POLLEDRARA WARE.

[PLATES VI.—VIII.]

THE contents of the famous 'Grotta of Isis' discovered on the Polledrara¹ estates at Vulci in 1839 have been generally known to archaeologists ever since the publication in 1844 of Micali's *Monumenti Inediti*, where a selection of them is given on Pl. iv.—viii., pp. 37—71. The quality however of the drawings there given is very far from answering the present requirements of study: and an adequate publication of these important remains has long been badly wanted. In the course of last year Professor Victor Horsley had a series of elaborate drawings made of some of the principal objects in the tomb, as a present to Professor Montelius. As the latter did not intend to publish the drawings in their elaborate form, Professor Horsley most kindly arranged with Mr. Murray that some of the more important should be presented to the Hellenic Society; it is thus owing to him that the Society is enabled to put this valuable series of drawings within the reach of scholars.

The drawings here given of the hydria (Pl. 6—7) were made by Mr. F. Anderson, a fact which is in itself a guarantee of their reliability: they show more of the detail of the design than will probably be seen at first sight by any one handling the original: as a matter of fact they represent the results of a considerable amount of patient examination of the vase in every variety of light by different pairs of eyes, which however almost invariably served to confirm Mr. Anderson's results. The colours of the design have worn away, not (as has been stated) because they were not fired: such pigments would not have stood a week unless fired: and even now damping does not injure them: they have faded principally for two reasons: partly because they were laid on a very smooth glazed surface which gave no foothold for the pigment: and partly because the artist at that period evidently was not

¹ The name Polledrara has been loosely applied to this particular tomb, but is misleading, inasmuch as several other important tombs have been found in the same locality (see the map in Gsell, *Fouilles de Vulci*). The term however will perhaps serve as well as any

other to distinguish the peculiar fabric which is the subject of this paper; it goes without saying that its usage does not commit one to a theory of origin any more than the similar usage of the terms 'Mycenaean,' 'Melian' or 'Fikellura' as applied to special fabrics.

well versed in the conditions which govern the fusing quality of colours. In some parts the original colouring is fairly well preserved, sufficiently so at any rate to render it easy to determine the character of the drawing, the colours used, and the method which governed their selection. In other parts the colours have absolutely worn away, and nothing remains but a discoloration of the surface, which varies in tone according to the pigment which has covered it. Moreover the vase has been broken, and the lines of fracture have been painted over by the restorer: in one case (on the right of Fig. 5) a small missing portion has been restored: but these imperfections do not materially affect the design of what is, though not absolutely unique, as yet the principal existing type of an interesting class of vases.

The hydria (Pl. 6, Fig. 1), which stands 17 $\frac{3}{4}$ in. high, is a variety of this form of which I know no other example: it has only the most rudimentary foot, formed by a slight lateral extension of the flattened surface in which the body terminates: it is very broad in proportion to its height, the greatest diameter being below the shoulder, at the side handles, which have a slight upward trend. The clay is not, as might at first sight be supposed, of the typical *Bucchero nero*² kind: though it has the smooth black surface, it is not close-kneaded nor grey all through, but dark reddish brown in colour, and somewhat coarse in texture, with occasional flaws caused by imperfect levigation. The surface is coated with a thin slip of deep lustrous black, which is apparently not vitreous, though very close and smooth, and takes a fine (hand?) polish. In the present case this black tone of the surface is only here and there preserved, the action of fire having altered most of it to a tone which varies from a warm yellow to an ashen grey. On this polished surface the colours of the design were laid and certainly fired: but with varying degrees of success, the red alone being preserved in anything like entirety: of the other colours, the blue in protected parts is fairly well preserved: of the yellowish white there is sufficient (principally on the lower bands of pattern) to render its presence incontestable.

