NOLAN AMPHORA IN THE BRITISH MUSEUM (E 326).

PANATHENAIC AMPHORA IN THE BRITISH MUSEUM (B 134).

R.-F. AMPHORA IN THE BRITISH MUSEUM (E 256).

PANATHENAIC AMPHORA IN THE BRITISH MUSEUM.

THROWING THE JAVELIN.

[PLATES XVII-XX.]

A.—*The Javelin and the Amentum.*

THE javelin used in Greek sports is called variously ἄκων, ἀκόντιον, μεσάγκυλον, σίγυννος, ἀποτομάς. The latter term, defined by Hesychius as σχίζαν καὶ ἀκόντιον πεντάθλου, appears to denote merely a lath or stick, and apparently describes the javelin as represented on the vases. It is merely a straight pole, in length nearly equal to the height of a man, though occasionally longer, and about the thickness of a finger. It is one of the commonest objects in palaestra scenes, whether in use, or carried in the hand, or planted in the ground singly or in pairs apparently to mark the line from which the athlete is to jump or throw the diskos.¹ These rods were formerly described as jumping poles; but of the pole jump there is no evidence, and the fact that they are precisely similar to javelins which are actually being thrown, and that they often have the throwing-strap or amentum attached, proves that they are nothing more than javelins. At the same time there is no reason why they should not have served as measuring-rods or κανόνες for measuring the jump, a use which is perhaps represented on the British Museum kelebe B. 361, published in vol. xxiv. of this journal, p. 180.

The athletic javelin is in the vast majority of cases pointless. On early black-figured vases, such as the kelebe just mentioned, or the B. M. lekythos B. 576 published in this volume, Pl. II, the javelin is represented by a black line which does seem to taper at the ends, but this is a mere accident of technique, the natural result of a line drawn rapidly with a single stroke of brush or pen. On the red-figured vases and Panathenaic vases, the rod is of uniform length and usually ends square. Sometimes indeed it appears to have a blunt cap or ferule, indicated by a thickening of the end, or by a black patch, or by lines which represent the binding by which it is attached.² Such are the javelins and spears which Xenophon recommends cavalry soldiers to use in practice, provided with a round end (ἐσφαίρωμένα)³ which corresponds to the button on the modern foil or bayonet. Such a cap served not only for protection but to give the necessary weight to the head of the javelin,

¹ v. p. 11 of this volume: also vol. xxiv. p. 186. Fig. 32.

³ *De re equest.* viii. 10.

² Jüthner, *Antike Turngeräthe*, p. 38,

without which it would not fly properly. It was probably universal, the omission of the lines or shading that indicate it being due to the vase-painter's carelessness. We cannot however ascribe to the same cause the omission of the point, seeing that in hunting and fighting scenes the javelin has almost invariably a long leaf-shaped metal head; and we may therefore safely conclude that the blunt javelin was generally used for practice, especially for distance throws. For target practice sharp javelins were naturally used, as is proved by the speech of Antiphon in defence of a youth who, missing the mark, accidentally hit and killed a companion.⁴ Moreover, on two of the three vases which represent javelin throwing on horseback at a target, the javelins have all long leaf-like points, such as we see in hunting scenes.⁵ A similar head is roughly represented on an early b.-f. hydria in the British Museum B. 326, where we see two athletes carrying javelins; but of the five weapons only

FIG. 1.—VARIOUS METHODS OF ATTACHING THE AMENTUM.

a. Vase of Hieron (Pollak, *Zwei Vasen Hierons*). b. B.M. Kylix, E 58. c. B.M. Lekythos, E 698. d. B.M. Kylix, E 96. e. Alexander Mosaic: Jüthner, Fig. 38. f. B.M. Amphora, E 316.

one is pointed. Somewhat similar is the javelin on a well known Chiusi wall-painting, while on the Lateran mosaic occurs a barbed javelin head.⁶ On the Berlin bronze diskos the javelin has a long thin point attached to it by a socket, and similar points occur on a few r.-f. vases.⁷ These however are but isolated examples, and the enormous preponderance of the blunt javelins justifies the conclusion that though for target practice the sharp javelin was used, the blunt one was preferred for distance throwing, and that down to the close of the 5th century distance throwing was more general than throwing at a target.

Whether pointed or blunt the javelin was evidently a light object, and Anacharsis contemptuously contrasts it with the more serviceable weapons

⁴ *Tetralogia*, ii. 2.

⁵ *v. infr.* Fig. 16 and Pl. XX.

⁶ Jüthner, *op. cit.* p. 39, Fig. 33; Schreiber-

Anderson, *Atlas*, xxii. 9.

⁷ Jüthner, Figs. 20, 40.

which are not carried about by the wind.⁸ It was thrown by means of a thong called ἀγκύλη, or amentum, fastened near the centre of gravity of the javelin, which was therefore called μεσάγκυλον. The amentum was a leathern thong a foot or eighteen inches in length, if we may judge from the numerous representations of an akontistes holding an amentum loose in one hand and a javelin in the other.⁹ It was bound firmly round the shaft of the javelin in such a way as to leave free a loop 3 or 4 inches long, in which the thrower inserted his first, or first and middle fingers. The point of attachment was the centre of gravity, in the light-headed javelin of the athlete almost in the centre of the shaft, in the more formidable weapon of war or the chase generally nearer the head. Its place varied also according as the javelin was to be thrown for distance or at a mark. By putting the amentum behind the centre of gravity it is possible to increase the distance thrown, but at a sacrifice of accuracy. Hence the amentum was detachable, and the athlete fastened it to suit his taste shortly before use. On the r.-f. hydria in the British Museum, E 164, published on p. 32 of this volume, we see a youth sitting on the ground in the act of attaching the amentum. On a Würzburg r.-f. kylix published by Jüthner,¹⁰ a youth is bending down winding the amentum round the shaft, while he holds the other end tight with his foot. It was as we shall see essential that the thong should be securely fastened. The vase-paintings are too minute to show precisely how the amentum was fastened, but they suggest a considerable variety of ways, as will be seen from the examples given in Fig. 1. The clearest example is that shown on the Alexander mosaic in Naples. In every case it is only the actual loop which is left free.

The amentum served various purposes. In the first place it enabled the thrower to give a rotatory motion to the javelin, which not only helped it to keep its direction, acting on it in the same way as the rifling of a gun on a bullet, but also increased its carry and its penetrating power. For this reason the modern savage habitually puts a spin on his weapon by a movement of the fingers, which however are not so effective as the thong. The manner in which the amentum acts is shown in the illustrations reproduced from Jüthner in Fig. 4 a, b. The carry was further increased by the additional leverage given to the thrower's arm. The amentum also served to mark the point at which the javelin was to be grasped, a matter of considerable importance in war or in the chase, when there is no time to adjust the weapon carefully. In javelins and spears used by savages at the present day this point is often marked by some sort of binding. Such binding is clearly shown on the long spear held by Athena on the British Museum r.-f. amphora E 316, a portion of which is shown in Fig. 1 f. Lastly, the amentum

⁸ Lucian, *Anacharsis*, 32.

