



*Jim Bowers 2005*

**Roman legionary , Dacian Wars**  
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## Introduction

Recently, the Carlisle finds have led to old conclusions about the manica being re-visited (e.g. “*It was only used against the Dacian falx-men*”) and old finds being re-evaluated (the Newstead finds). Manicae have been seen reconstructed by a number of re-enactment groups- most notably in the Ermine Street Guard.

This article aims to pull together the many excellent articles and book chapters on the manica in early Imperial Roman times (0-150 AD) , and to give amateur historians and re-enactors alike an easily referenced article on the manica - what it is, when it was used, and some thoughts about how it could be re-constructed.

I would particularly like to thank for help, advice, and permission to use photographs, drawings, and conclusions Dr. Mike Bishop, Dan and Susanna Shadrake, Adrian Wink, and Jim Bowers. Any errors and minor to catastrophic failures of judgement and knowledge are entirely down to me!

I will aim to give a short history of the manica, look at the Roman evidence - written, sculptural, mosaic, and (most importantly) actual finds. I will then go on to describe possible re-constructions, experiences of modern users, and then draw some conclusions.

What is a manica?

I will define a manica as a segmented arm protector made of iron or cupric alloy- leaving the textile and leather arm protectors to other , more knowledgeable individuals.

## History

### Hellenistic

The manica has a long history, with Xenophon describing cavalry of 4<sup>th</sup>/5<sup>th</sup> century BC equipped with an articulated armguard, a ‘*Cheira*’ on the left arm in place of a shield.

In Pergamon, pieces of an iron armguard were found, and armguards are also depicted in the sculpture at the Temple of Athena at Pergamon.

At Ai Knaum, another segmented armguard was found in the Hellenistic arsenal dated to 150 BC. This had a large upper plate and about 35 over-lapping curved plates, which appear to “*under-lap*” downwards from the hand/wrist plates- that is, with each plate being under the next as it goes up the arm. This would protect and deflect a sword or spear thrust. The opposite way (plates over-lapping downwards) would deflect the enemy’s spear point into the gap between the plates towards the unprotected arm – which, on balance, is probably not a good idea.

### Roman evidence 0-50 AD

Gladiators

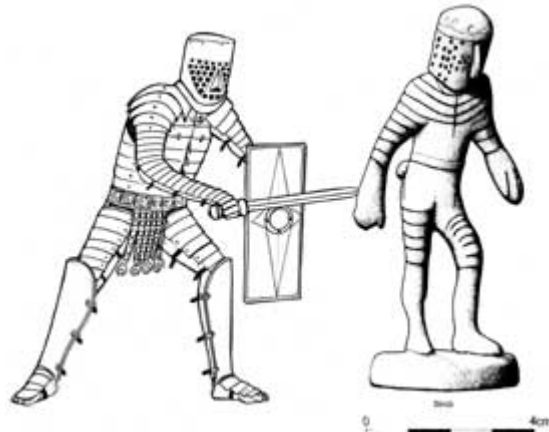


Gladiators demonstrate a wide variety of armguards- in metal, leather, and padding. However, a key development came with the ‘*crupellarius*’ - a heavily armed gladiator of Gaulish origin. Tacitus describes their use is fighting against legionaries in the revolt of Florus and Sacrovir of AD21:-

*“There was also a party of slaves training to be gladiators. Completely encased in iron in the national fashion, these crupellarii, as they were called, were too clumsy for offensive purposes but impregnable in defence...the infantry made a frontal attack. The Gallic flanks were driven in. The iron-clad contingent caused some delay as their casing resisted javelins and swords. However, the Romans used axes and mattocks and struck at their plating and its wearers like men demolishing a wall. Others knocked down the immobile gladiators with poles and pitchforks , and, lacking the power to rise, they were left for dead.”*

Tacitus, Annales, III 43

As it happens, a bronze figure was found at Versigny, France that matches this description, and is reproduced below.



