EDITORIAL

Despite initial problems (shortage of padded envelopes, of all things), the Journal of Roman Military Equipment Studies appeared for the first time at the beginning of this year and the second volume is already in preparation. The first half of 1992 will hopefully witness not only the publication of the first JRMES monograph, but also the next ROMEC, being held in Newcastle upon Tyne in April. Make a note in your diary and miss it at your peril (it is open to all — no elitism here!)

As I have mentioned before, ARMA suffers from the drawbacks of photocopy technology, particularly in terms of the resolution possible for line illustrations and the ability to carry half-tones. Getting the newsletter printed would solve these problems, but might cost slightly more (probably in the region of 50p per issue, but those who have taken out three-year subscriptions would not, of course, have to pay any extra). Do readers think it is worth pursuing this to improve quality, or is ARMA better off staying as it is? Write and let me know what you think.
A HOARD FROM BELGIUM

Excavations in 1990 at the Roman villa at Wange in central Belgium, near the road from Tongres to Tirlemont, revealed a hoard of horse (both riding and draught) harness at the foot of the stairs to a cellar. Dating to the 2nd or 3rd centuries A.D., this is probably one of the most important such finds in the western provinces to date.

Sources: Dr M. Lodewijckx and Academische Tijdingen December 1990.

BACK ISSUES

Copies of all back issues of ARMA are still available (1989 - 1:1 and 1:2; 1990 - 2:1 and 2:2) at a price of £3.50 for a year, or £1.75 for individual issues. All prices are, of course, inclusive of postage and packing.

TWO REPRESENTATIONS OF 3RD CENTURY AD EQUIPMENT FROM CUMBRIA

J.C.N. Coulston

During the course of work for the Northern England fascicle of the Corpus Signorum Imperii Romani the writer has had occasion to re-examine two sandstone sculptures which prove to represent 3rd century AD military equipment.

The first is a gravestone from Brougham (Cumbria) depicting two full-figure standing men (H.97cm. W.52cm.). The one on the left is heavily damaged, but that on the right wears a tunic and sagum. The latter is fastened with a decorated (?) disc-brooch. Around his waist he wears a broad belt exhibiting a ring-buckle flanked by one, perhaps a pair of domed studs.¹

The second is a cuirassed statue (H.65cm. W.35cm.) from Old Carlisle (Cumbria). It has lost its head, an arm and its lower legs, but the cuirass with pteryges is well preserved. A

¹ Rudiments of military dress were adopted by the late 3rd century military, probably because of Visigoth influence.
ROMECA VII, 1992

Preliminary Notice

The Seventh International Roman Military Equipment Conference will be held in The Department of Archaeology, The University of Newcastle upon Tyne, England, on the weekend on April 11th-12th, 1992.

Further details will be published in the December 1991 issue of ARMA. Those wishing to offer papers should contact the conference organiser:

Miss L. Allason-Jones,
Museum of Antiquities,
The University,
Newcastle upon Tyne,
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England

_paludamentum_ or _sagum_ is worn over the shoulders with a disc-fibula on the right shoulder. The muscled cuirass with its low, decorated abdomen is the stylised form for wear on foot. A most unusual rectangular panel, confused pair of chest-plates, or long shoulder-pieces cover the chest. A sword with eagle-headed pommel is suspended on the wearer’s left side from a broad baldric which terminates in a heart-shaped pendent. There is the hint of a greave on the left knee and the lost right arm was upraised to grasp a spear.²

The gravestone is straight-forward in that the belt-fittings may be compared with other representations and military site artefacts to identify the right-hand figure as a 3rd century soldier.³ The statue is more problematic, having been identified in the past as funerary. This is most unlikely because funerary military statuary does not occur in Britain in this period. Continental examples of 3rd century cuirassed officers tend to be in relief.⁴ Nor is it likely to depict an emperor because the imperial images ever present in north British military installations seem to have been modelled in copper-alloy, not stone. The most convincing interpretation based on pose and equipment is a cuirassed Mars statue. Such an adoption of contemporary military equipment in hieratic artistic contexts is well paralleled by a ring-buckle on a Mars from Custom Scrubs, Gloucs⁵ and by a Mars figure with broad baldric and scabbard slide from Aalen, Germany.⁶ An eagle-headed pommel occurs on a Mars (?) from Feldkirchen in Austria⁷ and with baldric terminals on a number of 3rd century military gravestones.⁸

