

## CHAPTER X

### Weapons

#### Shields

IN the sculptures of the Trajan column the Roman soldier marching out to the conquest of Dacia is represented carrying his shield on his left arm and his sword tucked under his right, while from his spear, which is borne over his shoulder, hang his camp kettle and other items of his equipment.

The weapons no less than the armour are illustrated by the Newstead finds. The remains of shields are very slight. The shields in use were probably of light wood, covered with hide or leather and bound with bronze or iron. They had a central projecting boss and some more or less rigid metal framework. Wood and leather alike have disappeared, leaving nothing save a few fragments of the metal mountings. On the Trajan column the shields of the legionaries are rectangular with a curve inwards to protect the body. The same shape appears on the sculptures from the Praetorium at Mainz. Some of the monuments, again, display a shield of hexagonal form. The most common type, however, is oval. This may be noted on the Trajan column among the spoils of the Dacians, as well as in the hands of Romans. It also figures among the Gaulish trophies on the Arch of Orange. We may infer that it was the shield generally borne by the auxiliaries.

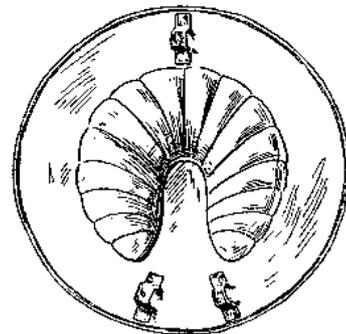


FIG. 18. REVERSE OF  
BRONZE DISC FROM PIT  
XCII

It is probable that such fragments of shields as have been recovered at Newstead belonged to the oval type. The most typical was a much damaged boss of iron which had certainly been an *umbo* or shield-centre. It came from the pit in the Principia (Plate XXXIV., Fig. 3), and had had a total

diameter of  $6\frac{3}{8}$  inches, while the domed central portion projected about  $1\frac{1}{2}$  inches and had a diameter of  $3\frac{7}{8}$  inches. It had been fastened to the shield by five nails or rivets. Similar bosses have been found at the Saalburg and other Roman castella abroad. From the bottom of the same pit came a number of decorative fragments of brass, which may well have formed part of the ornament of the shield. The remains of a second shield-boss of iron were found in Pit LXXXIII.

### **Remains of their Framework**

Another object, found in association with tools and weapons in Pit XVI, appears to have belonged to the framework of a shield. This is an iron rib (Plate XXXIV, Fig. 1), 28 inches long, flat on one side and rounded on the other. It has a width of half an inch. Although only one of the ends remains, it would appear that each of them has been beaten out flat so as to form an almost circular plate, having in the centre, on the side corresponding to the flat side of the main rib, a large flat-headed rivet  $\frac{5}{8}$  of an inch in diameter: evidently intended as a fastening for attaching to thin wood or thick leather. The iron rib is perforated with four holes, at equal distances apart, for fastenings. Another rib,  $25\frac{1}{2}$  inches long, came from Pit XCVI. It is somewhat thicker than the last specimen. In addition to the flattened plates at each end, it has four nail holes. The metal,  $3\frac{1}{4}$  inches from each end, has been curved outwards just enough to permit a strap being passed between it and the wood to which it was fastened. Another object, which was evidently the terminal of a similar rib, came, like the shield-boss, from the pit in the Principia. It too shows the flat-headed rivet for attachment. Three other portions of similar ribs (Plate XXXIV, Figs. 4, 5 and 12) were taken out of the ditch of the early fort. They are all flat on one side and rounded on the other, and have holes through them, by means of which they were fixed to the shield. Two of these latter pieces are characterised by a new feature. They bifurcate at the end, while the terminals are curved backwards, one on each side of the rib, and have their ends flattened out and perforated. The iron mounting illustrated in Plate XXXIV, Fig. 2, has in shape something in common with the objects just described. It was found in Pit XIV, and may also have served as a shield mounting.

A rib of some sort was often employed in the construction of shields. It may be seen, for instance, attached to a central boss on the early Gaulish shields, from the cemeteries of the Marne, which are now in the Museum of St. Germain-en-Laye. Again, it occurs on the later

PLATE XXXV. MOUNTINGS FOR SHEATHS AND HELMETS

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1 to 7. Edgings of brass, probably belonging to sheaths. Pits LVIII and LIX.	<a href="#">187</a>
8. Helmet mounting of bronze. Praetentura.	<a href="#">165</a>
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10. Ear piece from a helmet, bronze. Pit XXII.	<a href="#">166</a>
11. Sword guard, bronze. Pit LVIII.	<a href="#">186</a>
12. Sword guard, bronze. Praetentura.	<a href="#">186</a>
13. Sheath mounting. Baths.	<a href="#">187</a>
14. Brass loop, probably from a sheath. Pit LIV.	<a href="#">187</a>
15 to 18. Terminal mountings of sheaths) bronze.	<a href="#">187</a>



