B.F. AMPHORA IN THE BRITISH MUSEUM (B. 271).

ATTIC B.F. LEKYTHOS IN THE BRITISH MUSEUM (B. 576).

R.F. PELIKE IN THE BRITISH MUSEUM (E. 395).

R.F. FRAGMENT AT WÜRZBURG.

THROWING THE DISKOS.

[PLATES I.-III.]

A.—*The Solos.*

'THEN the son of Peleus took an unwrought metal mass which anciently the mighty Eetion was wont to hurl.'¹ This *σόλος αὐτοχόωνος*, which was at once the weight to be thrown and the prize in the Homeric competition, was apparently a mass of pig iron just as it came from the furnace; probably, as Mr. J. L. Myres suggests to me, 'the contents of one of the old open-hearth furnaces of the Mediterranean world, the natural unit quantity for the purveyor and buyer of the metal, the classical analogy to which is the mass of iron (*μύδρος σιδήρεος*) which the Phocaeans threw into the sea before their voyage westwards.'²

The word *σόλος* occurs only in this passage of the *Iliad* and in later imitations of Homer.³ The latter part of *Iliad* xxiii. is generally admitted to be a somewhat late interpolation, and the interpolator, wishing to insert in the games of Patroclus a competition similar to that of throwing the diskos, gives to his interpolation an archaic appearance by the use of the unusual word *σόλος*. The diskos itself was sufficiently familiar in Homeric times for the term 'a diskos throw' to be used as a measure of distance.⁴ There is no reason for supposing that the Homeric diskos differed essentially from that with which we are familiar in later times, save that the earlier form was probably of stone instead of metal. But in the *σόλος αὐτοχόωνος* we have the primitive type from which all lifting and throwing competitions have arisen: a stone, a mass of metal, or a tree trunk provides for early man a weapon in time of war, a test of physical strength in time of peace.

Of these primitive contests and feats of strength we have various records in Greece. A mass of red sandstone discovered at Olympia bears a very early inscription to the effect that Bybon with one hand threw it over his head.⁵ The latter part of the inscription is unfortunately doubtful. According to Dittenberger and Purgold, it runs *Βύβων τητέρη χειρὶ ὑπερκεφαλὰ*

¹ *Iliad* xxiii. 826 ff.

² Hdt. i. 165.

³ Apollonius Rhodius iii. 1366, 1372; iv. 657, 851; Nicander, *Ther.* 905; Nonnus, *Dionys.* xxxvii. 667; Quint. Smyrnaeus iv.

436.

⁴ *Il.* xxiii. 431, 523; cp. ii. 774; *Od.* iv. 626; viii. 129, 186; xvii. 168.

⁵ *Inscr. von Olympia*, 717; Jüthner *Antike Turngeräthe*, p. 22.

μ' ὑπερεβάλετο ὁ Φό[λ]α. Neither ὑπερεβάλετο nor ὑπερκεφαλὰ seems very satisfactory, and Mr. H. B. Walters therefore suggests the reading ὑπὲρ κεφαλᾶς ὑπερέβαλε τὸ δ' ἐφόρει, 'he threw over his head this thing that he was carrying.' But whatever the reading, the general sense is clear, and the greater difficulty remains, how did he do it? The stone weighs $143\frac{1}{2}$ kilos, and measures $68 \times 33 \times 38$ cms. The explanation that he merely lifted it over his head⁶ does not help matters; a one-handed lift of an object of such weight and shape is quite as incredible as the throw. I can only suggest that Bybon lifted it above his head with both hands, then balanced it on one hand and threw it backwards. This is precisely what Aelian describes Titormus as doing with a stone which Milo could hardly move.⁷ First he raises it as far as his knees, then lifts it on to his shoulders, carries it eight ὀργυῖαι, and throws it. A larger block of black volcanic rock weighing 480 kilos has been discovered at Santorin. It bears the following inscription of about 500 B.C.: Εὐμάστας μ' ἤρην ἀπὸ χθονὸς ὁ Κριτοβούλου.⁸ To lift such a weight off

FIG. 1.—R.-F. KYLIX.
LOUVRE, G. 96.

the ground is a good performance, but quite possible. The only representation I know of such scenes is in the interior of a r.-f. kylix in the Louvre, G. 96, where we see a youth lifting in both arms a large, roundish object, apparently a stone (Fig. 1). Lifting feats are ascribed to Milo, Euthymus, and other athletes, and the heroes in the *Iliad* hurl in battle boulders that two stalwart men can hardly lift.⁹

The Homeric σόλος, like the stones described above, has nothing distinctly athletic about it, any more than our word 'weight.' It is merely a mass of iron, and its athletic use is a mere accident. It is true that, like other objects, especially metal objects or weapons, it has its history. It belonged once to Eetion, king of Thebes, who used to hurl it too. And Achilles after slaying Eetion brought it to Troy among his possessions. But the author is far more concerned with its commercial value: 'it will furnish a countryman with iron for five years'; and we may feel sure that it found its place in Achilles's ship for practical purposes. In Apollonius Rhodius we shall find the σόλος always mentioned on the sea shore near the ships. A pig of iron would serve the sailor or soldier in many ways.

The word must have been an unusual one, and certainly puzzled the scholiasts, if we may judge from their numerous notes thereon.¹⁰ With a single exception to be discussed later, these notes, as well as the passages in later

⁶ Chryssaphis *Bulletin du Comité des Jeux Olympiques*, 1906, p. 57.

⁷ *Var. Hist.* xii. 22.

⁸ *I.G.* xiii. No. 499.

⁹ Aelian, *op. cit.* viii. 18; Paus. vi. 11;

Il. v. 302; xii. 445. In the *Odyssey* the Cyclops and the Laestrygonians hurl rocks at the ships of Odysseus, ix. 481, 537; x. 121.

¹⁰ Jüthner, *op. cit.* pp. 20, 22, collects and discusses the scholia.

authors where the word occurs, contain no information which may not be derived from Homer. The word is said to have been found inscribed on a bronze diskos discovered early in the last century in the bed of the Alpheius,¹¹ but without further information the evidence is worthless. We may however probably connect the word with the names of various places, Soli in Cyprus, and Cilicia, and Soloeis in Sicily (and Mauretania). According to Lewy, these names are cognate to the Semitic *sela*, a rock, and Victor Bérard explains the name as due in all these cases to a prominent headland or hill interrupting a level stretch of coast.¹² The etymology is supported by the note of Hesychius, *σόλος* = *ὄνομα βουνοῦ*; and it certainly suits the Homeric *σόλος*, the transition from a boulder to a mass of metal being easy. Thus in Apollonius Rhodius the great round stone which Jason hurls into the midst of the dragon brood is described as

δεινὸν Ἐνναλίου σόλον Ἄρεος (iii. 1366),

an expression which recalls the boulders thrown by the heroes of the *Iliad* in war rather than an athletic implement.

But whatever the original meaning of the word, there is reason for thinking that it was from an early date appropriated to metal. Hesychius explains *σολοιτύπος* as *μυδροκτύπος*, and the Soli in Cyprus and in Cilicia were certainly in the neighbourhood of mines. So too Apollonius Rhodius in a remarkable passage uses the word in connection with the Portus Argous, the modern Porto Ferraio in Elba, the very name of which implies the neighbourhood of the iron mines for which the island was already famous in classical times. There the Argonauts on their voyage landed and

ψηφίσιν ἀπωμόρξαντο καμόντες
 ἰδρῶ ἄλις · χροῖη δὲ κατ' αἰγιαλοῖο κέχυνται
 εἵκελαι · ἐν δὲ σόλοι καὶ τεύχεα θέσκελα κείνων (iv. 655).

Commentators and translators, following the scholiasts, identify the *σόλος* with a sort of *δίσκος*, and describe the Argonauts as holding athletic sports on the shore of Aethalia, and then going through their ablutions with stones for strigils. The pebbles on the shore have a flesh-like appearance in consequence, and their discs and weapons are still to be seen there.¹³ Did the Greeks never scrape off the sweat except after games? Had the Argonauts no need of such a process after their endless wanderings and sufferings by sea? And when at last they did find a resting-place, did they at once fall to throwing the diskos? The idea is preposterous, and but for the traditional explanation *σόλος* = *δίσκος* it would never have been mooted. Why then are *σόλοι* mentioned? Wether is surely right, 'spectant fortasse ad ferri abundantiam.'¹⁴ To Apollonius

¹¹ *C.I.G.* i. 1541.

¹² Lewy, *Semitische Fremdwörter*, p. 145;
 Bérard, *L'Odyssée et les Phéniciens*, i. p. 334.

¹³ Thus in the latest version by Mr.
 A. S. Way:

There in athlete-strife did they supple their
 limbs till the sweat of them dripped

As rain, and the pebbles are flecked as with
 scarf-skin strigil-stripped

To this day; and their quoits and wondrous
 armour are there, all stone.

¹⁴ *De Apollonii Argonauticarum rebus
 geographicis*, p. 96.

Aethalia would at once suggest the pigs of iron exported from the island and the mainland opposite; and what objects could be more natural on board a ship, whether they served for commerce, for ballast, for shipbuilding, or for weapons? Apollonius is surely thinking of the *σόλος αὐτοχόωνος* in its commercial rather than its athletic aspect.

However, as we have seen, the *σόλος* did take the place of the *diskos* in the sports of the *Iliad*, and so the scholiasts interpret it. In the third and last passage where Apollonius uses the word he describes Thetis coming to Aeaea, where she finds the Argonauts beguiling the time,

σόλῳ ῥιπῇσι τ' ὀϊστῶν (iv. 851),
τερπομένους.

