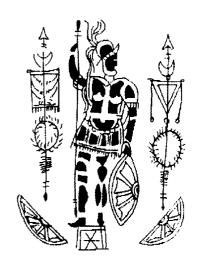
ARMA

NEWSLETTER OF THE ROMAN MILITARY EQUIPMENT CONFERENCE

VOL.2 NO.1

£2.00

JUNE 1990



Editorial	1	Markets in Germany	7
7th ROMEC, Magdalensburg	2	A Decorated Dagger Scabbard from Corbridge, Northumberland	11
The Next ROMEC	2		
A New Journal	2	Lorica 'segmentata'?	11
	~	What is it?	12
Any Republican Equipment?	3		
	2	Work in Progress	12
Roman Cavalry March in Britain Cancelled	3	Roman Scale Armour	12
Bibliography of Roman Military Equipment Since			
1980	4	Subscriptions	12
Indicium	5	Notes for Contributors	13
Reconstruction Group Update	5	List of Subscribers	13
Significant Roman Military Finds from Flea		Editorial Roard Contact Addresses	15

EDITORIAL

The more astute amongst you may have noticed a slight improvement in quality with this edition of ARMA. The advent of a Desktop Publishing system has made the production side easier, but the collection of copy remains a headache. I am astonished by how *little* military equipment seems to be found nowadays (or is it that archaeologists are becoming shier as a breed... unlikely, I should have said). Perhaps I am not exerting enough pressure on the right people.

The recent suspension of any new publications by BAR has caught the proceedings of the 1988 Bonn ROMEC, which were virtually ready for production. However, it is hoped that this unfortunate obstacle can be circumvented by the production of a new journal, preliminary details about which you will find elsewhere in this edition.

Finally, I hope nobody objects to a slight injection of levity in the form of Neil's cartoons — it never pays to take a subject *too* seriously (as anybody who has attended a ROMEC will attest)!

7TH ROMEC, MAGDALENSBURG, AUSTRIA

M.C. Bishop

The 24th-26th May 1990 saw the 7th Roman Military Equipment Conference being held at the Magdalensburg, to the north of Klagenfurt, Austria. It was certainly the most spectacular setting yet for a ROMEC, perched upon a mountainside with the sort of views that led one to expect Julie Andrews to appear at any moment. The top of the mountain had been a Celtic settlement (complete with *murus gallicus*), but it was the Roman trading station on the slopes below that was the focus of interest for the conference.

The original theme proposed for the volume, 'Military Equipment of the Republic and Early Empire', met with a disappointing response from contributors and the papers presented were on a wide range of subjects.

The morning of the first day saw a tour, led by Dr Piccottini, of the excavated monuments of the Magdalensburg. This was then followed in the afternoon by the first session of papers. J. Garbsch spoke about MARTIS brooches, whilst Th. Fischer gave details of an early-third century A.D. Newstead-type 'lorica segmentata' from a site near Eining. Your Editor presented some of the material from the Corbridge Museum collection, and S. Jilek examined pieces of military equipment made out of lead and discussed their implications for the method of manufacture employed.

The second day witnessed the bulk of the papers. N. Gudea talked about finds of weapons from North-West Dacia and L. Petculescu reexamined Thomas Fischer's published paper on officers' equipment of the 3rd century A.D. (see ARMA 1:2, page 24). A. Olivier outlined research into the relationship between unit identity and brooch types using Britain as an example, and M. Dawson then proposed a model and examined the evidence of Dacia. In the afternoon, D. Baatz discussed ballistic aspects of the flight of lead slingshot, demonstrating software on his portable computer for calculating the behaviour of various projectiles (even

grapefruit, or so it was claimed!). H. Ubl talked about some clay slingshot from Klosterneuburg, and then P. Connolly and C. van Driel-Murray gave a brief presentation on the Roman saddle, in the place of M. Junkelmann, who was unfortunately unable to attend to discuss problems with the reconstruction of tents and saddles. The afternoon was rounded-off by a brief excursion to examine some of the churches in the valley bottom, many incorporating sculpted stones from the Roman town of Virunum (the successor to the Magdalensburg, which was abandoned around A.D. 45).