Lombard shields from the cemeteries of Testona and Civezzano.<sup>1</sup> In both these cases the rib is flattened out at the end and perforated to receive a rivet. No purely Roman example of such shield-ribs appears to be known, but the sculptured monuments occasionally reproduce it. Thus, on the sarcophagus of the Vigne Ammendola there are several representations of the oval Gaulish shield without a boss but strengthened by a rib, or band of metal, running along its longest axis, and by a second crossing it transversely. In this case there is the same bifurcation of the rib as has been observed in two of the Newstead specimens, and the ends are curved backwards, combining a more secure fastening with a more ornamental terminal. A Gaulish shield on a relief found at Avignon shows the oval form with a central boss fastened by large-headed rivets and a straight central rib.<sup>2</sup> While on the Arch of Orange, where some of the shields are not furnished with a central boss, there are ribs which display a variety of decorative treatment.

### Swords

The Newstead pits provided some interesting examples of the sword. A specimen (Plate XXXIV, Fig. 11) of the gladius, or short heavy sword, so familiar on the monuments of legionary soldiers, came from the Pit at the Baths (No. LVII). This has no mountings of any kind. The blade measures  $19\frac{1}{2}$  inches in length and the tang for the hilt  $6\frac{5}{8}$  inches. The width immediately below the tang is 2 inches, and this is maintained with hardly any taper until within 3 inches of the point. There is a slight midrib. A fragment of a similar sword was found along with it. It consists of a small portion of the upper part of the blade,  $2\frac{1}{2}$  inches long and  $2\frac{3}{8}$  inches wide, and a tang  $5\frac{1}{4}$  inches long (Plate XXXIV, Fig. 14). With these may be compared a typical short Roman sword found, with its sheath, in the Thames near Putney, and now in the British Museum. It has a length of  $20\frac{9}{10}$  inches, and the width of the blade near the hilt is  $2\frac{3}{4}$  inches.

A second type of sword is illustrated by finds from Pits XIV and XVI, associated in both cases with first-century pottery. One of these specimens, that from Pit XIV (Plate XXXIV, Fig. 6), is in excellent preservation. The blade measures  $24\frac{1}{2}$  inches and the tang 6 inches. The former has a width of  $1\frac{3}{8}$  inches at the hilt, and gradually tapers to  $1\frac{3}{16}$  inches at 3 inches from the point. The example from Pit XVI (Plate XXXIV, Fig. 7), which is unfortunately broken in two pieces, has a slightly longer

1 J. de Baye, *Industrie Longobarde*, plate i.

2 Espérandieu, *Recueil général des Bas Reliefs de la Gaule romaine*, vol. i. p. 171, No. 236.

blade, 25 inches, but is otherwise similar in character and in dimensions. Both show a distinct midrib. On neither is there any trace of the mountings of the hilt, nor of the sheath. Another incomplete sword from the Pit at the Baths still retains the greater part of its bone hilt (Plate XXXIV., Fig. 13). The blade has been doubled back, and the point is gone. The remaining part of the blade measures  $16\frac{1}{4}$  inches in length, and has a maximum width of  $1\frac{3}{16}$  inches. The hilt, which is  $4\frac{1}{4}$  inches long, is obviously imperfect. It terminates at the upper end in an ovoid pommel  $2\frac{7}{8}$  inches in circumference. The grip has alternate ridges and flutings to prevent it slipping in the hand, and no doubt it expanded again beneath, as do the hilt of bone recently discovered near Dorchester, and the ivory hilt found at Mainz and now in the Museum there. The Dorchester specimen is  $6\frac{4}{5}$  inches long, and represents a variety which appears to have been in common use among the Romans. It is frequently to be seen on legionary monuments. It is, therefore, probable that this doubled-up sword, and the two more perfect blades, Figs. 6 and 7, are, like Figs. 11 and 14, to be classed as Roman.