The line is an elaborate, archaistic variation of the Homeric

*δίσκοισιν τέρποντο καὶ αἰγανέῃσι ἰέντες.*¹⁵

The verse may seem to tell against my interpretation of the previous passage, but in the case of a student and archaeologist like Apollonius it is not unnatural that he should use the same word in two different senses, especially when both senses can be justified from Homer. Even here the *σόλος* may just as well be the weight as the *diskos*. Nicander, however, in his *Theriaca* does use the word for a *diskos*. It is with a *σόλος* rebounding from a rock, he says, that Apollo killed Hyacinthus.¹⁶ Quintus Smyrnaeus and Nonnus merely imitate and elaborate the passage in the Homeric sports, and their evidence is worthless.

The scholiasts are much exercised in distinguishing the *diskos* and the *solos*, and their artificial descriptions still find a place in our commentaries and dictionaries.¹⁷ The *diskos* is flat, the *solos* round and ball-shaped; the *diskos* of stone, the *solos* of metal: the *diskos* has a hole in it and a string to throw it with, the *solos* is solid. The first distinction is fairly accurate; the *diskos* was flat, the *solos* a mass, more or less round. As to material, the *diskos* we know was made both in stone and in metal, and probably the *solos* could be either. The third and last distinction is ascribed to Tryphon, but another version ascribed to Eratosthenes assigns the hole and string to the *solos*, not to the *diskos*.¹⁸ That they belonged to the *solos* is disproved by every passage in which the word is used; that they belonged to the *diskos* is still more conclusively disproved by the monuments; and Dr. Jüthner therefore rightly rejects the evidence of the scholiasts. But his idea that the scholiasts invented the hole and string theory to explain the term *περιστρέψας* is hardly satisfactory. The athletic craze had spread to Alexandria before the time of Eratosthenes, so much so that few places produced such an array

¹⁵ *Il.* ii. 774 = *Od.* iv. 626; xvii. 168.

¹⁶ *Ther.* 905.

¹⁷ Jüthner, *op. cit.* pp. 19 ff., collects and discusses the scholia at length.

¹⁸ Ammon. 40 *δίσκος μὲν γὰρ ἔστι λίθος τετρημένος ὥς φησι Τρύφων ἐν πέμπτῳ περὶ Ἑλληνισμοῦ, σόλος δὲ τὸ χαλκοῦν δλοσφύριον.*

Odysses viii. 190 *Schol.* BHQT. ὁ δίσκος λίθος ἦν. καὶ Ἐρατοσθένης ἐν Ὀλυμπιονίκαις ἱστορεῖ τὸν μὲν σόλον λέγων σιδηροῦν ἢ ξύλινον ἢ χαλκοῦν τετρημένον κατὰ τὸ μέσον καὶ ἔχοντα καλῶδιον ἐξημμένον, οὗ ἐχόμενοι βάλλουσιν οἱ ἀγωνιζόμενοι.

of Olympic victors,¹⁹ and we could hardly credit Eratosthenes with such a blunder. It is possible, indeed, that he is speaking of some popular game in which a round object was bowled along by means of a cord.²⁰ Mr. R. M. Dawkins tells me he has seen such a game at Orvieto, round stones about a foot in diameter being bowled along the sloping road, much to the danger of pedestrians, by means of a strap wound round their periphery. Cheeses are said to be thus employed in parts of Italy, and to be much improved by the treatment. A more probable explanation, however, is suggested to me by Mr. J. L. Myres. The scholia of *Iliad* xxiii., he says, have become dislocated, and the string and hole belong not to the solos, but to the *καλαῦροψ* mentioned a few lines further on. Polypoetes hurls the solos 'as far as an oxherd throws a *καλαῦροψ*.' This word, which is usually explained somewhat pointlessly as 'a staff,' is really, says Mr. Myres, a sort of bolas, a weapon consisting of a string with one or more stones attached to it, which is used in Spanish America for throwing at and catching cattle. Mr. Myres tells me that he has often seen Greek boys extemporising a sort of bolas with a string and perforated stone. This explanation not only suits the passage in Homer far better than the traditional one of the text, but also offers a most satisfactory solution of the mistake about the solos and diskos. From this passage the mistake would easily be copied elsewhere.

To sum up, *σῶλος* is a heavy weight, originally perhaps a boulder, afterwards a mass of metal, and in late writers it is occasionally used as a synonym for diskos.

B.—*The Diskos.*

The word diskos means 'a thing thrown'; originally any stone of convenient shape and size, then a stone artificially shaped for throwing, lastly a similar object in metal. In Homer the diskos is still a stone: how far it is artificial we cannot say, but in one passage at least it seems to be used of the round, smooth stones that are found on the sea-shore. Odysseus, challenged by the Phaeacians, picked up a diskos 'larger than the rest, a thick one, far more massive than those wherewith the Phaeacians contended in casting.'²¹ The scene is the agora of the Phaeacians hard by the ships, and the sports are of that impromptu, after-dinner sort that needs no apparatus. The Phaeacians, as Alcinous admits, are no trained athletes, but 'swift of foot and the best of seamen.' In the palaestra of the fifth century one would expect to find diskoi of various weights, like the dumb-bells of a modern gymnasium, but surely not in the agora of the Phaeacians; yet Odysseus finds at once a diskos such as the Phaeacians themselves never use. If we think of the diskos merely as a stone, the difficulty vanishes. The agora is hard by the ships, and on the shore are diskoi ready to hand of all sizes, flat, smooth, round pebbles such as fishermen use as weights for holding down their nets and sails laid out to dry, and such as every visitor to the seaside inevitably

¹⁹ Krause *Gymnastik*, p. 800.

²⁰ Kietz *Diskoswurf*, p. 21.

²¹ *Od.* viii. 186 ff.

picks up to throw. From such a stone to the manufactured stone diskos the transition is easy, and the recurrence of the phrase

δίσκοισιν τέρποντο καὶ αἰγανέησι ἰέντες,²²

together with the use of the term *δίσκουρα* as a measure of distance, makes it probable that the manufactured diskos was known at all events in the later Homeric times. It is sometimes stated, on the evidence of the epithet *κατωμαδίω*,²³ that the Homeric heroes put the diskos as we put the weight. It is possible, of course, but the evidence is insufficient; *κατωμάδιος* would be at least equally applicable to Myron's diskobolos, and the use of the terms *δινήσας* and *περιστρέφας* proves that, whether they put the weight or not, the Homeric heroes sometimes slung the weight.

In Pindar there can be no doubt that the diskos is an athletic implement; and though he must have been familiar with the bronze diskos, he makes his heroes Nikeus and Castor throw the older stone diskos.²⁴ The latter is clearly represented on certain black figured vases as a thick, white object²⁵ (Pl. I.), but the evidence of the vases and of the actual diskoi which we possess shows that the bronze diskos must have been introduced before the beginning of the fifth century.

There exist in our museums various inscribed and carved marble diskoi.²⁶ But though in size and shape they differ little from the bronze specimens, they are too fragile and thin for actual use, and their inscriptions prove clearly that they are merely votive offerings. The practice of inscribing and dedicating diskoi was an ancient one, as we may see from the diskos of Iphitus dedicated at Olympia. With regard to the metal diskos we are more fortunate. Of the specimens which we possess, four are probably votive offerings, but one of these certainly, possibly three, had also been used; the rest were certainly intended for use. Most are of hammered bronze, four of cast bronze, one of lead. Their weights and measurements can be best seen from the following table:—

Finding place.	Museum.	Weight in kilos.	Diameter in cms.	Thickness in mms.
1. Olympia	Olympia, <i>Inv.</i> 7567	5·707	34	5-13
2. Corfu	B.M. 2691	3·992	23	6-13
3. Gela	Vienna	3·800	28	7
4. Amyclae	Athens, De Ridder, <i>Cat.</i> 530	3·349	19	
5. Olympia	Olympia, <i>Inv.</i> 4257	2·945 (?)	22	6-12
6. Olympia	Olympia, <i>Inv.</i> 12892	2·775	18	11-12
7.	Rome, Museo Kircheriano	2·378	21, 21·5	
8. Olympia	Olympia, <i>Inv.</i> 2859	2·083	19, 22·5	3 at edge
9. Sicily	B.M. 248	2·075	21	5
10. Olympia	Berlin	2·023	17·5	9-10
11. Aegina	Berlin	1·984	21	
12. Olympia	Berlin	1·721	20	7
13. Olympia	Berlin, <i>Inv.</i> 2286	1·353 (?)	20·5	4
14. Olympia	Olympia, <i>Inv.</i> 12891	1·268	17	4-12
15. Cephalenia	B.M. 3207	1·245	16·5	5

²² *Od.* iv. 626, xvii. 168; *Il.* ii. 774.

²³ *Il.* xxiii. 431.

²⁴ *Ol.* x. 72 *πέτρῳ*; *Isthm.* i. 23 *λιθίνοις δίσκοις*.

²⁵ *B.M. Vases*, B. 134, 142, 271; *Athens*

Nat. Mus. 832; *Munich* 408; *Berlin Vas.* 1727.

²⁶ Cambridge, *Fitzwilliam Museum*, 70, 72;

Kavvadias, *Γλυπτὰ τοῦ Ἑθνικοῦ Μουσ.* 93;

Salzmänn *Nécropole de Camiros*, Pl. VIII.

No. 1²⁷ is of cast bronze, ornamented with concentric circles, and bearing on one side a dedication by Poplius, a pentathlete of Corinth, to Olympian Zeus, on the other the name of the alytarch, with the dates respectively Ol. 255, 456. The difference in the date is possibly due to different methods of reckoning the Olympiads. The style and weight make it improbable that it was ever intended for actual use; if it was so, it is an illustration of the degeneracy of athletics and the worship of brute strength which we see also in the development of the heavy caestus.

No. 3²⁸ also of cast bronze had originally an inlaid dolphin, possibly of silver, which would have added slightly to its weight.

No. 4 is of a somewhat scyphate shape.

