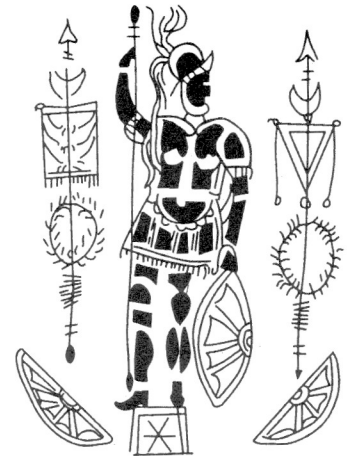


Arma

Newsletter of the Roman Military
Equipment Conference

VOL.7 NOS.1 & 2 £5.50

1995



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Plus these regular features:

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CVSTOS ARMORVM

Arma has now fallen ridiculously far behind itself so, in order to do a little catching up, this issue is a bumper double issue (double issues are always 'bumper', in case you hadn't noticed) so both parts 1 and 2 of volume 7 are here in one convenient, easy-to-use package. This does not mean that Arma will continue to appear only once a year, merely that it has helped me catch up for this year and avoids the inconvenience of having to send part 1 to the printers, then post it off just as part 2 goes off to be printed. Thus all the usual froth and thrill are to be found within, albeit in double measure, but to show that I am a man of mercy, you will only have to put up with one editorial. Actually, the other is still here, I have merely disguised it as an article.

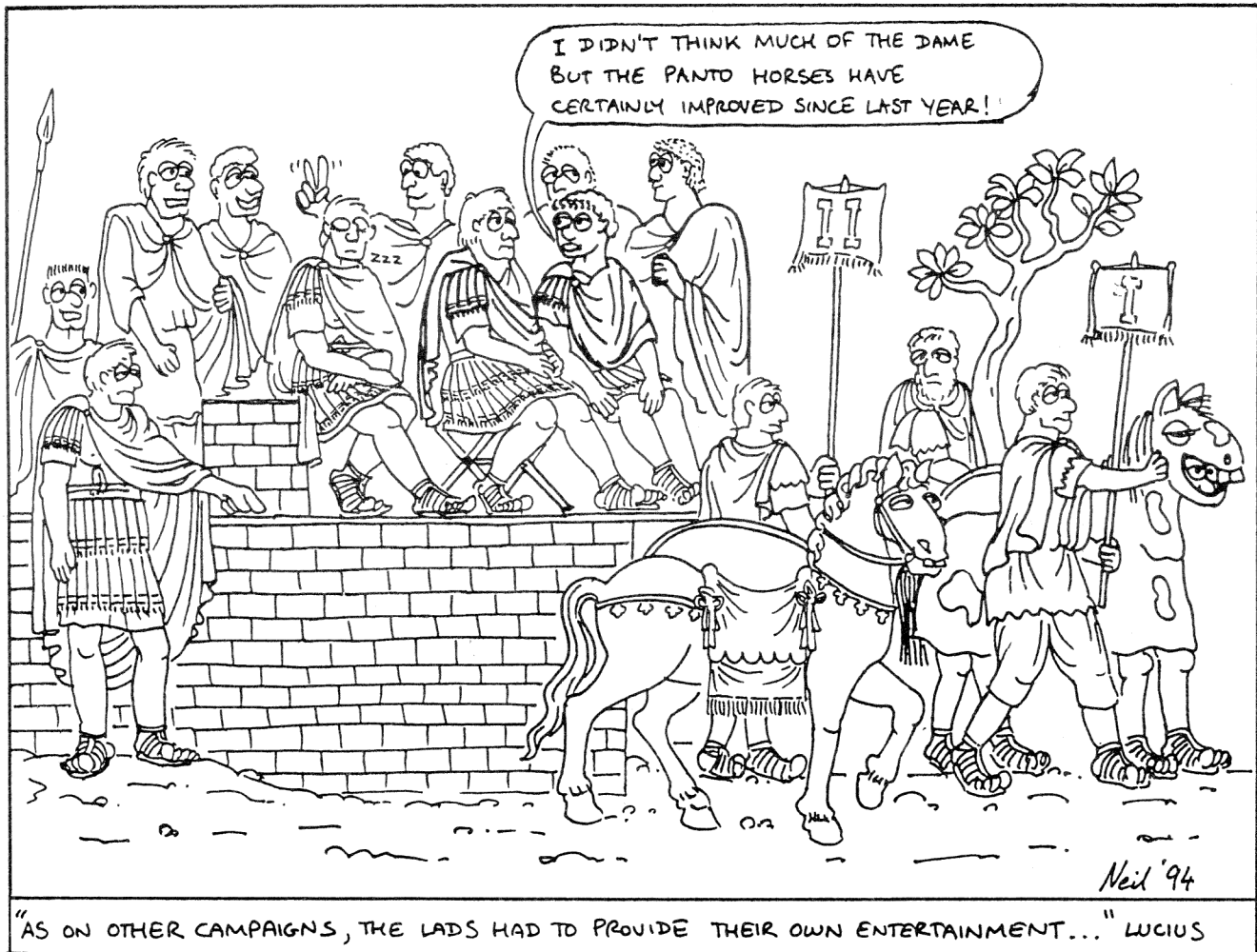
Not only is the announcement of ROMEC X to be found within these pages, but also a provisional list of speakers which shows how the conference continues to go from strength to strength. Particularly heartening is the strong showing by Spanish scholars, apparently catapulting (excuse the pun) Republican and Iberian issues to a new and most welcome prominence. Those with access to the Internet can keep up to date with the list of contributors by accessing the following page on the World Wide Web (particular thanks to Bill Hubbard for help with this):

<http://www.shef.ac.uk/misc/personal/cs1jwh/romec.html>

As befits an unusual *Arma*, we have some unusual offerings in this issue, not least the rather curious sculpture Jon Coulston and I bumped into in Romania. We also have Roman military equipment from Gamla, Germanic equipment from a Roman temple, as well as news of recent finds from France and the UK.

Finally, for those with access to email, you can now contact me (or even send me articles) at:

mcbishop@arma.demon.co.uk



THE FUTURE AND ARMA

As *Arma* embarks upon its seventh year, it is fitting that we should turn our attention to the future. What, for instance, will the newsletter look like in the year 2005? I have long suspected that it will no longer be originated in the form of ink on paper, but almost certainly in an electronic form, although I am equally convinced that most readers will continue to prefer to read the printed word. This may sound paradoxical, but reading a computer screen can never match the convenience of paper. The means of producing high-quality printout is now becoming cheaper and more accessible. It is therefore more a matter of the way in which the newsletter is *distributed*: at the moment it goes from my computer, to camera-ready copy, to the printers, back to me, then by post to you. By 2005, it could go from my computer, to another computer, to your computer. What, you don't have a computer? Well, watch your television set *very* carefully over the next few years, because unless you have not been paying attention, you will be aware that it is about to metamorphose and become the focus of a digital revolution: home banking, shopping, piped films – we've heard it all before. You can already get cards to turn your

computer into a television (you were, in fact, able to directly download computer software from teletext as early as the first half of the 1980s), but the difference between the two really is narrowing: even now, Amstrad are marketing a multimedia pc that is also a television.

We could already (if we were so inclined) produce an electronic *Arma*, courtesy of the Internet. The drawback at the moment is that the Internet is *very* slow, overly complex, of limited accessibility, and downright UGLY. What of the cost of all this? The bulk of your subscription at the moment goes on printing the newsletter, the remainder on sending it to you; with an electronic version, the main cost lies in purchasing storage on a remote computer, plus something for you to download the information. The cost of both is likely to come down over the next few years. Thus the question of whether *Arma* will ever exist in an electronic form is very much 'when?' rather than 'if?' and we are seriously looking into the possibility of producing a version of the newsletter on the worldwide web, perhaps complimented by a discussion group on the subject of military equipment. *Res Militares*, the Newsletter of the Society of Ancient Military Historians, already has a web site and a discussion group.

JRMES 5 AND ROMEC X

The fifth volume of *Journal of Roman Military Equipment Studies* is now with the publishers. Comprising those papers from ROMEC IX devoted to one of the two main themes 'Military Equipment in Context'. papers relating to the other theme 'Experiment and Reality' will appear in *JRMES 6*, hopefully early in 1996.

Elsewhere in this issue, you will find a preliminary call for papers for the 1996 ROMEC, the tenth conference, to be held in southern France, with a main theme of Republican equipment.

BISHOP & COULSTON

Who? Batsford's stocks of the paperback edition of *Roman Military Equipment* are almost exhausted (the hardback went out of print in 1994) and there appear to be no plans to reprint, so if you want one, time is running out. For those who like to read reviews before buying, here is a list of those of which your (*completely* disinterested) editor is aware:

- BENNETT, M., *Greece and Rome* 41, 1994, 79–81
DOBSON, B., *Archaeological Journal* 150, 1993, 526–8
ELTON, H., *Journal of Roman Archaeology* 7, 1994, 491–5
GARBSCH, J., *Bayerische Vorgeschichtsblätter* 59, 1994, 205–6
GREW, F., *Britannia* 25, 1994, 319–21
GRIFFITHS, W.B., *Archaeologia Aeliana* ser.5 22, 1994, 281–2
HAYNES, I., *Antiquity* 67, 1993, 689–91
RANKOV, B., *Classical Review* 44, 1994, 137–8

INSTRUMENTUM

Newsletters abound and long may they do so (we have a vested interest here, of course), catering for what is nowadays called a niche market (alternatively known as a minority interest), but the latest venture to come to our attention, *Instrumentum*, is an ambitious multinational attempt to draw together research on artefactual research in a wide range of fields, but centred on Roman handicrafts. For more details, see the back page of this issue of *Arma*, where you will also find an application form.

ROMAN CAVALRY – A NEW EXHIBITION IN NIJMEGEN

From 29th August 1995 to 7th January 1996, the exhibition 'Een leven te paard: ruiters uit de Lage Landen in het romeinse leger' will be at the Provinciaal Museum G.M. Kam in Nijmegen, the Netherlands. Should you miss it there, then you will have another chance to see it at the Regionalmuseum, Xanten, in Germany from 11th February to 8th April 1996. The excellent bilingual (Dutch/German) catalogue (see 'New Publications' below) would appear to indicate that this will be well worth a

visit. You may sample the exhibition, and see an image of one of the helmets from the site, by visiting the following worldwide web address:

http://archweb.LeidenUniv.nl/aic/home_aic_gb.html

THE TERUEL CATAPULT AGAIN

D.B. Campbell

In reply to the anonymous 'Hot News About Artillery' in *Arma* vol. 6 no.2 (better entitled 'Not So Hot News...', as will be seen), it is good advice for anyone intending to expound on ancient artillery first of all to consult the publications of Prof Dr Dietwulf Baatz, now conveniently collected in a single volume.