### The Gladius and the Spatha

The two types of sword that have been discussed, as exemplified by Figs. 11 and 6, probably represent the weapons of the legionary and of the auxiliary respectively. We learn from literary sources that in the time of Claudius the auxiliaries carried a sword, known as the *spatha*, which differed from the sword of the legionaries. Vegetius, writing at a much later date, describes the *spatha* as being longer than the *gladius*. Under Vespasian, too, the horsemen had a longer sword than the infantry. The contrast between the weapons of the legionary and of the auxiliary—the *gladius* and *pilum* in the one case, and the *spatha* and *hasta* in the other—is strikingly brought out in a passage of Tacitus, in which he describes the defeat of Caratacus by Ostorius Scapula.<sup>1</sup>

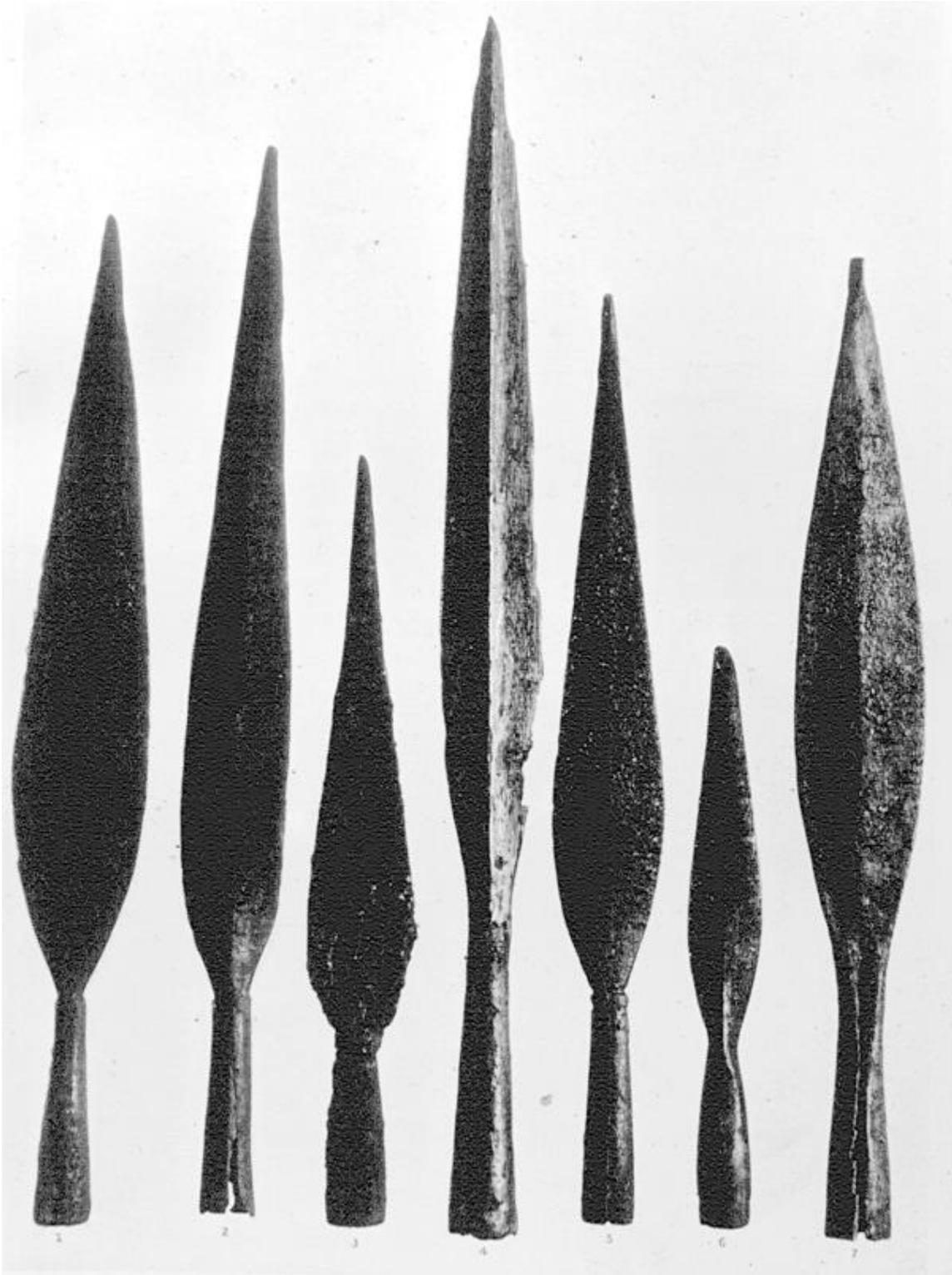
The long narrow blade of the *spatha* is closely akin to the Celtic swords of La Tène. No doubt many of the auxiliaries brought their native weapons with them into the Roman service. Thus, the curved sword which the Dacians wear in the sculptures of the Trajan column reappears on a tablet from Amboglanna, now at Newcastle, dedicated by Dacian auxiliaries. In the same way this long light sword, the counterpart of which may be found in pre-Roman graves in Central Europe, was perhaps the weapon

1 "Si auxiliariibus resisterent, gladiis ac pilis legionariorum, si huc veterent, spathis et hastis auxiliarium sternebantur." *Annals*, Book xii. c. 35.