No. 5 is fragmentary. The weight is calculated from the diameter and thickness, assuming the surface to be spherical and the specific gravity that of copper. If we make allowance for the slightly smaller specific gravity of bronze and for the weathering of No. 6, the weights of the two will be approximately equal.

No. 6. The weights of the Olympia diskoi are only approximate. They were weighed, Mr. Bosanquet tells me, in the village shop.

No. 7 is of markedly scyphate shape.

No. 9 and No. 11²⁹ are of cast bronze and engraved on the one side with the figure of a jumper, on the other with that of a spear thrower.³⁰ No. 11 is also ornamented with a series of concentric circles. They belong to the early part of the fifth century, but though they approximate closely in weight and size to Nos. 8 and 10, their flatness and the sharpness of their edges make me doubtful whether they were intended for actual use.

No. 12 is of lead, and has probably lost considerably in weight.

No. 13 is imperfect. Three pieces are broken away from the edge. It must have weighed 1.5 at least, perhaps considerably more.³¹

No. 15 is also very badly worn, and must have been much heavier. It is inscribed with two hexameters in archaic letters of the sixth century.

Ἐχσοίδα(ς) μ' ἀνέθηκε Διὸς Φο(ύ)ροιιν μεγάλοιο
χάλκεον ᾧ νίκασε Κεφαλ(λ)ᾶνας μεγαθύμους.³²

In the last Olympic games a wooden diskos with a metal centre was used. It is a thick clumsy object, the product of modern imagination, utterly unlike and in every way inferior to the specimens which we have in our museums. There is no authority for it whatsoever.

Is it possible from these data to arrive at any definite conclusions as to the weights actually used in competitions? The diskoi are all more or less worn, and the weights are therefore only approximate. They seem, however, to fall

²⁷ *Olympia* iv. 179; Jüthner *op. cit.* p. 28.

²⁸ *Jahreshefte* ii. p. 201, Pl. I.

²⁹ Jüthner *op. cit.* pp. 27, 28.

³⁰ The figure on the B.M. diskos is described in the Catalogue as an athlete holding a measuring cord. The interpretation does not

concern us at present: I hope to deal with it in another article.

³¹ For particulars of these two I am indebted to Dr. Zahn, from whom I received a drawing of No. 12.

³² B.M. *Bronzes*, 3207.

into certain groups. The best marked group is composed of Nos. 8—11, and possibly 12 if we make allowance for the greater softness of lead. It suggests a standard of 2·1. Heavier standards are suggested by Nos. 2 and 3, and by Nos. 4 and 5, say 4·0 and 2·8, while Nos. 14, 15 point to a standard of 1·3. Mr. Bosanquet, to whose kindness I am indebted for most of the data given above, suggests that these different standards correspond to the different ages of the competitors, but it is not safe to go beyond the general suggestion. We know that in the treasury of the Sicyonians at Olympia three diskoi were kept for the use of competitors in the pentathlon, and we know that there were two classes of competitors, boys and men, and that the boys used a smaller diskos than the men.³³ But we do not know that the standard at Olympia was the same as that adopted elsewhere, or that the diskoi which we possess were intended for competition. Rather we know that the metrical standards varied considerably in different parts of the Greek world, and also that there were different classifications of age at different festivals.³⁴ If then we are to arrive at any definite conclusion, we must confine ourselves to the Olympian diskoi, and here the most that we can say is that Nos. 5 and 6 point to a standard of about 2·8, Nos. 8 and 10 to one of about 2·1, which is confirmed by Nos. 9 and 11 and perhaps 12.

Nor do the written records enable us to say for certain what was the standard weight used by men. Phayllus is said to have thrown the diskos ninety-five feet and Philostratus speaks of the hero Protesilaus throwing beyond a hundred cubits, and that with a diskos twice the size of the Olympian one.³⁵ Statius,³⁶ again, describes Phlegyas as hurling the diskos across the Alpheius at its widest.³⁷ Little credit can be attached to these records, but as far as they go they agree with the one fact emphasized by writers, that the diskos was a heavy object.³⁸ In view of this and of the existing diskoi, it seems probable that the men's diskos was usually considerably heavier than 2 kilos; usually, but not always, for the lightest diskos in the list is that with which Exoidas defeated the high-souled Cephallenians.

The dimensions of the diskos in art correspond with those given in our table. On the vases too the diskos is often ornamented with concentric circles, as in Nos. 1 and 11, with various forms of crosses and dots, or with the figures of birds or animals.³⁹ When not in use the diskos was kept in a sort of sling, the two ends of which were tied in a knot. In such a sling the diskos is frequently represented hanging on the wall or carried in the hands of a youth.⁴⁰

³³ Pausanias vi. 19, 3; i. 35, 3.

³⁴ e.g. at the Panathenaea, Nemea, and Isthmia, *παῖδες, ἀγέμενοι, ἄνδρες*. Elsewhere we have four or even five classes, *C.I.G.* 1590, 2214; *I.G.* ii. 444.

³⁵ *Heroic*, p. 291.

³⁶ *Theb.* vi. 675.

³⁷ In the last Olympic games a diskos of 2 kilos was used. The winner in the Greek style threw it 115 ft. 4 in., the winner in the

free style 136 ft. The free style is possibly more effective, the modern Greek style certainly less so than that employed by the ancient Greeks.

³⁸ Lucian *Anach.* 27. Galen *de val. tuenda* ii. 9-11, iii. Homer, Statius *loc. cit.*

³⁹ Jüthner *op. cit.* p. 29.

⁴⁰ *ib.* p. 30. E.g. *B.M. Vases* E 78; vol. xxvi. of this journal, Pl. xiii.

C.—*The Balbis.*

The diskos, according to Philostratus, was thrown from a *βαλβίς*, our knowledge of which is derived entirely from an extremely difficult passage describing the picture of the death of Hyacinthus.⁴¹ *βαλβίς διακεχώρισται μικρά καὶ ἀποχρῶσα ἐνὶ ἐστῶτι εἰ μὴ τὸ κατόπιν καὶ τὸ δεξιὸν σκέλος ἀνέχουσα πρηνῇ τὰ ἔμπροσθεν καὶ κουφίζουσα θάτερον τοῖν σκέλοιν ὃ χρηρὴ συναναβάλλεσθαι καὶ συμπορεύεσθαι τῇ δεξιᾷ. τὸ δὲ σχῆμα τοῦ δίσκου ἀνέχοντος ἐξαλλάξαντα τὴν κεφαλὴν ἐπὶ δεξιᾷ χρηρὴ κυρτοῦσθαι τοσοῦτον, ὅσον ὑποβλέψαι τὰ πλευρὰ καὶ ῥιπτεῖν οἶον ἀνιμῶντα καὶ προσεμβάλλοντα τοῖς δεξιοῖς πᾶσι.* As Benndorf rightly says, ‘omnia dependent a Myronis discobolo,’ the last sentence being a singularly happy description of the statue with the ropelike pull of the right arm and the concentrated effort of all the right side of the body. The first sentence is more difficult. ‘A balbis is marked off small and sufficient for one man standing εἰ μὴ τὸ κατόπιν, and supporting the right leg, the front part of the body leaning forward while it lightly supports the other leg, which is to be swung forward and follow through with the right hand.’ This is the rendering given by Jüthner in an elaborate discussion of this passage in *Eranos Vindob.*, p. 317, and is manifestly superior to Benndorf’s version in his edition of the *Imagines*. Jüthner, after an exhaustive examination of the uses of *βαλβίς*, proceeds to identify the *βαλβίς* of Philostratus with the stone slabs with which we are familiar from the stadia of Olympia, Delphi, and other places. It is indeed highly probable, though at present there is no proof thereof, that the pentathlete did throw the diskos and the spear from the same line of slabs from which the races started. But when Dr. Jüthner, assuming that the *βαλβίς* of Philostratus is identical in size with these slabs, uses this assumption to explain the words εἰ μὴ τὸ κατόπιν as due to the narrowness of the slabs, which only afforded room for the right foot and not for the left foot behind, it is impossible to follow him; and, to do him justice, we must admit that he is not satisfied himself.⁴² ‘Ich gestehe dass diese Erklärung nicht ganz überzeugend klingt.’ As a matter of fact, the starting slabs are amply sufficient for one man to stand on, though possibly not in the position of Myron’s diskobolos; but if we think out the expression, what possible sense is there in ‘a space small and sufficient for one man except behind’? It is absolutely unthinkable, and we must either abandon the passage as hopeless or find some other interpretation. The absurdity to which we are reduced suggests the solution. A parallelogram cannot be sufficient for one man ‘except behind’; therefore the words qualify some-

⁴¹ *Im.* i. 24 (Benndorf and Schenkl). The earlier text of Kayser reads *διακέχωσται* for *διακεχώρισται*, ἢ δὴ for καὶ μὴ, *συναπαλάλλεσθαι* for *συναναβάλλεσθαι*, and inserts *ἐργάζεται* after τὰ ἔμπροσθεν. Benndorf’s text is undoubtedly superior; but I regret the alteration of *συναπαλάλλεσθαι*, which has considerable MSS.

authority, and, being the rarer word, is more likely to have been changed. The word is so wonderfully appropriate and lifelike.

⁴² His reference of *διακεχώρισται* to the two grooves on the starting slabs is quite pointless.

thing else; they can only qualify *διακεχώρισται*. The meaning is clear at once. The *βαλβίς* is marked off—small and sufficient for one man—it is marked off except behind. That the competitor must not overstep the line in front is an elementary principle of all such competitions. In the present day the hammer thrower or weight putter is confined to a square or circle. The conditions for the diskos thrower were not so severe; the *balbis* was marked off sideways but not behind, and, as we shall see, the method of throwing implied in the *diskobolos* of Myron requires room for at least one step forward. As I have said, it seems probable *a priori* that the starting slabs should have been used for throwing the diskos and the spear. At the same time, in the Delphi inscription describing the preparations for the Pythian games we find mention of *τὰμ παρὰ τοῖς πεντάθλοις*, the contract for which was eight staters.⁴³ As special contracts are named for the running track, the jumps, and the boxing ring (which would naturally serve also for wrestling and the pankration), the arrangements for the pentathlon would seem to refer to the diskos and the spear, *i.e.* the *βαλβίς* and the means for measuring the throw, and these arrangements seem therefore to be distinct from the starting arrangements for the races.