In that volume, a paper entitled 'Katapultfunde 1914–1988' lists seventeen separate finds of ancient artillery.¹ Findspot no.6 is 'La Caridad, Caminreal, Teruel (Spanien)', which yielded 'iron sheathing of a field-frame with the four associated bronze washers'.² Baatz records that the find was made in 1985 in house 1 (the 'Casa Likinete') of the small Celtiberian town, and must have been buried when the house was destroyed during the so-called Sertorian War (81–72 BC).

The primary publication of the find describes it as 'la caja central de una catapulta romana de torsión'.³ I understand from Prof Dr Baatz that permission to publish the find had not been forthcoming, but that he received authorisation to reconstruct two replicas, one now displayed in Teruel museum, the other in the Limesmuseum Aalen.⁴

As Prof Dr Baatz emphasized to me, the find consisted only of the metal fittings of the field-frame; no timber was preserved. Consequently, the observation of your correspondent, Snr Iriate, that 'the frame has some similarities with the Cremona catapult shield',⁵ relates not to the original components but to Prof Dr Baatz's reconstruction!

Finally there seems to be some confusion over the Cremona catapult shield. Your correspondent refers to 'a second aperture below that intended for the slider', and notes that 'Baatz's reconstruction [of the Cremona catapult] seems to ignore this lower aperture'.⁶ However, Baatz clearly states that the shield was modified at a late stage by trimming both sides and cutting a rectangular notch into the lower edge;⁷ consequently, neither the trimming nor the notch appear in his reconstruction.

NOTES

1. BAATZ, 1994, 275–83.
2. *Ibid.* 282. Baatz illustrates one of the washers as fig.1.6; the catapult from which it derives would appear to have had a calibre of about 2½ feet (i.e. a missile length of 0.76m).
3. VINCENTE RÉDON *et al.*, 1986, 11. Fig. 11 shows

Continued on page 6

ROMECC 1996

(Roman Military Equipment Conference) Lattes (Hérault)

- Themes:** Military equipment and weapons of the Republic
Recent finds and research
- Organizer:** UMR 154, Lattes (M. Feugère, CR CNRS)
- Place:** Lattes Archaeological Centre, 390 Av. de Perols, 34970 Lattes, France
- Dates:** 25–28 September 1996

You are cordially invited to join the 1996 ROMECC meeting which is going to take place at Lattes, near Montpellier (F), during the Autumn of 1996.

You can either propose a communication on the *specialized theme* or on recent finds and research in the field of military equipment and ancient weaponry. The former contributions will be published as a monograph, *L'équipement militaire et l'armement républicains* (volume 7 of *Journal of Roman Military Equipment Studies*); the others will appear in a subsequent volume of *JRMES*.

- Communications:** 10 to 20 mins
Projection facilities: slides, overhead transparencies, films

Specialized theme:

- preferably, military equipment and weapons of the Roman army under the Republican: helmets, cuirass and shields, hand- and thrown weapons, archery, artillery...
- discussion on military contexts of the Republican period;
- critical analysis of external sources on this type of equipment: sculpture, texts... etc
- but also*, contributions on contemporary weapons which may have influenced Roman weaponry: Greek, Punic, Celtic, Iberian..., etc. As far as possible, these last themes should be treated synthetically, in order to leave more time for contributions specifically devoted to the Roman Republic.

Recent finds and current research:

- information on new finds of military equipment and Roman weapons (Republic, early Roman period to Late Antiquity);
- information on current research (excavations, publication, thematic studies, university research);

Please do not hesitate to contact me to talk about any contribution or project. We hope to secure the necessary finances to be able to pay for the lodging and, if possible, travel expenses of the communicants.

M. Feugère

Centre de Documentation Archéologique Régional, 390 Avenue de Pérols, 34970 Lattes, France Tél: 67.65.31.67, Fax: 67.22.55.15

A Specialized theme

1. Sources

- P. Connolly (GB): Roman military equipment of the Republic: state of research.
L. Keppie (GB): Military service in the epigraphic and sculptural record of the Late Republic.
S. Sievers (D): Alesia and Osuna: Bemerkungen auf die Normierung der spätrepublikanische Bewaffnung und Ausrüstung
I.P. Stephenson (GB): Roman military training equipment: form and function in the Republican period.
Y. Le Bohec (F): L'armement pendant les Guerres Puniqes d'après les sources littéraires.
A.-M. Liberati (I): L'esercito di Roma nell'età delle guerre puniche.

2. The Hellenistic world

- E. Künzl (D): Waffendekor im Hellenismus.
G. Waurick (D): [title to be communicated]

3. Republican Italy and its fringes

- J. Horvat (SI): The Roman Republican weapons from Smihel in Slovenia.
M. Luik (D): Die republikanische *pila* in Talamone.
P. Piana Agostinetti (I): L'armement en Gaule Cisalpine et chez les peuples des Alpes pendant la romanisation (IIIe–Ier s. av. J.-C.): tradition celtique et innovations.

4. The Iberian peninsula and Gaul

- L. Berrocal-Rangel (E): Contributions archéologiques à la connaissance de l'équipement militaire pendant les Guerres Lusitaniennes.
M. Luik (D): Römische Waffen und Ausrüstung aus Numantia.
F. Quesada Sanz (E): [*Gladius hispaniensis* and/or Montefortino type helmets in Iberia].
M.-L. García (E), E. Gil (E), A. Iriate (E): A hoard of Republican armour in Gracuris (Alfaro, La Rioja, E).
J.D. Vincente Redón (E): La catapulta tardo-republicana y otro equipamiento militar de «La Caridad» (Caminreal, Teruel).
F. Gracia Alonso (E): L'artillerie romaine et les fortifications ibériques dans la conquête du NE de la péninsule ibérique (218–196 av. J.-C.).
I. Filloy (E), E. Gil (E): Les armes celtibériques de la nécropole d'Alava (E).
A. Rodríguez Colmenero (E), T. Vega Avelaira (E): Equipamento militar del campamento romano de Aquis Querquenis (Portoquintela, Ourense, España).
R. Boudet † (F): Contribution à la chronologie des casques en bronze de type Coolus-Mannheim d'après les découvertes de l'oppidum d'Agen (Lot-et-Garonne).
M. Reddé (F), V. Brouquier-Reddé (F): [excavations at Alesia: title to be communicated]

5. Germany

- K. Czarnecka (PL): Germanic weaponry of the Przeworsk culture and its Celtic background.

6. The East

- C. van Driel-Murray (N): Going native in Quasr Ibrim (s Egypt, 1st c. BC), the southernmost frontier fort of the Empire.

7. Cavalry

- R. Gebhard (D): Mediterranes Pferdegeschirr (?) in Manching (D).
A. Hyland (GB): [cavalry: title to be communicated]

B Current Research

8. General Principals

- M.C. Bishop (GB): How do you follow that? The Russell Robinson archive and the future of Roman military equipment studies.
J.C.N. Coulston (GB): Gladiators and soldiers: equipment and personnel in *ludus* and *castra*

9. High Empire

- L. Allason-Jones (GB): Recent work on some military equipment from Halton Chesters and Great Chesters.
M. Biborski (PL): Typologische Differenzierung der Schwerter aus dem europäischen Barbaricum in der ersten Hälfte des 1. Jahrhunderts n. Chr.
C. von Carnap-Bornheim (D): Militaria aus Niederbieber (D).

- E. Deschler-Erb (CH), C. Unz (CH): Bemerkungen auf die Militaria von Vindonissa (Windisch, CH)
 N. Hanel (D): Römische Bewaffnung aus Xanten I (c. 12 BC–69 AD).
 J. Istenic (SI): Early Roman weapons from the river Ljubljanica.
 P. Kaczanowski (PL): Umwandlungen im Bereich der Bewaffnung des europäischen Barbaricum zu Beginn unserer Zeitrechnung.
 M. Lodewijckx (B): Équipement militaire ou pseudo-militaire du centre de la Belgique.
 R. Marichal (F): Militaria du Ruscino (Château-Roussillon, Pyrénées-Orientales).
 S. Martin-Kilcher (CH): Un ensemble d'équipement militaire du IIIe siècle à Lyon.
 A. Morillo Cerdan (E), C. Pérez González (E): Armamento militar altoimperial en Herrera de Pisuerga (Palencia, España).
 A. Olivier (GB): Military supply in north-west England.
 M. Reuter (D): Bronzedepotfund mit Reiterhelm aus Herten (D).
 D. Sim (GB): The manufacture of chain mail in the Roman period.

2. Late Antiquity

- F. Aurrecochea (E): El equipo militar tardorromano en Hispania y su influencia sobre la población civil.
 K. Eibl (D): Ringsteine (Kameen) mit militärischen Insignien der *principales* (III–IV Jh. n. Chr.).
 A. Fuentes (E), N. Villaverde Vega (E): Quelques réflexions sur les fibules et les garnitures de ceinturon d'époque romain tardive trouvées dans la péninsule ibérique et au Maroc.

Continued from page 2

the find *in situ*. Prof Dr Baatz kindly sent me a photocopy of this some years ago. The find has also appeared in an exhibition catalogue, *Los Bronces Romanos en España. Madrid, May–July 1990* (Madrid 1990), 204 no.7 (with fig.); I have not seen this.

4. D. Baatz, pers. comm.
5. *Arma* vol.6 no.2 (Winter 1994), 16.
6. *Ibid.*
7. BAATZ, 1980, 290 = BAATZ, 1994, 192.

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- BAATZ 1980: D. Baatz, 'Ein katapult der *Legio IV Macedonica* aus Cremona', *Röm. Mitt.* **87**, 283–99
 BAATZ 1994: D. Baatz, *Bauten und Katapulte des römischen Heeres*, *Mavors Roman Army Researches* vol.11, Stuttgart
 VINCENTE RÉDON *et al.* 1986: J.D. Vincente Rédon, M.P. Punter, C. Escriche, & A. Herce, *La ciudad celtibérica de 'La Caridad' (Caminreal, Teruel)*, Teruel

The title 'Hot News...' was intended to be tongue-in-cheek, but the whole episode serves as a timely warning about the dissemination of information and the value of a publication like Arma in passing on news... when we know about it! – Ed.

NEW PUBLICATIONS...

Cavalry remain a very 'sexy' subject at the moment, a phenomenon driven by both some spectacular finds and some inspiring reconstruction work in recent years, so it is fitting that the new exhibition at first Nijmegen then Xanten should be accompanied by an excellent bilingual (Dutch/German) book. It is not strictly a catalogue, as it does not itemise each item displayed, but more a companion to the exhibition. Illustrated in both colour and black and white, it forms an useful introduction to the life of Roman cavalry troops on the Rhine frontier.