These two Cumbrian sculptures join the series of British 3rd century equipment representations from London,⁹ Bath,¹⁰ Chester,¹¹ Carrawburgh¹² and Wallsend.¹³ They will eventually be published in CSIR but also in a separate article.

NOTES
1. WRIGHT & PHILLIPS, 1975, No.226.
2. WRIGHT & PHILLIPS, 1975, No.238, pl.XII.
4. e.g CSIR, _Osterreich_ I.2, No.85.
5. TOYNBEE, 1963, Pl.65.
6. FILTZINGER, 1983, 14, Fig.5.
7. CSIR, Ost. II.1, No.21.
8. E.g. Archaeologia Hungarica n.s.33, 1954, No.225; ROCCHETTI, 1967-68, Fig.1-2, 5-
9. WACHER, 1974, Fig.9.
10. CSIR, GB I.2, No.47.
11. RIB 421.
12. CSIR, GB I.6, No.193.

BIBLIOGRAPHY

CSIR: Corpus Signorum Imperii Romani.


Jahrbuch 45, 1990, 59-67

BISHOP 1990: M.C. Bishop, ‘Legio V Alaudae and the crested lark’, JRMES 1, 1990, 161-4

BISHOP 1991: M.C. Bishop, ‘Soldiers and military equipment in the towns of Roman Britain’ in MAXFIELD & DOBSON, 1991, 21-7


DAWSON 1990: M. Dawson, ‘Roman military equipment on civil sites in Roman Dacia’, JRMES 1, 1990, 7-15


GREW & GRIFFITHS 1991: F. Grewe & N.
Griffiths, ‘The pre-Flavian military belt: the evidence from Britain’, Archaeologia 109, 1991, 47-84


RABEISEN 1990: E. Rabeisen, ‘La production d’équipement de cavalerie au 1er s. après J.-C. à Alesia (Alise-Sainte-Reine, Côte d’Or, France)’, JRMES 1, 1990, 73-98


Reports (Part 3)


McCarthy 1990: M. McCarthy, A Roman, Anglian and Medieval Site at Blackfriars Street, Carlisle, Cumberland and Westmorland Antiquarian and Archaeological Society Research Series Number 4, Kendal 1990

THE NIJMEGEN HELMET AND AN UNUSUAL UMBO

H. Brunsting and D.C. Steures

The Nijmegen iron helmet of Imperial Gallic A or early Weisenau type is well-known from literature, but its find circumstances have hitherto been treated only in a preliminary note. The reportedly Augustan sherds which up to now provided a date for the helmet were actually found in a different timber-lined pit, but a stamped strigil of Augustan type found with the helmet will give its date a much firmer base.
We are preparing an article on the find circumstances which will appear in *OMRO* in 1992. The helmet contained an iron umbo of unusual shape (Figs. 1-3), for which we have been unable to find a parallel. The shape of the shield could not be inferred from its discolouration in the excavation planum. Tiny fragments of its bronze rim show that its thickness there was 4mm, and suggest that its width was some 50-60cm. The umbo has not been distorted, is differently arched in two directions, and shows that the shield was strongly curved. No attachment holes are visible in its curiously narrow rim. We would be very grateful for suggestions for parallels, to be sent to the second author:

*Mr D.C. Steures, Hoofdstraat 16-18, NL-2351 AJ Leiderdorp, The Netherlands*

**NOTES**

1. Waurick 1988, esp. 337 no.2, 333 Abb.3.1, and Beilage 2 (between pp.350-1) no.9; Connolly 1989, with older literature.
3. E.g., Robinson 1975, 106, caption to Pls.100-103.