The hydria (Pl. 6, Fig. 1) is very light in proportion to its size, the walls being very much thinner than is usually the case in *Bucchero nero*. The lip and handles show the influence of metal-work: the lip is bounded by a broad vertical band which seems to have been suggested by a thin hoop of metal similarly applied in some bronze original: the back handle (partly broken away) terminates below in a raised ornament in the form of a leaf-shaped palmette inverted, with a volute at each side; from between the volutes a raised rib runs up the centre of the handle; the details of these ornaments are picked out in red, and the eyes of the volutes seem to have been blue. The side handles terminate at each end in a vertical moulding which finishes above and below in disc-shaped knobs: on the handle itself is painted a pattern of lines resembling the arrangement of metopes and triglyphs, with a central dot in each metope: and on the outer edge of the vertical mouldings a row of dots between parallel lines, all in red. Within each of the side

² See Gsell, *loc. cit.* p. 445, note.

handles is painted an elaborate pattern formed of four primitive lotus palmettes set outwards in cruciform around a central wheel-shaped rosette: this is painted red, with a touch here and there of blue. This ornament occurs frequently on Corinthian aryballi.³

On the inside of the lip is a guilloche pattern picked out in red outline against a ground of red. On the neck is a band of single disconnected maeanders, alternately blue and red. On the uppermost part of the shoulder is a band of alternately a lotus flower and lotus bud (both blue within a red outline) connected below by semicircular lines incised and also painted blue: between each flower and bud is a red disk, and above and below each intersection of the incised lines is a blue dot. The body is ornamented in three friezes of about equal width, of which the uppermost (Pl. 7, Fig. 5; Pl. 6, Fig. 2) is the most important. In this frieze the back handle forms the one structural division: in the second frieze it serves a similar purpose, but this frieze is further divided by the side handles, so that the whole of this second frieze is divided into three portions (Pl. 6, Figs. 3 and 4; Pl. 7, Fig. 6). The third frieze is occupied merely with a series of single maeanders, alternately red and blue, each about its own width away from the next. Below each frieze run two thin lines which appear to have been white but may have been blue: below the third frieze is a thick red band, and below this again a thick white band. Lastly, round the base of the body is a series of rays, alternately in red outline and red silhouette, surmounted by a thin red line which joins their points.

At either end of each of the side handles is painted within the frieze the mask of a lion or other animal of the feline race, looking outwards from the handles, drawn at right angles to the frieze: and a similar head, now in very bad preservation, appears to have been drawn behind the back handle, that is, between its lower and upper insertion. These masks are treated in a purely conventional manner which recalls the full faces of lions on the early vases of the Corinthian and Ionian fabrics. The outline, as usual, is red: the main portion was painted in white, the jowl and probably the upper part, between and including the ears, blue: the nose is conventionally rendered by a series of semicircular concentric lines in red. The eye seems to have been first drawn in red outline and then filled in with a wash of red, the pupil painted blue: the eyelashes are drawn as a fringe above and below in a red which stands out in slight relief.

Upper Frieze.—Starting from the right hand side of the upper frieze, the first group (Pl. 7, Fig. 5) represents the myth of Theseus and the Minotaur. First on the right is a chariot drawn to the left by a pair of horses driven by a beardless man in a short chiton, who holds a pair of reins in each hand, and in his right a two-thonged whip. Facing the horses is a large dog seated on its hind quarters with tongue protruding: and over it a bird flies almost vertically downward. On the left, the Minotaur, wearing a short chiton, runs to

³ See Brit. Mus. A 414: *Berlin Cat.* 1047.

right with head *en face*,⁴ and is seized by its right horn by Theseus, who seems to have held horizontally in his right hand a sword (of which now no trace remains) which he probably plunged into the side of the Minotaur: the monster seems to be holding something in his clenched hands which may be either the stone which is frequent in later renderings of this scene, or possibly he may have been grasping the sword of Theseus: Theseus wears a short chiton and, like all the figures, has long hair falling on his shoulders. Behind him stands Ariadne, in a long chiton and a himation which covers the back of her head and is held aside by her left hand, so that it forms a background to her profile: in her right hand she holds the clue, represented as a long thick cord which touches the ground at the left foot of Theseus and rises in a spiral between the legs of the Minotaur. Beside the left foot of the Minotaur a lotus flower on a long stalk springs from the ground, and another beneath the bodies of the horses.