Cavalry fittings also appear in another volume that has come our way. Anybody who saw Ludwig Vanden Berghe's photographs of military equipment he has rooted out in Belgian museums cannot fail to have been impressed by his diligence and now we have a tangible result of his labours in his catalogue of equipment in the Museum van Bogaert-Wauters in Hamme. I cannot help but recall Graham Webster's seminal paper 'the Roman military advance under Ostorius Scapula' in *Archaeological Journal* **105**, which had an appendix of finds of military equipment from Britain which showed just how much material lay unrecognized in provincial British museums.

- L.J.F. SWINKELS (ed.), *Een leven te paard/Reiten für Rom* Nijmegen & Köln (1995) ISBN 90-71923-19-3/3-7927-1518-X
 L. VANDEN BERGHE, *Romeinse militaire voorwerpen in het Museum van Bogaert-Wauters Hamme* (1995)

...AND SOME NOT-SO-NEW

PUBLICATIONS

The Osprey Men-At-Arms series will be well-known to many, as will the sub-series that have sprung from them. Recent additions include volumes on Late Roman infantry in the *Warrior* series and the Praetorian Guard in the *Elite* series. For those unfamiliar with the format they usually consist of text with halftone and line illustrations, some colour reconstruction plates, and notes to accompany the illustrations. Most incorporate brief bibliographical details.

Although primarily aimed at the modeller/wargamer and 'military buff' markets they are perfectly accessible to all. That being said, they do rather vary in quality, but a couple of minutes thumbing through one in a bookshop will help you sort the grain from the chaff. Details of the two mentioned above are as follows:

S. MacDowall & G. Embleton, *Late Roman Infantryman 236–565AD*, Warrior Series 9, London 1994. ISBN 1 85532 419 9. 64pp. £8.50

B. Rankov & R. Hook, *The Praetorian Guard*, Elite Series 50, London 1994. ISBN 1 85532 361 3. 64pp. £8.50

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J. Bouzek, 'Die neuen römischen und barbarischen Funde und Befunde in Südmähren und Niederösterreich: Historische Interpretationsmöglichkeiten', in Friesinger *et al.*, 1994, 173–8

C. von Carnap-Bornheim, 'Zur Entwicklung des germanischen Gold- und Silberschmiedehandwerks vor und nach den Markomannenkriegen – Vergoldung, Filigran und Pressblech', in Friesinger *et al.*, 1994, 99–107

L. Chabot & M. Feugère, 'Les armes de l'oppidum de la Cloche (Les Pennes-Mirabeau, B.-du.Rh.) et al destruction du site au I^{er} siècle avant notre ère', *Documents d'Archéologie Méridionale* 16, 1993, 337–51

E. Deschler-Erb & P.-A. Schwarz, 'A bronze spearhead from Insula 22, and its significance for the urban history of Augusta Rauricorum (Augst BL, Switzerland)', *JRMES* 4, 1993, 9–22

T. Fischer, 'Archäologische Zeugnisse der Markomannenkriege (166–180 n. Chr.) in Raetien und Obergermanien', in Friesinger *et al.*, 1994, 341–54

M.Th.R.M. Dolmans & J. Kempkens, 'Militaria uit Valkenburg Z.H.', *Oudheidkundige Mededelingen uit het Rijksmuseum van Oudeheden te Leiden* 75, 1995, 119–30

H. Friesinger, J. Tejral & A. Stuppner (ed.), *Markoman-*

nenkriege: Ursachen und Wirkungen, Brno, 1994

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C.M. Gilliver, 'Hedgehogs, caltrops and palisade stakes', *JRMES* 4, 1993, 49–54

K. Godtowski, 'Die Synchronisierung der Chronologie des germanischen Fundstoffes zur Zeit der Markomannenkriege', in Friesinger *et al.*, 1994, 115–28

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P. Kaczanowski, 'Das Problem der Widerspiegelung der Markomannenkriege in den Waffenfunden des Barbaricum', in Friesinger *et al.*, 1994, 139–48

L. Kocsis, 'A recently identified cavalry sports helmet from Aquincum', *Budapest Régiségei* XXX, 1993, 281–92

M. Lodewijckx, L. Wouters, W. Viaene, J. salemink, H. Kucha, M. wevers, & R. Wouters (with a contribution by S. Scheers & F. Steenhoudt), 'A third-century collection of decorative objects from a Roman villa at wange (Central Belgium): first interdisciplinary report', *JRMES* 4, 1993, 67–99

M. Maczynska, 'Der Hortfund aus der frühen Völkerwanderungszeit aus Lubiana, woi. Gdansk, in Pommern', in Friesinger *et al.*, 1994, 149–57

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T.G. Padley, 'Two dolphin scabbard runners from Carlisle', *JRMES* 4, 1993, 101–2

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J.C.V. Rodríguez, 'Un nuevo testimonio arqueológico sobre la presencia efectiva de contingentes militares centroeuropeos en la Hispania bajoimperial: una hebilla de *cingulum militia* procedente del Sur de Córdoba', *Anti-quitas* 5, 1994, 69–71

J.P. Salvatore, 'Roman tents "replicated" in stone-built barracks of the 2nd century BC in Spain', *JRMES* 4, 1993, 23–31

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J. Tejral, 'Die archäologischen Zeugnisse der Markomannenkriege in Mähren – Probleme der Chronologie und historischen Interpretation', in Friesinger *et al.*, 1994, 299–324

T. Völling, 'Plumbata – Mattiobarbulus – Martzobarboulon? Bemerkungen zu einem Waffenfund aus Olympia', *Archäologischer Anzeiger* 1991, 287–98

D. Woods, 'The ownership and disposal of military equipment in the Late Roman army', *JRMES* 4, 1993, 55–65

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ROMAN MILITARY EQUIPMENT FROM GAMLA

Jodi Magness and Guy D. Stiebel

In 1976, the Israeli archaeologist Shmarya Gutmann began excavations at the site of Gamla in the Golan Heights, under the auspices of the Israel Department of Antiquities. Since then, his work has revealed the remains of a Jewish town of the late Hellenistic and early Roman periods built on the steep slopes of the site. In 67 C.E., Gamla was taken by the Romans during the First Jewish revolt. Flavius Josephus (*War* IV.1.1–10) vividly describes the Roman siege, in which the V, X, and XV Legions participated, led by Vespasian. According to his account, over 5000 of the town's inhabitants plunged to their deaths over the rocky cliffs of the site.

A large corpus of military equipment connected with the Roman siege and conquest of Gamla has been found in Gutmann's excavations. Professor Jodi Magness of Tufts University in Medford, Massachusetts, and Mr Guy D. Stiebel, a PhD candidate at University College, London, are preparing the final publication of this material, which will appear in *Atiqot* (a publication of the Israel Antiquities Authority). The hundreds of ballista stones recovered in the excavations will be published by Mr Andrew E. Holley of the Hartlepool Museum in England. The military equipment from Gamla includes hundreds of iron arrowheads, catapult bolts, pieces of equine equipment, and scabbard chapes. During our first examination of the material in the summer of 1994, Mr Stiebel found a small carton in the excavation office which contained the remains of a suit of segmented armour (*lorica segmentata*). It includes iron shoulder and chest plates to which copper alloy hinges, buckles, and decorative elements are still attached. The armour is currently undergoing treatment by a restoration specialist and will eventually be sent for metallurgical analysis. Other objects found in the same area, such as complete parts of a soldier's helmet, and a dagger handle, suggest that we might have the remains of a fully-equipped Roman soldier. The quality, quantity, and excellent state of preservation of the military equipment from Gamla will contribute a great deal to our knowledge of the Roman army, especially in the eastern provinces of the Empire.

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GERMANIC EQUIPMENT IN A ROMAN TEMPLE: HELP!

Carol van Driel-Murray

Although badly eroded, the site of the temple at Empel (prov. North Brabant, Netherlands) has produced a considerable amount of military equipment, which, it is surmised, was dedicated to the gods (possibly Hercules Magusanus) at the end of a soldier's career.¹ Beginning as

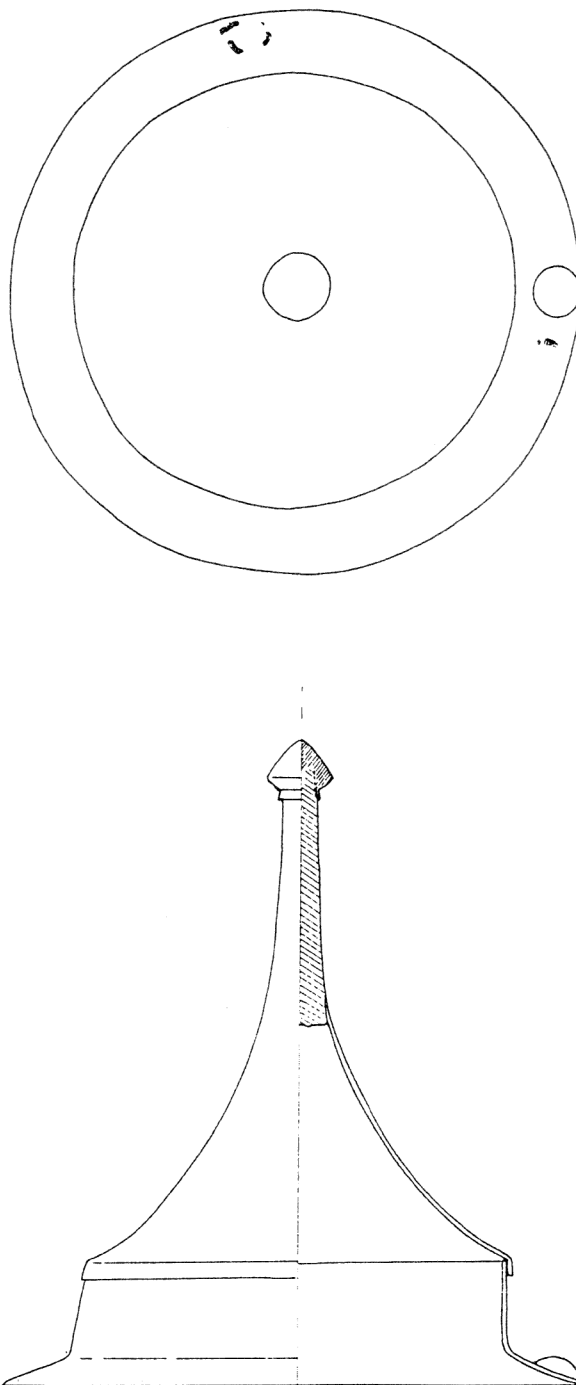


Fig.1: shield boss from Empel (scale 1:2)

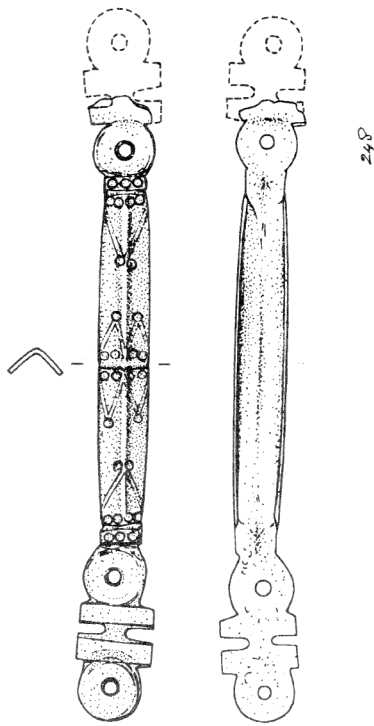


Fig.2: shield grip from Empel (scale 1:2)

an open-air site in the Late Iron Age, a stone temple of normal Gallo-Roman plan was erected in the Flavian period. Some time towards the end of the Second Century the complex was damaged by fire, but the debris was cleared and the temple continued to function until c. 235, when the coin series breaks off.