Kietz's theory of the *βαλβίς* as a small platform sloping downwards has been conclusively disproved by Jüthner, and need hardly have been noticed had it not been adopted by the Greek authorities in the recent Olympic games. According to their wonderful regulations, the platform is 80 cm. long by 70 cm. wide, with a height of not more than 15 cm. behind and not less than 5 cm. in front. This extraordinary arrangement is based solely and entirely on the old, corrupt reading of the obscure passage in Philostratus quoted above. Even if the old text was correct, its evidence would be absolutely worthless in face of the manifest absurdity of the idea, and the fact that in all the numerous statues, bronzes, vases, and gems representing the *diskobolos* there is not the slightest trace of such a platform. Can we imagine Myron's *diskobolos* tilted forwards? Were it so, there would indeed be some excuse for Herbert Spencer's criticism that he is about to fall on his face! Even the scanty literary evidence is conclusive against this arrangement. Lucian, Philostratus, and Statius all emphasize the follow through of the *diskobolos*. As the diskos swings down the left leg must inevitably be advanced, and a platform which prevents such a movement not only renders a good throw impossible, but, being fatal to all freedom and grace of action, is absolutely un-Greek.⁴⁴

The throw was measured from the front line of the *βαλβίς* to the place where the diskos fell. That the competitor might not overstep the line in throwing the diskos or the javelin is obvious, and in the case of the latter is clearly implied by Pindar's expression *μὴ τέρμα προβάς*,⁴⁵ words which could never have been misinterpreted by anyone with even a superficial knowledge

⁴³ *B.C.H.* 1899, p. 566, l. 32.

⁴⁴ In my criticism of the modern Greek style I rely on the photographs in Chryssaphis's article and on descriptions from eye-witnesses,

especially Mr. G. S. Robertson.

⁴⁵ Eustathius ad Hom. *Od.* viii. 202 p. 1591, 42; *Nem.* vii. 70.

of athletics, except to defend some *a priori* theory. This line, like the jumper's *βατήρ*, is possibly indicated on certain vases by spears stuck in the ground⁴⁶ (Pl. II.). The place where the diskos fell was marked by a peg or arrow, as described by Statius, and on several vases we see a diskobolos putting down or pulling up such a mark.⁴⁷ (Fig. 2.)

In the modern free style the diskos is thrown from a circular area $2\frac{1}{2}$ metres in diameter, and the method of throwing it is a modification of that of throwing the hammer, the thrower's body making either two or three complete turns. Of such a method there is no trace in ancient times, and,

FIG. 2.—R.-F. KYLIKES. (After Jüthner, Fig. 27.)

effective as it undoubtedly is, we may doubt if it would ever have been invented but for the experience acquired in hammer-throwing.

D.—*The Method of Throwing the Diskos. The Evidence.*

It would be tedious and unprofitable to describe and criticize the various schemes elaborated by scholars for throwing the diskos. No branch of Greek athletics has been treated at greater length or with less regard to practice and unfortunately the scheme established by the Greek authorities in the recent Olympic games is no exception. As the defects in these schemes are largely due to a misappreciation of the value of the different classes of evidence, it may be useful briefly to review the evidence.

(1) *Literary.*

The literary evidence is of the scantiest, and practically useless except as confirming the evidence of the monuments. Besides the passage in Philostratus discussed above, we have a few scattered allusions in Lucian and a lengthy description in Statius of a type common in later epics.⁴⁸ In the latter the heroic character of the contest is marked by the vast weight of the

⁴⁶ *B.M. Vases* B 574; Krause *Gymn.* xiv. 49; cp. *J.H.S.* xxiv. p. 186.

⁴⁷ Jüthner *op. cit.* p. 32, Figs. 26, 27; *Coll. Dutoit*, Paris, 1879, 79; Girard *L'Éducation*

Athénienne, f. 23; Pottier *Louvre* 9, 73.

⁴⁸ Lucian *Philopseud.* 18; *Anachars.* 27; *Dialog. Deor.* xiv. 2; Statius *Theb.* vi. 679–712.

diskos. There are various archaeological details with which we are familiar from other sources, but of the actual throw we learn nothing which we could not learn from Myron's statue. The description of Hippomedon throwing the diskos over his head into the air as a preliminary show off has indeed suggested to M. Girard the delightful theory that the Greeks practised not only 'le lancement en longueur' but 'le lancement en haut.'⁴⁹ One wonders how they contrived to measure the height! Jüthner, again, depends chiefly on various poetical expressions for his wonderful theory of the Kreisschwung,⁵⁰ a method of throwing the diskos by whirling the arm round as when one jerks a cricket ball, a feat highly dangerous to performer and spectators, but hardly likely to break records. He is surprised that a method so frequently alluded to in literature finds such scanty support in the monuments! Lastly, it is on the strength of the passage in Philostratus and of Myron's statue that the Greeks have derived ἡ Ἑλληνικὴ δισκοβολία, arguing that because Myron's diskobolos has his right foot forward, the right foot must be kept forward till the completion of the throw, and regardless of the fact that even the literary evidence proves that the left foot was advanced as the diskos swung down. Such theories are highly creditable to the imagination of the authors, and prove conclusively the inadequacy of the literary evidence.

(2) *Monumental.*

Fortunately, the evidence of the monuments is exceptionally rich and varied. The two statues, Myron's Diskobolos (Fig. 18) and the Standing Diskobolos (Figs. 13), often assigned to Naucydes, are of first-rate importance, such works being independent of the accidents which affect the types in the lesser arts. Besides these we have a multitude of vases, bronzes, gems, and coins representing this subject. Their evidence is of very different value. Bronzes often form part of candelabra or serve as handles of vessels, and the figure is therefore modified by practical considerations. The vase painter is influenced by laws of composition or by the shape of the vase space, especially in the interior of kylikes. The same cause operates still more strongly in the case of gems and coins, as we may see by comparing the copies thereon of Myron's statue with the original.⁵¹ Hence, when we come to classifying the types in these objects, we find apparent divergence, often due not to difference in motive, but to differences of material or space, or to the age and style of the artists. The classification is important, because the constant repetition of any motive is fair evidence that the attitude represented is typical of the performance. Again, not only does the style of the artist vary; that of the diskobolos himself must have varied equally. It is inconceivable that the ancient Greek athletes should have been compelled slavishly to imitate the style of a particular performer, or even of a statue. The swing of the diskos must have varied with individual performers as much as the swing of the golf

⁴⁹ *Op. cit.* p. 202.

⁵⁰ *Op. cit.* p. 32.

⁵¹ Furtwängler *Antik. Gemmen* xliv. 26, 27.

club, and we may naturally expect to see these differences of style reflected in art. It has been necessary to dwell on these causes of divergence, because of the tendency of archaeologists to force every attitude represented into one series of movements. It is as though someone utterly ignorant of golf were to try to reconstruct a single swing out of a miscellaneous collection of photographs or drawings of various golfers playing various shots and a few medals or prizes bearing conventional representations of the game. At the same time, though we must expect to find variety in style, we shall find, I believe, that the general principle of the throw is always the same.

E.—*Typical Positions.*

The scheme generally accepted in England till recently is based on the two statues. It distinguishes three stages :

(1) The thrower takes up the position of the Standing Diskobolos, right foot in front, the diskos in his left hand (Fig. 13).

(2) He swings the diskos forward and as it rises grasps it firmly with his right hand, a position commonly represented on vases (Fig. 3).

FIG. 3.—R.-F. KYLIX. B.M.C.E. 6.

(3) He swings the diskos downwards and backwards in the right hand, turning head and body to the right, till at the end of the backward swing he is in the position represented by Myron (Fig. 18).

In this extremely simple scheme the right foot is the pivot on which the whole body swings. This swing of the body round a fixed point is of the essence of the swing of the diskos as of a golf club. The force comes not from the arms, which merely connect the body and the weight, but from the lift of the thighs and swing of the body. Kietz⁵² in his criticism of Six's scheme⁵³ describes the upward swing in the left hand as useless, because the

⁵² *Op. cit.* pp. 84, 85.

⁵³ *Gaz. Arch.* 1888, p. 291.

diskos is thrown by the right hand, not the left. Such criticism shows a complete misunderstanding of the whole theory of the swing, in which the arms are less important than body and legs. The scheme as far as it goes would be quite satisfactory, were it not that it fails to account for the very large number of vase paintings where the diskobolos is shown with the left foot advanced. The same criticism applies to Jüthner's scheme.

Besides the positions of the two statues, there are two other positions, of such frequent occurrence on vases and on bronzes that we feel sure that they belong to the ordinary method of throwing the diskos.

(1) The diskobolos holds the diskos in front of him in both hands (Figs. 3, 4, 5, 16, Pl. II.).

(2) He holds the diskos flat in the right hand, which is turned out so that the diskos rests on the forearm (Figs. 6, 7, 8, 9, 10, Pls. I., III.). The left hand is usually raised above the head.

Let us examine these two types, paying especial attention to the position of the feet, a detail of supreme importance, which has however been unduly neglected by nearly all writers on the subject.