The scene on the left of this is not separated from it by any tectonic division of the field, and therefore might be taken as a continuation of the Minotaur group: it consists however of a series of figures which as a composition may well stand as a separate group, and this is the more probable from the fact that the figure in it next to Ariadne moves in a direction contrary to her own. First on the right come two Centaurs, moving to the left in single file: they are of the transitional Ionic type, with human forelegs, and apparently are beardless: each carries over his shoulder, not the usual pine-tree, but a tree of which the trunk hanging downwards ends in a broad splay, tapering off to a point, and the stem, tapering horizontally over the back, has pairs of leaves and terminates at the top in a bunch of leaves grouped like the petals of a lotus flower. Close behind the shoulders of the Centaur a dead fawn hangs by its forelegs from the stem of the tree: the left arm of the Centaur seems to pass round it. Confronting them are three human figures, one behind the other: the two foremost seem from the character of their dress to be women; the third figure, who has his arms raised, and appears to wear a short chiton, is probably a man, but the design is here too faded to admit of any certain attribution. Beneath the body of the foremost Centaur, and behind the other, a lotus flower springs from the ground: the stalk of this lotus is obliquely striated with thin red lines; it is possible that the other lotus stalks may have been similarly treated, but if so the traces have disappeared: the central petal of this flower is not of the usual form, but resembles the central petal of a palmette. Between the hindlegs of the foremost Centaur is a wheel-shaped rosette: and between those of the other, a smaller lotus flower springs from the ground. Last on the left is (Pl. 6, Fig. 2) a pair of two-horsed chariots like that in Fig. 5, driven towards

⁴ The broad mass on each side of the muzzle is not a 'Kopftuch' as Jahn (*Arch. Beitr.* p. 264, note 25) supposed, nor yet a mane as Wulff (*Zur Theseussage*, p. 4) suggests: it is not easy to understand how a bull can have a mane. It is merely the full-face drawing of the

bull's neck, which, in the usual archaic method, has been reproduced on each side, just as the plume is repeated on each side of the helmeted head in full face (see Murray in *J.H.S.* vol. ii. p. 318).

each other by a youth in a short chiton who holds reins and whip as before: between them stands a figure in a long mantle to left: in the right hand chariot there may have been a second figure now almost wholly faded: beneath the horses of this chariot a lotus bud springs from the ground, curling over to the left so as to fit into the empty space.

As to the relation of these groups to one another, it is difficult to decide in the present condition of the surface. Probably the myth itself (as usual in the earliest representations) is actually concerned only with the three figures, Ariadne, Theseus and the Minotaur: the chariot and dog on the right, and the Centaurs and standing figures and chariots on the left are merely accessories brought in to fill the space. That such juxtaposition of scenes, related or otherwise, was common in early Greek art is obvious: as a case in point may be quoted the Corneto vase with subjects in relief,⁵ which has on adjoining panels Theseus and the Minotaur, and two examples of a Centaur with human forelegs carrying a tree from which hangs a fawn. A similar association of the Minotaur group with a chariot is seen on two of the archaic Corinthian gold reliefs:⁶ and on a third is a choros of women dancing hand in hand, a subject which also recurs on our hydria; even if these particular reliefs did not form part of a connected composition, they at any rate show what kind of repertoire was open to the artist of that date of scenes for selection or for combination. The Corneto vase and the Corinthian gold plaque are already associated by students of mythology⁷ as giving, with our hydria, the three earliest types of the Minotaur myth in art.

Lower Frieze.—Starting again from the right, beside the back handle, the first group (Pl. 6, Fig. 4) represents a chariot like the one above, moving to left, holding two figures, one of whom in a short chiton (Theseus?) holds in each hand a pair of reins, the other (Ariadne?) wears a long mantle: in the background beside the horses stand three women, all of whom are dressed like Ariadne in Fig. 5, and hold their mantle aside from their face with one hand: the one nearest the chariot is turned towards it, the other two look to the left. On the left the ground space is filled with a conventionalized lotus ornament, above which a bird of the eagle kind flies downward to the right.

Next on the left is a choros (Pl. 7, Fig. 6) of six figures, who move to the right, headed by one who plays upon the lyre with a plectrum: the second figure holds up in the left hand a cord, which on the analogy of the first scene must be the clue: we may therefore identify this figure with Ariadne, and the personage with the lyre in that case is certainly Theseus. The whole scene thus stands in close parallel with the group of dancers headed by Theseus with the lyre, and identified by inscriptions, which occurs on the François vase: probably the scene on the interior of the Cachrylion cup (British Museum E 14) is merely a shortened form of the same type. On the François vase the dancers are alternately male and female: here there is apparently no distinction of sex, for all have the same dress, a long chiton

⁵ Furtwängler in *Arch. Zeit.* 1884, p. 107.