⁹ Jüthner, p. 40, Figs. 34, 35, 36. Jüthner proves conclusively that the objects represented on the Panaetius kylix (*v. infr.* Fig. 12) and

elsewhere and commonly described as compasses are merely amenta, somewhat misdrawn.

¹⁰ *Op. cit.* Fig. 37.

afforded a convenient handle, also a matter of some practical importance. Hence it was sometimes attached to long spears not intended primarily for throwing. Spears are sometimes provided with a short loop or sling for this purpose only.¹¹

From these considerations it is obvious that the amentum was not as is sometimes stated the invention of the gymnasium, but was adopted by the gymnasium from war and the chase. This is abundantly proved by the monuments. Whether it was used in Homeric times, is uncertain. The principle of the sling was certainly known to the Homeric shepherd,¹² and besides the *δολιχόσκιον ἔγχος* of the chieftain, there was apparently a lighter and shorter weapon, the *αἰγανέη*, which is closely associated with the bow, and like the bow was used for hunting, and by the common soldiery in war and in

FIG. 2.—INTERIOR OF B.-F. KYLIX. B.M. B 380.

sport.¹³ But there is no evidence in Homer that the principle of the sling was applied to the *αἰγανέη*. The warrior vase from Mycenae¹⁴ however clearly shows two types of spear, a long spear carried with clenched fist, and a short spear raised almost at arm's length behind the head, with the point somewhat downwards, in a position commonly represented in hunting scenes. The hand is sharply pointed as if the fingers were extended, and a comparison of the way in which the spear is held with the hold shown in Figs. 6 and 7 confirms Jüthner's view that the artist intended to represent a weapon thrown with the amentum.

From the sixth century onwards the amentum was used in war, in the

¹¹ Possibly the *Hasta Ansata* is such, but *v. infr.* p. 255. Such spears are known among the Indians, *v. Egerton Arms of the Indians*, Figs. 2, No. 6; 72, No. 25.

¹² *v. p.* 5 of this volume (the *καλαῦρος*); *cp. Il.* xiii. 600. Slingers are represented on a

fragment of a silver vessel from Mycenae.

¹³ *Il.* xvi. 589, ii. 774. We may note that both Odysseus and Nestor speak of their skill *δοῦρι*, not *ἀκοντίῳ*. *Od.* viii. 229; *Il.* xxiii. 637.

¹⁴ Schliemann-Schuchardt (*Eng. Trans.*), Figs. 284, 5.

chase, and in athletics. A few examples will suffice. On a Corinthian b.-f. lekythos in Berlin showing the various pieces of a hoplite's armour there stands side by side with the long spear a shorter weapon provided with a sort of loop.¹⁵ The use of the amentum is clearly shown on a Chalcidian b.-f. kylix in the British Museum (Fig. 2). As is often the case the artist has made a mistake in drawing the fingers: the first and middle fingers should have been passed through the loop, not the other two. The warrior is perhaps about to throw the spear with a short underhand throw, a throw in which certain savages are extraordinarily skilful and for which the amentum would be most useful. Another Corinthian vase, in the British Museum, B 37, shows a delightful hunting scene. Several javelins fitted with amenta are seen sticking in the boar's back, clearly proving that the amentum was fixed to the javelin and did not remain in the thrower's hand. On yet another archaic vase, to which Mr. Cecil Smith has called my attention, a javelin fitted with the amentum is flying

FIG. 3.—FROM THE FRANÇOIS VASE. (From Furtwängler, *Vasenmalerei* XIII.)

through the air, and the artist to produce a sense of velocity has given the shaft a wavy appearance.¹⁶ Lastly on the François vase we see a pair of warriors with their fingers in the amentum about to throw their spears (Fig. 3), who in the position of the hands and fingers, and the whole attitude, closely resemble the akontistes in Fig. 10, save that on the latter vase the head is turned backward, a position obviously inadvisable for a hunter or warrior. As an early example of the amentum in athletic scenes we may take the akontistes on the b.-f. stamnos in the Museo Gregoriano (Fig. 7).

A javelin thrown by a thong is necessarily a light weapon, but though light the akontion used in war and in the chase was decidedly formidable, and could be used effectively not only for throwing but for stabbing. For the latter purpose it could be held either with clenched fist or with the amentum. Some of the figures on the François vase for example (Fig. 3) have their javelins raised behind their heads like the warriors on the Mycenae

¹⁵ Jüthner, Fig. 51, Berlin 3148.

¹⁶ *Arch. Zeit.* 1883, Pl. X.

vase as if to stab; the hands are clenched and there is no sign of the amentum. The type is a common one on vases of all periods. That the amentum would afford a useful grip both for throwing and stabbing is clear from the hunting scenes represented in Gerhard's *Apulische Vasenbilder*, Pl. A.

If the akontion could be used for thrusting, the long spear could on occasion be thrown. The Homeric warrior sometimes hurled his *δολιχόσκιον ἔγχος*, and so did the hoplite of the fifth century. The long spear is even represented sometimes with an amentum, for example on the British Museum r.-f. lekythos E 698, on which is drawn a female figure, possibly Eudaimonia, holding in her hand a long spear, or on the vase of Hieron from which the detail of Fig. 1 a is taken.¹⁷ How far this practice was general, it is impossible to say. The amentum is a detail only occasionally inserted by the vase-painters whether on javelin or spear, and even when inserted the thin lines which indicate it are very liable to wear away. Certainly the primary use of the long spear was for thrusting: the hoplite could not afford to risk its loss and would rarely throw it. The amentum therefore if generally attached served probably rather as a handle than as an amentum proper.

The long heavy spear was the weapon of the fifth century: the real importance of the javelin dates from the closing years of the Peloponnesian war, when the value of light-armed troops and cavalry began to be realized. The light-armed troops were mostly mercenaries, Lydians, Mysians, Arcadians, Aetolians, Thessalians, Thracians.¹⁸ All these races were skilled in the use of the javelin. That the peltasts threw the javelin by means of the amentum is clear from Xenophon. In the passage of the Ten Thousand through the mountainous territory of the Carduchi, the Greeks he tells us picked up the long arrows of the enemy and used them as javelins fitting thongs to them (*ἐναγκυλῶντες*).¹⁹ Elsewhere he orders the peltasts guarding the rear to advance with their fingers in the amentum (*διηγκυλισμένους*) ready to throw.