PLATE XXXVI. SPEARS

	PAGE
1. Spearhead. Pit XVI.	188
2. Spearhead Pit XVI.	188
3. Spearhead. Pit LIV.	
4. Spearhead. Found in 1846 during formation of the railway.	188
5. Spearhead, with punctured inscription. Pit XVI.	188
6. Spearhead. Pit XVI.	188
7. Spearhead. Pit XVI.	188

All the objects figured are of iron.



of the Celtic peoples. An example very closely approaching the Newstead specimens was found, with objects typical of the close of the bronze age, in a tumulus at Louette St. Pierre, Canton de Geduine, Belgium, and may be seen in the Museum of Namur.

### **The Celtic Sword**

It is natural to enquire whether any trace of the native sword is to be distinguished among the fragments of broken weapons. The answer is probably in the affirmative. One complete sword and portions of three others seem to be Celtic weapons. The first find (Plate XXXIV., Fig. 10) came from Pit LVII at the Baths. All that remained was a portion of the blade, somewhat bent and very frail,  $14\frac{3}{4}$  inches in length, with part of its iron tang. At the base of the tang the sword-guard of thin bronze was still in position. On the lower edge where it joins the blade the guard is quite flat. Its upper outline describes a central curve with terminal cusps. The whole is entirely undecorated. The significance of this discovery was not appreciated until the finding of a second sword in Pit LVIII, a receptacle whose position and contents alike suggested that it belonged to the early period, probably the advance of Agricola. Besides the sword and a quantity of early pottery, it contained a number of fragmentary bronze objects, including a piece of thin brass with embossed Late Celtic ornament. The sword (Plate XXXIV., Fig. 8) had been rendered useless by bending the hilt down upon the blade. The blade measured 23 inches in length, and the tang for the hilt  $5\frac{1}{2}$  inches. The greatest breadth was  $1\frac{3}{8}$  inches, tapering to  $1\frac{1}{4}$  inches at a distance of 3 inches from the point. All that remained of the hilt was the small rounded knob of bronze which had constituted the pommel, and the mounting which had served as the guard. Both of these appear to have been overlaid with silver. In outline the mounting resembles the one already described. It is in its decoration that its chief interest lies. There we may recognise, though poorly executed and, indeed, somewhat debased in their character, the sinuous stems and trumpet-shaped terminals so dear to the Late Celtic metal-worker.

### **Sword Guards**

Another guard (Plate XXXV., Fig. 11), presumably also of a Celtic sword, was taken from the same pit. It is of yellow brass, more solid than the last specimen, and without any decoration. A fourth example, also undecorated, subsequently came to light among the surface-finds. That such mountings are a typical feature of the Celtic sword can be shown from a good many British analogies. Celtic swords of this period are of rarity in Scotland, owing

perhaps to the fact that, being of iron, they are liable to be destroyed by rusting. But, while the blades have disappeared, we have one or two examples of sheaths. The finest of these, which is of bronze, was found at Mortonhall, on the Pentland Hills, and is now in the National Museum in Edinburgh. The blade of the sword for which it was made must have been about 22½ inches long—that is, a blade of very nearly the same length as the Newstead specimen. Several sword-guards are known. One, found in a moss at Middlebie, in Annandale, in association with a group of typical Late Celtic objects such as bridle-bits and harness mountings, is illustrated below in Fig. 19 along with one of the Newstead specimens, and two specimens from Hod Hill, near Blandford, Dorset.

No. 1 represents the decorated guard-mounting from Pit LVII. It will be evident that the design, though comparatively poor, is closely related to that upon No. 2, which is the Middlebie specimen, and that this in its turn is but an inferior copy of