My call for help concerns a few pieces of 'Germanic' equipment. Now, native equipment like spears and shield edgings fit nicely into the accepted interpretation of votive gifts offered by native auxiliaries in the earlier First Century, but these pieces are not only much later in date, but also very definitely and spectacularly Germanic in character. Moreover, the apparently restricted distribution of comparative finds pose problems of interpretation.

The first and most obvious piece is a large iron shield boss (Fig.1) with an exaggerated point ending in a massive knob (Stangenschildbuckel), painstakingly restored and documented by Jo Kemkes (Roermond). It was found in well 303, together with a complete cavalry helmet of the Hedderheim type, closely similar to the examples from Nijmegen and Bodegraven.² Though found together, the boss and helmet need not actually have been associated since it is supposed that various trophies and dedications were deposited throughout the history of the cult site. It does look as though the boss was already dismembered. There is no sign of edging, grip or rivets, nor of boards (though a wooden bucket was present). They may, of course, have come loose if the wooden shield was burnt in the general destruction.

The boss is made in four sections: the knob and massive rod are soldered together, the conical, slightly concave body is beaten onto the rod, and the separate base is soldered on. Unfortunately the base is too fragmentary

for an accurate assessment of the number and exact location of the rivets. One simple, flat headed rivet remains, with traces of another at 90°: this suggests the presence of at least four, symmetrically placed rivets, but slight traces of solder next to the remaining rivet and irregular lumps visible on photos of the corroded edge fragments before cleaning are vaguely suggestive of groups of multiple rivets. The lack of certainty is particularly regrettable since the rivets are an important feature in deciding the cultural and geographical affiliations of Germanic bosses.

Now you would think that Zielsing's enormous compendium of Germanic shield bosses³ would make identification child's play and perhaps for someone familiar with these Stangenschildbuckeln, it does. But this is the first one I've ever come across and Zielsing does not include enough illustrations to cover the range of forms included in his categories. On tracing the references I was also dismayed to find that the distinctions are far from clear cut and the criteria not rigorously defined nor maintained (to judge from the type attribution of bosses from Putensen, Hamfelden and Schäplitz there is a considerable overlap between his type B2 and C2 – which has severe repercussions for the interpretation of the Empel example). Zielsing divides the shield bosses into types A–T, with the distinctive group of the Stangenschildbuckeln comprising types A–D.

My first inclination was to take the large knob at the top of the boss as the main characteristic and to go for type B2b (with six examples), though we may also consider C2b (with only two). The overlapping collar is a further problem, since this is a defining element for the group B2e, though in view of the diversity of shapes represented in the group, it may be questioned whether it is a valid criterion, however obvious the technological distinction may seem. No other boss type has an overlapping collar, so on this feature the boss would automatically belong to the B2 category.

The interesting thing about B2b is that it has a fairly short life, starting in Eggers B2 and into C1, but no later⁴ and it is pretty well restricted to the Przeworsk culture, with a single outlier in Bohemia.⁵ However, most Polish B2 bosses are rather angular, with quite a sharp break at the junction between the cone and the projecting rod. The cones also tend to be convex rather than concave as in the Empel example. Only Leznica Wiekla⁶ and the pair from Chruslin⁷ approach the curve of the Empel example, while Walichnowy⁸ has a similar massive knob. Far more satisfactory as far as shape – concave cones – is concerned are the numerous C2 bosses from the Elbe region – in particular Putensen and Hamfelde.⁹ But here there is not a knob in sight. Furthermore, the Elbe bosses are characterised by huge dome headed rivets, set in groups of three. The Przeworsk culture bosses on the other hand are usually secured by three or four simple rivets, as the Empel boss seems to be. Zielsing only mentions two examples of C2s with knobs (i.e. C2b), one of which, from Dylowo¹⁰ is a moderately good parallel for Empel.

So do we take general shape as the primary criterion,

or the knob, or the overlapping construction?

This is not the only Germanic piece here. There is also a profiled and decorated bronze grip (Fig.2) belonging to Zieling type F5 (these are rather easier to identify than the bosses), dated to Eggers B2, but found in the clearance debris above well 91. Though Germanic grips occur with some regularity in early Roman military contexts (such as the examples from Xanten to which Dr H.-J. Schalles drew attention in the last *Arma*), late examples are much rarer. Zieling lists 11 examples of this type, widely scattered over Free Germany. Two of these are too fragmentary for accurate identification, and several more are not particularly good parallels for our example. The closest parallels come from N. Germany (e.g. Hamburg-Marmstorf,¹¹ Naunheim,¹² Altbarnum¹³). In addition, Hamburg-Marmstorf has several nice, smoothly concave C2 bosses, though none with knobs.

The Germanic tries certainly went in for spectacular shields: spiky and aggressive, you can see what the attraction could have been for Roman treasure hunters.¹⁴ Believing the boss to belong to the Przeworsk culture, I originally surmised that these items were war trophies brought back from the Marcommanic wars, but if their origins lie in the Langobard region of the Elbe a different explanation needs to be sought for their presence in a Roman temple on the northern frontier.

In the whole discussion, however, the main problem is the lack of grave gifts west of the Elbe: we may be searching for parallels far afield and increasingly illusory, simply because the weapon types nearer home elude us. Empel may not be a store of exotic items but simply representative of the equipment in use in the northern Netherlands and NW Germany at this period.

Has anyone any help, suggestions or comments?

NOTES

1. ROYMANS & DERKS, 1993; 1994, VAN DRIEL-MURRAY, 1994.
2. ROBINSON 1995, pl.280-5.
3. ZIELING, 1989.
4. *Ibid.* 55.
5. *Ibid.* no.804.
6. *Ibid.* no.1232.
7. *Ibid.* no.969.
8. *Ibid.* no.1523.
9. *Ibid.* sites 24 and 52.
10. *Ibid.* no.1032.
11. *Ibid.* no.109.
12. *Ibid.* no.306.
13. *Ibid.* no.518.
14. When is someone going to make a replica of these impressive shields? They make Roman equipment look dull and conventional, but it would be interesting to find out how practical the Stangenschildbuckel actually is, and whether the more exaggerated examples are for use or for status display.

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SILBERCINGULUMTEIL AUS

ANATOLIEN

Ernst Künzl

Abb. 1: Fundort unbekannt (angeblich Kleinasien); Mainz, Römisch-Germanisches Zentralmuseum Inv. O.38172; Silber; Länge 176 mm; Breite 17 mm; Gewicht 51,5 gr; Unpubliziert; Phot.: Römisch-Germanisches Zentralmuseum Mainz T 86/1251-1253.

Es ist ein silberner Scharnierbeschlag von einem Cingulum des 3. Jhs. n. Chr. Ringschnallencingula und Rahmenschnallencingula kamen im frühen 3. Jh., wohl unter Caracalla, in Mode (Abb. 2). Sie verschwanden um 300 wieder, die Schnalle mit beweglichem Dorn wurde wieder eingeführt.¹

Der obere Teil besteht aus einer doppelten Platte zur Aufnahme der Lederpartie mit zwei runden Nietten. Den Schmuck bilden zwei Reihen ausgeschnittener Dreiecke. Die Arbeit ist nicht sehr fein, sie kann jedenfalls weder mit den Münchner Stücken² noch mit dem von Sackrau³ konkurrieren.

Relativ lange Exemplare derartiger Scharnierbeschläge aus Silber sind bislang sehr rar. Man kennt bisher nur Funde aus Kleinasien/TR,⁴ dem Ostbalkan⁵ und der Germania libera.⁶

Etwas kleiner dimensioniert sind die Silberexemplare aus Remagen, Nordrhein-Westfalen/D, Regensburg, Bayern/D und Carnuntum, Niederösterreich/A.⁷ Kleinere Scharnierbeschläge aus Bronze⁸ stammen aus den Provinzen Germania superior, Raetia und Pannonia. Derartige Cingulumteile wurden, und das verrät auch der variable Dekor, sicher an diversen Orten der Nord- und Ostgrenze produziert; nach dem aktuellen Stand spricht allerdings viel für eine Führungsrolle der Donauländer zwischen Süddeutschland und dem Schwarzen Meer.

FUßNOTEN

1. Die Forschungslage in Zusammenfassung bei FISCHER, 1988, 175, Anm. 33.
2. Gute Opus interrasile-Arbeit; FISCHER, 1988, Taf. 19.
3. Niellodekor; GREMLER, 1988, Taf. VI, 16.
4. Abb. 1.- Von der Euphratgrenze?