⁷ Wulff, *Zur Theseussage*, p. 2.

⁶ *Ibid.* Pl. 8, Figs. 3 and 4.

girt at the waist, excepting Theseus, who wears in addition a short over-tunic hanging nearly to the knees. The dance which, according to Plutarch, was celebrated at Delos, was of an elaborate character intended to suggest the mazes of the labyrinth: in the François vase each dancer merely holds the nearest hand of each neighbour, but here the artist has ingeniously carried out the idea by joining the hands of every alternate figure; since the left hand of Ariadne is occupied with the clue, the dancer adjoining her places her left hand on the left shoulder of Ariadne. As if further to emphasize the connection with the Minotaur scene, the dog is again introduced here, and sits at the head of the procession, looking, as before, to the right. Between Theseus and Ariadne, between the third and fourth dancer, and behind the last dancer is a lotus flower, which rests on a conventionalized double stalk, springing from the ground. Lastly on the left is a winged lion striding to right, with open jaws and teeth showing. The head and mane and the tooth-like marking on the back⁸ seem to have been painted in a separate tone of colour, which can no longer be identified. Between the hind feet a lotus springs from the ground, the flower partly covering the body of the animal. Above its flank, at the top of the design, are traces of what seem to be the capital of a column.

On the left of this side handle, and partly beneath the back handle, is a seated Sphinx (Pl. 6, Fig. 3), an almost exact counterpart of those on the painted slabs from Caere (*J.H.S.* x. pp. 248—9). The function of this figure is probably like that of the Centaurs above, merely decorative.

Technique.—Three colours only are used throughout, a deep purplish red, a creamy yellowish-white, and a deep blue: the white has almost entirely faded, but wherever it has been it consistently leaves a yellowish discoloration of the black surface; the colour is however sufficiently well preserved on parts of the lower ornamental bands to place its quality beyond doubt. Incised lines are very sparsely, and, as it would seem, tentatively employed: they occur, as before stated, in the lotus pattern on the neck, and are also used for the outline (and sometimes the details) of the chariot wheels in each scene, laid in throughout by means of a compass. The flesh of both sexes is left in red outline, which forms the basis of the design throughout: it is almost certain that the flesh of the women was not painted white, for in Fig. 5 the chiton of Ariadne was undoubtedly white, and it is unlikely that the foot would have been painted white against it: the details of faces, horses' manes, etc., are also indicated in red lines. The colours are applied generally on a system which is designed to afford effective contrast between different surfaces and variety to the whole. In Fig. 5 the dress of the charioteer is blue, the body of the chariot red: both horses are first drawn in red outline and then washed in, the near one in white, the off one in blue. The dog is in red outline, its mask, belly, tail and

⁸ This peculiarity, a kind of mane between the loins and tail, recurs on the Veii wall-painting, Micali, *Mon. Ined.* Pl. 58, Fig. 1,

and on the bronze relief from Perugia, Micali, *Storia*, Pl. 28, Fig. 3: cf. Dümmler in *Röm. Mitth.* 1888, p. 162.

legs blue; its eye and protruding tongue red; the rest of the body may have been white. The Minotaur has the horns left in outline, mane blue, and short chiton (the edges of the sleeves are plainly indicated on the shoulders) probably white: the details of the face seem to have been left in unpainted outline within the red wash. Theseus has blue hair and white chiton: Ariadne has her chiton white with wavy folds in red; of her himation both sides are seen, the outside covering her body, the inside showing where her hand holds it aside from her face: the outside is left in outline alone, the inside is painted in a wash of red with a broad border left in red outline against the black field.

In the remaining scenes these principles of colouring are consistently carried out: the only one which calls for special description is the dance of figures in Fig. 6, where the three colours are applied in such a scheme that each dancer has hair and dress different from those of the dancers on either side: the arrangement is as follows, in order from left to right:

	i.	ii.	iii.	iv.	Ariadne	Theseus
<i>Hair</i>	red	blue	white	red	blue	white
<i>Dress</i>	blue	white	red	blue	white	red

Theseus in this scene as the leader of the choros has the distinction of an additional upper-garment, a sort of diplois, coloured blue. The general effect of the whole vase when the colours were still fresh must have been gaudy in the extreme.