Interpretation on left: Versigny figurine on right  
(with kind permission on Mike Bishop and Susanna Shadrake)

As can be seen, this segmentation covered both arms, body, and legs. A rather wonderful re-enactment of this ‘Ned Kelly’ of the Roman world has been made by Familia Gladiatoria of Hungary- and it is a sight that must have impressed watching soldiers.





**Crupellarius reconstruction**

Reproduced with permission of Familia Gladiatoria of Hungary

Further evidence- this time placing the metal manica firmly in the Roman army, comes from the tombstones of *Sextus Valerus Severus* (CIL 13, 06978) and *Gaius Annius Salutus* (CIL 13, 06953), both from Mainz and legionaries of Legio XXII Primigenia, who were based in Mainz between AD 43-70. Their tombstones show manicae as part of the decorative border of weaponry surrounding the text of the tombstone. Severus' manica shows eleven plates and a hand shaped section of four plates (though it would be unwise to rely on this sculptural reference as opposed to the archaeological finds). However, this clearly places the manica as being used- although rarely- by Roman legions on the Rhine around AD 43-70.

## **Roman evidence 50-150 AD**

### Sculptural evidence

The most useful source is the *Tropaeum Traiani* metopes at Adamklissi, constructed c. 107/8 and depicting Trajan's Dacian wars. Although the same campaign as shown on Trajan's Column, the equipment shown is very different. As a monument set up closer to the front line and the actual soldiers - and less of a "Head Office" official propaganda monument like Trajan's Column- Adamklissi is generally regarded as being more accurate in its depiction of the troops.

Of the metopes showing troops in battle, virtually all show legionaries wearing manicae on their sword or spear arm. Those that do not show:-

- Auxiliaries (metope XIV)
- Cavalry (metope 1)

One legionary, dressed in mail with a scutum (metope XXIX) does not appear to wear a manica, though the stone is damaged. Some others have suffered similar or worse damage, and it is not possible to conclusively prove that manicae are depicted in these pieces..

Troops marching or off-duty, standard bearers, cornicenses, attending senior officers, or holding captives do not wear manicae.

Legionaries are shown in mail or scale, but not in lorica segmentata as on Trajan's Column. Helmets with cross-bracing and greaves are also depicted. Auxiliaries are shown in mail, with senior officers in lorica musculata.





**Legionary with mail, manica and spear with Dacian falxman**



**Legionary in scale, holding sword and Dacian falxman**

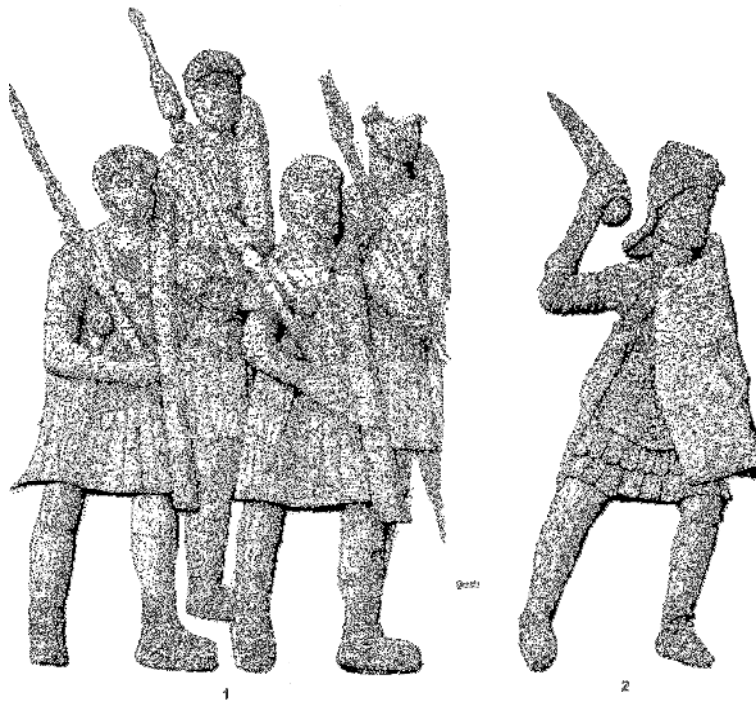


**Legionary in mail, manica with sword and Dacian falxman**



**Legionary in scale, manica with sword and two Dacian falxmen**

(All pictures reproduced with kind permission of Jack O'Keefe and Legio VIII of Ireland.)



