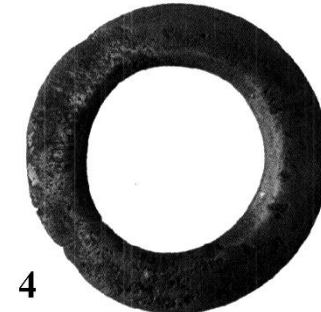
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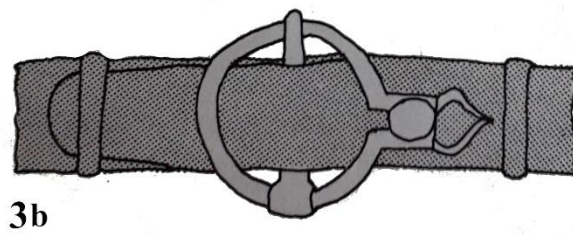
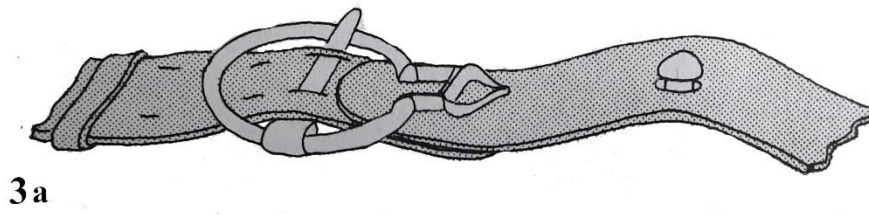