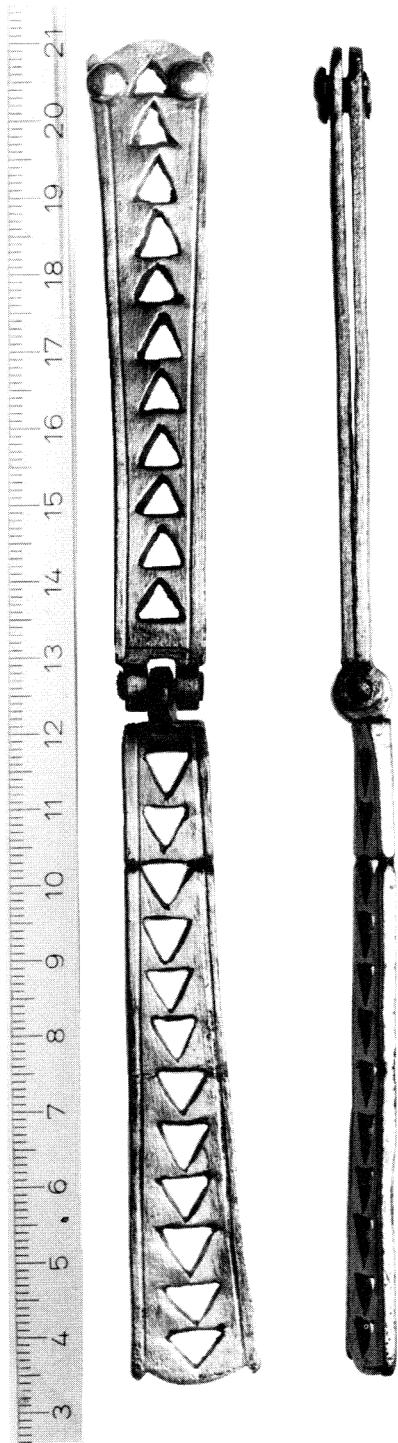


Abb. 1: Silbercingulumteil. Mainz, Römisch-Germanisches Zentralmuseum. Phot. RGZM.

5. Bulgarien? München, Prähistorische Staatssammlung. FISCHER, 1988, 167f. Abb. 1,4–5. Taf. 19.
6. Sackrau/Zakrzów, Schlesien/PL. Grab III. GREMPLE, 1888, Taf. VI,16a und 16b; FISCHER, 1988, 178 Abb. 5,9.
7. FISCHER, 1988, 180 Abb. 7,1–3.
8. OLDENSTEIN, 1976, Nr. 325–34 Taf. 37; FISCHER, 1988, 185f. Abb. 10.

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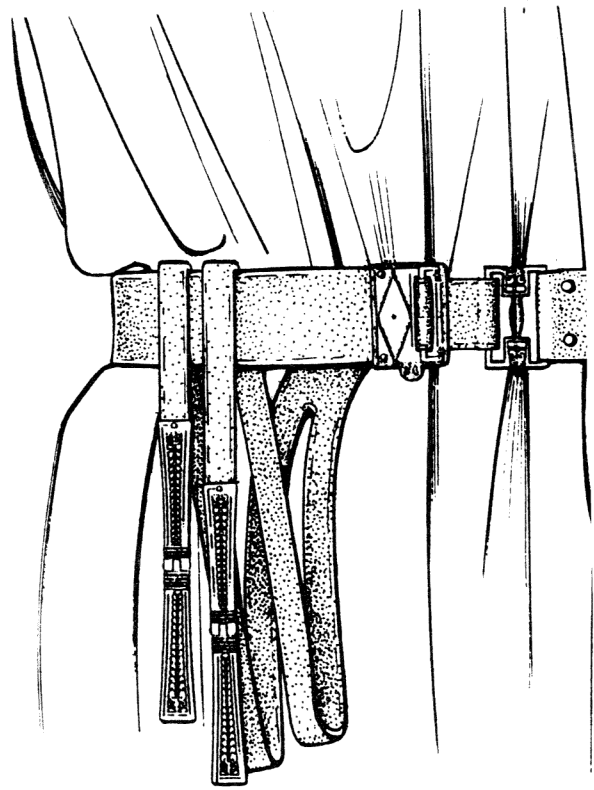


Abb. 2: Rekonstruktion eines Cingulum des 3. Jhs. n. Chr. Nach FISCHER, 1988, 182 Abb. 8.

ausrüstung im 3. Jahrhundert n. Chr., *Bayer. Vorgeschbl.* 53, 1988, 167–89.

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AN UNUSUAL HARNESS PENDANT FROM THE NARBONNE AREA

M. Feugère & P. Abauzit

Harness elements and horse-fittings are not uncommon on early Roman settlements of Narbonensis, and the site of the Roman villa at "Gaugac" (Lézignan-Corbières, Aude), 20km W of Narbonne, has yielded a number of such finds. Most of them belong to the early type of harness pendant, the one equipped with a hook, which provides c. 90% of all harness pendants known in Southern France.

A new discovery, recently made on this site by local archaeologists Mr and Mrs Pauc (Arques) concerns, as an exception, a hinged pendant of a quite unusual form. Though much distorted and fragmentary, the object (fig.1) can be reconstructed as a quadrangular plate, very thin

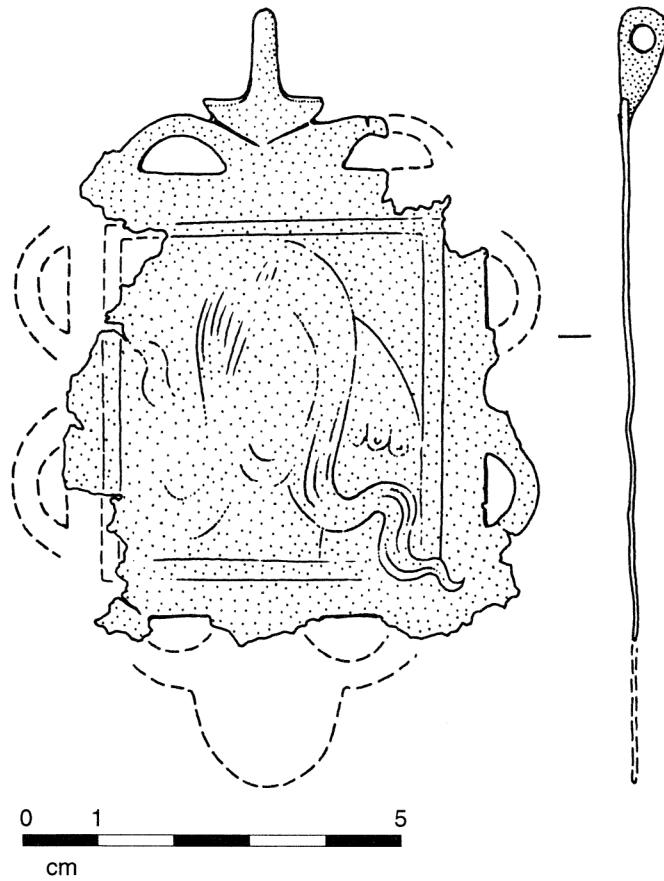


Fig.1: harness pendant from the Narbonne area (scale 1:1)

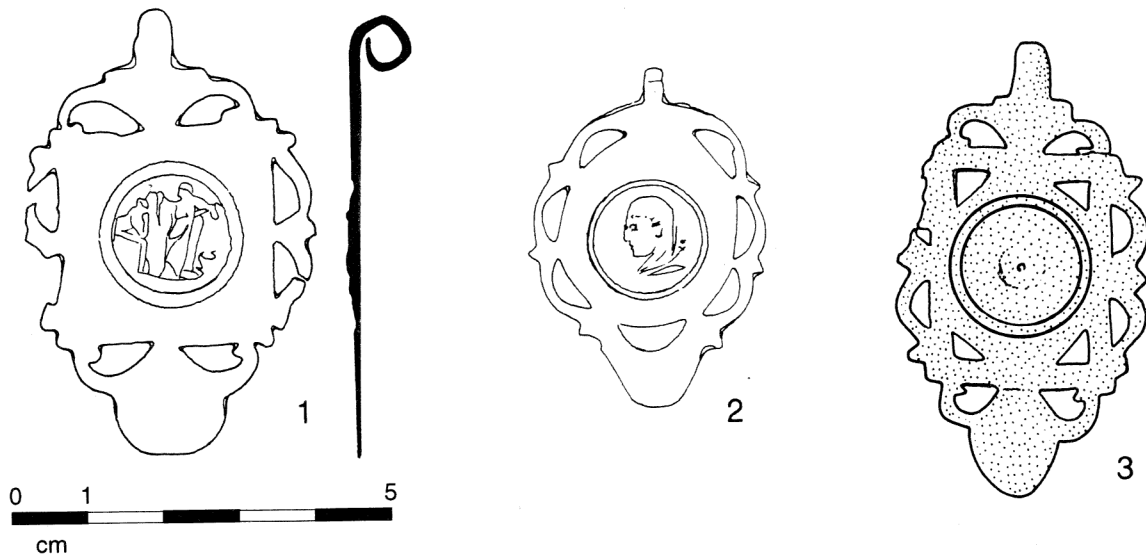


Fig.2: harness pendants from 1-2 Sisak, 3) Tangiers (scale 1:1)

except at the hinge, which was cast. The pendant was externally decorated with open arches, most likely two on each side. The upper surface has an engraved decoration delimited by a double frame. The engraving seems to show a female face with long hair, but many details are missing and we may be unable to distinguish important attributes.

Such pendants appear to be rare, but some parallels are available, at least, in Slovenia and Morocco. At Sisak, a similar pendant bears a central medallion illustrating a group; the top of this object was twisted to form a strong hook (fig.2,1).¹ Another pendant from the same site, decorated with a male head to the left, is more circular in shape and could illustrate a variant issued by the same workshop (fig.2,2).² In his publication of the Sisak small finds, R. Koscevic also reproduced another quadrangular pendant from Slovenia which seems simply decorated with incised circles.³ The form also appears at Tangiers (Morocco), where Chr. Boube described a hooked pendant of 60mm length, also decorated with circles (fig.2,3)

Objects of such a poor value are not likely to have been commercialized for themselves, and it would be very interesting to show if the distribution of certain rare types of harness pendants, such as this form, could possibly illustrate the movements of some cavalry auxiliaries.

NOTES

1. KOSCEVIC, 1991, pl.XV, nr.224.
2. *Ibid.* nr.225.
3. *Ibid.* 53, nr.315.
4. BOUBE, 1980, 370 and pl.129, nr.631.

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THE SCULPTURE OF AN ARMoured FIGURE AT ALBA IULIA, ROMANIA¹

J.C.N. Coulston

In the museum collection at Alba Iulia (Romania) there is a stone which has been carved in high relief to represent an armoured human figure.² The piece is a substantial size (H. 1.09m, W. 0.7m, D. 0.28m) despite the loss of the figure's head, neck and legs below the mid shins. The stone has a bedded structure with horizontal lines of weakness, is worn overall, and parts are broken away (the figure's left knee, part of its right shoulder, the right hand and the object it carries, some of the shield-boss).

A full-length figure stands frontally with the weight on its right leg. It wears a tunic reaching down to above the knee and the less damaged leg is clearly bare. The torso has three horizontal bands and a waist belt, whilst the

visible upper chest is covered by two rectangular plates overlapping with two visible small roundels suggesting attachment. Small triangular sections of scale armour appear over the shoulders, the right one clearly overlapping outwards rather than downwards. On the front of the right breast between the scale and the girdle bands there is a plain rectangular 'plate'.