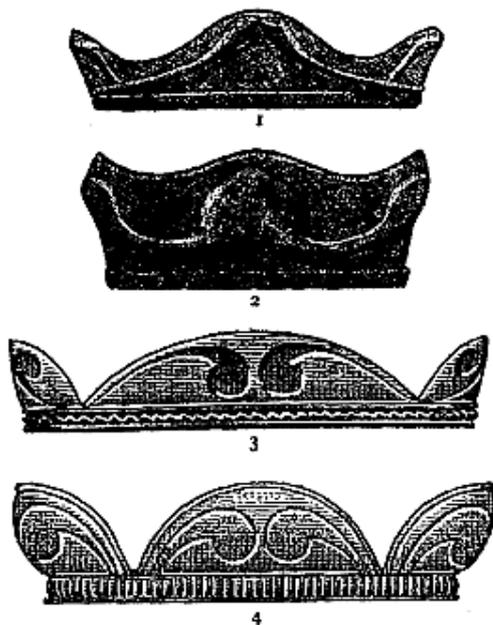


FIG. 19. LATE CELTIC SWORD GUARDS

such designs as we see on Nos. 3 and 4, the sword-guards from Hod Hill. It thus seems probable that during the period into which the Newstead occupations fall, the art which produced the Hod Hill mountings, and the great shield found in the Thames at Battersea, had begun to decline. Other evidence to the same effect will be dealt with later.

Mountings of this form are of a purely Celtic character, as is clear from the occurrence of undecorated examples on many pre-Roman swords. A case in point is the sword from Catterdale, Wensleydale, Yorkshire, where the sheath is 23 inches in length.<sup>1</sup> Another is a sword from Flasby, Yorkshire. Perhaps earlier in date than the preceding examples is a form of

mounting to be seen on a sword from a grave at Grimthorpe Wood, Pocklington, East Yorkshire.<sup>2</sup> This last example was probably about 3 inches long. The guard

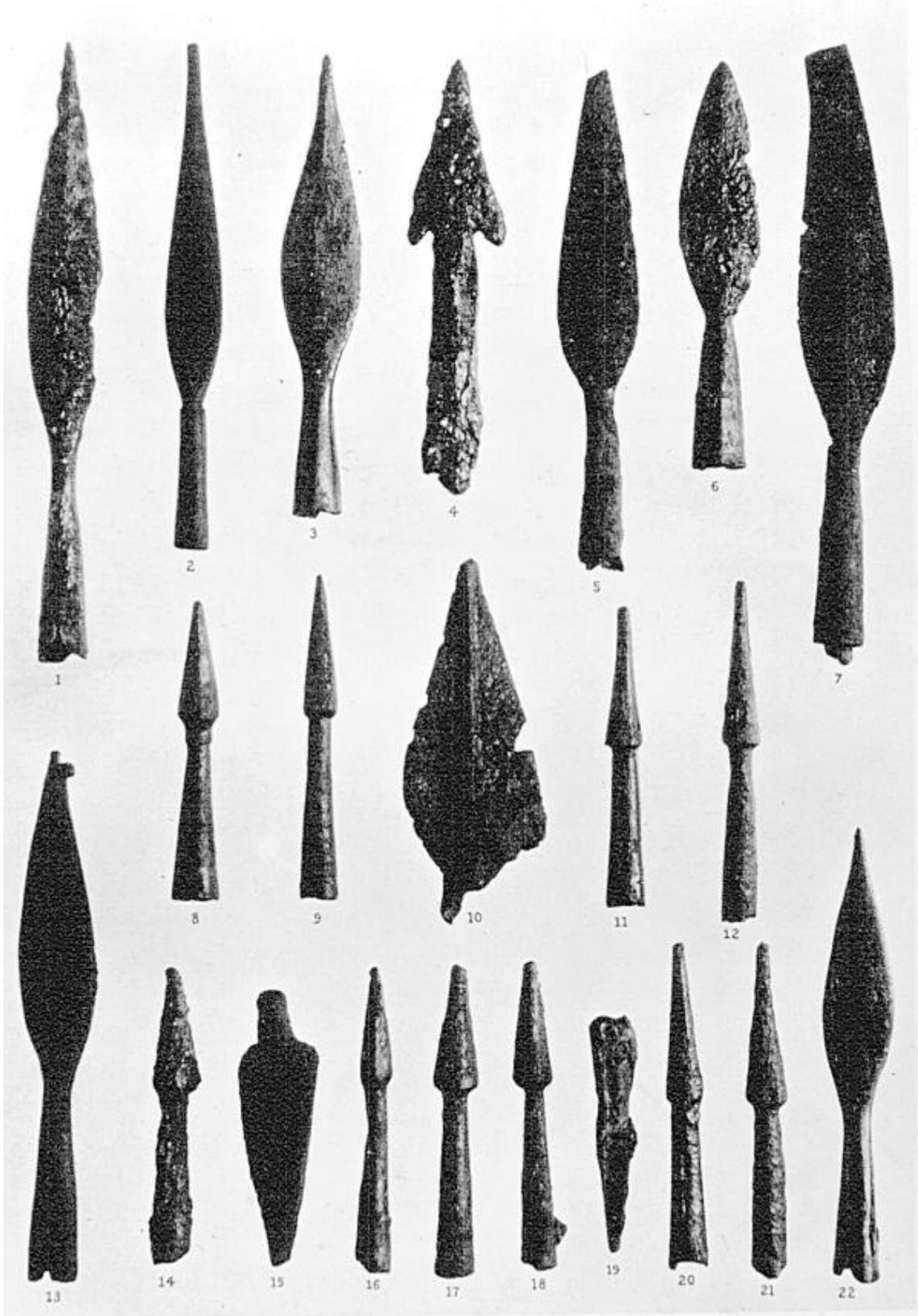
1 *Archaeologia*, Vol. xlv. p. 251, plate xvi.