**Marching “off-duty” soldiers, compared with soldier in combat**  
 (With kind permission from Dr. Mike Bishop)

It is understandable that the theory grew up that the manica was brought in to combat the fearsome Dacian falx, whose wielders were later to guard the Emperor himself (see column of Marcus Aurelius and coinage). However, archaeological finds elsewhere invalidate this theory.

#### **Archaeological evidence**

A number of finds have been made- or subsequently recognised as manicae. The first was from the Waffenmagazin at Carnuntum, followed by the copper alloy curved plates from Newstead, which also provided pieces belonging to an iron manica. Both came from the well in the headquarters building that also conserved the Newstead lorica segmentata. These were (incorrectly) described by Robinson as thigh guards, and the finds are probably not complete, with more plates/ lames being in the original..

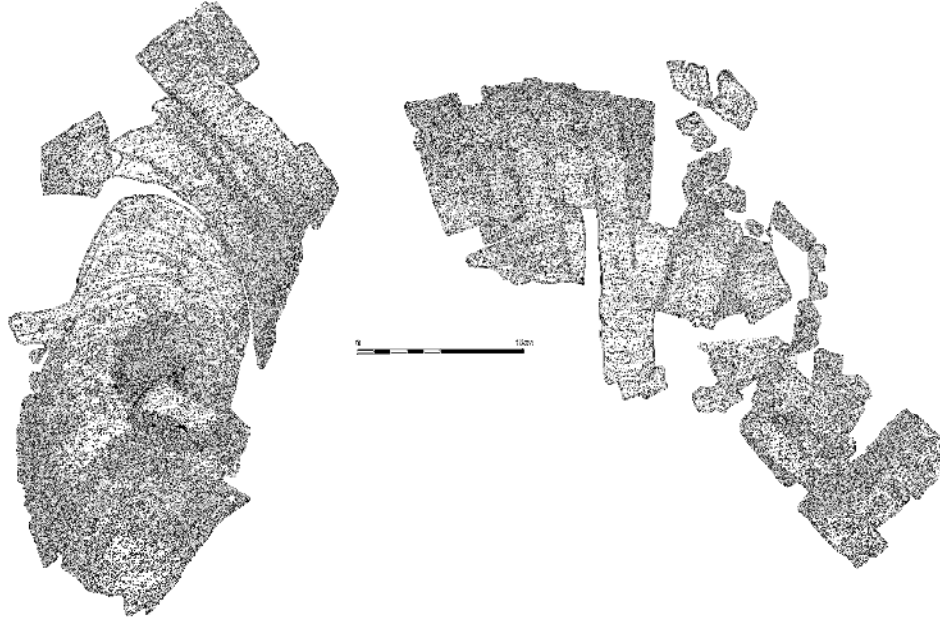


**Newstead Manica (copper alloy) , National Museums of Scotland**

Further plates have now been identified from Richborough, Corbridge, Eining, Leon, and possibly complete manicae have been found at Carlisle and at Ulpia Traiana Sarmizegetusa in Dacia/ Romania .

The finds of manicae therefore stretch across the Roman Empires- and cannot be simply a defence against falx-men.

The Carlisle finds, from a Hadrianic context are the most important (though I have been unable to obtain photographs and details of the Romanian find). It appears to be one complete iron manica. In addition, two halves of two other iron manicae were found. I understand that two further manicae were found, but these are yet to be examined and published.