**BIBLIOGRAPHY**


**THE FASCIA VENTRALIS: A FOLLOW UP**

Peter de Haas

On leafing through the Proceedings of the 5th ROMEc (BAR S476) my attention was caught by H.-J. Ubl's contribution on the *Fascia Ventralis*. As handyman of the Gemina Project I welcomed the discovery of a new piece of equipment, but I could hardly have foreseen the consequences this discovery would have for my performance in Gemina issue armour.

For those not acquainted with the article: on the evidence of tombstones and in particular a statue discovered in Casacco (Italy), Dr Ubl deduces that the Roman soldier wore a body belt (Leibbinde, *fascia ventralis*) wound tightly round the waist between the tunic and the belts. He compares this waist band with the sash/ shawl of eastern male dress. Dr Ubl draws the following conclusions from his observation:
1. *the fascia ventralis* seems to have determined the drapery of the tunic’s folds;

2. it would ease the pressure of the crossed belts on the sensitive area of the stomach and hips;

3. the thickness of the cloth would protect the skin from bruising and grazes caused by the heavy metal belts;

4. the roll of cloth would support the belts, thus keeping the side arms in the correct position;

5. the folds of the *fascia ventralis* would form a convenient pocket for personal possessions.

By way of experiment, I folded a remnant of flannel 350 × 60cm double lengthwise, stitching it to give a strip 30cm wide. A shorter length might have been sufficient but I found three turns around the waist the most satisfactory. I have now worn the sash during several of our displays and would like to report on my experiences, beginning with comments on the points raised by Dr Ubl.

1. Folds

I used to tie a string around my waist, pulling the extra length of the tunic up and pouching it over so that the hem just touched the top of my knee, but the decorative pleats, which appear more or less automatically, sag out quite quickly when walking in kit. In addition, while marching, the tunic tends to work up under the armour, ending up like a mini-skirt. Actually this effect can also be observed on tombstones. But the *fascia ventralis* changes all this. The tunic is pulled up a bit further over the cord and the sash is wound tightly round the waist, being secured by a pin (*fibula*). Then the front of the tunic is pulled down just below the knees and the curved folds familiar from the tombstones appear of their own accord. On the march, the tunic again works up a bit, ending up just above the knee, but exposing no indecent length of leg and retaining the fold pattern more successfully. Obviously, thin cloth keeps the pleat for longer than thick cloth, though they don’t last for ever in either case.

Did soldiers worry about the pleats in their tunics? I have no idea. One thing is certain, the sculptors permitted themselves considerable artistic licence in depicting them.

2. Protection from the pressure of the heavy belts

The tight fitting sash indeed helps to alleviate the pressure of the heavy crossing sword and dagger belts. If a mail shirt is worn over the *fascia ventralis*, the belts rest on the bulge of the cloth instead of on the hips, which at the same time reduces the threat of them slipping down. The crossed belts also seem to stay in position rather better when the *fascia ventralis* is worn.

3. Bruise protection

That a thick layer of cloth will prevent bruising by the weight of the belts and grazing by the sharp protrusions of the metal fittings is logical enough (see below, point A).

4. Keeping belts and weapons in place

When the belts are buckled crosswise over the *fascia ventralis* it is virtually impossible for them to shift to either side. This automatically means that the weapons suspended for the belt will remain securely in place.

Here, however, we arrive at a difficult point, since, if the soldier is wearing his tunic, *fascia ventralis* and belt, this implies that he is not in combat dress but in fatigues. Why then should he have his weapons at the ready?

Though the weapons do not slip down when the belts are worn over a mail shirt with the *fascia ventralis* underneath, they can move round, as the mail presents a fairly smooth surface. Would the *fascia ventralis* have been worn over mail? If so, why is it never depicted in this fashion?
5. The fascia ventralis as handbag

On several reliefs the soldiers have 'something' stuck behind the belt. This is often interpreted as a wax tablet. Dr Ubl, however, points out that a wooden tablet carried thus would be quite painful, and the wax might even melt due to body heat. From personal experience I can report that carrying a tablet in the fascia ventralis poses no problems (except when bending down), neither does the wax melt. All the same, I find Dr Ubl's alternative far more attractive. He suggests that the flat, rectangular object is a leather or cloth purse for personal items. Furthermore, if the last turn of the fascia ventralis is doubled, an open pouch about 15cm deep is formed in which coins, a comb or knife can be secreted. Other solutions to the problem of pocket-less clothing which come to mind are the Scots sporran and the Hussar's sabretache. Why should the Roman soldier not have sought some way of carrying his knickknacks comfortably without having to lug a handbag around?