2 J. R. Mortimer, *Forty Years' Researches in British and Saxon Burial Mounds*, plate i. p. 150.

PLATE XXXVII. SPEARS AND ARROW-HEADS

	PAGE
1.	Spear-head. 188 and 189
2 and 3.	Spear-heads. Ditch of early fort.
4.	Barbed spear.
5 and 6.	Spear-heads. Pit
7.	Spear-head. Pit LV.
8.	Arrow-head. Pit LV.
9.	Arrow-head. Ditch of early fort.
10.	Portion of spear-head showing strong midrib.
11 and 12.	Arrow-heads. Ditch of early fort.
13.	Spear-head of iron. Ditch of early fort.
14.	Arrow-heads. Praetentura.
15.	Spear-hutt of iron. Ditch of early fort.
16 and 17.	Arrow-heads. Pit LV.
18.	Arrow-head. Pit VII.
19.	Spear-butt of iron. Baths.
20.	Arrow-head. Principia.
21.	Arrow-head. Pit VII.
22.	Spear-head. Ditch of early fort.

All of the objects figured are of iron.



has a high ogee outline, and is curved on the lower edge as though to allow the corresponding outline of the sheath to fit into it. In this respect it forms a connecting link between these British swords and the swords of the Swiss lake-dwellers. Many of the latter have, at the base of the hilt, a guard formed of a thin strip of bronze with a similar high ogee curve, into which the sheath was fitted. The same feature may be noted further south on an early sword from Introbobbio, Como.<sup>1</sup>

### Sheaths

Another interesting object which is illustrated in Plate LXXVII., Fig. 4, must have formed part of a sword-sheath. It was found at a considerable depth on the south side of Block XIV, and is of bronze, being  $3\frac{7}{8}$  inches long. Apparently it had been affixed to the upper part of the sheath, thus forming a loop through which the belt would pass. No doubt a piece corresponding to the terminal on the lower side, but of shorter length, originally projected on the upper side of the loop.<sup>2</sup> Similar loops are to be seen at Novaesium,<sup>3</sup> and also in a variety of shapes on scabbards from Thorsbjerg.<sup>4</sup> There remain to be noted a few mountings which must have belonged to sheaths. Plate XXXV. shows a number of pieces of thin bronze (Figs. 1–7), several of which also came from Pit LVIII. These were probably edgings, while Figs. 13, 15, 16, 17 and 18 provide good specimens of the chape. Fig. 14, a neatly looped object of brass wire from Pit LIV, seems designed to hold a sheath together.

Three objects from Pit LVIII (Plate LXXXIV, Figs. 4, 10 and 13) may have formed part of the mountings of hilts of swords or of daggers. Fig. 4 is semicircular in shape and consists of two pieces of bone held together by bronze pins, two on each side. It is  $2\frac{1}{2}$  inches wide at the base,  $1\frac{7}{8}$  inches high, and  $\frac{3}{4}$  of an inch thick. Between the two plates there has been cut a hole sufficiently large for a thin metal tang to pass through. Fig. 10 is an imperfect specimen of the same class. These latter might very well have served as the bases of hilts. The method of construction—two plates of bone pinned together with metal studs—may be seen in the pommel of a sword hilt, found at York and now in the Museum there. Fig. 13, which is of heavy brass, resembles the bone objects in shape and is of much the same dimensions. Its weight, however, makes one hesitate to

1 *Bulletino di Paletnologia Italiana*, vol. xii plate X. 29.

2 For the interpretation of these objects see *Der Obergermanische-Raetische Limes*, Lief. 32, Kastell Zugmantel, p 64.17.

3 *Bonner Jahrbücher*, Heft 111/112, Taf. xxxiii A. 36.

4 Engelhardt, *Denmark in the Early Iron Age*, pl. 10.

suggest that it ever formed part of a sword or dagger. At the same time its shape is one which was employed on daggers, as may be seen from a sculptured trophy from Trier. Fig. 9 of Plate XXXIX. is probably a dagger. Another of these was found in Pit XCVII.