The final day saw L. Allason-Jones' paper on the military equipment from Elginhaugh in Scotland. Then D. Beyll presented her research into the marks left by shoes on Roman tiles, combining the evidence of dated shoes and tilestamps. A group of legionaries from legio XV Apollinaris gave participants a chance to examine and comment upon their reconstructed equipment. Prof Gudea's enthusiastic donning of full kit presented a fine opportunity for those of us with cameras. In the afternoon, the conference visited the museum and lapidarium at Klagenfurt.

All participants were grateful to Dr Ubl for organising the conference and Dr Piccottini for hosting it at the Magdalensburg.

THE NEXT ROMEC

Venues for the next two ROMECs have been proposed and, all things being equal, these will be as follows: 1992 Britain (probably Newcastle upon Tyne) and 1994 Leiden, in the Netherlands. It is hoped that the British conference will see an enthusiastic response from those of you interested in the subject who have not had a chance to attend one in Britain since 1986.

A NEW JOURNAL

The proceedings of the 1988 Bonn ROMEC were almost complete when news came that BAR will not be producing any more books until further notice, probably some time in 1991. This

has left me in a rather awkward situation, since it is clearly undesirable that the papers contained in it should be delayed any longer, so I have decided to attempt something about which I had been thinking for some time.

There has been a general dissatisfaction with the quality and cost of BARs, although the recent proposals to improve various aspects of their presentation may have gone some way towards remedying such disquiet; however, circumstances dictate that we should now pursue a different course to secure the publication of papers from military equipment conferences. My main criteria are that such a publication should be both cheaper and better quality than those volumes already in print with BAR.

Therefore, the proceedings of the Bonn conference will now be published as the first volume of the new Journal of Roman Military Equipment Studies (JRMES for short). Although priority will be given to papers presented at ROMECs, the journal will consider for inclusion all articles on the arms, armour, and equipment of the armies, allies, and enemies of Rome from the foundation of the City to the fall of Byzantium. Monographs on specific subjects (such as catalogues of equipment) will be published as supplements to JRMES.

The first volume will include the following contributions:

- D. Marchant 'Roman Weapons in Great Britain, a Case Study: Spearheads, Problems in Dating and Typology'
- M. Dawson 'Roman Military Equipment on Civil Sites in Roman Dacia'
- K. Dixon 'Dolphin Scabbard Runners'
- J. Oldenstein 'Zwei römische Helme aus Eich, Kreis Alzey-Worms'
- A. Olivier 'Ein Bruchstück eines neuen großartigen Helms aus eine Tempel im Vicus Papcastle'
- W. Meighörner-Schardt 'Zur Rekonstruktion eines römischen Bockkranes'
- P. Connolly 'The saddle horns from Newstead'
- A. Hyland 'The action of the Newstead cavalry bit'
- E. Rabeisen 'La production d'équipement de cavalerie au

ler s. après J.-C. a Alesia (Alise-Sainte-Reine, Cote-d'Or, France'

A.M. Gerhardtl-Witteveen & A.V.M. Hubrecht 'Survey of swords and daggers in the Provincial Museum G.M. Kam, Nijmegen'

C. van Driel-Murray 'New light on old tents'

J.C.N. Coulston 'Third century A.D. armour'

ANY REPUBLICAN EQUIPMENT?

Given that the theme of the 1990 ROMEC was supposed to be Republican equipment and no papers were presented on this subject, Peter Connolly would be most interested to hear from anybody who knows of any unpublished material from this period. Of course, there is the equipment from Numantia, Cáceres el Viejo, and Alesia (still not fully published 100 years after its discovery), as well as sundry odds and ends from Entremont and other sites. But there must be more somewhere! If you know of anything, write to Peter Connolly, 22 Spring Street, Spalding, Lincs., PE11 2XW, England.

ROMAN CAVALRY MARCH IN BRITAIN CANCELLED

Dan Peterson

This writer regrets to report that the British portion of Dr Marcus Junkelmann's Roman Cavalry march has been postponed until further notice. The entire march was scheduled to last over three months, beginning mid-July in Britain and ending in October at the Limes Museum in Aalen, West Germany. Because of the considerable time, distance, and the fact that most of the Roman cavalrymen have regular jobs and limited vacation time, only three riders, myself included, had committed themselves to the British portion. It was Dr Junkelmann's decision to postpone the British phase until a future date when the full contingent of Ala II Flavia can

take the field.