The javelin was not confined to the mercenaries: at Athens it was the special weapon of the ephebos, who is generally represented holding a pair of javelins. Pl. XVII. gives a typical picture of the Athenian ephebos. In the third century special trainers called *ἀκοντισταί* were engaged to train the epheboi in the use of the javelin.²⁰ Competitions were held at Athens and elsewhere in throwing the javelin both at a mark and for distance, both on foot and on horseback.²¹ In the vases representing the latter contest the amentum is not shown, but its use is implied by

¹⁷ The amentum occurs frequently on Hieron's vases, e.g. on a r.-f. kotyle representing Achilles and Briseis in the Louvre, *M.d.I.* vi. 19; on a kylix representing Theseus and Aethra, Hermitage, 830, Harrison and MacColl *Greek Vase-paintings*, Pl. XXII.

¹⁸ Dar.-Sagl. *s.v. jaculum*, p. 594.

¹⁹ *Anab.* iv. 2. 28, iv. 3. 28, v. 2. 12.

²⁰ Ditt. *Syll.*² ii. 520, 521; cp. 522 of Ceos, 523 of Teos.

²¹ Ditt. *Syll.*² ii. 522, 668, 670, 671, 672, 673, 674; *Inscr. Cr. Gr.* 339; *I.G.* vi. 444; *Ath. Mitth.* xxx. 1905, p. 213.

the fingering of the javelin, and this conclusion is confirmed by the representation of a cavalry skirmish on an embossed swordbelt found at Watsch in Carinthia, where the spears flying through the air are all provided with a loop,²² or that on a vase from the Acropolis described below (Fig. 8).

B.—*The Distribution of the Amentum.*

The Romans are said to have borrowed the amentum from the Greeks.²³ But the evidence of its distribution seems to render this statement highly improbable. The amentum was widely known in Italy at an early date. It was certainly known to the Etruscans, being represented on an Etruscan warrior's spear in a tomb at Caere, while in another tomb at Chiusi an Etruscan athlete is depicted in a typical position, putting his fingers through the loop.²⁴ From other tombs and from vases representing Italian warriors we learn that the Samnites and Messapians used the amentum.²⁵ A very interesting painting found in a tomb at Paestum represents a fight between two warriors, each armed with a shield and two javelins, fitted with a sort of semicircular loop.²⁶ Two of the javelins have been thrown, one of them is sticking in the left hand warrior's shield. The other has pierced right through his opponent's calf, so that its point projects on the other side. With their remaining javelins they are preparing to stab one another. They hold the javelins with clenched fists, but in only one case is the thong visible, forming a loop over the holder's hand but certainly not used as an amentum proper. Hence the javelins have been identified with the *hastae ansatae* mentioned by Ennius. But whether the object represented is an amentum or *ansa*, or whether the amentum is the same as the *ansa* or different, we cannot say. I am inclined to think that the amentum did at times serve as a handle or *ansa*, and that the object represented is intended for the amentum, for which *ansa* is merely another name. But though there is evidence of the wide distribution of the amentum in Italy at an early date, there is no evidence of its use in the Roman armies. It is stated indeed that the *hasta velitaris* used by the light-armed troops was thrown by the amentum, but I do not know on what evidence. Certainly the characteristic Roman weapon was the heavy pilum, and Livy in his account of the battle of Magnesia expressly contrasts the heavy weapons of the Roman soldiers and the light weapons of Antiochus' forces.²⁷ The damp, he says, had no effect on the heavy pila and swords of the Romans, but it had softened the bow-strings, slings, and the '*amenta jaculorum*' used by the king's soldiers. The light javelin was, as we have seen in Greece, essentially the weapon of the hunter and the light-armed soldier, and the strength of Rome lay in her

²² *Revue Arch.* 1884, Pl. III.; Jüthner, pp. 61, 62.

²³ F. Krause, *Schleudervorrichtungen für Wurfaffen in Internationales Archiv* (Leyden) 1902, pp. 121 sq.

²⁴ Dar.-Sagl. s.v. *amentum*, Figs. 255, 256.

²⁵ *Ib.* s.v. *hasta*, p. 38, s.v. *barbari*, p. 674.

²⁶ *Ib.* Fig. 254.

²⁷ xxxvii. 41.

heavily armed legionaries, her light-armed troops being supplied mostly by allies and at a later period by mercenaries. Among the enemies of Rome we undoubtedly find a weapon thrown by means of the amentum. This was the tragula used by the Spaniards at the time of the Second Punic War. In Caesar's time the tragula is the weapon of the Gallic cavalry, serving as mercenaries in his army.²⁸ From this time we have abundant evidence of the use of the amentum in the Roman army. We find traces of it in the Roman weapons discovered at Alise Sainte Reine, and we even find it represented on the Roman legionary's spear.²⁹ But it is unnecessary to go into details of this period. Enough has been said to show that the amentum was widely distributed over Italy, Gaul, and Spain, and that Rome probably adopted it, not from Greece, but from her own allies and subjects. To suppose that its use spread from Greece to Rome, and thence to Gaul and Spain, is surely inconceivable.

This view is supported by evidence from other parts of Europe. We have already found the amentum at Watsch in Austria. A comparison of the light javelin heads found in large numbers at La Tène with those found at Alise renders it likely that the weapons to which they belonged were thrown with a thong.³⁰ From Vergil we gather that the use of the throwing thong was a Teutonic custom.³¹ In his catalogue of the Latin forces he mentions two apparently similar weapons, the aclys and cateia. The former was thrown by the 'lento flagello,' the latter 'ritu Teutonico.' Unfortunately we do not know the exact nature of the weapons mentioned. Proceeding further north-west we find conclusive proof of the existence of the amentum in the early iron age of Denmark.³² Remains of it have actually been found at Nydam. The spears found are from 8 to 10 feet long. On the middle of the shaft are often visible a number of small bronze rivets, between which the cord was fastened, or a bronze mounting to mark the point of balance. In some cases the cord was found still fastened between the rivets. Lastly we find the amentum in Ireland.³³ In ancient Irish story it is frequently mentioned. Thus in the battle of Moyreth 'Cuanna pressing his foot on the solid earth put his finger in the string of his broad-headed spear and made a cast at Congal.' This loop—called suanem, or suaineamh—was made of silk or flax, and the laigan or spear to which it was attached is said to have been brought into Ireland by Gaulish mercenaries in the fourth century B.C. A most interesting survival of this old Irish spear with its loop is seen on a picture of Captain Thomas Lee painted in 1594, now in the possession of Lord Dillon, a print of which is in the Ashmolean Museum at Oxford.

The fixed amentum seems practically unknown to the modern savage. The only example that I can find is a javelin from the Pitt Rivers collection no. 217, now in the Ashmolean Museum. It is described as coming from

²⁸ Livy, xxi. 7. 10, xxiv. 42. 2; Caesar *B.G.* i. 26, v. 35, 48; *B.C.* i. 57.

²⁹ Dar.-Sagl. *s.v.* *hasta*, p. 39, Fig. 3729.

³⁰ Desor *Les palafittes*, p. 86.

³¹ *Aen.* vii. 730, 741.

³² C. Engelhardt *Denmark in the Early Iron Age*, p. 56, Pls. X. 5, 6, XII. 2.