The right arm is covered by nine or ten overlapping segmental bands and the damaged hand holds a vertical object. The latter probably represents the lower and middle sections of a shafted weapon depicted in stone extending from the bottom of the relief up to a surviving lump above the hand. In the hand area there are three approximately aligned holes which, if they are not a modern feature, may have been used to attach a section of shaft cast in metal. The end of a sword scabbard, worn on the figure's left side, projects below the shield. A curved, truly rectangular shield is carried by the left hand, and obscures much of the owner's body. It has a plain field and no edging, but displays an *umbo* in the form of an anthropomorphic (Gorgon's?) head. The boss-plate is rectangular with five small roundels surviving damage.

The shield is of the common curved rectilinear form characteristically carried by legionary infantry and armoured gladiators which is represented by actual examples from Dura-Europos.³ The general form of the boss is also well-represented by artefacts with legionary associations.⁴ The boss-flange presumably originally had eight roundels representing flat-headed attachment nails in positions analogous with holes on the Tyne shield-boss.⁵ A boss decorated with a lion's head is seen on the Domitianic or later gravestone of C. Valerius Crispus.⁶ The shield-boss of C. Castricius, also late Flavian or later, displays an anthropomorphic head,⁷ recalling the Medusa head borne on the war goddess Minerva's shield. An apotropaic function may perhaps be inferred.

Banded armour for the arm (*manicae*) is well represented on the Adamklissi metope sculptures worn by legionary soldiers,⁸ and by finds from Carnuntum, Newstead and elsewhere.⁹ It is also a common protection for gladiators.¹⁰ However, the rendering of the torso is less easy to parallel. What it appears to be is a '*lorica segmentata*' form of armour for midriff and chest with scale shoulder-pieces. The chest-pieces with roundels correspond with chest-plates on segmental legionary armour but also with the plates associated with both mail and scale cuirasses.¹¹ The scale shoulder guards are puzzling because it might be thought that scale would have given protection inferior to that afforded by the conventional articulated shoulder-plates of the '*lorica segmentata*'. Scale shoulder sections are of course seen on *loricae squamatae*.¹²

This combination of armour types is not otherwise seen in the Roman artefactual or iconographic evidence, with the dubious exception of a funerary relief from Arlon.¹³ The latter shows cavalry in mail(?) with shoulder-pieces which have been interpreted as being made up of segmental plates.¹⁴ If this rather dubious identification is correct, the use of plate armour as a superior defence for

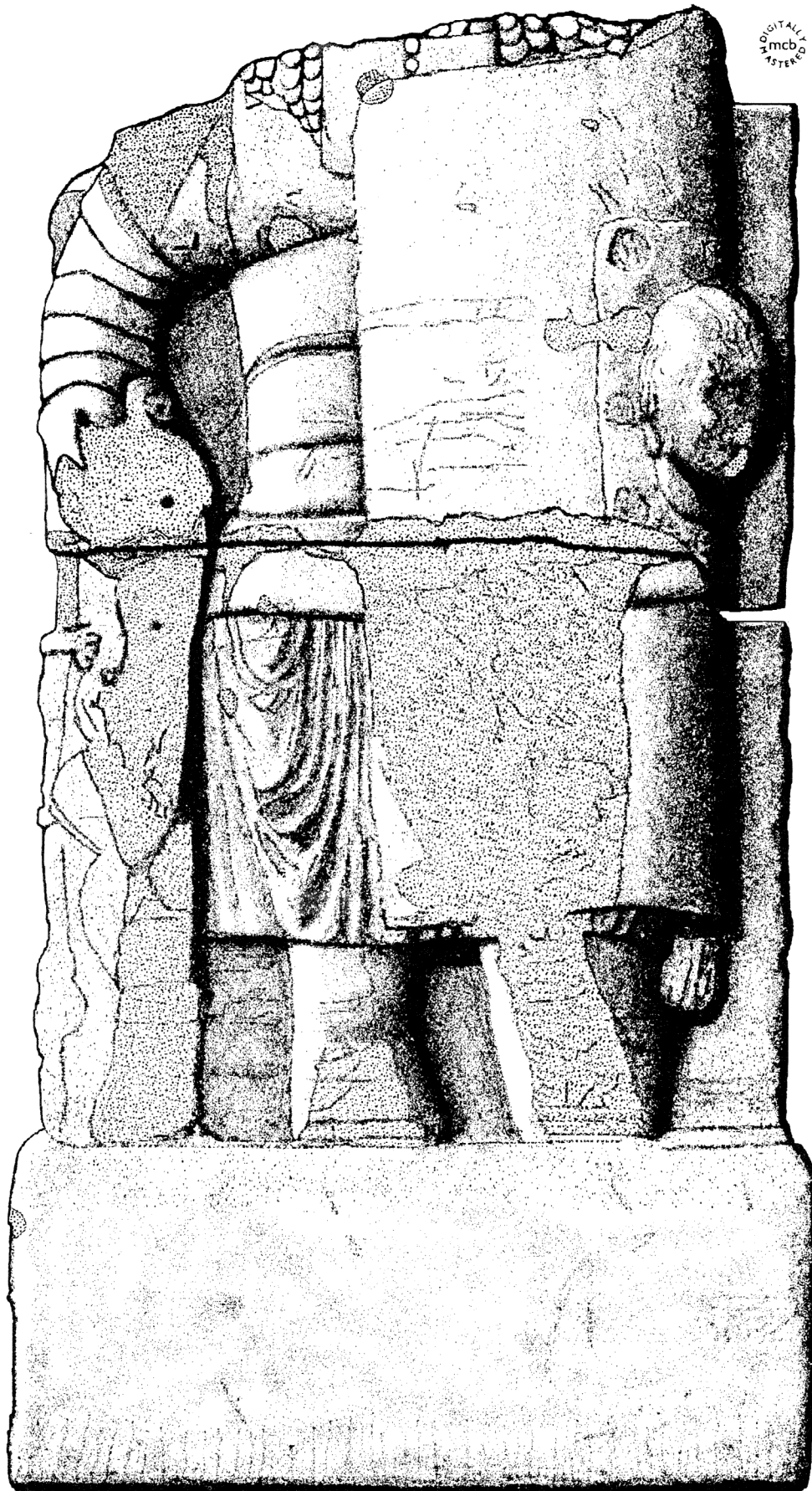


Fig.1 The figure from Alba Iulia (not to scale)



Fig.2 The figure from Alba Iulia (photo: JCNC)

shoulders would make logical sense. There are plenty of parallels from later periods for such a provision, although they appear in conjunction with other plate defences rather than with mail or scale cuirasses.¹⁵

It is particularly regrettable that the Alba Iulia figure has lost its head. It would have been very useful to have a helmet representation, perhaps even with a crest and plumes, which would have been virtually in the round, with which to compare other 2nd century examples.¹⁶

The sculpture may be dated broadly between the Trajanic conquest of Dacia and the Aurelianic withdrawal in the early 270s A.D. The presence of a rectangular shield would militate towards a 2nd century date, whilst a sword worn on the left might suggest later 2nd or 3rd century date, provided, of course, that the subject is a military one

(see below). Gladiators seem to have carried such shields into the 4th century.¹⁷ Without an inscription, however, there is a problem of identification. The sculptural details may be as closely paralleled in the gladiatorial sphere as in the military field, so the question must be raised: is the figure a gladiator, a soldier, or something else?

There is abundant evidence for the popularity and staging of gladiatorial games amongst the frontier armies, not least in the provision of amphitheatres outside legionary fortresses and the finds of gladiatorial equipment at such sites.¹⁸ However, the scale and high relief execution of the Alba Iulia piece make it unlikely to have been a gladiatorial gravestone of 2nd–3rd century date. Moreover, gladiatorial monuments were an urban rather than a frontier phenomenon.

Alba Iulia (Apulum) is the site of a legionary fortress and thus a centre of sculptural production and patronage.¹⁹ The Alba Iulia sculpture might belong to either the 'official' or the 'private' spheres of work. If the latter, then it would be a funerary dedication, but again objections of size and execution arise. Large-scale representations of people of rank lower than equestrian (or higher) rank are rare, thus it may reasonably be doubted that the piece is a private legionary's gravestone.

This leaves the 'official' military area, and indeed there are some usefully analogous sculptures and contexts. At Mainz there are the Flavian representations of legionary soldiers and barbarians on pedestal blocks, perhaps originally used for a colonnade in the fortress *principia*.²⁰ High relief figures of armed deities were used to flank dedicatory inscriptions and to decorate buildings in some Hadrian's Wall installations.²¹

This is the likely context for the Alba Iulia sculpture which most probably represents a *legionarius*, not a gladiator. Perhaps a soldier of *legio XIII Gemina*, the unit in residence during the 2nd century and beyond, was intended.²² The (Gorgon?) boss does not suggest a known legionary emblem. The original painted scheme of the sculpture may have included insignia on the field of the shield.²³

However, the figure's pose, 'S'-shaped with the weight in its right leg, is very reminiscent of Mars iconography.²⁴ Whilst the god was most often depicted naked or wearing a Hellenistic style of muscled cuirass, contemporary military equipment was sometimes shown. Military belts and baldrics, *loricae hamatae*, *pila*, shield boss and carriage details, and helmet decoration all appear.²⁵ Mars figures were appropriately depicted flanking military inscriptions, sometimes balanced by a Victoria or a Hercules,²⁶ and interpretation of the Alba Iulia piece as Mars may be correct.

The armour forms depicted are of special interest in a Dacian context, given that the closest iconographic parallels for the *manicae*, the Adamklissi metopes, are from the same theatre. Additional arm-protection might be thought to have been desirable in a region where the principle enemies wielded the wicked scythe-sword (*falx*), but it must be remembered that finds of *manica* artefacts come from frontiers where other enemies (Germans, Britons) were faced. Unlike the Adamklissi *legionarii*, the Alba Iulia figure does not wear greaves.²⁷ Perhaps the choice of additional armour provision was left to the individual soldier (and greaves were much more common for soldiers below centurial rank than is now usually admitted), or it was dictated by a front-rank function.²⁸

Also unlike the Adamklissi men, the Alba Iulia figure is protected by a hybrid form of cuirass, not by a more conventional *lorica hamata* or *squamata*. It is extremely likely that in common with most sculptures found along the Roman frontiers the piece was executed by a military craftsman. His familiarity with actual equipment is supported particularly by the shield-boss details, and he was working in the same artistic *milieu* as that which produced the detailed verism of the Adamklissi metopes.