**Carlisle Manica**  
(with kind permission from Dr. Mike Bishop)

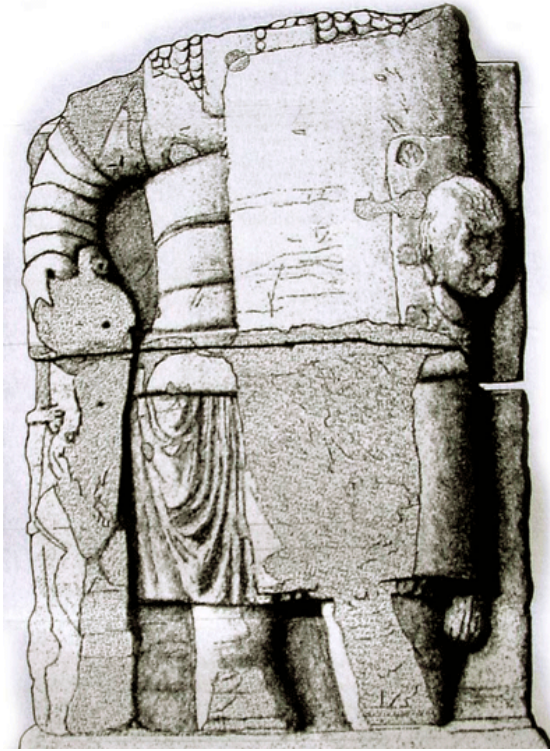
X-rays taken of the manica when found also show convincingly that the manica plates under-lapped from the wrist to provide better defence against a thrust. One has surviving copper-alloy ring fittings - another a hook similar to lorica segmentata fastenings.

### **Roman Evidence post 150 AD**

After 150 AD (though not the main aim of this article), further evidence exists for Gladiator manicae, with both mosaics and references to '*Manicarii*' at the gladiator training schools during the reign of Commodus.

The 2<sup>nd</sup>/ 3<sup>rd</sup> century relief at Alba Julia shows a legionary wearing a segmentata (of unique design) and a manica.





**Alba Julia relief (by kind permission of Mike Bishop)**

In Dura Europos, the famous “*clibanarii*” graffito appears to depict manicae, which are also shown in medieval copies of the (much) later ‘*Notitia Dignitum*’.

Finally, Ammianus describes Roman cavalry on parade in 350 AD as “*Laminarum circuli tenues apti corporis flexibus ambiebant per omnia membra diducti.*” (Thin circles of iron plates, fitted to the curves of their bodies, completely covered their limbs).

## **Re-creating the manica**

Based on the work of Dr Mike Bishop, the armguards had about 35 iron/steel or copper alloy plates below the main upper plate, articulated on internal leathers fastened by copper-alloy rivets. The upper plate (based on Newstead) is 25.8 cm long and 9 cm wide, with a turned upper edge and holes for the attachment of a lining and straps, tapering down to the smallest plate of 12cm long. The lower plates were 2.7 cm wide.

Comparing with the Carlisle manica, the main plates varied between 25 and 30 mm wide, again shortening as they progressed down the arm.

At the wrist, the Eining and Leon examples were riveted together and not articulated.

Some kind of padding also existed, and Van Grollier noted remains of linen and leather. The Newstead manica also had fragments of leather surviving when it was first found.

Susanna Shadrake and 'Britannia' have also noted the tendency of the manica to rotate around the arm in combat- also noted by some other groups who have used these in simulated battle. This can be counter-balanced by a disc being worn around the pectoral area- as seen in the mosaic below (also on the cover of her highly recommended book "The World of the Gladiator".) No unequivocal evidence has so far been found of such discs in a military context, but some such device seems likely.



**Fourth Century 'Villa Borghese' mosaic**  
Reproduced with kind permission of Susanna Shadrake

Britannia's reconstructions show that an unsecured metal manica needs a strap, like a baldric, passing under the shield arm, if it is not to slip down under its own weight. A padded manica made of fabric, in contrast, stays up held by the thonging that ties it to the arm.

Finally, the manica is primarily worn on the upside of the arm, and not over the elbow. This is because this would be the most exposed part of the arm when using a sword. This is supported by the design as a manica going over the elbow would need a medieval-style 'couter-plate' to allow the manica to expand over the joint. No such plate has been found.