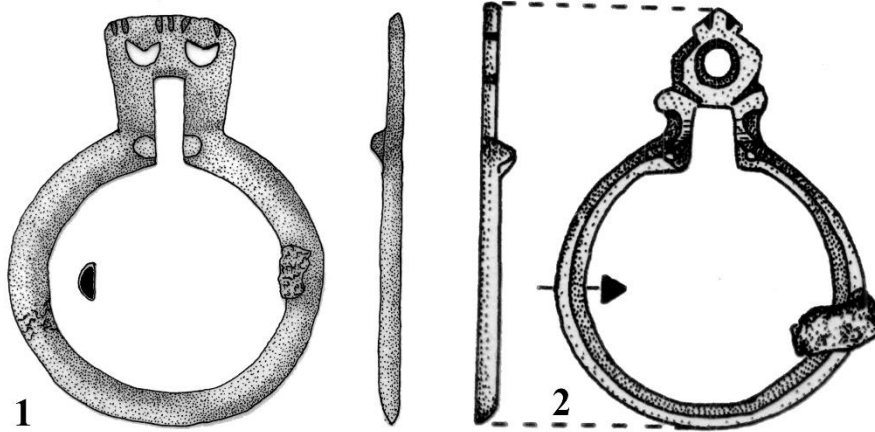


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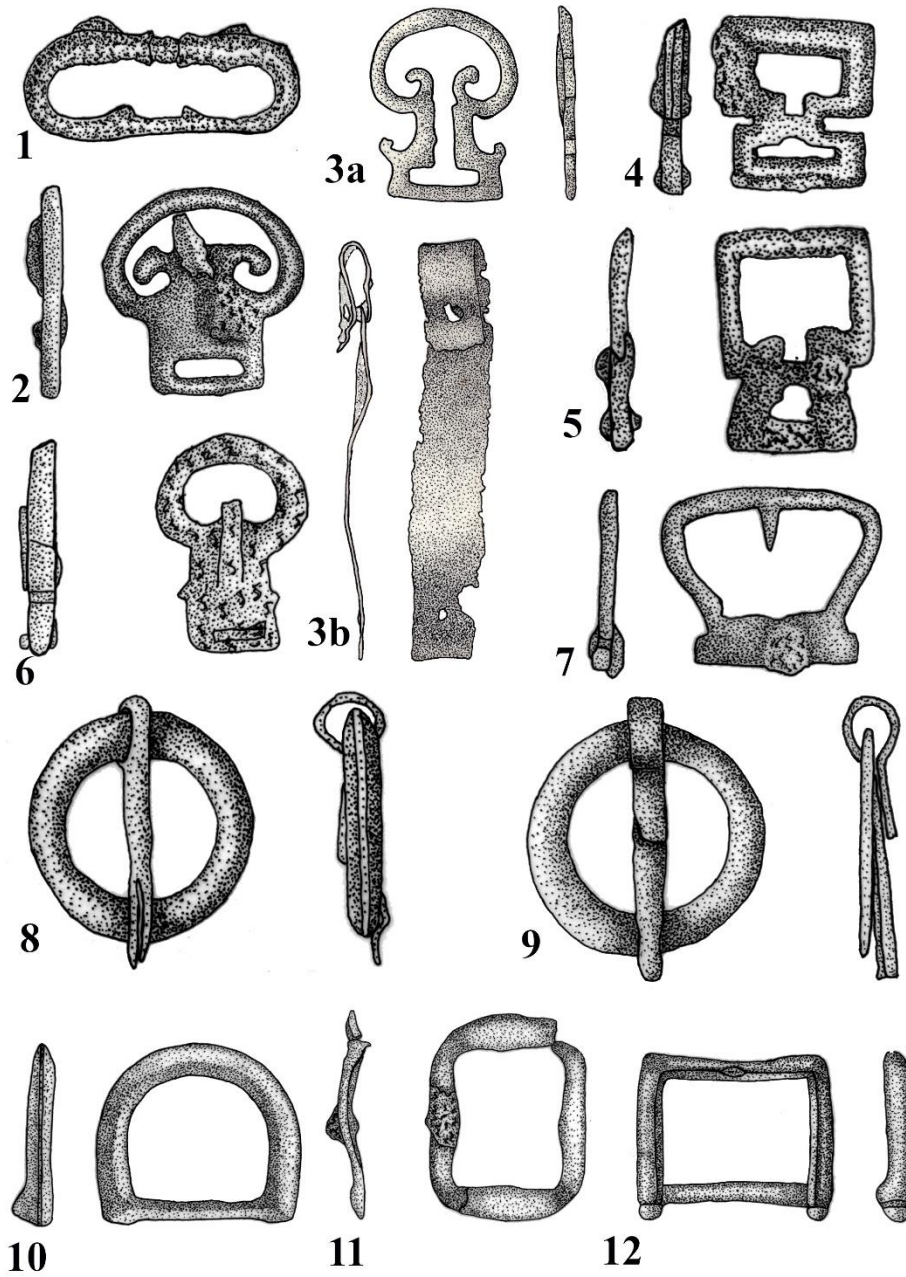