³³ P. W. Joyce *A Social History of Ireland*, i. 113; O'Curry *Manners and Customs of Ancient Ireland*, I. ccccxliv.

central Africa, where it is probably a survival of the javelins used by the Roman mercenaries occupying Africa.³⁴

Another type of throwing thong, the *ounep*, is used by the people of New Caledonia and New Hebrides. It is a thickish cord about 6 or 8 inches long with a loop at one end for the finger and a knot at the other. The spears are 9 to 12 feet long with a slight projection just behind the centre of gravity, behind which the cord is placed and twisted over the knot in such a way as to untie as the spear leaves the hand, remaining itself in the thrower's hand. An illustration of this is taken from a drawing displayed in the Ethnographical Gallery of the British Museum (Fig. 4). A combination of this thong with the throwing stick is used in New Zealand. The throwing stick is by far the commonest means of increasing the

FIG. 4.—ILLUSTRATIONS OF THE USE OF THE THROWING THONG.

a, b. Jüthner, Figs. 47, 48. *c.* B.M. B 134. *d.* The *Ounep* of New Caledonia.

throw of a spear. It is widely used in Australia, Melanesia, Central America, and among the Eskimos, but is unknown in Europe, though a similar implement of bone was apparently used by Palaeolithic man in France.³⁵

To sum up, the fixed amentum is an exclusively European invention. It is found throughout Greece and Italy, in Spain and Gaul, in Central Europe, in Denmark, and in Ireland. The light javelin to which it belongs is essentially the weapon of the less highly civilized peoples. It is a weapon of the chase, a weapon of the common people, but it plays little part in the heavily equipped citizen armies of Greece and Rome. Both in Greece and Rome it comes into prominence with the organization of light-armed troops, and then it is chiefly the weapon of the troops of subject states and mercenaries. Under these

³⁴ *Bethnal Green Museum Catalogue*, 1877, p. 40; Pitt Rivers *The Evolution of Culture*, pp. 132-4.

³⁵ *Internationales Archiv, l.c. B.M. Guide to the Stone Age*, p. 49.

circumstances it is hardly conceivable that its use should have originated in Greece, and we are forced to the conclusion that the amentum was a device of the peoples of Central Europe, and in the course of their wanderings was carried by them throughout the Southern and Western portions of the Continent.

Experiments have amply established the practical use of the amentum with a light javelin. In the experiments made by General Reffye for the Emperor Napoleon it was found that a javelin which could be thrown only 20 metres by hand could be thrown 80 metres with the amentum. According to Jüthner an inexperienced thrower increased his throw from 25 to 65 metres. These records are with a light javelin. The javelin used in the recent Olympic games was of the Swedish type, without the amentum, and weighed 800 grammes or 2 lbs. Lemming, the winner, threw it 53·90 metres, but Colonel V. Balck informs me that in Sweden he has thrown nearly 55 metres. The old Greek javelin must have been a much lighter weapon.

C.—*The Manner of Throwing the Javelin.*

In spite of frequent carelessness and mistakes in the drawing of hands and fingers, in spite of the frequent omission or disappearance of the amentum, the vases leave no doubt as to the method of throwing the javelin with the amentum. Two things are necessary: the amentum must be firmly attached to the shaft, and the loop must be drawn tight by the fingers before the javelin is thrown. We have already seen the akontistes in the act of fastening the amentum. On a r.-f. psykter (Fig. 5) we see a group of javelin throwers preparing to practise under the supervision of a paidotribes and his assistant, while two other paidotribai are obviously giving instruction in wrestling. Two of them are testing the bindings: resting one end of the javelin on the ground and holding it firm with the left hand, they pass their right hands along the shaft so as to see that the binding is secure. A third holding the javelin in the same position is about to pass his fingers through the loop. The loop has disappeared, but is clearly indicated by the position of the hand. A fourth has already inserted his fingers through the thong, and raising the javelin horizontally to a level with his breast, presses it forward with his left hand so as to draw the thong tight. The attitude of this figure has caused quite unnecessary difficulty: it is a perfectly natural position, from which by a half turn to the left any of the preliminary positions which we shall now describe may be reached.

Dr. Jüthner distinguishes two types of javelin throwing, one in which the javelin is pointed more or less upwards, the other in which it is horizontal. The distinction, in spite of de Ridder's denial, is a real one, though Jüthner has not grasped the full meaning of it. The so-called horizontal throw is the throw of war or the chase, the other the throw of athletic competitions. In the latter, distance is the one and only object, and the thrower may take his time: in the former distance is only a secondary con-

sideration, compared with force and accuracy, and everything depends on rapidity of action. It is the difference between throwing in a cricket-ball to

FIG. 5.—R.-F. PSYKTER OF PHINTIAS. (*Antike Denkmäler*, ii. 20.)

the wicket and throwing a cricket-ball in a competition. An examination of the two types will make this clear.

(a) *The Practical Style.*

The soldier or the huntsman must have his javelin ready for use at a moment's notice. He therefore carries it with his fingers passed through the loop, διηγκυλισμένος. He may carry it horizontally by his side as does

the warrior in Fig. 2, a somewhat cramped position owing to the fact that the arm has to be turned outwards. The freer and more natural position is with the arm bent and the javelin sloped over the shoulder or across the body, the point downwards. From this position he can draw it back as does the other youth from the same vase, or raise the elbow so that the javelin is level with the head, an excellent position for taking aim. This manner of holding the javelin is implied or represented on many hunting or battle scenes. It is equally serviceable on horseback and on foot. But the best examples of it are on the two Panathenaic amphorae (Pl. XVIII and Fig. 6). On the British Museum vase the athlete who leads the procession carries his javelin at the slope, the other *akontistes* has raised it horizontally. On the Leyden amphora the javelin is still sloping slightly downwards. This position, with the javelin poised on a level with the head, which we may call 'the carry,' is the natural preliminary position for starting, whether the thrower uses the

FIG. 6.—PANATHENAIC AMPHORA, LEYDEN. (*Arch. Zeit.* 1881, IX.)

amentum or not. In the latter case it enables the thrower to balance his weapon properly. In a photograph which Mr. Bosanquet sent me of Lemming, the winner in this competition at the last Olympic Games, the latter is standing with his javelin poised in this very position. The javelin may be kept in this position during the run or may be at once drawn back. On the two vases in question the thrower certainly appears to be running, but the position of the left arm clearly proves that he is not in the act of throwing. Where time was no object, as in sports, the thrower might before starting to run adjust the javelin by pressing the point back with his left hand so as to draw the amentum tight, and this movement is represented on a b.-f. stamnos in the Museo Gregoriano (Fig. 7). From the 'carry' the thrower immediately before the throw draws back his arm in the manner represented on the François vase (Fig. 3). In the actual throw the move-

ment is reversed, arm and spear travelling back through the same positions again, saving that when the amentum is used the fingers loose their hold of the spear which (even before the hand reaches the level of the head) is held merely by means of the thong. This is clearly shown on a most interesting b.-f. vase from the Acropolis, the upper zone of which represents a battle of chariots and the lower zone a cavalry fight between archers and javelin throwers. One of the latter is reproduced in Fig. 8 from a photograph of the vase for which I am indebted to the kindness of Drs. Wolters and Gräf, who are engaged in the publication of these vases.³⁶ Perhaps the moment before the actual throw is represented on a Panathenaic amphora in the Museo Gregoriano.³⁷ The attitude of the javelin thrower is very similar to that shown on the two Panathenaic amphorae mentioned above. The action however is decidedly more vigorous, the body is inclined slightly forwards, and the left hand instead of being

FIG. 7.—B.-F. STAMNOS. (Museo Gregoriano II. xvii.)