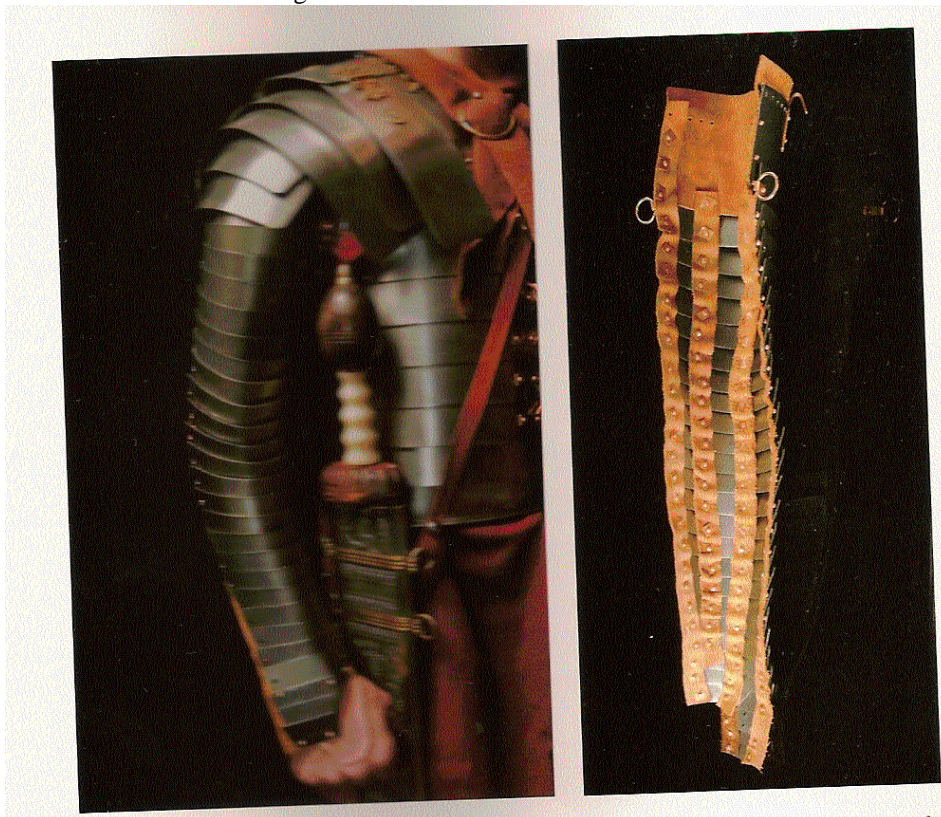


**“Correct” Carlisle manica position**  
Picture by kind permission of Jim Bowers

This seems to contradict some sculptural representations and other depictions of gladiators- but is supported by the actual finds to date. Of course, the longer the plate, the more it could encircle the arm giving the impression of a manica completely encasing the arm. And it goes without saying that further finds may shed more light on alternative designs!

Overall, in reconstructing the manica, the following components are likely :-

- Shoulder plate – 1
- Lames - c. 35
- Leathering copper-alloy rivets -90-120
- Internal leathers - 3-4
- Padded fabric and leather lining - 1



**Replica manica based on the Carlisle finds, reproduced with kind permission of Susanna Shadrake and Michael Hardy**

## **Conclusion**

In conclusion, the manica- having had a long history before- came into the Roman army between AD 21 and 70, with widespread use throughout the Empire. At the moment, only legionary use is attested but of course “absence of evidence is not evidence of absence”. It appears to be a combat item of equipment, and not used day to day.

“Official sculpture” does not depict the manica, which is only shown in sculpture from the “front line” in Dacia and the Rhine. It is only possible to speculate why this might be, but it might be thought that a gladiator-associated item of kit should not be shown on a soldier and citizen of Rome? Gladiators, despite their “footballer celebrity” status, were also regarded as somewhat degraded- “solemnly handed over body and soul to our masters” (Petronius, *Satyricon* 117) and Augustus prohibiting young men of rank from becoming gladiators.

Finally, it is completely justified for re-enactment groups depicting first century Rome to have members wearing a manica if a potential combat situation is to be shown.

## **Key Bibliography**

Lorica Segmentata, Volume 1- M.C. Bishop  
The Armour of Imperial Rome- H.R.R Robinson  
The World of the Gladiator- Susanna Shadrake  
A Roman Frontier Post and its People- James Curle