I feel that an apology is due for this minute and I fear very dull description of technical details: I have perpetrated it on the supposition that this hydria is the 'Haupttypus' of an important class about which very little is as yet known, and also in the hope that it may save trouble in future classification: the class can never be an easy one to study, inasmuch as its technical inefficiency renders the designs specially liable to destruction. It is probably owing to the consciousness of this fact that few specimens were made in antiquity. At any rate, among published descriptions of vases I have only been able to identify two other examples which seem to belong to this category, and even these represent a slight variation, inasmuch as they are described as 'Bucchero,' whereas we have seen that the true 'Polledrara' fabric is not 'Bucchero nero' proper, as it has a reddish and not a grey clay. From the character and technique of their designs however we are justified in assigning them to this fabric.

Treating the hydria as no. i., they are as follows:—

(ii.) *Berlin Cat.* no. 1543. A trefoil oinochoe (Ht. 0.24 m.) from Orvieto, of the large-bodied Ionian form, with a frieze of figures around the body, painted on the black surface in colours which have very much faded, but of which clear traces of blue and red are preserved. Unfortunately very little of the design can be made out, except that there are human figures with long hair and pointed caps,⁹ and a tripod in red. Furtwängler

⁹ These caps are probably the Etruscan describes may be that which occurs on the terra-cotta slab from Caere, *J.H.S.* vol. x. Pl. vii.

describes it as 'steifer archaisch etruskischer Stil,' and instances the Polledrara hydria: he classes it by itself as group 9 of the *Bucchero fabrics*: but Mr. H. Arnold Tubbs, who some years ago kindly examined it for me, stated that 'the clay is a dull brown, generally neutral: in one place where there is a broad blaze, the clay has a yellowish brown tone. The surface is a highly polished black.'

(iii.) *Bull. dell' Inst.* 1881, p. 167, no. 26 (Helbig). An amphora of 'bucchero nerastro,' Ht. 0·295. Upon each vertical handle are reliefs, a leopard with head *en face*, a lion with head in profile, and a bull, all turned towards the mouth [apparently one above the other, in this order]. Of the bull, which is the nearest to the lower extremity of the handle, only the upper part is given. On the neck is a scale pattern running upwards, incised and outlined red. The body is surrounded with zones, divided from one another, above by ribs in relief, and below by painted bands: these zones are decorated with archaic painted ornaments. 'It would take too long to describe minutely the rich polychromy of this vase, among the colours of which blue, red and yellow predominate.' The reliefs also are painted; the leopards have the masks blue, the bulls' heads and legs are red, with bodies white, and horns blue. Of the same class evidently are two vases in the Louvre, of which I owe to the kindness of Pottier the following description:—

(iv.) *Salle de la Poterie Étrusque*, no. 617. Amphora with flat handles of the style of Nicosthenes, 'Bucchero nero,' greyish-black clay, polished surface: much damaged and mended, Ht. 0·35 m. On each handle, in relief stamped from a mould, a file of three animals (lionesses or panthers?). Traces of vermilion colour occur on these animals, and a double red line surrounds the design on each handle. On the neck a series of ornaments painted in vivid red and white colours, consisting of a band of double spirals and another formed by three rows of dots arranged chequer fashion, among parallel lines: on the shoulder a band of vertical arrow-heads formed by punctured dots, with traces of red: on the body, below two raised mouldings a zigzag line in yellow among red lines: on the foot a larger zigzag pattern in yellow. In certain portions of the body one seems to distinguish a *blue* colour, very pale and much faded.

(v.) *Same Salle*, no. 618, same form, Ht. 0·30. On each handle a stamped subject, 1. a nude man running: traces of vermilion on the legs, arms, and face: 2. (below) a draped woman with a veil on her head, upright before a man who leans with both hands upon a large staff. Vermilion is traceable on the legs, arms, and face of the man, on the legs and face of the woman: clear pale yellow upon the staff and on the border of the woman's mantle. On the other handle, the same details, with colours less well preserved. On the neck, painted decorations as follows: above and below, a band of 'metopes,' *i.e.* parallel horizontal lines joined at regular intervals by vertical ones: in the upper band, the horizontal lines are red, the vertical alternately red and white: in the lower, the horizontal and the vertical are alike white. Between these is a band of red herring-bone above a band of white single dots, among red and white horizontal lines. On the body between the two

moulded bands, a band of zigzag and of herring-bone among lines, yellow and red. No trace of blue visible.