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Pl. IV





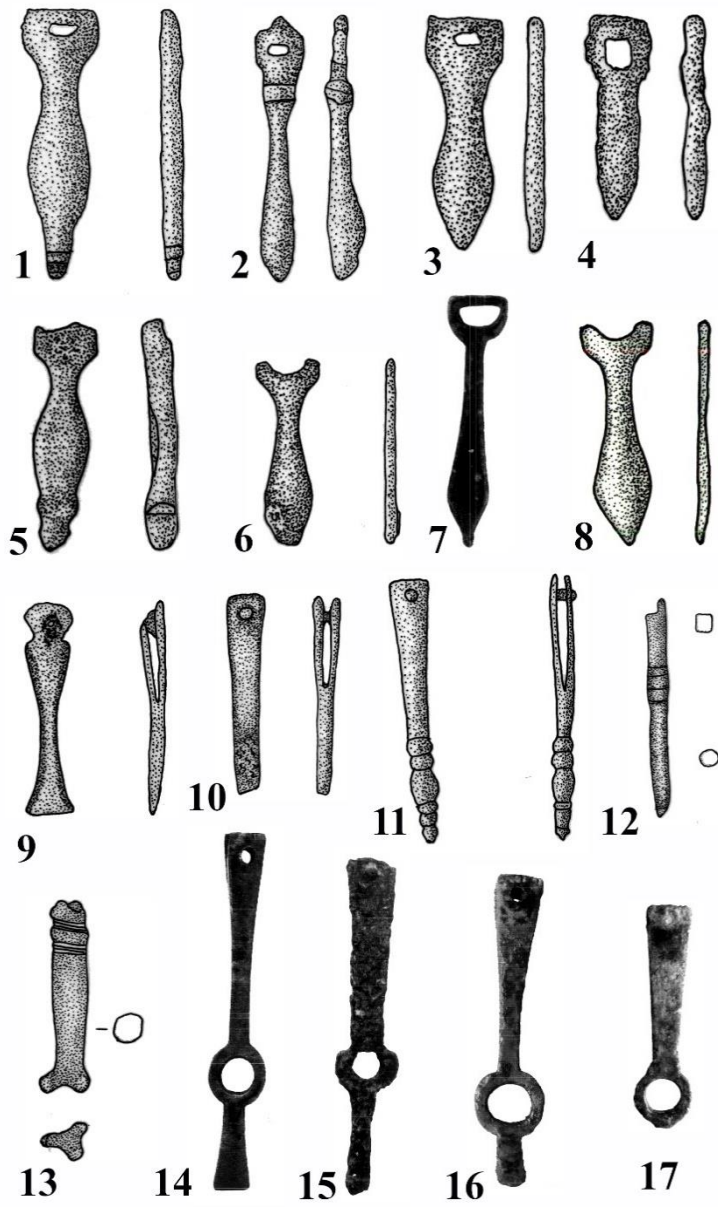
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