(1) *Diskos held to the front in both hands.*

There can be no doubt as to the moment represented in this type: it is the moment immediately before the diskos is swung back in the right hand. If the right foot were always advanced, there would be no difficulty, this position being the natural link between the positions of the two statues. In a certain number of vases this is the case,⁵⁴ but in a far greater number we find the left foot advanced (Fig. 4). Now the position of the feet cannot be due to accident or carelessness, for the uniformity of other details is remarkable. The advanced leg is always straight or nearly so, the other leg more or less bent. The right hand always grasps the diskos, the left hand merely supports it. This position of the hands is invariable.⁵⁵ Kietz, indeed, mentions a kylix where the position of the hands is reversed; but the figure there depicted has nothing to do with the actual throw.⁵⁶ It is true he holds the diskos to the front with both hands; but he is standing at ease, with both feet together, and even has his himation thrown over his shoulder! Seeing, then, that the artists show such care and accuracy in depicting the position of the hands and other details, we cannot dismiss as accidental the fact that in so many instances the left foot is advanced, while in both the statues the right foot is in front. The difference cannot be that between a right-handed

⁵⁴ Right foot in front, Gerh. *A. V.* 259, 260 (b.-f. vases); *Mus. Chius.* ii. t. 196 (r.-f. kylix); *B. M. Vases* E 6 (r.-f. kylix). Left foot in front. *Arch. Zeit.* 1878, 11, 1879, 4; *Ann. d. I.* 1846, 4. M.; Gerh. *A. V.* 39, 294; *Ant. Bild.* i. 4, 68; d'Hancarville i. 63; *B. M. Vases* B 142, 326, 361, 576, 691, E 288; *Mus. Greg.* lii. 1 a, 4, lviii. 1, lxx. 2 a, *Bibliothèque Nationale*, 354.

⁵⁵ Cp. vases where I do not know the

position of feet. *Schöne Mus. Bocchi* 1 (a fragment of kylix), r.-f. krater, Naples 3084, r.-f. kylix, Munich, 803; r.-f. hydria, Munich, 377; r.-f. amphora, Hermitage, St. Petersburg 1669; r.-f. fragment, Berlin 4041.

This very incomplete list will give some idea of the frequency of this type.

⁵⁶ *Mus. Chius.* ii. 195; Kietz *op. cit.* p. 75.

and left-handed throw, for, apart from the absence of any other evidence for the use of the left hand, the position of the hands, the right hand firmly grasping, the left merely supporting the diskos, proves conclusively that the diskos is to be thrown with the right. We are forced to conclude, therefore, that as the diskos swings forward in the left hand the left foot is advanced, and of this we shall find further evidence when we come to consider this forward swing.

How then does the diskobolos pass from this position with the left foot forward to the position of Myron's statue? The change of feet may be effected in two ways—either by making another step forward with the right

FIG. 4.—B.-F. KELEBE. B.M. E 361.

foot, or by drawing back the left foot. The former was the method adopted by some performers in the Olympic games of 1896. Starting with the left foot forward, the thrower raised the diskos in both hands to a level with the shoulders, and at the moment of swinging it back advanced the right foot, stepping forward again with the left foot as the diskos swung forward for the throw. This method requires room for three steps forward, the impetus being helped by this forward movement. The other method requires room for only one step, and the pendulum-like swing of

the left leg, first forward, then back, and finally forward again, seems at least equally effective as helping the swing of the body, like the preliminary waggle of a golf club.⁵⁷ Both methods are, of course, incompatible with the *balbis* of the last Olympic games. Both are equally effective, and

FIG. 5.—R.-F. KRATER.
(After Hartwig, Fig. 56 a.)

possibly both were employed. A few of the vases are in favour of the forward step,⁵⁸ but the strong inclination of the body backwards in most of the figures is in favour of the backward step. Particularly convincing is the attitude shown on a r.-f. krater of Amasis (Fig. 5). The *diskobolos* is represented three-quarter face, a position which has greatly troubled the artist: he holds the *diskos* before him in both hands, resting his weight on his right foot, while the advanced left foot barely touches the ground. The drawing is careless in some respects, the athlete, for example, having two right hands, but the balance of the body clearly indicates that the left foot must be moved backwards. A B.M. hydria B. 326, published in Marquardt's *Pentathlon*, Pl. II., carries the movement a step farther. The left hand is already releasing the *diskos*, and the left foot is raised well

off the ground. These two vases seem conclusive for the backward movement of the left foot.

(2) *Diskos flat in the right hand.*

The second typical position of the *diskobolos* is with the *diskos* slightly in front of the body in the right hand, which is turned outwards so that the *diskos* rests flat against the forearm. The left arm is usually raised above the head, or in a few cases it is stretched to the front. The right foot is usually advanced. The attitude of the body varies greatly, from the stiff upright position of certain bronzes to the stooping attitude depicted in the interior of a r.-f. kylix ascribed to Euphronius (Fig. 9). This difference of attitude seems at first sight to favour Kietz's view that we have here two distinct types, one in which the body is practically at rest and the performer is merely feeling the weight of the *diskos* by a short preliminary swing, the other forming part of the actual swing. But a consideration of the various classes of monuments leads rather to the conclusion that the position of the arms is the essential point, and that the variation in the pose of the body is due rather to the limitations of the early artists.

The type occurs in a number of bronzes, mostly archaic and of the class

⁵⁷ This movement of the left leg is part of the scheme prepared by Six, the only fault of which is the endeavour to include too many

types in one series.

⁵⁸ E.g. B.M. Vases E 393, 395.

formerly described as Etruscan.⁵⁹ The diskobolos on the cover of a bronze lebes in the B.M. (Fig. 6) is an imitation, possibly by an Etruscan artist, of

FIG. 6.—DISKOBOLOS ON BRONZE LEBES. B.M. 559.

⁵⁹ Reinach *Répertoire* ii. 544, 3, 4, 5; *Arch. Anz.* 1904, p. 36, Fig. 8; *Ann. d. I.* 1879, p. 133, No. 5 (= Kietz, Fig. 2); *B.M. Bronzes*, 502; Munich Antiquarium, 128; *Burlington*

F. A. Club Catalogue, 1903, Pl. I. 38 a, b. A similar type is found on the coins of Abdera, Kietz, Fig. 4.

the Greek archaic type, the general features of which it reproduces, though it shows none of the promise of true archaic art. The stiff attitude with the feet only slightly apart and the body upright, an attitude which at first sight seems incompatible with vigorous action, is characteristic of early bronzes. But what is the meaning of the uplifted left hand, unless it is to balance the body? And why should the body need this assistance unless the diskos is being vigorously swung? It seems as if the artists could reproduce the position of the arms and legs, but not that of the body, in action, a fact which should not surprise us when we remember that even Myron in his diskobolos has not completely overcome this difficulty. This view is confirmed by comparison with similar but finer Attic bronzes of the fifth century, where the stiffness has disappeared and the attitude is full of action and vigour. An excellent example of this is the beautiful little bronze

FIG. 7.—FIFTH CENTURY
BRONZE.

(After Burlington Fine Arts
Club, 1903, Pl. L.)

exhibited at the Burlington Fine Arts Club in 1903, to the graceful vigour of which our illustration does not do justice (Fig. 7). Here the right foot is well advanced, the right knee is bent, and the weight, as in Myron's statue, rests entirely on the right leg, the left foot touching the ground only with the toes. Another interesting bronze is figured in the Catalogue of the Forman Collection, No. 77.⁶⁰ The left arm instead of being raised is extended horizontally sideways, a variation very similar to one which we shall find represented on the vases.

In these bronzes the right leg is usually advanced, but here, as in the vases, we find a few exceptions with the other leg in front.⁶¹ There are also several bronzes representing a youth holding a diskos in either right or left hand, but not expressing any definite action.⁶²

The stiff, upright type is found also on certain black-figured vessels; for example, on the British Museum Panathenaic vase B 143.⁶³ Kietz excludes such vases from his consideration, on the ground that the figures are depicted in a sort of procession. But despite the processional character which is common to many early vases, the attitudes of all the athletes are distinctive of their particular performances: the jumper swings his halteres, the spear-thrower poises his spear, and the diskobolos, with his large white diskos flat in his right hand and his left hand uplifted, is identical in type with the diskobolos of the bronzes. At the same time, the processional character may account for the fact that he, like all the other figures in the

⁶⁰ Reinach, *op. cit.* iii. 153, 6.

⁶¹ *ib.* iii. 153, 5 (according to Reinach, identical with ii. 544, 5, but this is apparently an error, or else the drawings are wrong, as the position of the legs is reversed); B.M. 504, 559.

⁶² Reinach, *op. cit.* ii. 544, 6, 7, 9; 545, 1, 2, 4; 814, 4.

⁶³ Jüthner, *op. cit.*, Fig. 44; *J.H.S.* vol. i. Pl. VIII.

procession, has the left foot advanced. The very similar figure on the B.M. vase B 271 (Pl. I.) has the right foot foremost.⁶⁴ A very conventional treatment of the same type is seen on a r.-f. amphora in the Lambert Collection, reproduced by de Witte, Pl. xxiv. The artist has attempted to represent a diskobolos three-quarter face: the exaggerated treatment of the muscles and the affected pose give the figure an archaistic appearance, and de Witte therefore considers the vase the work of an Italian imitator. I know of no examples of the upright type on the red-figured vases, except perhaps a r.-f. amphora in Munich,⁶⁵ on which are two groups of three figures, diskoboloi and akontistai. Of these only the central figure in either group represents action. The diskobolos holds a diskos slightly to the front, flat in his right hand; his body is carefully balanced, leaning slightly backwards, with the weight on the left foot, which is behind, but the left arm instead of being raised is held by the side, bent at the elbow.