The ride is now scheduled to begin at Leiden on 12 September, with the group arriving at Xanten on 21 September. The rest of the ride will follow the original timetable.

BIBLIOGRAPHY OF ROMAN MILITARY EQUIPMENT SINCE 1980

Papers (Part 3)

BIBORSKI, M., KACZANOWSKI, P., KEDZIERSKI, Z., and STEPINSKI, J.: 'Ergebnisse der metallographischen Untersuchungen von römischen Schwerten aus dem Vindonissa-Museum Brugg und dem Römermuseum Augst', Jahresbericht der Gesellschaft Pro Vindonissa 1985, 45-80

BISHOP, M.C.: 'On parade: status, display, and morale in the Roman army', in H. Vetters & M. Kandler (eds.) Akten des 14. internationalen Limeskongresses 1986 in Carnuntum, Wien 1990, 21-30

BOCKIUS, R.: 'Ein römisches Scutum aus Urmitz, Kreis Mayen-Koblenz. Zu Herkunft und

Verbreitung spindelfömiger Schildbuckelbeschläge im Gebiet nördlich der Alpen', Archäologisches Korrespondenzblatt 19, 1989, 269-82

FEUGÈRE, M.: 'Phalères romaines en calcédoine', in F. Rebecchi (ed.) Miscellanea di studi archeologici e di antichità III, Modena 1990, 31-51

LANG, J.: 'Study of the metallography of some Roman swords', *Britannia* XIX, 1988, 199-216

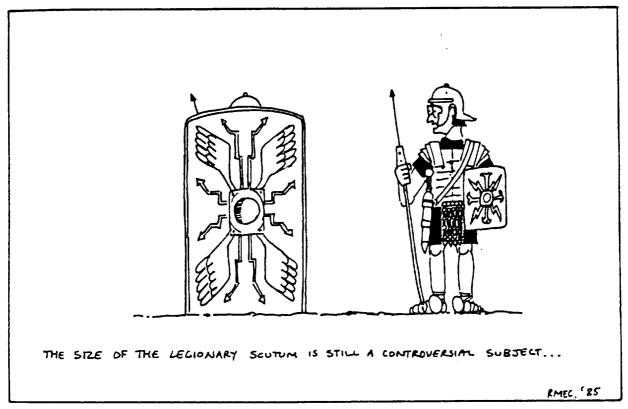
PETCULESCU, L.: 'Contributions to Roman decorated helmets and breastplates from Dacia, in H. Vetters & M. Kandler (eds.) Akten des 14. internationalen Limeskongresses 1986 in Carnun-tum, Wien 1990, 843-54

Reports (Part 2)

DEIMEL, M.: Die Bronzekleinfunde vom Magdalensberg, Klagenfurt 1987

DOWN, A.: Chichester Excavations VI, Chichester 1989

EVANS, D.R. & METCALFE, V.M.: 'Excava-



tions at 10, Old Market Street, Usk', Britannia XX, 1989, 23-67

GUDEA, N.: 'Porolissum. Un complex arheologic daco-roman la marginea de nord a Imperiului Roman', vol.1, Acta Musei Porolissensis XIII, 1989

KELLNER, H.-J. & ZAHLHAAS, G.: Der römische Schatzfund von Weißenburg, München & Zürich 1983

TEJRAL, J.: 'Vorgeschobener Militärstützpunkt der 10. Legion in Musov', in H. Vetters & M. Kandler (eds.) Akten des 14. internationalen Limeskongresses 1986 in Carnuntum, Wien 1990, 789-95

INDICIUM

British archaeology has long lacked a good colourful magazine on the subject, lagging behind our continental cousins. After several flops and downright dodos, Current Archaeology (more a trade journal, in many ways!) has now crept up from behind and is revamping itself. The new (50% more pages, colour every other page) magazine can be had at the same price as before (£8.00) if you subscribe before the end of July 1990 (thereafter £12.00, but if ARMA took a long time to get to you by surface mail, try asking them very nicely!). Contact: Societies Special Offer, Current Archaeology, 9 Nassington Road, London, NW3 2TX.