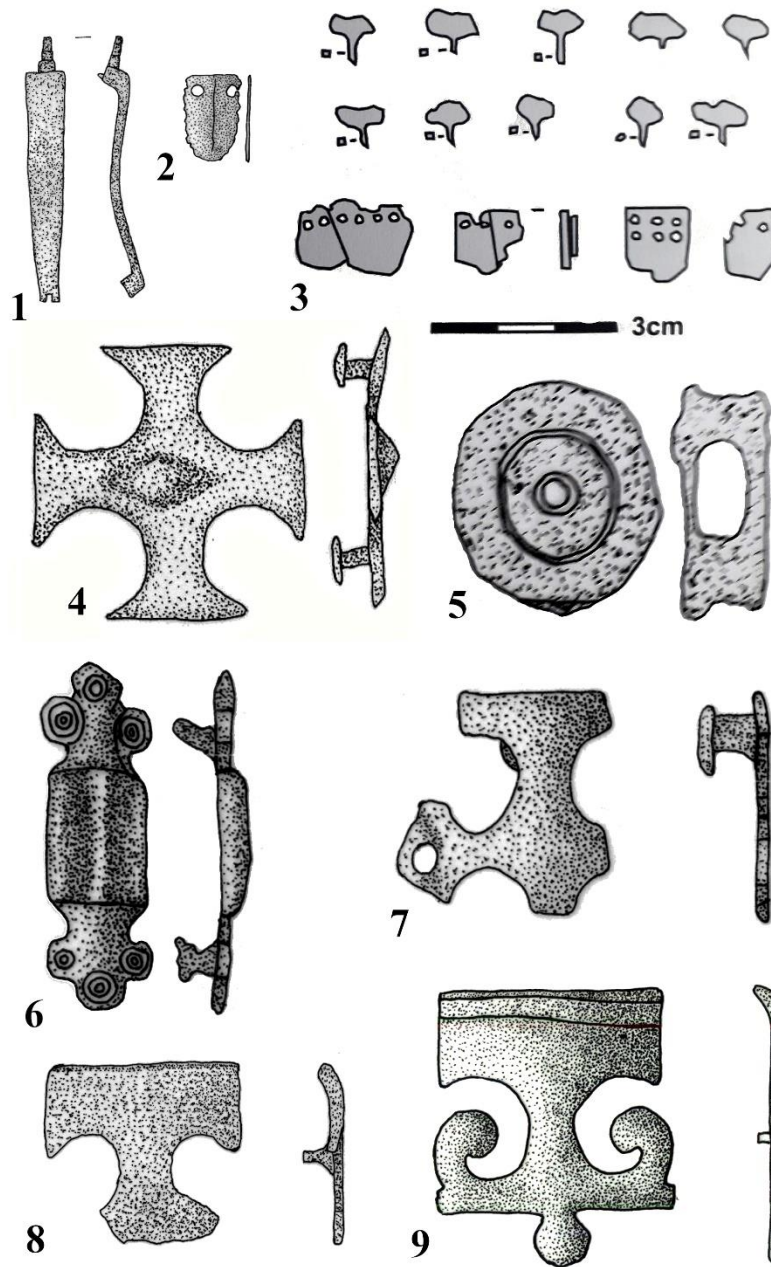
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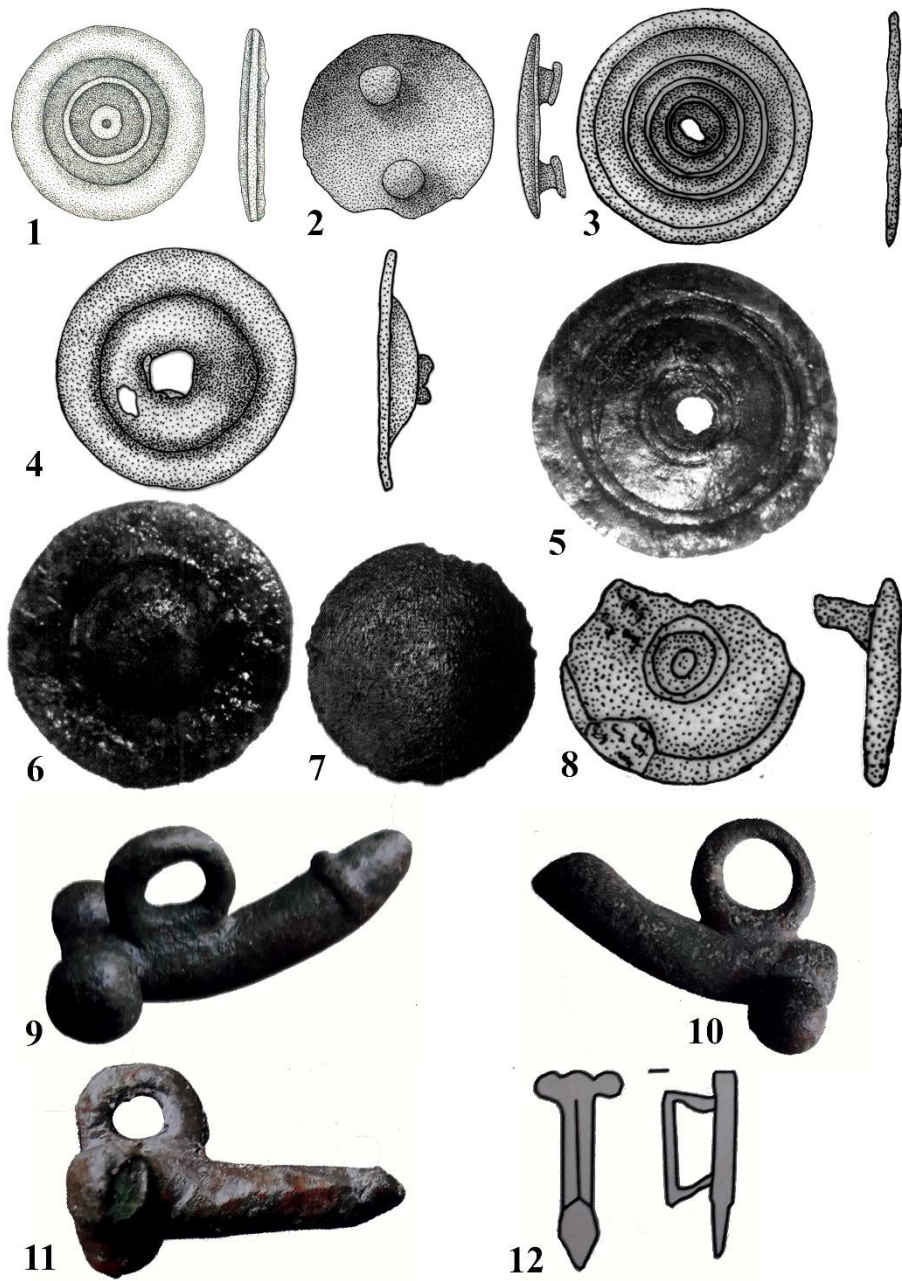
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