Just as we saw in the bronzes the archaic type, where the motive is obscured by the stiffness, passing into a freer, more vigorous type where the motive cannot possibly be mistaken, so it is with the vases; and the connecting link is furnished by the diskobolos on a b.-f. tripod from Tanagra, now in Berlin⁶⁶ (Fig. 8). The artist's intention of expressing vigorous action is obvious. The bearded athlete strides forward with his right leg, holding a thick white diskos in his right hand well in front of the body, the left hand being raised as usual. In its stiffness and angularity the figure resembles the archaic bronzes; in its movement it suggests the beautiful figure in the centre of the kylix in the Bourguignon collection at Naples, to which I have already referred (Fig. 9). Every line and curve in this latter figure denotes action, though I fancy the artist has somewhat exaggerated the stoop of the body to suit the circular space.

FIG. 8.—B.-F. TRIPOD. BERLIN. 1727.

The angle of the body naturally varies greatly; sometimes it is inclined forward, sometimes upright, sometimes thrown well back. This latter position is represented on a r.-f. kylix published by Noël des Vergers, Pl. xxxvii., and also on the outside of the Bourguignon kylix mentioned above (Fig. 10). In the first of these the left foot is advanced; in the second the left arm instead of being raised above the head is stretched well to the front, still, however, with the intention of balancing the body. We find the same position of the arms on two r.-f. pelikai in the British Museum E 393, 395 (Pl. III.). In both the diskobolos appears to be taking a step forward with the right foot, but in the one the body is upright, in the other it is stooping.

⁶⁴ So too has the diskobolos on a vase figured by Tischbein i. 54 (Krause xiii. 44), of which I can find no particulars. He has his right arm bent at the elbow, and the whole attitude is supple and vigorous.

⁶⁵ Munich, 408; Furtwängler - Reichhold, Pl. XLV.

⁶⁶ *Berlin Vas.* 1727; *Arch. Zeit.* 1881, Pl. III.

If then we are right in assuming that, in spite of variations, the motive of all these bronzes and vases is the same, the essential points being the use

FIG. 9.—R.-F. KYLIX. NAPLES. (After *Arch. Zeit.* 1884, Pl. XVI.)

of the unemployed hand to balance the body and the position of the hand which holds the diskos, it remains to consider what this motive is. We may

FIG. 10.—(From exterior of Fig. 9.)

dismiss at once the delightful suggestion of Girard that the diskobolos amused himself by throwing the diskos up in the air and catching it, and that this is the motive here represented.⁶⁷ We may also dismiss Kietz's suggestion that in those cases where a swing is clearly indicated the diskobolos is swinging the diskos backwards and forwards in the right hand in order to make the muscles supple. This idea fails to explain why the right hand is turned outwards, and is based on the mistaken idea that the throw of the diskos depends chiefly on the swing of the right arm and not on the body swing. Jüthner, again, imagines that the diskos is being swung to the front in the right hand, and he therefore places this movement previous to the position with the diskos in both hands. But this view is open to the same objection as Kietz's scheme: there is no danger of the diskos slipping, and the outward turn of the right hand is pointless. It is not only pointless, it is unnatural; for every gymnast knows how difficult it is to raise a weight

⁶⁷ *Loc. cit.* p. 202.

to the front with the hand turned out, and we may be sure that, in an exercise depending for its success on the smooth and harmonious working of all the muscles, any such constrained and awkward movement would have been avoided. On the other hand, if the movement represented is a downward swing from the two-handed position to the position of Myron's statue, all difficulties vanish. This downward swing must have been a very vigorous movement, in which the diskos might easily slip. Hence the outward turn of the right hand to prevent slipping, and the use of the left hand to preserve the balance. Hence too the fact that in nearly every case the right leg is advanced.

This view of the relation between the two types is confirmed by a most interesting bronze in the British Museum (Fig. 11), which represents the moment of transition.⁶⁸ The diskobolos stands with right foot advanced and both hands holding the diskos, which instead of being upright rests flat on the palm of the right hand, while the left hand only touches it lightly and is on the point of letting go. We may notice, however, that the thumb of the left hand is turned inwards, whereas in the vases it is as a rule on the outside of the diskos. The same peculiarity is noticeable in a bronze in the Museum at Athens,⁶⁹ where the diskos is held in both hands high above the head. This position could not be reached if the diskos were swung to the front in the left hand from the position of the standing diskobolos. If, however, the diskobolos takes up his stand holding the diskos in the left hand level with the shoulder, and then, grasping it with the right hand, raises it to arm's length, we reach the exact position represented in the bronzes. The attitude is indeed depicted on several vases, the diskos being sometimes held close to the head,⁷⁰ sometimes extended to the front.⁷¹ Variations of the motive occur where the diskos is held thus on the right hand⁷² or rests on the shoulder,⁷³ and in such figures there can be no connexion with the actual throw, but the position of the hand in the bronzes forces us to suppose a previous position with the diskos raised thus in the left hand. The position is well shown on a lekythos from Eretria, published in the *Ephemeris* for 1886 (Fig. 12) though, as Mr. Bosanquet points out to me, it is doubtful if this particular vase represents a stage in the throw, the stool with the clothes upon it rather indicating that the youth is leaving the

⁶⁸ *B.M. Bronzes* 675; Murray *Greek Sculpture* i. p. 274. Perhaps the same moment is represented on the *B.M. kylix* E 96, where the right hand grasps the diskos as usual, while the left, instead of supporting it underneath, rests flat on the surface.

⁶⁹ No. 7412, Chryssaphis *op. cit.*, Fig. 2. Though the surface is much corroded, it is of fine and vigorous workmanship. It will be shortly published in the catalogue of the Athenian bronzes by the Ephor M. Stais, who has kindly sent me through Mr. Dawkins a

photograph of it. On a *B.M. gem*, 1817, the diskobolos holds the diskos high above the head in both hands.

⁷⁰ Gerh. *A.V.* 272; *B.M. Vases*, E 256. Cp. relief on Athenian stele, Sybel *Weltgeschichte der Kunst*, p. 107; Murray *Greek Sculpture* i. p. 133.

⁷¹ R.-f. amphorae, Munich, 1, 9 = Kietz *op. cit.*, Figs. 6, 7; 'Εφ. 'Αρχ. 1886, Pl. IV; *B.M. Vases*, E 96.

⁷² Gerh. *A.V.* 22.

⁷³ *B.M. Vases*, B 136.

dressing-room, perhaps calling to a companion to come on. Here then we have an alternative position to that of the Standing Diskobolos.

FIG. 11.—BRONZE IN THE BRITISH MUSEUM (675).

One difficulty remains. As we have seen, the normal position of the first type, with the diskos in both hands, shows the left foot forward; the normal position of the second type, with the diskos flat in the right hand, shows the right foot forward. The transition is made either by advancing the right foot or, more probably, by drawing back the left. There are, however, exceptions. Sometimes the right foot is to the front in the first type, occasionally the left foot in the second type.⁷⁴ Though such variations may possibly be due to the artist's carelessness, the care shown in other details renders it more probable that they are due to variations in the style of throwing. For example, a diskobolos starting with the right foot forward

FIG. 12.—LEKYTHOS FROM ERETRIA. (From 'Εφ. 'Αρχ. 1886.)

might prefer to reach the forward position without advancing the left foot. Or again, supposing he does advance the left foot, and supposing that to reach the position of Myron's statue he has to draw back the left foot, this movement of the foot may take place at various times. He may let go the diskos with the left hand first, in which case we have the diskos swinging back in the right hand and the left leg still advanced. If, however, he drew back the left leg first, he would for a moment still be holding the diskos in both hands, but the right leg would be advanced, and it is noticeable that

⁷⁴ *V. supra* pp. 14, 18.

in vases which do show this attitude the left foot rests very lightly on the ground, and the body is slightly inclined forward. The precise moment at which the change took place would be just one of those details in which we might expect to find a difference in style.

It has been necessary to discuss these types at length, because they establish the two important principles, that the diskobolos changed the position of his feet in different parts of the swing, and that there was considerable variation in the style of throwing. At the same time, there are certain typical positions which we may regard as fixed: the position with the diskos in both hands, the swing back in the right hand, and Myron's diskobolos. Bearing these principles and these positions in mind, we may proceed to reconstruct the method of throwing.

F.—*Reconstruction of the Throw.*

(a) *The stand and preliminary movements.*

After first rubbing the diskos with sand⁷⁵ to secure a better grip, the diskobolos takes up his position on the balbis, a space possibly marked out by side lines, certainly by a line in front. At a little distance behind this line he takes his stand, carefully measuring with his eye the space he requires, so as not to overstep the line. This is the precise moment represented in the Standing Diskobolos (Fig. 13), a statue the athletic meaning of which has been so much neglected that one writer has actually proposed to reconstruct it as a Hermes Diskophoros.⁷⁶ The care with which he is planting the right foot, the firm grip which the toes are taking of the ground and the consequent contraction of the muscles of the calf and leg, the slight bend of the body to the right, all indicate that though the weight may for the moment rest on the left leg, it will be immediately transferred to the right. Whether the left leg is kept stationary, or is advanced to the front and then drawn back, the right leg is the pivot on which the swing depends; and on no other hypothesis can the statue be explained. The position is one of rest; but it is the rest which precedes action, and every line of the figure betokens the preparation for action. A point which has never, so far as I know, been duly noticed is the direction of the head and eyes. The diskobolos is not, as is sometimes asserted, looking down the course toward the mark, whatever the mark may be; much less is he taking aim, a part of the performance to which Jüthner and others assign an undue importance in a competition for distance. His head is inclined to the right and somewhat downwards, and his eyes are fixed on the ground a few feet in front. He is, as I have said, mentally measuring the distance to which he may advance the left foot as in the final swing the diskos is swung forward for the throw. For, in spite of the modern Greek authorities, the actual throw must take place off the left foot.

⁷⁵ Statius *loc. cit.*

⁷⁶ G. Habich in *Jahrb.* 1898, p. 57. This

view is refuted by A. Michaelis in the same vol. p. 175.