RECONSTRUCTION GROUP UPDATE

Dan Peterson

Ala II Flavia: is the only group solely dedicated to the reconstruction of Roman cavalry. It was organised by Dr Marcus Junkelmann, who previously organized and led the Augustan legio XXI Rapax over the Alps from Verona to Augsburg to commemorate that city's 2000th anniversary. Like the members of the XXI

Rapax, members of the Ala II Flavia have trained, worked, slept and even eaten for weeks at a time in Roman fashion in some very impressive feats of 'living history' experimentation. Thus far the Ala has navigated much of the German Limes, and conducted training on the beaches of Italy in anticipation of its planned ride from England to the Limes Museum in Aalen, Germany which will begin this July. The group maintains high standards of authenticity, utilizing not only the most accurate equipment available (much of it supplied by master armourer Michael Simkins), but even the horses were carefully selected to duplicate Roman period originals as closely as possible! Contact address: Dr M. Junkelmann, Schloss Ratzenhofen, 8301 Elsendorf, West Germany.

Legio XIIII Gemina Martia Victrix: this group was organized by the staff of a U.S. Army Museum in Frankfurt, Germany in 1982, though its membership now includes many Germans. The group primarily represents the named legion from about A.D. 83 when it was stationed in nearby Mainz, and participated in the Chatti War (which saw the conquest of the surrounding area and the establishment of a new limes). The group's legionary shield emblem, standards, and other emblems are based on like representations researched from actual XIIIIth Legion tombstones, and much of its armour and equipment are based on local Mainz archaeological discoveries contemporary with the latter 1st century time period being depicted. The group now rivals the Ermine Street Guard in size, and in addition to reconstruction work and public displays, intensive 'living history' experimentation is undertaken utilizing authentic leather tentage, artillery, complete camp and marching equipment, etc. Legio XIIII and Ala II Flavia share similar goals and the two groups frequently conduct displays together at museums and historic sites. Contact: (U.S.) Dan Peterson, Director, 3d Armd Div Museum, HHC, 3d Armd Div. Box B-44, APO NY 09039; or (Europe) Dan Peterson, Thudichumstr. 18-22, 6000 Frankfurt 90, West Germany.

Cohors IIII Vindelicorum: was organized by the

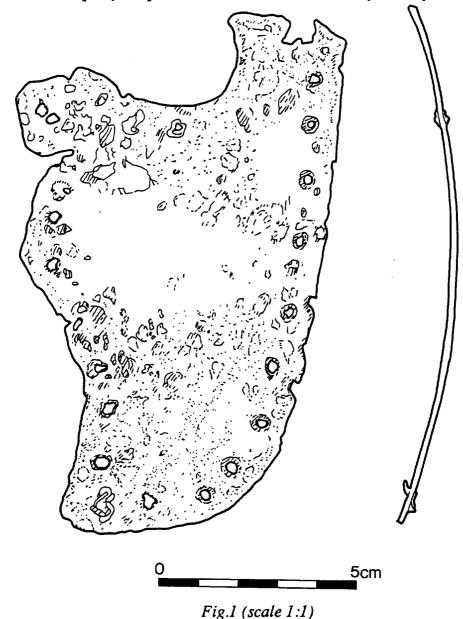
small Heimat Museum staff in the town of Gross Krotzenburg, site of a Roman cohort fort at the point below Hanau where the *limes* meets the River Main. The group frequently cooperates with the Frankfurt-based *Legio XIIII*, which has assisted the newer group in its reconstructions. Contact address: Ralf Eltner, Posener Str. 15, 6451 Gross Krotzenburg, West Germany.

Römische Cohort Opladen: not yet an authentic reconstruction group in the true sense, the Opladen Cohort began as a 'carnival club' (but then the Ermine Street Guard humbly began as 'Roman soldiers' in a religious pageant). Under the leadership of Dr Klaus Schwab, the group is rapidly improving its authenticity and is already an impressive sight with nearly thirty equipped men. They boast an equally impressive-sized

camp of nearly twenty Roman tents, made of cloth. Like the Ermine Street Guard and Legio XIIII, the Opladen Cohort is attempting to reconstruct Roman legionaries in the latter half of the 1st century A.D. Contact address: Dr Klaus Schwab, Paulstr. 3, 5090 Leverkusen, West Germany.