So much for the points made by Hans Jorg Ubl. These are quite sufficient to justify the existence of the fascia ventralis. But I might add a few extra observations, which will perhaps make the addition of the fascia ventralis to our equipment even more acceptable.

A. The cingulum has rather a lot of rivet ends and other sharp protrusions at the back which can rip the tunic — an item which the soldier would have to replace himself. Damage can be limited by wearing a protective layer of cloth under the belts and protection of the stomach would have been a very welcome side effect. A fascia ventralis can be made easily, using a scrap length of cloth, and would be much easier and cheaper to replace than the tunic itself.

B. The tightly wound fascia ventralis supports the small of the back, which makes it easier to endure the weight of the belts, weapons and armour for longer periods. Though I'm fully aware of being a 20th century softie, I often have back trouble after a day of Romanizing and I now wear it under my mail shirt. If wearing the fascia ventralis helps me, as a part-time Roman, the miles calgatus no doubt also appreciated this bit of support. It is worth noting that weight-lifters and construction workers — people subjected to continuous heavy strain — also protect their backs with a supporting girdle.

In summary, I think we can conclude that the evidence of sculpture and literary sources presented by Hans-Jorg Ubl, together with my modest practical experiences are reason enough to accept the fascia ventralis as a newly identified item of dress. It may not have been official issue, but it served a useful purpose and will, hopefully, become common property of the display and reenactment societies.

THE FASTENING OF THE GLADIUS TO THE BELT IN THE EARLY EMPIRE

Peter Connolly

The method by which the Roman soldier fastened his sword to his belt in the early years of the empire has long been a bone of contention. Many tombstones show both legionaries and auxiliaries with swords suspended from the belt on the right side with no apparent method of fastening. The same sculptures clearly show the dagger fastened by two frogs. The sword must therefore have been attached by a method that was not visible from the outside.

Two recent discoveries may shed some light on this problem.

The as yet unpublished sword discovered at

Fig.1 Buckle found with sword from Herculaneum. Scale 1:1
Herculanenum in the early 1980s was found with two almost complete belts, apron straps and a small buckle 30mm wide which had no evident function. A second sword, the earliest *gladius hispaniensis* known to the author, was discovered on the island of Delos. This sword which, although far longer than the early first century AD examples, is clearly a *gladius hispaniensis* having a long point and a typical Roman scabbard. It was found with two tiny buckles 16-18mm wide and a belt plate. This suggests that the sword was fastened to the belt by straps and buckles attached to the four suspension rings on the scabbard. This has been tried; it works very efficiently and is indiscernible from the outside.

![Fig.2 Buckles found with sword from Delos. Scale 1:1](image)

**EVIDENCE FOR THE PRODUCTION OF ROMAN MILITARY EQUIPMENT**

*Liviu Petculescu*

Since the monograph of J. Oldenstein it is generally accepted that the production of military equipment in Roman forts of the 2nd-3rd centuries A.D. is quite common, but, reflecting the differing levels of research, the evidence is concentrated mainly in the western part of the Roman Empire.

As an example, in Dacia province there has been, until now, only one securely known spot, the civil settlement of Tibiscum auxiliary fort, has provided a series of published objects — crucibles and moulds — which undoubtedly prove a local production of military equipment.

Two other unfinished pieces also come from Dacia — a mount and a strap end with casting jets and undetached flanges — from Wesselenyi-Teleki Collection, now housed in Zalau Museum. As the inventory of the collection was lost in the last world war, their exact findspot can no longer be established, yet it must be Porolissum fort or town, or less probably the smaller Tiha fortress, that produced the objects of the former Wesselenyi-Teleki Collection.