FIG. 8.—B.-F. VASE. ACROPOLIS, ATHENS.

raised is swung backwards, while the spear points slightly upwards. The only difficulty in this interpretation is that the spear still rests between the finger and the thumb, and is not as it should be at this point held only by the amentum. But careful though the early vase-painters are in details, the realism of the Acropolis vase is certainly exceptional, nay as far as I know unique, and I am inclined to think that the artist of the Gregoriano amphora did intend to represent the actual moment of the throw. The three amphorae and the other vases discussed all belong to the sixth century. The style of throw represented is typical of the black-figured vases and quite distinct from that which we shall find general on the red-figured vases of the fifth century. It is the practical style of the chase and war adapted to the palaestra, and in the fifth century, when owing to the

³⁶ Acropolis vases, 568, cp. Jüthner, p. 52.

³⁷ *Mus. Greg.* xliii. 2. b. The other figures are a diskobolos and an official. A slight

variation occurs on an archaic r.-f. amphora figured by de Witte *Hôtel Lambert*, Pl. XXIV, the left arm being close to the side.

development of the heavy-armed hoplites the light javelin temporarily lost its practical importance, this style was superseded by a purely athletic style.

Before proceeding to discuss the latter we must deal with a question which naturally arises. If the style of throwing is that of the chase and war, does it not follow that these vases represent throwing the javelin at a mark rather than for distance? The question is of importance in connexion with the nature of the javelin competition in the pentathlon. At first sight the general attitude seems in favour of throwing at a target; but the care which the artists take to emphasize the fact that the spear point is blunt is conclusive for a distance throw. There is no evidence at any period for any kind of target or mark for which a blunt spear could be used. Moreover, both in sport and war distance and force are no less important than accuracy, and it is natural that as long as the javelin was regarded as

FIG. 9.—R.-F. KYLIX, MUNICH. 562 A. (After Jüthner.)

a military rather than as an athletic implement, it should be thrown even in an athletic competition for distance in the style most practically useful.³⁸

(b) *The Athletic Style.*

The purely athletic character of the style depicted on the red-figured vases is obvious from the most casual inspection. Till the actual moment of the throw the head is turned backwards, the eyes fixed on the right hand,³⁹ a position absurd alike for war and for the chase, and for throwing at a mark. After carefully adjusting and testing the amentum in the manner described and passing his first finger or first and middle fingers through the loop the

³⁸ I have received confirmation of this from a friend who has long resided in Central Africa. The natives in war and hunting throw spears much in the style described above, though without the amentum, and in throwing the

spear for distance in sport they use the same style, never the purely athletic style described below.

³⁹ Cp. Figs. 9, 10, 11, 14, 15.

thrower extends the right arm backwards to its full length, while with his left hand opposite his right breast he holds the end of the spear and pushes it backwards so as to draw the thong tight. This is the moment depicted on the B. M. amphora E 256 (Pl. XIX). The javelin is sometimes held horizontally, more commonly sloping with the butt-end almost on the ground.⁴⁰ As the thrower starts to run he draws his right arm still further backwards turning his body sideways and extends his left arm to the front. On the Munich kylix (Fig. 9) the youth on the left still holds the point of the javelin in his left hand, the youth on the right has just released it. On the Berlin kylix (Fig. 10) the left arm is fully extended. From the position of the head

FIG. 10.—R.-F. KYLIX, BERLIN. 3139. (After Hartwig, *Meisterschalen*, Pl. XLVI.)

and body it is obvious that the violent, rapid run of which some authors speak is an impossibility. Just as in throwing the cricket-ball the run consists of a few short springy steps. Immediately before the throw a further turn of the body to the right takes place, the right knee being well bent and the right shoulder dropped, while the hand is turned outwards so that the shaft rests on the palm of the hand. This attitude is vividly depicted on a Torlonia kylix, the illustration of which is taken from Jüthner (Fig. 11).⁴¹

⁴⁰ It need hardly be said that there is no evidence for the 'tir en haut' of which de Ridder speaks. Dar.-Sagl. *s.v. jaculum*. In the r.-f. kylix from the Louvre (Dar.-Sagl. Fig. 252, Schreiber, *Atlas* xxii. 8) which he cites the angle of the spear hardly differs from that in Figs. 9, 11, 14. Generally speaking the

higher the throw, the greater the carry. Cf. Xenophon *de re equest.* xii. 13, quoted below p. 271.

⁴¹ Cp. the directions for spear-throwing and the illustrations given by Col. V. Balck in his *Lekar och Idrottsöfningar*, p. 426.

A variation of style is represented in Fig. 10. Here the javelin instead of pointing upwards is almost horizontal. A similar variation has been noted

FIG. 11.—R.-F. KYLIX, TORLONIA 270 (148).
(After Jüthner.)

in the preliminary position. The attitude closely resembles that adopted in throwing at a target, and we might be tempted so to interpret it. But this interpretation is put out of court first by the position of the head, which has been already noticed, secondly by the fact that in all the vase-paintings of this type the javelin is blunt. This type occurs on the British Museum bronze diskos, which is figured by Jüthner p. 28. The javelin is represented by a single line, which is misinterpreted in the catalogue as a cord. The drawing of the

akontistes is however so coarse and contrasts so strongly with that of the diskobolos on the other side, that Mr. Cecil Smith has come to the conclusion that it is spurious. If genuine, the line can only be part of an

FIG. 12.—R.-F. KYLIX, MUNICH 795. (From *Arch. Zeit.*)

unfinished drawing of a javelin. The closest parallel to the diskos is the vase represented in Fig. 10.