The right forearm is said to be modern: if so, the restoration is peculiarly happy: the position of the arm is found on certain bronzes which closely resemble the statue,⁷⁷ and the nervous curling of the fingers appropriately suggests alertness and readiness to seize the diskos as it is swung forward in the left hand to the front position. The artist has not merely put a diskos into

FIG. 13.—THE STANDING DISKOBOLOS. VATICAN.

the hand of a youth standing at ease; he has, as we should expect him to do in a work of such importance, selected a truly typical and important position.

Starting then in this position, the thrower may either keep the left leg stationary or step forward with it. In the latter case he will be in the

⁷⁷ Pourtales xiii. 3 = Reinach ii. 545, 3; *Arch. Anz.* 1904, p. 36, n. 7.

position shown on the Pauaetius kylix in Munich (Fig. 14). The left leg is advanced and straight; the weight rests on the right leg, which is bent; the

FIG. 14.—R.-F. KYLIX. MUNICH 795.

body leans forward, and the right hand extended to the front serves to counterbalance the weight of the diskos, which is still held behind the body. Kietz sees in this figure a left-handed diskobolos about to throw—in a most original style! Jüthner sees in him a youth stooping down to fix or take up a peg. But when we compare this figure with others which do undoubtedly represent this motive, we find a fundamental difference in the whole attitude. The 'vorsichtig balancierender Schritt' which Jüthner himself notices is surely not necessary for putting down or pulling up a mark, and the straightness of the extended left leg

would render such an operation quite difficult.⁷⁸ Perhaps we may see the swing forward in a more advanced state, the diskos being now in front

FIG. 15.—R.-F. KYLIX. (From Gerhard *A.V.*)

of the body, on a vase figured by Tischbein iv. 42 and on the B.M. kylix E 58,⁷⁹ but neither attitude is very satisfactory.

The position of the Vatican diskobolos is reproduced, as has been said, in

⁷⁸ A very similar type occurs on the r.-f. kylix in Rome, *Mus. Greg.* lxx. 2, a.

⁷⁹ *J.H.S.* xxiv. 191, Fig. 10.

certain bronzes, but does not, so far as I know, occur on the vases. The latter, however, suggest alternative methods of starting the swing. One of these, where the diskos is held shoulder high in the left hand and then raised above the head in both hands, has been already described. Another method is suggested by vases which show a diskobolos holding the diskos in both hands, but low down and with the arms bent close in to the body⁸⁰ (Pl. II.). From this position it could be swung up in both hands to a level with the head. In this type the left leg is already advanced. The actual swing is perhaps depicted on the r.-f. kylix published in Gerhard *A.V.* 294 (Fig. 15), but it is possible that the position here represented forms part of the

FIG. 16.—(From interior of Fig. 14.)

FIG. 17.—R.-F. KYLIX.
(After Hartwig, Pl. LXIII. 2.)

first method described, coming between the moments represented in Figs. 14 and 16, and that in the other cases we have merely an athlete carrying a diskos.

(b) *The backward swing.*

At the end of the swing forward, the diskobolos holds the diskos extended to the front horizontally in both hands, the body upright or inclined backwards, the weight chiefly on the back foot. If the right foot is in front, no further change of foot is necessary; if the left is in front, either the left foot must be drawn back or the right foot advanced. The latter method does not explain the position with the diskos

⁸⁰ R.-f. kylix in Louvre, figured by Pottier, *viii.* 1; *Mus. Greg.* *lii.* 1, a; *B.M. Vases*, *Doris*, Fig. 6; Gozzadini *di un ant. Nesrop.* B 576.

FIG. 18.—MYRON'S DISKOBOLON. (Rome, Palazzo Lancelotti)
(By permission of Messrs. Methuen and Co.)

in the right hand and the left foot forward; and though there is some evidence for it, most of the monuments are in favour of the drawing back of the left foot. The variations in the swing backward have already been discussed. The diskos is held flat in the hand until it passes the body; at this point the head and body commence to turn to the right, till at the conclusion of the swing the position of Myron's diskobolos is reached. The moment previous is well illustrated (Fig. 17 cf. below, p. 36) on a r.-f. kylix figured by Hartwig. It is difficult to say for certain whether the moment depicted is just before the top of the backward swing, or is the beginning of the forward swing. But though the position of the feet certainly favours the latter hypothesis,⁸¹ the forward inclination of the body and the evident care with which the youth is balancing himself seem to me conclusive for the former view, which is further confirmed by comparison with vases which undoubtedly represent the forward swing.

(c) *The top of the backward swing. Coins of Cos.*

An interesting variation of the top of the swing is represented on a number of coins of Cos belonging to the early part of the fifth century. It has been the fashion to connect this type with a totally different position depicted on a Panathenaic amphora to be discussed later, and to place the moment represented immediately before or after the top of the swing. A few experiments would convince anyone that no one but a contortionist could pass from this position to that of Myron's statue, or *vice versa*, and that such a movement would be fatal to any success. The position of the right hand, with the diskos turned to the front, excludes the theory of Chryssaphis that we have here the beginning of the backward swing. Three points deserve attention: the bend of the leg, the position of the right hand, and the position of the left arm. When we examine a series of these coins we are led at once to the conclusion that the attitude of the body is largely due to the shape of the coin space. This will be obvious from the series published below from the British Museum (Fig. 19). The way in which the body is bent over to the right is manifestly impossible. In Myron's diskobolos the body turns round the hips, but its inclination is forward; here the turn is hardly indicated, and the body is bent to the right. The explanation is, I believe, purely artistic. The maker of the coin die wished to represent a diskobolos at the top of the swing from the front. The difficulty of such a task can be best realised by a glance at Myron's statue from this position. To the artist of the early fifth century the difficulty was insuperable. The amount of foreshortening required to represent the forward bend of the body was far beyond him, and even if it had not been, the success of the result on a coin would have been more than doubtful. Moreover, the circular space had to be appropriately filled. He adopted therefore the obvious expedient of bending the body to the right instead of forward. I am indebted to Mr. G. F. Hill for an admirable illustration of the same process. In various cultus statues the arms were by the

⁸¹ The position of the right foot may be due to a dislike of foreshortening.

side, bent at right angles, with the forearms extended to the front: on coins representing them the forearms are extended not to the front, but to the right and left.⁸² Another illustration is afforded by the manner in which the heads of the horses are turned right and left in a quadriga represented from the front.⁸³ This view is confirmed by the variations which occur on the coins themselves. The more the body is bent sideways, the more it is elongated, while in the more upright figures there is a decided attempt at foreshortening. To the same cause may be due the position of the front foot. The foot is sometimes foreshortened in vase paintings, but the result is often by no means

FIG. 19.—SERIES OF COINS OF COS IN B.M. (Enlarged.)

happy, and the coin maker therefore avoids the difficulty by extending the foot in such a way that the diskobolos appears to be standing on tip-toe.

Coming to the arms and hands, we may remark first that the bending of the right arm noticeable on certain of the coins is clearly due to considerations of space. The position of the diskos, again, may be due to the fact

⁸² *E.g.* Artemis of Ephesus, *B.M.C. Ionia* Magnesia, *ib.* xix. 4, 5, 67.
xiii. 1, 2, 7, 8, 12; Artemis Leukoph at ⁸³ Gerh. *A.V.* 105.

that if represented parallel to the body it would appear from the front merely as a thin line, which on so small an object as a coin would be unrecognisable. It may, however, also be due to a difference in the style of throwing. We have seen that the left hand is sometimes raised above the head in the swing back, and we shall find it still raised in the swing forward as represented in Fig. 21. It is only natural then that it should be raised in the intermediate position. Now a supple, youthful athlete would be always liable to exaggerate the swing, just as the youthful golfer does. In such an exaggerated style the right hand would be raised higher than in Myron's statue, and as it reached the perpendicular would naturally turn outwards so that the diskos would face to the front, while the tendency would be to keep the left hand raised in order to balance the body. I am not saying that such a swing is as effective as that represented by Myron. The artist of the coin was not depicting an ideal, but working from his own experience of what may have been a local fashion. My point is that such an exaggerated style is natural, and my point will be conceded by any one familiar with the differences exhibited by golfers at the top of the swing. Compare, for example, the position of the young St. Andrews player with that of Vardon or Taylor. My conclusion then is that the Coan coins represent a variation of the same moment as that of Myron's statue, modified by the shape of the coin space and the limitations of the artist.

(d) *The throw.*

'The diskobolos,' says Lucian, speaking of Myron's statue, 'seems as if he would straighten himself up at the throw.'⁸⁴ At the beginning of the swing forward the extensor muscles come into play, and by a vigorous lift from the right thigh the whole body is raised and straightened. This momentary but most important movement is finely represented on two vases, a Panathenaic vase in Naples and a b.-f. hydria in the British Museum (Figs. 20 and 21). The attitude depicted is, as far as I know, unique in Greek athletic art, which prefers positions of comparative rest and equilibrium. But here we have a sort of snapshot, an impressionist picture of a momentary position which cannot possibly be maintained. On the Panathenaic vase especially, the thrower seems to be flying from the ground in a way which recalls the figures of Winged Victory so strongly as to suggest the idea that the attitude is borrowed from this type. The position of body, legs, and arms is identical: substitute the victor's wreath for the diskos, and add the wings, and we have the Winged Victory so often represented on athletic vases; and it is certainly appropriate that the artist should borrow from and suggest the figure of victory on a vase

⁸⁴ *Philopseud.* 18. Μῶν τὸν δισκεύοντα, ἦν δ' ἐγώ, φῆς τὸν ἐπικενυφῶτα κατὰ τὸ σχῆμα τῆς ἀφέσεως, ἀπεστραμμένον εἰς τὴν δισκοφόρον, ἡρέμα

ὀκλάζοντα τῷ ἐτέρῳ, ζοικότα συναναστησομένῳ μετὰ τῆς βολῆς;

intended for the prize of victory. The position of the head and right arm lead is similar to that depicted on the coins of Cos. But whereas on the coins the body is bent sideways and the right leg is upright, on the

FIG. 20.—PANATHENAIIC VASE. NAPLES. (After *Bull. Nap.*)

vase the whole figure forms a curve from head to toe, and is overbalanced. On the British Museum hydria the curve is not quite as marked, and

FIG. 21.—R.-F. HYDRIA. B.M. E 164. (After *B.C.H.* 1899.)

the moment shown is slightly later; the two vases illustrate also the two different positions of the left arm which have already been noticed.