![Fig.3 Method of fastening sword to belt using Delos buckles — seen from inside.](image)

![Figs.1-2: Unfinished buckles from Micia.](image)

So I think it could be of some interest to publish more information about the production of Roman military equipment in Dacia.

My own excavations in the 6ha auxiliary fort of Micia (Vetel, Hunedoara county) have produced a large number of small finds. Among them there are a dozen small earthenware crucibles of usual shape, waste products of bronze working and more interesting, two unfinished buckles (Figs.1-2). These buckles of a very common type met all over the Empire still have undetached casting jets and flanges.
In Dacia I know two more buckles of the same type, still having casting jets, both unpublished, one from Bologna (Cluj county) ala fort (excavations N. Gudea) and the other one from the ancient collections of Deva Museum, without known findspot, most likely Micia. It must also be pointed out that a mould from Tibiscum was made for the production of the same kind of buckles.

In Micia fort I have also found the inventory of a workshop of composite bows, consisting of antler ear and grip laths and a quantity of antler debris. As from the beginning of the fort during Trajan’s reign and until the end of Dacia province in the 260-270s, cohors I II Flavia Commagenorum equitata sagittariorum was quartered here, it must be accepted that the soldiers of this cohors were manufacturing composite bows for themselves but possibly for other military units in Micia or even for nearby forts as well.

A last example I know of is a workshop producing military equipment is in Copaceni (Com. Racovita, Vîlcea county). Here, outside the fortlet of numerus burgariorum et veredariorum, in a Roman house badly damaged by medieval graves, some common small earthenware crucibles from bronze working and a clay mould for a bronze mount were found (information Sergiu Purece).

All the evidence mentioned above suggests a pattern of supplying the military units in the Danubian regions during the 2nd-3rd centuries A.D. So, irrespective of the category of units and the number of soldiers the garrisons consisted of a considerable part of the demand for military equipment, at least the common objects which were easy to manufacture, well met by local production. The workshops were located either inside the forts or in the military vici. In the first case the workers were obviously the soldiers themselves, and in the second, probably the civil one, a fact which once again stresses the complexity of Roman military organization.

NOTES

RESCRIPT
Dr G. Lloyd-Morgan writes: 'May I throw some light on the mystery object illustrated on p.12 of ARMA vol.2 No.1 (June 1990)? There is one complete example, with three incomplete ones in Stephanie Boucher Inventaire des Collections Publiques Francaises no.17: Vienne Bronzes Antiques (Paris 1971) p.191 no.522-525 pl. on p.190. The complete example (no.525) with the iron fitting in situ is clearly a key; of the other pieces no.524 still has part of the iron shaft, no.522, 523 are less well preserved. All four have the same turned cylindrical shaft and terminal knob. The heights are given as between 4.3 - 5.5cm; they are unprovenanced, but presumably come from Vienne or elsewhere within the Departement of Dauphine. A reference is given in the catalogue entry to a piece from Banon published in Gallia 16 (1958) p.397 fig.15,16.'

MYSTERY OBJECTS

Excavations at a Roman villa near Petersfield, in southern England, have produced some objects which the excavator, Mrs des Brisy, thought might be military equipment. Unfamiliar to the editor, he felt the readership of ARMA might appreciate an opportunity to see illustra-
tions of the objects and possibly help Mrs des Brisay. Any ideas?

Fig.1: Two 'mystery objects' from near Petersfield, Hampshire. Scale 1:1.

A WOODEN TRAINING SWORD AND THE SO-CALLED PRACTICE POST FROM CARLISLE

Ian Caruana

TRAINING SWORD

One complete wooden sword and two other possible sword handles were found during excavation of the Flavian timber fort at Carlisle, founded A.D.72/3.