The actual throw is very rarely shown and the artists who attempt it are hopelessly confused. For example, the central youth on the Munich kylix (Fig. 9) is clearly intended to be throwing the javelin to the right, but the fingering of the right hand is only compatible with a throw to the left. Not much better is the drawing on the Panaitios kylix (Fig. 12). The general attitude is good and lifelike, but the position of the hand is hopeless and the amentum is conspicuous by its absence. The carelessness of the red-figured vase-painters as to the amentum is in marked contrast with the carefulness of their black-figured predecessors. For the former the typical positions of the akontistes are the preliminary positions described above, which are repeated with little variation till they become merely conventional. Moreover, whereas in the black-figured vases the amentum is inserted in black in the same way

FIG. 13.—R.-F. AMPHORA, MUNICH. (From Furtwängler's *Vasenmalerei* XLV.)

as the spear itself, in the red-figured vases it has to be added in some other colour, usually white or purple, after the drawing is finished. Hence this detail tends to be omitted altogether, and if inserted is the first to become obliterated.

Occasionally we find a type that reminds us of the black-figured vases. On a r.-f. 'kylix' in the Museo Gregoriano reproduced in Klein's *Euphronios*, we see a youth striding vigorously forwards with his javelin raised in his right hand level with his head, and his left hand swung backwards. The same type occurs on a kylix of Epictetos in Berlin.⁴² The energy of the action, which on the latter vase is encouraged by the strains of a flute, seems to suggest that the actual moment of the throw is represented. But the fact

⁴² *Mus. Greg.* lxix. Klein, p. 291; *Berl. Vas.* 2262, Gerh. *A.V.* 272.

that the right leg is advanced seems decisive against this view, unless we can suppose that the javelin is being thrown not for distance but at a target, of which, as I have said, there is no evidence.

Similar but less vigorous is the drawing on the Munich amphora (Fig. 13). Here again the right hand, which in the other two vases is hidden by the head, is quite impossible, the wrist being curved over the shaft instead of being bent back underneath the shaft. It seems safer then to regard this type as representing the run.

A few small points remain. Was the javelin ever thrown without a run? That it was usually thrown with a run is obvious from the vase paintings, but a drawing published by Jüthner from the

FIG. 14.—R.-F. KYLIX, ROME. (After Jüthner.)

Apparat des röm. Instituts (Fig. 14) proves that the standing throw was sometimes practised, the attitude being evidently borrowed from that of the diskobolos. Possibly the Torlonia kylix (Fig. 11) may also represent a standing throw.

Secondly, was the javelin thrown with the left hand as well as with the right? Plato recommends the training of both hands alike, and the fact that the Greek carried two spears, often one in either hand, renders the suggestion probable. But the only direct proof of a left-handed throw is on a kylix of Nicosthenes, in Berlin.⁴³

Even if a left-handed throw was practised in the gymnasia, there is no evidence of it in competitions.

Lastly, was the javelin ever thrown without the amentum? The only evidence is derived from the position of the hand and the omission of the amentum on the vases, and this evidence is, as has been explained, too untrustworthy to warrant us in asserting that it was so. Here again common-sense tells us that the Greek athlete, used as he was to the amentum, would not have rejected its help in competitions.

D.—Competitions in Javelin Throwing.

In the games of Patroclus javelin throwing is a separate event. Here and in all other passages where it is mentioned in Homer as a sport the competition is for distance only.⁴⁴ Throwing at a mark may possibly be implied in the association of javelin throwing and archery,⁴⁵ a combination which meets us again in fourth-century inscriptions, and Pindar definitely describes such a competition in the legendary Olympic games celebrated by Heracles,

ἄκοντι Φράστῳρ ἤλασε σκοπόν.—*Ol.* x. 71.

⁴³ Krause, xviii. b, 14 e; *Berl. Vas.* 1805.

⁴⁵ *Il.* ii. 774; *Od.* iv. 626, xvii. 168.

⁴⁴ *Il.* xxiii. 637; *Od.* viii. 229.

But though in this as in all other sports the chieftain excelled the common soldier, the javelin like the bow did not occupy a very high place in the aristocratic sports of Homer.

To the same prejudice we may ascribe the fact that in the great athletic festivals which preserved unchanged through all their history many of the aristocratic traditions of their early days, the javelin and the diskos, which as I showed in my last article may be traced back to the stone thrown in primitive warfare, were not separate events but merely formed part of the pentathlon. But though javelin throwing as a sport was less esteemed than boxing or wrestling, the use of the javelin was universal. As the weapon of the chase every Greek must from boyhood have practised throwing the javelin for distance and at any improvised mark. At an early date its use was taught in the gymnasia, and its popularity is shown by the numerous representations of it on the vases and by the frequent metaphors which Pindar borrows from it. There is however no evidence for any separate competition in javelin throwing, with the possible exception of the competition on horseback, until the fourth century.

The question whether in the pentathlon the javelin was thrown for distance or at a mark has been discussed at wearisome length by archaeologists and commentators on Pindar. The argument too often revolves in a hopeless circle, the commentators using as premisses the purely *à priori* statements of early archaeologists or conclusions based on the very passages which they are discussing. Martin Faber for example exhausts himself in the Sisyphean task of proving that when Pindar speaks of σκοπός in connexion with a javelin, he does not mean a mark but a boundary wall evolved out of his own imagination.⁴⁶ Others argue from conjectural hypotheses as to the order of events in the pentathlon or the method of deciding this competition as though the hypotheses were established facts. The question has been admirably discussed by Jüthner, whose conclusion is, I think, incontestable, namely that the competition in the pentathlon was one purely for distance.

Let us first take the witness of the monuments. The vases, as we have seen, show no evidence for throwing at a mark. The points of the javelin are blunt, the thrower has his head turned away, and there is no sign of any mark or target. The latter argument is particularly convincing, because on the only three vases which represent throwing the javelin on horseback the target is clearly depicted. It is unnecessary to discuss the delightfully naive suggestion of M. Girard⁴⁷ that the objects falsely interpreted as compasses, which as has been shown above are really nothing more than badly drawn amenta, were used for drawing circles in the sand which served as targets, or the hardly less curious suggestion of the late Mr. Freeman that these same objects were a sort of croquet hoop used as a target.⁴⁸ The hunter or soldier does not throw his spear at his victim's feet but at his body, and if a target is used it is at a reasonable height.

⁴⁶ *Philologos*, 4. 489 sq. ⁴⁷ *L'Éducation Athénienne*, p. 206. ⁴⁸ *Schools of Hellas*, p. 134.

The literary evidence agrees with that of the monuments. The passages of Pindar referring to a mark with the exception of the account of the games of Heracles have no necessary connexion with any competition, certainly not with

FIG. 15.—R.-F. KYLIX, BERLIN 2728.
(After Jüthner.)

the pentathlon. They are metaphors borrowed from the practice of everyday life. One passage certainly refers to the pentathlon,⁴⁹ two others possibly;⁵⁰ all three clearly indicate a distance throw. Lastly Lucian in the *Anacharsis* 27 definitely states *περὶ ἀκοντίου βολῆς ἐς μῆκος ἀμιλλῶνται*. His evidence though late is valuable because he is speaking of Olympia, and therefore of the pentathlon, the only event in which javelin throwing occurred at Olympia, and it is most improbable that the conditions of the competition were ever changed in that most conservative of festivals.