A curious variation occurs in an early Athenian lekythos from the Pozzi Collection,⁸⁵ to which Mr. G. F. Hill has called my attention (Fig. 22). The general position closely resembles that which we have been discussing, but the diskos instead of lying along the forearm is turned upwards so as to rest between the fingers and thumb.⁸⁶ The vase painter frequently makes mistakes in drawing hands, and such a mistake is the only possible explanation of our present figure.

Jüthner, identifying the type of the Naples amphora with that of the coins, considers them to represent a distinct method of throwing the diskos, which he calls the *Kreis-schwung*.⁸⁷ He supposes the diskobolos to whirl his arm round from the front, right over his head, and he supports his theory by a variety of poetical quotations. Epeius hurls the solos *διήσας*, Odysseus the diskos *περιστρέψας*; in Pindar Nikeus hurls the stone *χέρα κυκλώσαις*. Even Propertius and Statius are called to witness. It is hardly necessary to point out the obvious appropriateness of these expressions to the ordinary method of throwing the diskos or any other object.

FIG. 22.—ATHENIAN LEKYTHOS. BOULOGNE. (From *Le Musée*.)

To argue that they denote a complete revolution of the arm is the quintessence of pedantry, inexcusable even if the expressions occurred in prose; and it is indeed surprising that Jüthner, whose useful work is generally distinguished by great soundness of judgment, should have allowed himself to be misled by a passage or two of the scholiasts into so unpractical a theory. A light object, easily grasped, might be thrown a certain distance in this way; certainly not a heavy, slippery object like the diskos, much less the ponderous Homeric solos. It is unnecessary to labour the point, especially as the position which we are discussing forms the natural sequel to that of Myron's diskobolos.

I have compared the position to that of the Winged Victory; but the diskobolos has no wings, and unless he recovers his equilibrium by advancing one foot, he must fall forward on the ground. The modern thrower 'in the Hellenic style' does contrive to rid himself of the diskos in this attitude, but the throw inevitably suffers; and there is absolutely no evidence that

⁸⁵ *Le Musée*, Vol. iii, p. 178, Fig. 12.

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⁸⁶ Cp. Figs. 11, 12.

⁸⁷ *Op. cit.* p. 32.

the ancient diskobolos had to throw off the right foot. Indeed, the evidence of literature and art is conclusive for the throw off the left foot, the only rational method of throwing. 'The left foot' says Philostratus, 'must be swung to the front with the right arm,'⁸⁸ and his words are confirmed by the less definite language of Lucian and Statius, and by the vases. A r.-f. kylix at Boulogne⁸⁹ (Fig. 23) shows the early part of

FIG. 23.—R.-F. KYLIX. BOULOGNE.

the movement. And the actual throw is vividly portrayed on a b.-f. hydria in Vienna⁹⁰ (Fig. 24). On both vases the diskobolos strides vigorously forward with his left leg. Elsewhere the motive is more or less obscured, but Six appears to be right in thus explaining the figure of the diskobolos on the Leyden Panathenaic amphora, though the grotesque exaggeration of this vase discredits its evidence.⁹¹ The diskobolos, the jumper, and the spear thrower all appear to be running, an action perhaps introduced by the artist to give more life to the convention of the processional type. If we make allowance for

FIG. 24.—B.-F. HYDRIA.
VIENNA.

this, we find the movements represented are really typical of their respective performances. Possibly we may assign to the same motive the diskobolos on a r.-f. kylix of Corneto, published in the *Mon. d. I. XI. Pl. 24* and also a wall painting reproduced in *Mus. Chius. Pl. cxxvi*. In both these cases the bending of the right arm suggests some doubt as to the action, but this may be a modification due to space limitation, such as we have noticed in the representation of Myron's diskobolos on gems or on the coins of Cos. Of another

wall painting, figured in *Mus. Borbonico*, ix. 52, there can be no doubt. Perhaps a still later moment, just before the diskos quits the right hand, is

⁸⁸ V. supra, p. 9.

⁸⁹ *Le Musée*, Vol. iii, Fig. 32.

⁹⁰ Masner *Mus. für Kunst und Industrie*,

Wien, 318.

⁹¹ *Arch. Zeit.* 1881, Pl. ix.

represented in an exceedingly quaint terracotta found at Smyrna and exhibited at the Burlington Fine Arts Club in 1888.⁹² The exaggerated emaciation of the body and contorted attitude are typical of this class of grotesque. The position is evidently influenced by Myron's statue, but the left foot is advanced and the diskos has already swung to the front.

The so-called bronze diskoboloi of Naples are said to represent the moment after the throw, but this interpretation seems to me impossible, in view of the position of the arms and the alertness and expectancy expressed both by the figures and the heads, and I have no doubt that they are really wrestlers. Moreover, as the diskos leaves the hand the right foot must be again advanced to prevent the thrower from falling forward, and in the bronzes the left foot is advanced. Of this final movement of the follow through we have perhaps a representation in the right-hand athlete in Fig. 23, but as the diskos has already left the hand, it is impossible with certainty to identify the position. Whether in this movement the thrower was allowed to overstep the *balbis* or not, we cannot say.

In palaestra scenes we often see youths carrying a diskos whose position, whether at rest or in motion, has clearly nothing to do with the actual throw; similar types occur also in the bronzes. Some of these have been alluded to, and it would be useless to deal with them in detail. A word, however, may be said as to certain gems, though the evidence of this class of monument has little independent value. The numerous representatives of Myron's statue⁹³ have been already mentioned. Perhaps the influence of this statue may be traced on a Berlin paste No. 4561,⁹⁴ where the diskobolos is apparently on the point of throwing the diskos, which is swinging down in the right hand, still behind the body, while the left arm is swung forward; the body and head are thrown backward, and the right foot is vigorously advanced. Furtwängler describes him as 'im Anlauf begriffen,' and compares him to the diskobolos on the Leyden amphora. The evidence for a preliminary run is non-existent, and I prefer to assign the position of the right leg to the influence of Myron. Another Berlin gem shows a somewhat similar position of the arms, with the left foot in advance. This gem is interesting from the fact that a flaw in the stone was long interpreted as an elevation, or mound, representing the bater or *balbis*, regardless of the fact that it cut off the thrower's left foot. Fortunately we have a duplicate in which the flaw is wanting.⁹⁵ The duplicate has also a peculiarity, in that the diskobolos holds in his left hand a cord, a peculiarity repeated on the B.M. gem 1816. The cord is possibly a boxing thong, but why it should be inserted has not been explained. The close connection between the spear and the diskos renders it more likely that it represents the spear-thrower's ἀγκύλη or amentum. It is curious that such a piece of evidence should have escaped the notice of the advocates of the hole and string theory of the diskos or solos!

⁹² Branteghem Coll. 223.

⁹⁴ *ib.* xliv. 25.

⁹³ Furtwängler *op. cit.* xliv. 26, 27; lxvi. 8;
B.M. Gems, 742.

⁹⁵ *ib.* xliv. 28 (=Krause xiii. c. 54 b), 30.

A summary of our conclusions may be useful.

1. The stance.

- a.* position of standing diskobolos. Fig. 13.
- or *b.* diskos raised in left hand level with the shoulder. Fig. 12.
- or *c.* diskos held in both hands level with waist. Pl. II., Fig. 15.

From these positions, with or without a change of foot, the diskos is swung or raised to

2. Position with left foot forward (usually) and diskos in both hands.

- a.* extended horizontally to the front. Figs. 3, 4, etc.
- b.* raised above the head. Fig. 11.

3. The diskos is swung downwards, resting on the right forearm. Either before or in the course of the swing

- a.* the left foot is drawn back. Fig. 5.
- or *b.* the right foot is advanced (Pl. III.) so that we reach

4. The position of Myron's diskobolos. Fig. 18.

5. At the beginning of the swing forward the body is straightened. Figs. 20, 21.

6. And as the diskos swings down, the left foot is vigorously advanced. Figs. 22, 23.

7. Finally, after the diskos has left the hand, the right foot is again advanced. Fig. 23.

I am again indebted to Mr. Cecil Smith for leave to publish objects in the British Museum. To Messrs. J. L. Myres, R. C. Bosanquet, G. F. Hill, H. B. Walters, and Dr. Zahn my obligations are many. The excellent illustration of Myron's Diskobolos is reproduced by kind permission of Messrs. Methuen from Mr. Walters's recently published 'Greek Art.' Mr. G. S. Robertson has kindly given me the benefit of his experience both as diskobolos and as Hellanodikes in the revived Olympic games, and it was a great satisfaction to me to find that the conclusions which I had arrived at independently from the study of the evidence agreed with those to which he had been led by practice.

The extremely interesting fragment of a Würzburg alabastron on Pl. III. is from a photograph obtained for me by Mr. Bosanquet from Dr. Wolters, which arrived too late for notice in its proper place. The artist has depicted a back view of the position shown in Fig. 17. The legs unfortunately are missing, the light patch visible below the arm being merely a stain on the background. The drawing does not affect any of the views put forward above, but no excuse is needed for the insertion of so original a fragment.

E. NORMAN GARDINER.