Thus it would probably be unwise to dismiss the Alba Iulia cuirass as merely an artist's fancy. Nor should it come as a surprise that modifications of the *lorica segmentata* were undertaken, given the long currency of this armour form from the Augustan period²⁹ to the 3rd century AD.³⁰

NOTES

1. The writer is very grateful for help received in the preparation of this piece from Dr M.C.Bishop, Prof. K.M. Coleman and Dr H. Dodge.
2. ZEVI GALLINA, 1970, C63.
3. BISHOP & COULSTON, 1993, 149, 208; DIEBNER, 1988, Fig.1-2, 5-6, 12-14, 16-18, 21; SABBATINI TUMOLESI, 1988, No.59, 92, 101, 106, 110a, 109, 114.
4. BISHOP & COULSTON, 1993, 82.
5. *ibid.*, pl.3a.
6. Weisbaden; ÉSPÉRANDIEU, 1931, No.11; ROBINSON, 1975, pl.469.
7. Aquincum; ROBINSON, 1975, pl.470.
8. FLORESCU, 1965, Fig.189-90, 195, 197-201, 204, 212, 217, 221.
9. BISHOP & COULSTON, 1993, 87.
10. HONLE & HENZE, 1981, Fig.8, 21; SABBATINI TUMOLESI, 1988, No.92; WIEDERMANN, 1992, Fig.3, 5, 9, 11-2, 16-7.
11. ROBINSON, 1975, Fig.178-81, 164-70.
12. *Ibid.*, pl.450-1.
13. Belgium; GABELMANN, 1973, Fig.17-18.
14. JUNKELMANN, 1992, Fig.173.
15. STONE, 1934, Fig.37-9, 42, 44-5, 725.
16. e.g. PHILLIPS, 1977, No.68; COULSTON & PHILLIPS, 1988, No.67; BISHOP & COULSTON, 1993, Fig.3.
17. SABBATINI TUMOLESI, 1988, No.113.
18. WAHL, 1977.
19. GUDEA, 1979, 65.
20. ÉSPÉRANDIEU, 1907-66, No.5822; ROBINSON, 1975, pls.196-9; BÜSING, 1982.
21. PHILLIPS, 1977, No.95, 297; COULSTON & PHILLIPS, 1988, No.67, 99-100, 272.
22. MANN, 1983, 39-40, Table 33.
23. BISHOP & COULSTON, 1993, 82, n.35.
24. E.g. COULSTON & PHILLIPS, 1988, No.67.
25. Cf. ROBINSON, 1975, Fig.176; PHILLIPS, 1977, No.194; COULSTON, 1991; BISHOP & COULSTON, 1993, 28; HENIG, 1993, No.60.
26. E.g. PHILLIPS, 1977, No.215, 295-7.
27. Cf. FLORESCU, 1965, Fig.190, 195, 198, 202.
28. Cf. Vegetius, *De re militari* 2.15; COULSTON, 1990, 148, 151.
29. See now SCHLÜTER, 1992, 362-4, Fig.9.
30. BISHOP & COULSTON, 1993, 145.

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SOME PRE-FLAVIAN MILITARY EQUIPMENT FROM KENT

M.C. Bishop

A recent metal detector survey at Goodnestone (about 11km south-east of Canterbury) in Kent has produced considerable material evidence of Roman occupation. Close co-operation with the Canterbury Archaeological Trust means that the resultant finds are being carefully recorded. The assemblage includes a number of items of military equipment, together with a few more objects with a possible military association.

Five copper alloy objects are definitely military in origin:

1. **Pendant from cavalry harness.** This ovoid pendant,¹ retaining limited traces of its inlaid decoration and some tinning(?), has fractured at the point of suspension (which was of the hinged type) and has lost its crossbar and terminal knob.
W: 37mm; H: 26.5mm; Th: 2mm. GST94/SF442.
2. **Strap mount from cavalry harness.** A hollow cast mount² retaining its two shanks on the underside, one bent over slightly (probably to secure the item to its leather strap), the other broken near its base. The object retains clear traces of tinning.³ The moulded decoration is symmetrical about a central bead, with a reel on either side of it, and a teardrop-shaped terminal at either end is attached to spatulate plates (from which the shanks – which are cast in one with the fitting – descend).
L: 45.5mm; W: 11mm; Th: 9mm; L of shank: 5mm. GST94/SF88.
3. **Junction loop fragment from cavalry harness.** A very small fragment of the loop from a junction loop fitting.⁴ It has fractured in the two most usual positions, in other words near the apex of the loop and at the junction between the cast scarp and the worked body.⁵
L: 13.5mm; W: 13.5mm; Th: 11mm. GST94/SF793.
4. **Fragment of shield binding.** A fragment of U-sectioned binding, its profile slightly distorted. The dimensions suggest this to be a piece of shield binding (certainty is impossible in the absence of an expansion for a shield nail).
L: 31.5mm; W: 9mm; H: 13mm; Th: 1mm. GST94/SF807.
5. **'Lorica segmentata' hinged strap fitting.** Part of the free-moving element from a hinged strap fitting from 'lorica segmentata' of the Corbridge type.⁶ In common with many such fittings, it has a rounded end; the opposite, hinge, end is damaged. The object appears to be only single thickness sheet, so the other (under?) side is missing. The two ovoid flat-headed rivets are still *in situ* and are of the type usually found as repairs on 'lorica segmentata' fittings.⁷
L: 21mm; W: 15mm; Th: 0.5mm. GST94/SF144.
6. **Fragment of strap fastener from cavalry harness.** Part of the keyhole-shaped moving element from a

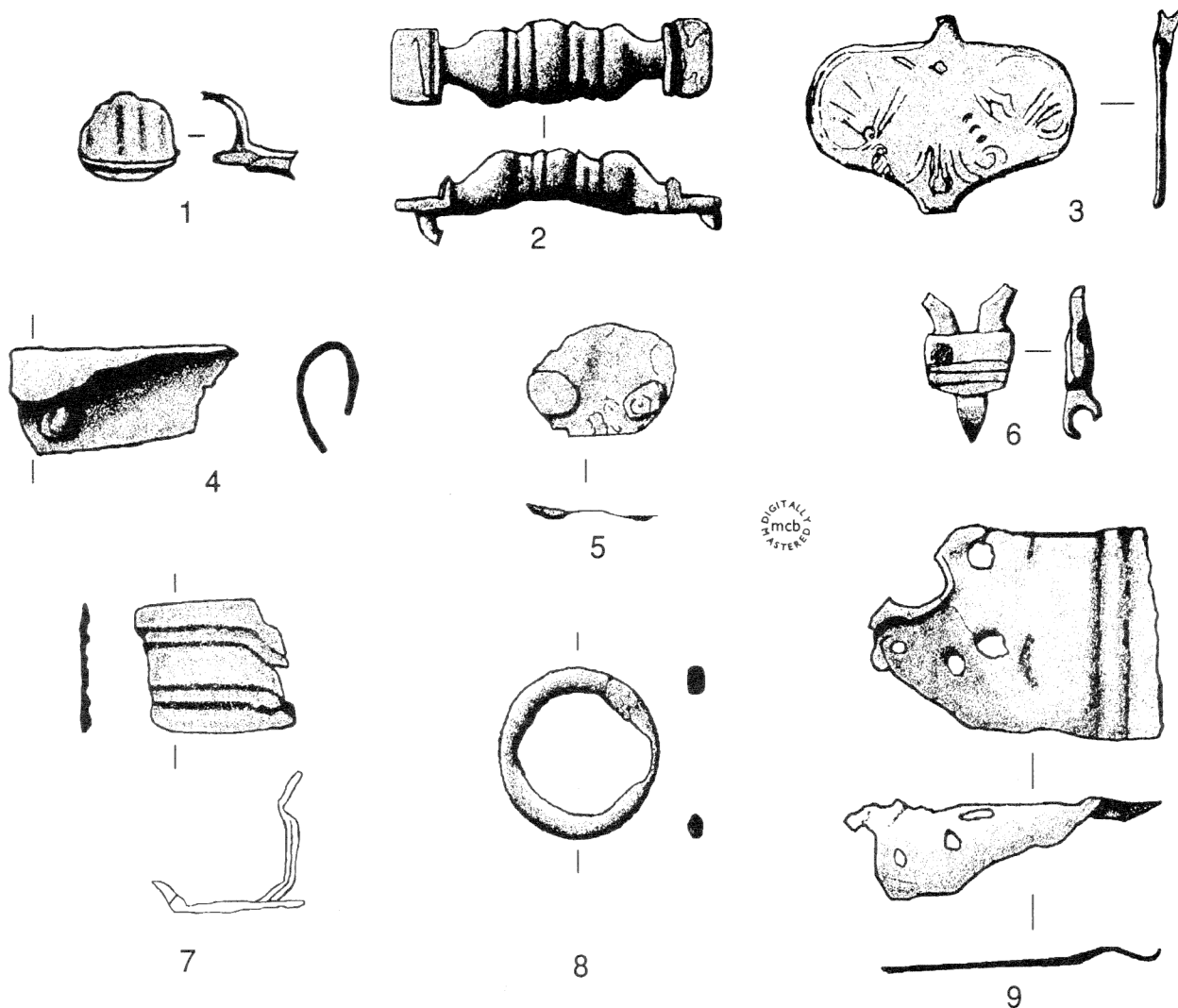


Fig.1: Military equipment from Goodnestone, Kent (scale 1:1)

cavalry strap fastener of the female variety.⁸ The upper face of the rectangular basal region bears three slight grooves as decoration. The hinge survives, although it shows clear signs of heavy wear and its failure may even have been the reason for deposition of the item. However, the loop has also broken, so it may be that both this and the hinge failed at the same time.

L: 20.5mm; W: 13mm; Th: 3mm. *GST95/SF88*.

Three further copper alloy items may belong to military equipment, but certainty is not possible:

7. **Length of strip with moulded decoration, possibly a helmet browband.** A slightly distorted length of strip with moulded decoration. The decoration consists of two pairs of longitudinal grooves, on either side of a broad central band. No rivet holes survive, and the object appears to have been torn at one end, but cut at the other. Half way along its surviving length, it has been bent upwards at right-angles. The object bears a close resemblance to a helmet browband strip from an Imperial-Gallic or Imperial-Italic (Weisenau) type helmet.⁹

L (straightened): 32mm; W: 17.5mm; Th: 1mm.

GST94/169.