Description (Fig.1)

Replica of a gladius made from oak timber. The width diminishes gradually from pommel to blade tip. The pommel is roughly semi-circular in shape with the thickness reduced at the top by removing facets from both faces of the circumference. On the underside there are cut marks adjacent to and parallel with the handle showing where surplus wood has been cut away to make the handle. The handle, centrally placed in the straight side, increases slightly in width towards the blade. The width of the blade decreases evenly from its sloping and uneven shoulders until 56mm from the tip where one side decreases more sharply, only to level out again 32mm from the tip. Catalogue No.D227 in final report. Date not later than A.D.83/4. L.571mm (overall). Blade: L.425mm W.52mm Th.12mm. Handle (with pommel): L.147mm W.48mm (max.) Th.15mm.

Comment

The complete sword is a close replica of an iron gladius, the blade dimensions being well within the normal range of such weapons (HAZELL, 1982, 77; MANNING, 1985, 150). The form of the pommel on the broken handles
(not illustrated) differs from that on the complete sword in being round rather than angular with a rounded top. Both shapes can be found on soldiers’ tombstones though the rounded type should, on real swords, normally be fully spherical rather than the flattened disc form of the wooden handles.

So-called toy swords in wood occur from medieval contexts at Novgorod (KOLCHIN, 1989, 462, Pl.216) and Dublin (LANG, 1988, 33, DW88). The Dublin sword, from its size, is too small to be anything but a toy though it faithfully reflects Viking prototypes. The reason for attribution of the Novgorod swords is less clear. Curiously one of them also has a stamped motif on the pommel as occurs on one of the broken handles.

Although the Annetwell Street weapons may have been toys, there is reason for believing that wooden swords were used for training purposes. Ancient sources establish that Roman weapons training involved the use of wooden swords, initially double weight, then probably more authentic weight, after which the recruit was allowed to risk the use of real iron blades. Vegetius refers to a stake being placed in the ground against which the recruit practised with his wickerwork shield and wooden stave (I, 11) and Livy describes recruits ‘engaged in combat with one another with wooden swords after the manner of a real battle’ (XXVI, 51, 4). (The evidence is fully discussed in WATSON, 1969, 55-7 and DAVIES, 1968, 81ff).

A Roman period wooden sword from Oberaden has a curved tip and appears to be modelled on a gladiator’s weapon (SCHNURBEIN, 1979) and there is some evidence for the introduction of gladiatorial training methods into the army in the Republican era (Val.Max. II, 3, 2).

There is no surface damage to the complete sword which might be taken to tip the argument in favour of it being a toy. The findspot in the west gate tower unlike, say, the commanding-officer’s house does not seem to be a structure likely to be frequented by children whereas weapons were at times stored in towers. The sword may simply have been little used or the oak may have resisted casual damage. A replica made by the author using naturally dried out (i.e. not scientifically conserved) Roman oak from the Flavian fort was too hard to shape accurately with a knife.

THE PSEUDO-QUINTAIN

A photograph of this object has been published describing it as a possible practice post (DAVIES 1989, 78, Pl.3.7). Before this attribution becomes accepted, it will be useful to list some of the problems which make the attribution very doubtful.

Description (Fig.2)

Rectangular oak plank joined by a short neck (L. 65mm W. 135mm) to a round head (dia. 380-400mm). Both the lower end and the left shoulder are damaged. The left shoulder has the remains of a rectangular mortice (W. 165mm D. 120mm Th. 22-25mm) cut into the side. The wood at this point has split across two peg holes (dia. 20mm). The front (upper surface, as it lay in the ground) is heavily scratched in two orientations. The right side is burnt.

Minimum total height 1.60m; width 370mm; thickness 85mm.

Found incorporated in the board floor of an intervallum building [4857] dating to the early 80s. Catalogue Number in final report is Q382.

Comment

The function of this object is not known, but, despite the superficial attraction of the idea, there are strong reasons for believing that it is not a practice post. The reasons which gave rise to that identification seem to be: 1. the resemblance to a human figure; 2. the presence of surface cuts, supposedly the result of attack by edge weapons; 3. the identification of the object with one of the wooden posts described by Vegetius as part of soldiers’ training.
Unfortunately this suggestion was put forward without reference to a close examination of the object itself and the reasons do not withstand scrutiny.