### The Spear

The weapon of most frequent occurrence was the spear. Heads of spears were found throughout the fort. They were often leaf-shaped, but exhibited a considerable variety in form, while they ranged in size from 14 inches in length down to 4¼ inches. The great majority lay near the surface, and were in consequence little more than shapeless masses of rusty iron. A few were found in pits, and these were in better condition. One group of five, found in Pit XVI, among the curious mass of iron objects which the pit contained, was of special interest. All five were in excellent preservation (Plate XXXVI., Figs. 1, 2, 5, 6 and 7). They measure respectively, inclusive of the socket, 12¼, 11½, 11¼, 10⅝ and 6½ inches in length. Without exception they are leaf-shaped and flat, showing very little midrib.

For the most part they are very slender at the neck, where blade and socket join, but the metal always thickens towards the point. The sockets had been formed by turning over the end of the flat metal plate, from which the spear has been hammered, until its edges came together. On the opposite side from that on which they meet is a hole for the nail by which the spear-head was fixed to the shaft. At least one of the heads has been



FIG. 20. PUNCTURED INSCRIPTION ON A SPEAR FROM PIT XVI

blunted by use. Portions of the wood still remaining in the sockets indicated that the shafts had been of hazel. On one of the blades (Fig. 5) was the punctured inscription shown in the accompanying figure. Professor Haverfield suggests the reading T·M·N·B·A, possibly TURMA·JUNII·BASSI, but some of the letters are uncertain. The fine spear-head shown in Plate XXXVI., Fig. 4, was found during the formation of the railway in 1846. The various spears differ markedly in character. One (Plate XXXVII., Fig. 4) is barbed. Some are spears for thrusting, others probably for throwing.

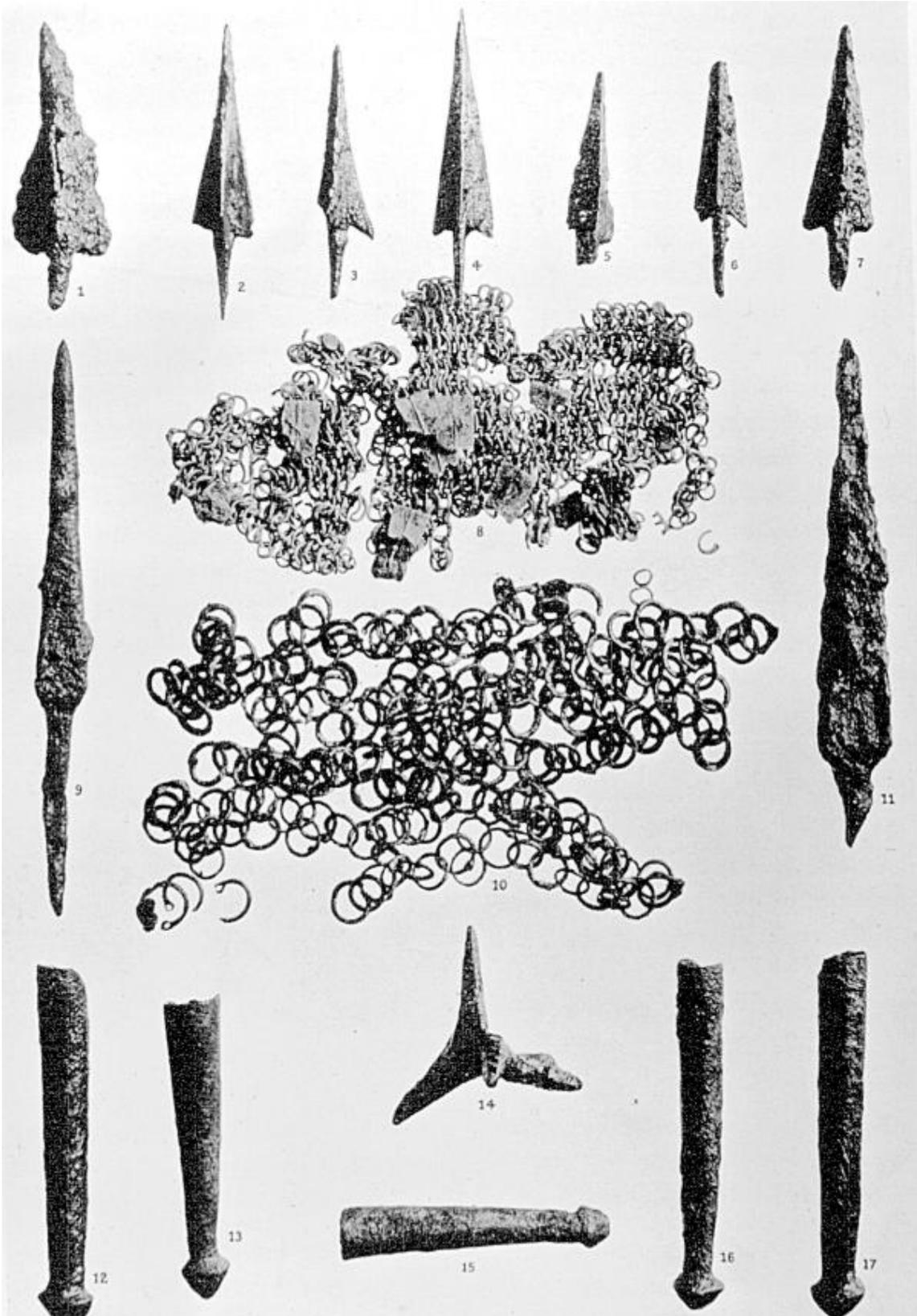
Among the miscellaneous finds are two objects which seem to be the heavy pointed butts of spears.