It seems difficult to decide whether yellow and white are both in use, or whether the one is not merely a discoloration of the other; but in any case the general principle of decoration is the same. The provenance of these two vases is unknown; they formed part of the Campana collection, and therefore probably came from Chiusi. No. iii. was found in a large tomb chamber at Caere, which contained two skeletons and a variety of objects, of which Helbig gives a list: they include (5) an alabastron of green 'smalto' (Egyptian porcelain?). (6, 7) Two flat bone spoons, apparently similar in every respect to the one in the Grotta of Isis. (11) A hydria which from its description seems to be of the 'Caeretan' class. (12, 13) Vases of bronze hammered and with the parts nailed together: one is ornamented with bands of raised dots: [several such vases were found in the Grotta of Isis]. (15, 16) Archaic b. f. amphorae with friezes of animals below the design, probably of the Corintho-Attic class. (16) An archaic Attic amphora. Helbig on the evidence of the painted vases in this tomb assigns it to the last decades of the sixth century, but in the light of our present vase chronology he would probably himself agree to place it in the *first* decades of that century. This date coincides well with the chronology usually accepted for the Grotta of Isis: it is clear I think from a comparison of their contents that these two tombs must belong to one and the same civilization, but that the Caere tomb represents a stage slightly later than that of Vulci:¹⁰ at any rate the presence of the two Corintho-Attic b. f. amphorae seems to point to this.

In the Vulci tomb there was also found a scarab of Psammetichus I. whose date was 656—611 B.C., and dangerous though it may be to regard such scarabs as independent evidence of date, we are justified in accepting them as confirmation of pre-existing inference: Mr. Murray has pointed out moreover (*J.H.S.* vol. x. p. 247) that the presence of porcelain objects and ostrich eggs in this tomb is appropriate to a period shortly before 600 B.C., when by favour of that monarch Graeco-Egyptian trade may be supposed to have entered on a new era of prosperity.

The date thus indicated for the Polledrara fabric receives further support when we come to examine the details of style and technique of our vases. Wulff has shown¹¹ that the type of the Minotaur contest here represented is the earliest that has yet come down to us: and that it precedes, probably by a short interval, the archaic gold relief of Corinth, the terracotta relief from Caere, and a very early Chalcidian b. f. vase, all of which he there describes. The association of these four earliest types of the legend, which stand apart from all subsequent known types of it, foreshadows the connection which I shall endeavour to establish, of Corinth, Caere, and Chalcis, with the fabric we are discussing. It is hardly necessary to add that

¹⁰ In an adjoining tomb at Caere, ransacked in antiquity, there was found a sarcophagus like the celebrated Campana one in the British

Museum, and with it the fragments of various Corinthian vases (Helbig, *ibid.* p. 168).

¹¹ *Zur Theseussage*, p. 4 &c.

our type is *a fortiori* considerably earlier than that of the François vase, of which the date is usually assigned to about 570 B.C.

The same result is obtained if we examine the system of decoration. In its outline the Polledrara hydria belongs to a class of vases which are designed specially to afford space for long friezes, and of which the body is therefore extended laterally at the expense of the height: in the seventh century 'Ionian' vases modelled on this principle had found their way over most of the ancient world: their decoration originally consisted of a series of friezes of conventionalized animals, of which the faces and feet are drawn in outline, no incised lines being yet used: the groundwork is filled in with rosettes or with linear ornaments. Gradually the incised line is introduced, the field is freed, and the uppermost frieze of the body is reserved for a design which is not mere decoration: these changes we may regard as taking effect in the last quarter of the seventh century. On the Polledrara hydria we find the most important subject placed on the uppermost frieze; the decorative animals still occur, but their function is merely to eke out the empty spaces in the inherited long frieze: the old ornaments of the horror vacui period have almost wholly disappeared, or are treated as definite organic adjuncts to the scene, not scattered broadcast over the field, but in relative perspective and growing out of the true groundwork of the design: and lastly, though the faces are here drawn in outline, the incised line is already tentatively employed. Allowing for the time which would elapse for such improvements to permeate the various existing fabrics, the period which would best suit these data is the same as that to which the previous considerations also led, viz. about 600 B.C.