1. The human shape is superficial (the excavators always called it the 'petrol-pump') and may be irrelevant. The body parts are out of proportion. The chest width is correct but the head is twice life-size. One of the principles used in training is to create exercises harder, not easier, than will be met under field conditions. This is not achieved by a double-size target.

Reproduction of the photograph in Davies' book is not good enough to show it, but the line-drawing reproduced here (Fig.2) illustrates clearly that something was once jointed into the broken side. It might be argued that this was supposed to represent an arm, but, if so, why was there not one also on the other side? The remains of the joint, moreover, imply that something was very carefully morticed into the side and then pegged into position. In itself pegging a mortice joint is not a very sophisticated piece of carpentry but this was an extremely rare example from all the joints studied from the Carlisle fort. In this light it is rather unlikely to have been used in an object created for the sole purpose of being hacked about.

The lateral joint could have held a support arm for the object but a practice post is unlikely to have been held in this manner. Vegetius specifically say the posts were fixed in the ground (pali defigebantur in terram), not supported from the side. A lateral support would impede the recruit's approach to the post. More importantly the joint present here could not have borne the weight of attack which was the raison d'être of the post. As the damage shows, the joint was a weak point which did not survive dismantling.

2. The surface cuts (better described as scratches) have nothing to do with the primary function of the object. They are found
on virtually all large timbers used as flooring and I suspect them to be produced by hobnail shoes. Typically they fall within the range 30-50mm, occasionally slightly longer or shorter, and never more than 2-3mm deep. They are categorically not the result of stabbing or slashing with a sword. Even if posts were padded (for which there is no evidence), some sword marks might be expected.

3. The phrase used in describing weapons training is *ad palos* (Vegetius I, 11). It appears in other more literary writings (e.g. Juvenal, *Satires* 6.247) to describe the training exercise, so it is unlikely that Vegetius was using an obscurely technical term. *Palus* is usually translated as a stake or post. *OLD* also gives the meaning of “length of unsplit wood”. (It was incidentally also used for the gladiator’s wooden sword). The word was surely used because it best described the form of the timber being used, not an imitation human figure. Peter Connolly has drawn the exercise post as a length of tree trunk (1981, 218) and this is much more plausible than the object in Fig.2.

The identification as a practice post was initiated by the supposed resemblance to a medieval quintain. Arising from a purely visual similarity a totally unwarranted assumption has been made that there was an identity of function. The medieval quintain belonged in a milieu of heavily armed medieval knights tilting with a lance. Such body-shaped targets are a world away from the training of a Roman infantry swordsman.

*Function*

After giving reasons for dismissing the identification as a exercise post or quintain, we are unfortunately not in a position to supply a plausible alternative. Having examined all the wood from the fort this is not altogether surprising. The function of objects, small or large, is either immediately obvious because their design has not altered over two thousand years or it remains impervious to close analysis. Many unidentified items are detached parts from a larger composite whole (as this is), and much depends on being able to identify the whole from its component parts.

The only remote parallel so far noted, and no more plausible than the quintain theory, consists of a series of similar shaped planks, said to be gods, attached to the roof of the ninth century Slav temple of Gross Roden (BRACHMANN 1983, Fig.8).

**BIBLIOGRAPHY**


DAVIES 1968: R.W. Davies, ‘Fronto, Hadrian and the Roman Army’, *Latomus* xxvii, 75-95


NEXT ISSUE

The December issue of ARMA (Vol.3:2) will include the first of the annual subscriber lists, more details about the forthcoming ROMEC, and (hopefully!), our first major subject bibliography on... well, you'll just have to wait and see. In addition there will be the usual surprises (for you and me) which trot in at the last moment, just when I think I'm going to have to send out a two-page issue. For those who have appetites that need whetting, there will be a brief preview of the contents of volume 2 of JRMEs and news about the first JRMEs monograph, which we hope to have available in the first half of 1992.

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, 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).

2. 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 typescript 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.

6. 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).

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