In addition to the societies mentioned above by Dan Peterson, the Editor came across the following group at the 7th ROMEC held at the Magdalensburg, Austria (see above).

'Noricum-Provinz-Garde': a tentative title for a group primarily formed to conduct a march along the Roman Danube frontier from Passau to Linz, during the first week of July, 1990. However, they clearly have ideas of moving



6

onto a more permanent basis. They currently stand at a centurio, signifer, cornicen, two milites gregarii, and a mulio. They have produced their equipment solely using the books of H.R. Robinson and Peter Connolly. One interesting idea that caught my attention was their tinned 'lorica segmentata' (go on — prove it wasn't tinned!). Contact address: Hubert Krexhammer, Brandhof 33, 4701 Bad Schallerbach, Austria.

SIGNIFICANT ROMAN MILITARY FINDS FROM FLEA MARKETS IN GERMANY

Dan Peterson

While frequenting flea markets in search of materials such as leather for our Roman reconstructions, ancient artifacts are occasionally seen offered by vendors. Generally, the dealer has no idea of the artifacts' provenance, or is reluctant to state it, and the majority of the materials are of little interest. Occasionally, more important items have been found, which have included complete *paterae*, building tiles with military unit inscriptions, and rarely, actual items of Roman military equipment.

Obviously the lack of concrete data as to where the objects were found, and absence of associated datable materials considerably lessens the scientific value of these finds. Nevertheless, the readers of **ARMA** may find them interesting.

Figure 1 illustrates an iron cheekplate from a late Romano-Sassanian infantry helmet. It is very similar in appearance to the plates on the complete helmets now at Worms and Augst, and I suspect that the plate was recovered in the area near Worms. I mention this find because of an interesting variation. At the cheek plate's bottom, possibly associated with a chin strap securing stud, and at another point immediately

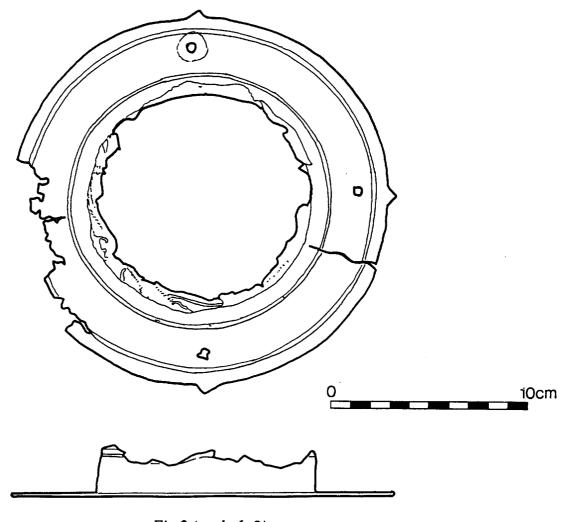


Fig.2 (scale 1:2)

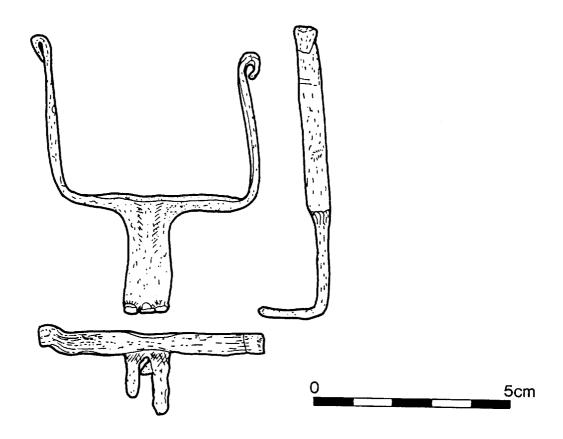


Fig.3 (scale 1:1)

below the ear cut-out, are round, hollow, thin walled projections, now crushed down, composed of a cupric alloy metal. This would seem to have once held a decorative element such as coral, glass, or enamel, though no trace now exists.