The pentathlete then threw the javelin for distance. As in the diskos

throw and jump he was not allowed to overstep a certain line. This line is perhaps suggested by the pillar in Fig. 15: it is certainly the *τέρμα* mentioned by Pindar in *Nem.* vii. 70

Εὐξενίδα πάτραθε Σώγερες, ἀπομνύω
μὴ τέρμα προβάς ἄκονθ' ὅτε χαλκοπάραον ὄρσαι
θοὰν γλῶσσαν, ὃς ἐξέπεμψεν παλαισμάτων
αὐχένα καὶ σθένος ἀδιάντον, αἶθωνι πρὶν ἀέλφῳ γυῖον ἐμπεσεῖν.

Here I must join issue with Jüthner. He argues that the javelin thrower with his short run would be most unlikely to overstep the mark, and therefore concludes that the *τέρμα* is not the line from which he throws, but the line on either side of the arena within which he must keep his throw. This interpretation does violence not only to the natural meaning of *τέρμα* but also of *προβάς*, which can only mean 'stepping in front of.' Moreover, experience shows that in the similar competitions of throwing the cricket-ball or putting the weight, disqualification for overstepping the line though rare is by no means unknown in the excitement of competition. With this reservation, Jüthner's interpretation of the passage may be accepted. Without fully discussing the endless interpretations of these lines I may briefly state my reasons.

Pindar defends himself throughout this ode against a charge brought against him by certain Aeginetans of having transgressed the rules of courtesy and fairness in some previous mention of their national hero Neoptolemus. These detractors seem to have blamed Thearion for allowing one who had

⁴⁹ *Nem.* vii. 70.

⁵⁰ *Isthm.* ii. 35, *Pyth.* i. 44.

insulted their hero to introduce a note of discord into the triumph of his son (v. 69). Pindar had transgressed the laws and was disqualified thereby. Perhaps too they had taunted Thearion for his extravagance in employing so expensive a poet (v. 18). In reply, Pindar appeals to the fact of his friendship with Thearion (v. 61), to his position as proxenos at Dodona (v. 66). He disclaims all violence or arrogance (v. 62); there is nothing discordant in his praise of Sogenes (v. 69). Then comes the passage in question. 'Sogenes of the house of the Euxenidae I swear that I did not overstep the mark and send forth the swift speech of my tongue like a bronze-headed javelin that puts out of the wrestling the strong neck sweatless yet, or ever the limbs be plunged in the sun's fire.' He disclaims all unfairness that would disqualify. 'Yet,' he continues, 'if there was trouble, if I was carried somewhat too far, song can make amends: after trouble delight follows more abundant.'

Such I take to be the thought of the passage. A word or two on points of detail. The emphatic ἀπομνύω followed by μή surely shows that the disclaimer is not confined to the participle προβάς but extends to the infinitive ὄρσαι. Professor Bury realizing this proposes to read ὑπομνύω, a purely arbitrary emendation of a scholiast and quite unnecessary. Secondly, if, as Mr. Fennell says, the notion of disgrace does not *generally* attach to ἐκπέμπω, it frequently does so. It is used of 'divorcing' a wife, and 'sending into exile,' while he quotes no instance in which it means 'to release' or 'send off in triumph.' The word is however in itself neutral, and takes its meaning from the context. What then is its meaning in athletics? Did the Greeks regard the finish of a hard-fought contest as an unnecessary toil from which it was an advantage to escape? Every sportsman will instinctively answer 'no;' and that the Greeks really were sportsmen is shown by the additional honour attaching to a victory in which the victor had fought every round without drawing a bye. Certainly Pindar's ideal athlete who 'rejoices in the cost and the toil' (*Isth.* v. 10) would feel no satisfaction in being 'put out of the wrestling' by an opponent's mistake.

This interpretation then does not rest on the 'arbitrary assumption' that an unfair throw at once disqualified the competitor, it rests on the natural meaning of the Greek. If, as I believe, the words naturally imply such a disqualification, it is for those who interpret them otherwise to show that such disqualification did not take place. For my own part, considering the punctilious, the religious strictness with which the great games were administered, it seems in the highest degree probable that the slightest breach of the regulations involved disqualification. But it is arbitrary to assume that Sogenes himself or a fellow competitor overstept the line, it is arbitrary to assume that one competitor frequently won three of the first four events, it is arbitrary to assume that in consequence the competition was frequently finished before the wrestling came on, it is arbitrary to assume (though personally I think it probable) that the javelin throwing immediately preceded the wrestling. These and other arbitrary assumptions are made by those who translate ἐξέπεμψεν παλαισμάτων 'saves from the wrestling.'

The competitors then might not overstep the line and any such breach of the rules probably involved immediate disqualification. Further, common-sense and the safety of the spectators required that they should keep within certain limits as regards direction, and this as Jüthner sees is implied in the *ἔξω ἀγώνος* of *Pyth.* i. 44, an expression which is not synonymous with *τέρμα προβάς*.

ἔλπομαι
μὴ χαλκοπάραρον ἄκονθ' ὥσειτ' ἀγώ-
νος βαλεῖν ἔξω παλάμα δονέων,
μακρὰ δὲ ῥίψαις ἀμεύσασθ' ἀντίους.

How many throws were allowed we cannot say. The fact that on the vases youths are represented frequently with two, more rarely with three javelins in their hands, renders it probable that two or three throws were allowed, but the evidence is not conclusive.⁵¹ Nor do the javelin which we see so commonly in palaestra scenes stuck in the ground allow us to conclude that no throw counted unless the javelin stuck in the ground; an impossible condition with blunt points. Nor do we know how the throw was measured. In the stadium of Epidaurus there are a number of short square blocks facing one another on either side at fairly regular intervals which may well have served for measuring the throw of the disks or spear like the measured boards on either side of the modern long jump.⁵²

Towards the close of the fifth century increased importance was given to the javelin as the weapon of light-armed troops and of the Epheboi; and from the fourth century onwards we find *ἀκοντισμός* quoted in inscriptions as a separate competition at Athens and elsewhere.⁵³ The association of the javelin and the bow suggests that in these competitions some sort of target was used. At all events the case cited by Antiphon proves that javelin throwing at a mark with a sharp weapon was practised in the Gymnasia. But the only direct evidence for such a competition apart from that on horseback is furnished by two inscriptions from Larisa of the time of Hadrian which mention victors *σκοπῶ πεζῶν* and *σκοπῶ ἱππέων*.⁵⁴ Of the details of these competitions nothing is known.

E.—Competitions on Horseback.

From an early date the javelin had been employed by horsemen both in war and in the chase. At Athens especially horsemanship was the duty and also the recreation of the richer classes. Plato tells us that Themistocles himself taught his son Cleophantus not only to ride, but to throw the javelin

⁵¹ Nothing can be proved from the Cean inscription which records 3 λόγχοι as a prize for spear-throwing, *I.G.* 2360; Ditt. *Syll.*² ii. 522.