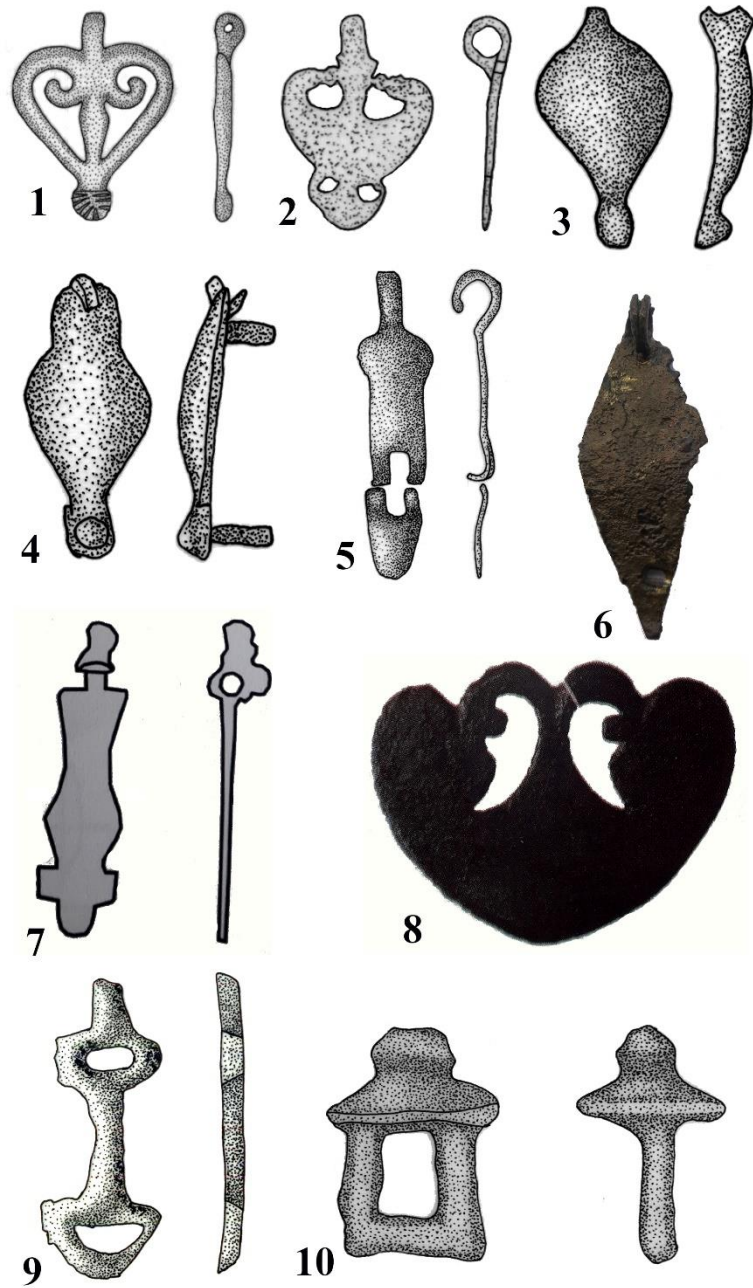
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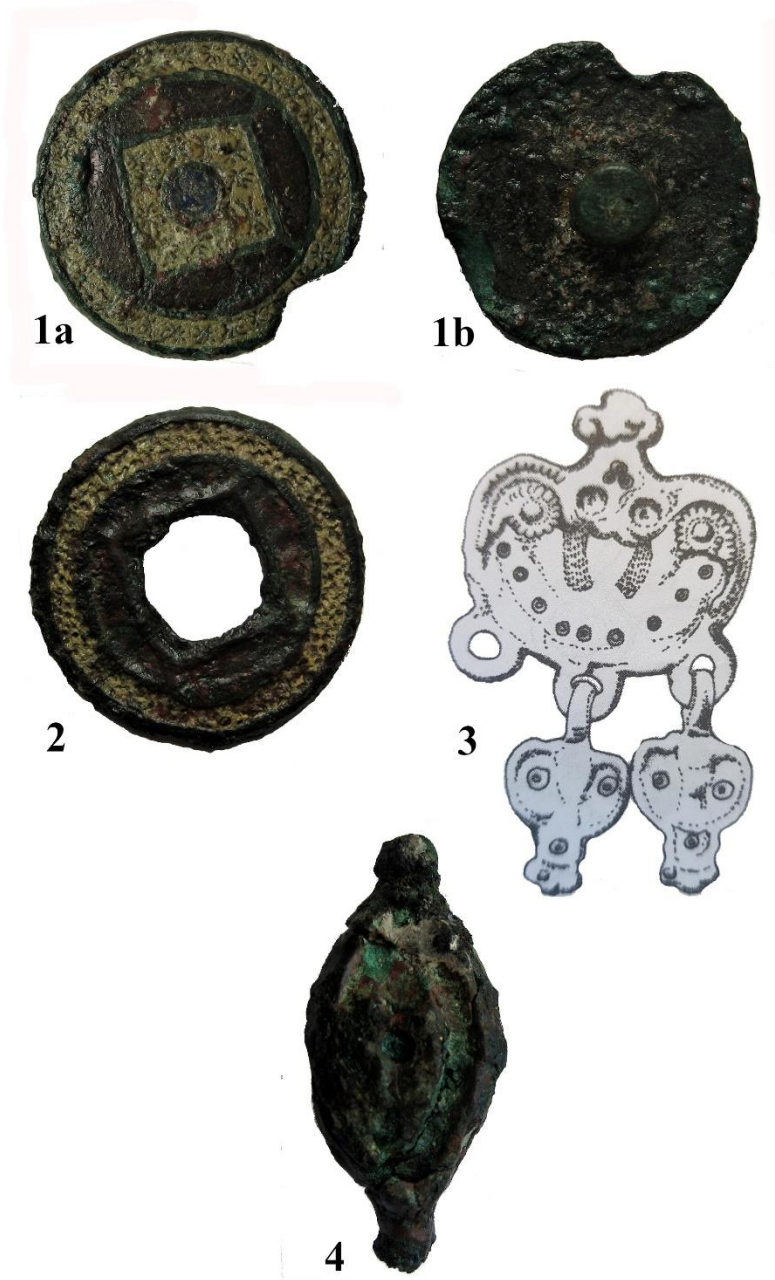
Pl. X



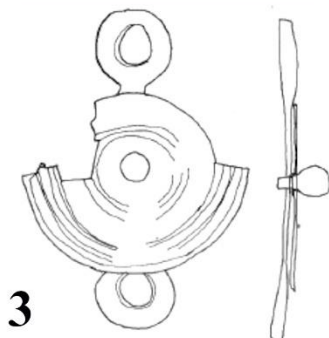
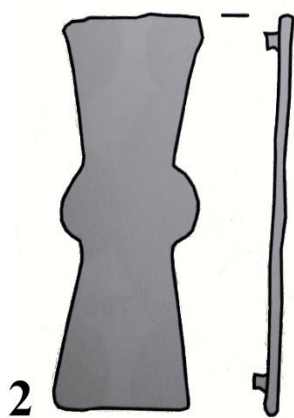
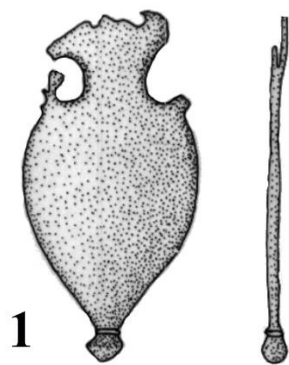
Pl. XI



Pl. XII



PL. XIII



Pl. XIV