Figure 2 illustrates a cupric alloy shield boss with no known provenance other than its probable origin was Germany. Much of the dome is missing, and the object is of an extremely thin metal (less than 1mm) possibly denoting it as a parade or sports item. It is mentioned here because of some of its interesting features, such as the concentric ring design and the flanged points at each securing hole.

Figure 3 is an iron crest box attachment of a type commonly associated with 'Imperial Gallic' helmets. It is of split tongue variety, and was probably found near Mainz. Nearly identical examples are known from Rheingönheim and other sites.

Figure 4 illustrates two iron stave weapons which I believe may be beneficiarius lance heads. The dealer called them 'pilum' indicating that they may have been found in a Roman context. The larger one on the left bears a close

resemblance to the *beneficiarius* lance seen on the Cancelleria relief. The second lance, supposedly found together with the first, has a similar shape but differs with the addition of a crossbar much in the fashion of many hunting spears and military 'spontoons' of the 17th and 18th centuries.

Figure 5 illustrates five different military type pendants, some of which seem to definitely fit into the category of belt apron terminals. All are composed of cupric alloy metal with no visible traces of plating. There is no known provenance on any of these objects, which were selected out of badly worn cull coins, and various ancient bits offered by dealers specializing in ancient coins. It is probable that the find spot may be in the Rhineland as most were acquired at a Mainz flea market.

The writer will gladly share any additional information on these objects requested by the readers, and would be curious to learn of any nearly identical specimens with known provenance for comparison and dating purposes.

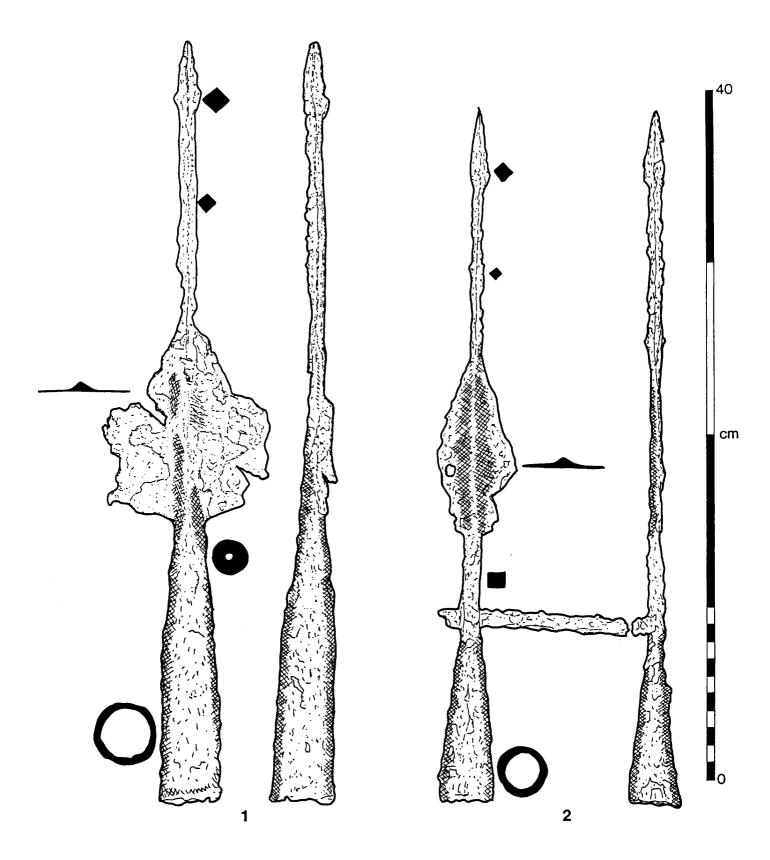


Fig.4 (scale 1:2)