### Arrows

It is possible that there may have been bowmen among the auxiliaries. If so, they were perhaps of Oriental stock—Palmyrenes, or Hamii from Syria. Some of them appear in the sculptures of the Trajan column, clad in scale armour and wearing a curious high conical helmet. The Hamii have left traces of their presence at Magna on the wall of Hadrian.

PLATE XXXVIII. CHAIN MAIL, ARROW-HEADS, ETC.

		PAGE
1.	Arrow-point of iron. Praetentura.	189
2 to 6.	Arrow-points of iron. Pit No. I.	189
7.	Arrow-point of iron. Block XVI.	189
8.	Chain mail of bronze. Block XVI.	161
9.	Arrow-point of iron near Block XVI.	189
10.	Chain mail of iron. Pit I.	161
12, 13, 15, 16, 17.	Iron sockets. Ditch of early fort.	189
14.	Caltrop. Iron. South Annexe.	



They also seem to have been at Bar Hill.<sup>1</sup> To judge from the monuments, the bow must have been comparatively short and stout. No positive traces of the weapon itself were got, but a few iron arrow-points were found, things in themselves so delicate that their survival is rare. The finest, which came from the pit in the Principia, measures from  $1\frac{3}{4}$  to 2 inches long. They are triangular in section, and are slightly fluted and barbed, with a tang for insertion into the wood of the shaft.<sup>2</sup> Five of this type came from Pit I (Plate XXXVIII., Figs. 2 to 6), one from the barracks of the Praetentura (Fig. 7), and one from the north buttressed building (Fig. 1). The north buttressed building also yielded a larger type of arrow-head, having a point  $2\frac{3}{8}$  inches long and a tang  $1\frac{3}{8}$  inches long. It is square in section,  $\frac{3}{8}$  of an inch wide at its broadest part (Fig. 9). There is occasionally some difficulty in drawing an exact line between arrows and spears. But the small spear-like objects, measuring from  $3\frac{1}{2}$  to 4 inches in length and rounded at the point, probably belong to the former class. They have no harbs and are furnished with a socket for fixing them to a wooden shaft. They were evidently in use at an early period: one of them (Fig. 2), blunted by wear, came from the inner ditch of the early fort on the west side. The leaf-shaped arrow, which was present in such large numbers in the Principia at Housesteads, did not appear at Newstead. The type of short solid arrow-point shown in Plate XXXVI., Figs. 8 and 9, was not uncommon. It measured about  $3\frac{1}{4}$  inches in length. The head was circular or heptagonal in section and was furnished with a socket to receive the shaft. Such weapons have been noted on many of the German Limes forts belonging to different periods, but at Newstead they were found only in the ditch of the early fort and in the early pits. More than once they were associated with the sockets terminating in a spherical projection illustrated in Plate XXXVIII., Figs. 12 and 13. Though no evidence was obtained that this association was other than fortuitous, it seems possible that the sockets were fitted to the end of the shafts. Such arrows may have served as ballista-bolts. Whether any specimen of the pilum was found is doubtful. There was certainly no representation of the long, light iron shaft of this weapon; but among the solid pointed heads there are one or two which had possibly belonged to it (Plate XXXVIII., Fig. 11).

1 *The Roman Forts on the Bar Hill* p. 85.

2 For the occurrence of similar arrowheads at Corbridge and elsewhere, see *Archaeologia Aeliana*, 3rd Series, vol. v. p. 106, and Professor Haverfield's note, Appendix II.