8. **Oval-sectioned ring.** A ring of flattened oval section with signs of heavy wear at one point on its internal circumference. There are corresponding, but much lighter, traces of wear at the opposite point on the internal circumference. Although resembling a sword scabbard suspension ring, these are normally rectangular in section or profiled with raised ridges.¹⁰

Ext. D: 23mm; Int. D: 15mm; Th: 2.5mm. *GST94/SF164*.

9. **Rectangular plate, possibly a belt plate.** A distorted, damaged, rectangular plate with some resemblance to embossed types of belt plate of the pre-Flavian period, although the only decoration is a raised ridge running widthways at one end. Perhaps a rough for an embossed plate?¹¹

L: 42mm; W: 29mm; Th: 1mm. *GST94/SF692*.

NOTES

1. BISHOP, 1988, Fig.44 Type 2.
2. BISHOP, 1988, Fig.56 Type 4.
3. It is a tin wash and not silver foil and this is characteristic of pre-Flavian cavalry equipment of this type.

4. BISHOP, 1988, Fig.50, probably Type 1 or 3. Insufficient survives to be sure whether it is from a spectacle or double-spectacle type of fitting, but the scarp makes it clear that it belonged to a ring, rather than *phalera*, junction (and scarps tend to be more common on Type 1 fittings).
5. Many cavalry fittings were just cast, but some were quite clearly cast and then partly worked into sheet.
6. ALLASON-JONES & BISHOP, 1988, Fig.31 – the collar-plate assembly has three hinged strap fittings.
7. The usual 'standard' rivets were dome-headed.
8. BISHOP, 1988, Fig.54. Cf a similar piece from Verulamium (FRERE, 1984, Fig.11,79).
9. Examples from Rheingönheim (ULBERT, 1969a, Tafn.30,7–9; 43, 12–21) range in width between 7mm and 16mm.
10. Cf ULBERT, 1969b, Tafn.17–19, 21, 28, 33–4. There is, however, an example of a loop from Vin-donissa with a plain, apparently circular-sectioned, ring still attached (unpublished).
11. Cf ULBERT, 1969a, Taf.27,1–2.

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ROMAN MILITARY EQUIPMENT ON THE INTERNET

Keen-eyed readers will have noted that ever-trendy *Arma* is now beginning to carry references to the World Wide Web of the Internet where appropriate and now is as good a time as any to provide the briefest of surveys of what is available to the student of Roman military equipment.

As more references come our way, *Arma* will keep you posted. If you know of a Web site that is relevant, please let us know. At the moment, much of it is rather superficial, but nevertheless useful material is out there. None is specifically concerned with military equipment so far, but it can be found featuring amongst the following:

1. *The Gemina Project* have a presence where they outline their work, give details of forthcoming events

in which they will be participating, and have a few relevant illustrations. The first Roman re-enactment group on the Net?

<http://huizen.dds.nl/~henk-jan/>

2. Many museums are waking up to the potential of the Internet; one such is *Aquincum Museum*
<http://www.inf.bme.hu/budapest/bptour/bpduna03.html>
3. Another museum is the *Limesmuseum Aalen*, with illustrations of a face mask helmet and the Buch helmet. This is at
<http://www.uni-tuebingen.de/uni/ymu/>
4. A useful list of Roman military sites and associated museums in Britain can be found at
<http://www.athenapub.com/britmus1.htm>
5. The *Directory of British Archaeology* provides all sorts of useful information about... er, well... British archaeology, but it gains brownie points by mentioning *Arma*, so I had to include it here (it is basically the annual supplement issued with *Current Archaeology*).
<http://orca.unl.ac.uk/lamas/ldtempi.htm>
6. *The Roman Military Bibliography* is (thankfully) free of modem-punishing graphics and includes a section on military equipment:
<http://shakti.trincoll.edu/~helton/army.html>
7. The *Bibliography of the Military History of Britannia* is a rather inferior offering to the last-named (whatever happened to alphabetical order?) but is quite useful occasionally.
<http://www-personal.umich.edu/~pfoss/green/test.htm>
8. *ROMARCH* is the main starting point for anything Roman and archaeological and provides links to a wide range of related sites, as well as running a list server that carries useful information about forthcoming conferences and the usual pleas for help in researching this that and the other. The main site is at
<http://www-personal.umich.edu/~pfoss/ROMARCH.html> but when the Americans are awake it tends to be a bit slow so there is a useful 'mirror' (i.e. copy) in the UK at
<http://www.sys.uea.ac.uk/Research/ResGroups/JWMP/ostia/ROMARCH.html> which is faster, but is not always there at weekends. Military equipment is prominent by its absence so far, but things might change. Subscribe to the list server by emailing the message `subscribe romarch` to the following address:
majordomo@rome.classics.lsa.umich.edu
9. *The Catapult Museum* concerns itself with the history of the catapult, from its very beginnings right up to its use to launch aircraft. Naturally, it has sections devoted to Hellenistic and Roman artillery.
<http://www.nzp.com/02contents.html>
10. *Roman_Sites-PL* is another list server which presents the fruits of Bill Thayer's cruising of Roman cyberspace – he appears to be attempting to visit every site in the world with anything vaguely Roman on it and he regularly unearths graphics of a military flavour. New subscribers get an update of all mailings so far,

so you won't miss out on anything. Subscribe to this by emailing the message

SUBSCRIBE Roman_Sites-PL yourname
to the following address:

petworth@suba.com

11. Now if you find yourself in need of a classical text but you don't have it on your shelf and the library is shut, you could try *Project Libellus*, which is attempting to put all of the classical texts (out-of-copyright editions, of course, so often quite old) onto the Internet in the form of downloadable texts (yes, that's right, free books, effectively!). The old favourites like Caesar are already there and they will be getting a Vegetius very soon. Project Libellus are to be found at

gopher://gopher.etext.org/11/Libellus

So, don your cybershorts, plug in your virtual reality carpet slippers, and try and steer clear of `alt.binaries.sex.dressing_up_as_a_Roman_soldier...`

BOOK BARGAINS

The ultimate literary humiliation (for the author) of remaindering does have its advantages (for the book buyer) and English Heritage are having a massive sale of old (and not-so-old) archaeological reports 'to reduce levels of warehouse stock' (one would *like* to think that the implications of the need to have such a stock clearance are being pondered by English Heritage at this very moment... well, it was just a thought). Included in this bonanza for bibliophiles are the reports on the Corbridge Hoard, the excavations at Corbridge and Vindolanda forts (military equipment in the finds reports), and the Iron Age cemetery excavations in East Yorkshire (Celtic mail and chariot burials). Priced at only £10 they mostly represent a good bargain (the Hoard volume less so, since it only cost £16 to start with). If you are interested, look out for the special promotional leaflets imaginatively entitled 'Sale!' or ring their credit card 'hotline' on 01604 781163. For reference purposes, the product codes of the above-mentioned volumes are as follows: Corbridge Hoard XA13007; Corbridge Fort & Town XA 13008; Vindolanda XA13001; Iron Age Cemeteries XA10790.

NEW ROMAN RECONSTRUCTION

REENACTMENT BOOK PLANNED

Dan Peterson reports that the success of *The Roman Legions Recreated in Colour Photographs* (see *Arma* 4:1, 3) has led to plans for a much larger, hard cover format book on much the same subject, to be published probably some time in 1997. While some material from the previous book will be utilized, Dan requests new photographs from all interested groups and individuals. It is the intention to 'pack' this book with colour photos of the best reconstructions, as well as the most photogenic pieces of original

Roman military equipment. Colour slides are preferred, and all institutions, groups and individuals will be fully acknowledged in the text. Contact Dan Peterson, Freiherr vom Stein str.22, 55774 Baumholder, Germany. U.S. contributors please write to Dan at 1st Armd. Div. museum, 222d BSB, CMR 405, P.O. Box 1024, APO AE 09034.

MUSEUM OF LONDON ROMAN GALLERY

The Roman London Gallery at the Museum of London has just undergone a facelift and re-opened on January 30th 1996. If *Arma* may be permitted to bathe in a little reflected glory, Jenny Hall (see list of subscribers) was responsible for its redesign. The Museum is open 10.00am to 17.50pm Tuesday-Saturday, 12.00pm to 17.50pm Sunday. Unfortunately, the press release does not mention the museum admission price, but there is a 24-hour information line on 0171 600 0807.

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1. Copy dates for *Arma* are 31st May (for the Summer edition) and 30th November (for the Winter one).
2. Absolutely anything pertaining to the study of Roman military equipment will be considered for publication, including details about recently published books or articles, news about finds, or information about forthcoming courses or exhibitions.
3. Contributions should preferably be in typescript in English, French, or German, but a computer disc with the text will be very helpful (either as ASCII text, in RTF (Rich Text Format), or WordPerfect 5.1); disk formats handled include Acorn (DFS, ADFS), IBM/MSDOS (in whatever combinations of 5.25in, 3.5in, DD or HD you can manage), Apple (3.5in HD). Please,

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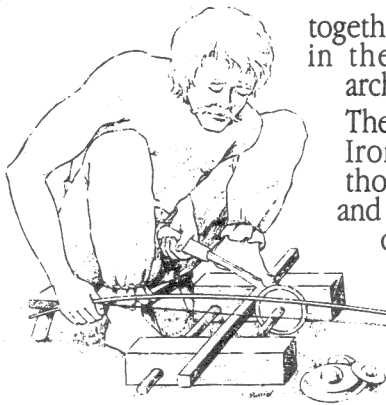
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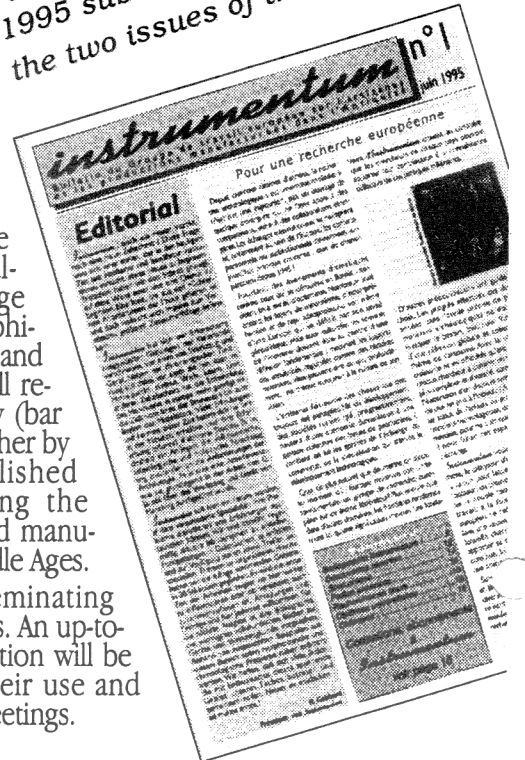


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