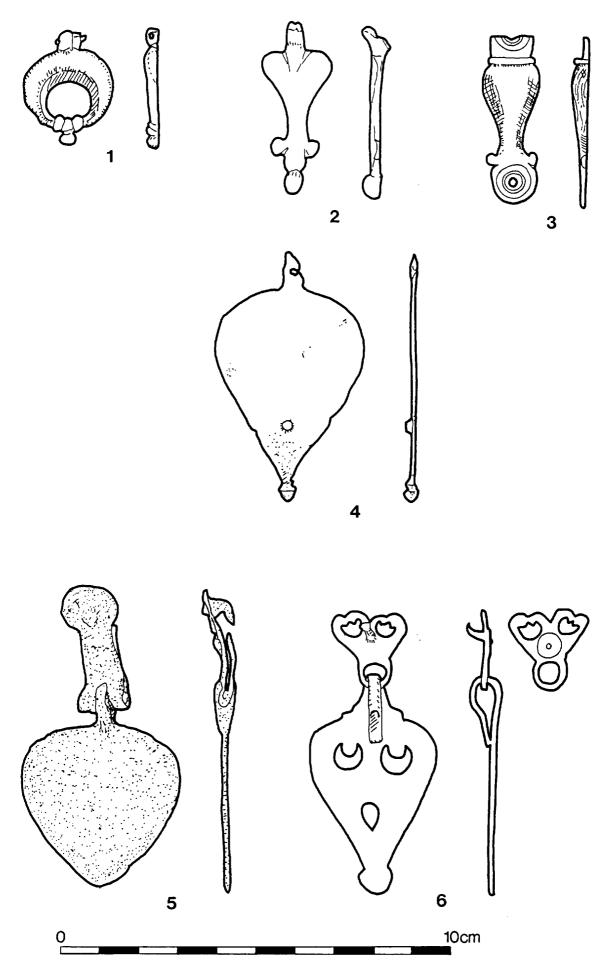
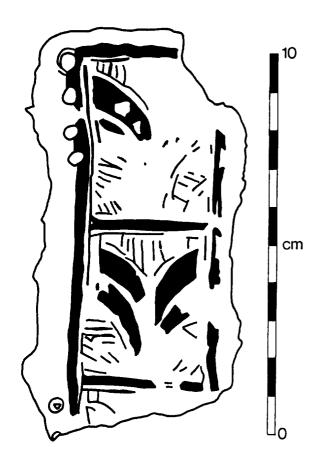


Fig.5 (scale 1:1)

A DECORATED DAGGER SCABBARD FROM CORBRIDGE, NORTHUMBERLAND

M.C. Bishop

During the process of examining boxes of miscellaneous ironwork from the site at Corbridge, part of what appeared to be an inlaid dagger scabbard (Type A) was identified by the author. As a result, it was sent to NEMS for radiography who confirmed that this was indeed the case (the figure is a tracing of the X-ray). Two whole, and part of a third, out of the the usual four decorative fields survive, all apparently with the same device. Mr I.R. Scott has very kindly commented that although employing a familiar motif, this layout is rather unusual. The foundation date of Corbridge is generally thought to be some time after A.D.85, so this is a fairly late example of its type.



scale 1:1

LORICA 'SEGMENTATA'?

Michael Simkins

The laminated iron body defences, so very much in evidence on the great Column of Trajan, called today 'loricae segmentatae', have yet to be furnished with either their actual Latin name, or an accurate date of origin. The word lorica is a valid one, which originally referred to small square or circular bronze breastplates, commonly worn by Roman soldiers in the second century B.C., but evetually came to be used in connection with all types of body defence, lorica hamata — a mail hauberk, for example. Lacking a known Latin adjective which referred to the laminated cuirass, enthusiastic scholars of the nineteenth century applied the word 'segmentata' to body defences of that type. However, it appears that the word carries no historical validity in connection with armours; being derived from segmentum, n., segmentatus, adj., which refer to fabric trimmings such as fringes, flounces and strips of coloured cloth.

Other known Latin words which may conceivably be properly applied to cuirasses of that type are: lamina, or lammina, or lamna, -ae, n., a thin slice, plate, leaf, layer or lamina; hence lorica laminata, or lamminata, or lamnata. This series of words was certainly applied to sword-blades and even to plates specially heated for purposes of interrogation. If one or more of these words were actually used in connection with the laminated cuirass, then it would most likely have been used for the single arm defences (manicae) depicted on the Adamklissi Monument, thus manica laminata.

In support of the possible use of the Latin word laminata in place of segmentata, one may observe that a very similar word is used by professional armourers today; lames, n., strip plates, laminated, adj., a defensive construction of such strips.