⁵² Πρακτικά, 1902.

⁵³ Ceos, Sestos, Tralles, Samos, Larisa: v.

supra, n. 21. At Athens we hear of it first in an inscription relating to the Thesea, B.C. 160-1. There is no mention of *ἀκοντισμός* or *ἀκοντιστής* after the commencement of our era.

⁵⁴ Ditt. *Syll.*² ii. 670, 671.

standing on horseback and other wonderful tricks, and in the *Laws* he recommends javelin throwing on horseback as a useful accomplishment.⁵⁵ Somewhat earlier Xenophon in his treatise on the duties of a cavalry officer urges the latter to encourage his men to practise javelin throwing, and to stir up emulation among them by offering prizes.⁵⁶ They are not merely to practise individually, but in sham fights, using *ἐσφαιρωμένα ἀκόντια*. In his discourse on Horsemanship he gives further instructions. Velocity and distance are the most important points for war. To secure these the thrower must advance the left side of the body and draw back the right, straightening himself from the thighs, and holding the javelin pointed slightly upwards. If however the object is simply accuracy, the javelin should point straight at the mark. At Athens there seem to have been competitions in this sport as early as the fifth century. It is mentioned in an early fourth-century inscription, where among the prizes for the Panathenaea five amphorae of oil are assigned for the first prize, and one for the second *ἀφ' ἵππου ἀκοντίζοντι*.⁵⁷ In the second century *ἀφ' ἵππου ἀκοντίζειν* occurs in inscriptions relating to the Thesea.⁵⁸ In Thessaly, a land always famous for its horses, we find *σκοπῶ ἱππέων* mentioned in the Larisa inscription of the time of Hadrian referred to above.⁵⁹

Fortunately we are able to supplement these scanty notices by three vases actually representing this competition. A fifth-century aryballos from Eretria, now at Athens,⁶⁰ a fourth-century r.-f. krater in the Louvre,⁶¹ and a hitherto unpublished Panathenaic amphora presented by Sir H. Campbell-Bannerman to the British Museum (Pl. XX). In all three the target is a shield or similar object with a crown forming a sort of bull's-eye in the centre, raised on a post to the level of the horses' heads. On all three vases the competitors gallop past this target, hurling their javelins at it as they pass. On the B. M. vase the javelins are represented roughly by a single line, on the other two vases they have regular leaf-shaped heads: they are held a little above the shoulder, with the point directed somewhat downwards towards the target.

On the Eretria vase the riders wear petasoi, elaborately striped chitones secured by a belt, and high boots. The first rider has already thrown his weapon, but his right arm is still extended to the front. His javelin is in mid air, having missed the target. Another javelin lies broken below the target. There is nothing on any of these vases to indicate that the competitors started with two javelins and threw both as they passed the target. If we see extra javelins in the field, they merely indicate that there are more competitors than can be represented on the vase space. Some conventional shrubs on this vase suggest that the sport takes place in the open country. In the fifth century there was probably no hippodrome at Athens, and the

⁵⁵ *Meno*, 93 d ; *Leg.* 834 d.

⁵⁶ *Hipparch.* i. 6. Cf. *de re eq.* viii. 10.

⁵⁷ *I.G.* ii. 985.

⁵⁸ *Ib.* ii. 444, 446, *Ath. Mitth.* xxx (1905), p. 213.

⁵⁹ *Ditt. Syll.*² ii. 671.

⁶⁰ Collignon, 1478.

⁶¹ Millin, i. 45. Both vases are reproduced and discussed in P. Wolters *Zu Griechischen Agonen* (Würzburg Program 1901).

Panathenaea were held somewhere in the deme of Echelidae near the Peiraeus.

The krater in the Louvre has a yet more festal appearance. Of the three riders one has already thrown his javelin, the other two are about to throw. They wear chitones like the riders on the Eretria vase, but no boots, and instead of the petasoi they have crowns on their heads, while over them hover two winged victories bearing crowns.

These two vases were connected by Welcker with ἡ ἐξ Ἀργους ἀσπὶς, but Wolters rightly refers them to τὸ ἐφ' ἵππου ἀκοντίζειν. Their festal character suggests a definite connexion with some festival, but what festival

FIG. 16.—PANATHENAIC AMPHORA IN BRITISH MUSEUM. B 146.

we cannot say. The sport was probably a common one in Attica, Thessaly, and other horse-breeding lands, and formed an attractive feature of other festivals, besides the Panathenaea and the Thesea. There is certainly no ground for connecting the vases with the Argive Heraea.

The B.M. vase figured in Plate XX needs no detailed description. The riders wear the regulation dress of the Athenian ephebos, a bright-bordered chiton fastened over the left shoulder and the petasos. A similar ephebos occurs on another Panathenaic amphora in the British Museum (Fig. 16). He carries two javelins, and beside him stands another youth naked, and on foot, also bearing javelins. Whether this vase was a prize for the same event, we cannot say for certain. It may have been connected with those com-

petitions for *εὐανδρία* and *εὐοπλία* mentioned in inscriptions, of the details of which we are completely ignorant. The immense variety of competitions at the Panathenaea is best illustrated by the well-known Panathenaic vase representing an acrobat tumbling.⁶²

There remains yet another Panathenaic vase, figured by Gerhard in his *Etruskische und Campanische Vasenbilder*.⁶³ Here we see four youths galloping to the right, but they are naked: there is no target, and their javelins are blunt, if we can judge from the illustration. Clearly we have to do with quite a different event, perhaps with some sort of sham fight such as is described by Xenophon, which in later times developed into a competition.⁶⁴

We must think of the Panathenaea as partly a vast military tournament with a variety of displays and military competitions, which must have appealed greatly to the spectacle loving populace of Athens. Not the least attractive event was τὸ ἐφ' ἵππου ἀκοντίζειν, an event which finds its modern analogy in such competitions as heads and posts or lemon-cutting. Of its details and regulations we know nothing. Its popularity is shown by the number of vases representing it; but that it did not rank as a serious athletic event is proved by the fact that only five amphorae were given for the first prize and one for the second.

The javelin has been admirably treated by Dr. Jüthner in his *Antike Turngeräthe*, to which I owe much. I have endeavoured to avoid covering the same ground and to deal with points which he has discussed less fully. I have received considerable assistance from the practical experience of Colonel V. Balck, and also from Mr. Henry Balfour of Oxford. The vases from the British Museum are published by kind permission of Mr. Cecil Smith from drawings by Mr. Anderson.

E. NORMAN GARDINER.

⁶² Salzman *Nécropole de Camiros*, Pl. XXXVII; Schreiber *Atlas* xxiv. 2.

Comptes Rendus, 1876, p. 52.
⁶⁴ *Hipparch.* i. 20; *I.G.* 1921.

⁶³ i. Pl. A. 3. 4; *Annal.*, ii. 1830, p. 223. 9;