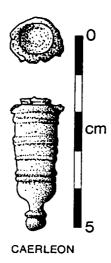
WHAT IS IT?

Archaeology is one of those disciplines that frequently throws up the odd mystery which can quite happily be accommodated within the scheme of things without anybody actually understanding anything about it. Does such a thing happen in philosophy, I wonder?

Although archaeological magazines and newsletters often have such curios adorning their pages, ARMA will be going one stage further, in that the objects included here will almost certainly be Roman military equipment (however you may chose to define it); all that will be lacking is an explanation of what the object was intended to do! Thus excavators spotting such a beast will be able to guess that the Roman army is at hand, even if they do not know the function of the mystery object.

The first object is a ferrule of copper alloy, cast, with moulded decoration on its outside. Examples are known from Caerleon, 1 Corbridge, 2 and Hüfingen. 3 The Caerleon piece includes the remains of an iron shank in its socket. They seem to be datable to the second half of the 1st century A.D.

1. V.E. Nash-Williams, 'The Roman legionary fortress at Caerleon in Monmouthshire: report on the excavations carried out in the Prysg Field, 1927-29, Pt.II', Archaeologia Cambrensis



scale 1:1

2. L. Allason-Jones, 'The small finds' in M.C. Bishop & J.N. Dore, Corbridge: Excavations of the Roman Fort and Town, 1947-80, London 1989, Fig. 79, 70

3. Der obergermanische-raetische Limes der Römerreichs (ORL) Nr.62a Kastell Hüfingen, Taf.XII,60

WORK IN PROGRESS

ROMAN SCALE ARMOUR

J.B. Clemetson

I am at present attempting a study of Roman Scale Armour and its place in the equipment of the Roman Army. The scope will in the first place be limited to the province of Britain for which I intend to build up a data base of archaeological finds of scale armour recording the find place, context, date and present location, so far as these are known, together with relevant information of the individual scales and the method by which they were combined into armour. Later I hope to extend the study to other provinces. Sources of information are excavation reports and, of course, museums. A first impression is that much of the older material is not well dated, if possible to date at all, and I would be glad to hear of any examples of scale armour which can be more reliably dated. I should also welcome information of examples which are in private collections or which have not been published. Please send information to: J.B. Clemetson, 32 Sewell Avenue, WOKING-HAM, Berks., RG11 1NS, England.

SUBSCRIPTIONS

The annual subscription for ARMA, which includes two issues (June and December), is as follows: £3.50 per annum for Britain, the rest of Europe, and the rest of the world. Postage is inclusive in the price, 1st class for Britain,

LIST OF SUBSCRIBERS

surface mail to the rest of the world. CHEQUES (IN STERLING, PLEASE) SHOULD BE MADE PAYABLE TO 'M.C. Bishop'; alternatively, the appropriate amount can be transferred to the following British Giro account: M.C. Bishop, 639965903.

NOTES FOR CONTRIBUTORS

- 1. Copy dates for ARMA are 31st May (for the June edition) and 30th November (for December).
- Anything of relevance to the study of Roman military equipment will be considered for inclusion, including details about recently published books or articles, news about finds, or information about forthcoming courses or exhibitions.
- 3. Contributions should preferably be in type-script in English, French, or German.
- 4. Illustrations should be designed to fit the text area either landscape, portrait, a portion of the latter, or a column's width. They should also be camera-ready: i.e. should already have been reduced to the size required in reproduction. Please bear in mind that, for the time being at least, ARMA is produced by xerography, so the tolerances for line-thicknesses etc. are not as fine as for real (offset-litho) printing.
- 5. If it is thought essential that a photograph should be used as an illustration, please make sure it is sent in the form of a screened print. Smaller (i.e. no wider than 106mm) half-tones can be reproduced by scanning, but they will lack the quality of a screened print.
- Contributions can be sent to any of the editorial board M.C. Bishop, C. van Driel-Murray, or H.-J. Ubl (see below for addresses).

EDITORIAL BOARD CONTACT ADDRESSES

© 1990 The Individual Authors

Edited, produced, and published by M.C. Bishop