The provenance of this fabric has been a question already much discussed. In *Naukratis*, part i. p. 49, I ventured the opinion that it might possibly be referred to Naukratis, and this opinion has been provisionally shared by more than one writer on the subject. A closer study of the examples above described has led me to think differently. We now know that the period to which the Polledrara hydria belongs was marked by a closer communion of artistic ideas between east and west than had previously existed except probably during the Mycenaean period: the reopening of Egypt had led to the dissemination of Greeco-Egyptian trade-products, but it was natural that the principal channels of this intercourse should run through those cities which had contributed to form the Greek colonies in the Delta. Thus it happened that the Egyptizing influences of this period were closely associated with the Ionian traditions of flourishing Asiatic settlements such as Miletus. Dümmler has already shown¹² the complex character of the Ionian influence, part African part Asiatic, in the case of the 'Caeretan' hydriae: the same difficulty in deciding between a fabric imported from such a place as Cyme, and a local fabric strongly influenced from such a quarter, meets us here again. Let us see for a moment what evidence our fabric offers of influences, either Italian or external.

¹² *Röm. Mitth.* 1888, p. 159 foll.

The form of our hydria is as yet unexampled, and its technique, though clearly suggesting an imitation of *Bucchero nero*, is not that of true *Bucchero*. The form of the *Bucchero* hydria is well known, and is altogether slimmer and clumsier than this. Gsell has shown that the true *Bucchero nero* comes into Italian tombs for the first time apparently at about 600 B.C.:¹³ it seems to me that our vase is the result of an Italian attempt to imitate this new *Bucchero* technique on a form borrowed from elsewhere.

The hydria, contrary to most Greek forms, has no prototype in either the Mycenaean or Dipylon fabrics. The earliest instances of its occurrence at present known are among the Ionian fabrics of the first part of the sixth century, at Daphnae, and in the Caeretan and Chalcidian styles. Another early example is *British Museum Cat.* B 58 from Caere, which was formerly referred to Cyrene, but which is more probably of local Italian manufacture: it is clumsier in outline than the others, and approximates rather to that later adopted in the *Bucchero nero*. Otherwise all these hydriae are of the same general form as that of Polledrara. The Caeretan are usually of this large size and have the swelling body: but the nearest resemblance is offered by a Chalcidian vase, *British Museum* B 75, which not only has the metallic hoopformed lip, but has also the moulded palmette at the lower insertion of the back handle: this vase is in a developed b.f. style, and is therefore probably later than ours: but on the other hand it is a Chalcidian vase (Rayet in *Gazette Arch.* 1884, Pl. 1, 2) which first gives us the fully developed type of the Minotaur legend, with the choros of youths and maidens which we have on the Polledrara hydria also. The Chalcidian and Caeretan fabrics are alike in presenting the general Ionian characteristics, of which the introduction of the lotus bud springing from the ground is one: on the Caeretan hydriae we have the same method of arrangement, the principal scene occupying a long band on the shoulder, and the body of the vase cut in two as it were horizontally by a band of pattern nearly as broad as the principal frieze: the hawk or eagle flying perpendicularly downwards in the field is also common to those hydriae and our vase, and is also found on terracotta reliefs of local Italian fabric of this period (*Gazette Arch.* 1883, Pl. 49). Since however in the Caeretan fabric the incised line is already in regular use, it is probable that those vases also must be of later date than the Grotta of Isis.

Perhaps the most striking feature of the fabric is the striving after a polychrome gaudiness of effect, and the employment for this purpose of blue, a colour otherwise unknown in Hellenic pottery before the time of the Athenian white lekythi and vases with gilding of the beginning of the fourth century. Another characteristic of our vase is the indiscriminate usage of these colours, not only for dresses, but also for the hair of human figures. The best parallel in both these respects is perhaps offered by the poros sculptures of the Acropolis excavations at Athens: these sculptures, which probably belong to the early part of the sixth century, are indiscrimin-

¹³ *Loc. cit.* p. 448.

ately coated with colours of which the prevailing tones are red and a deep blue, with occasional touches of yellow: a notable instance of their unnatural selection is the head of Typhon from the pediment, whose hair and beard are coloured a vivid blue. Collignon (*Histoire de Sculp.* p. 213) suggests Oriental influence as an explanation, and finds a parallel in the blue Ammon and green Osiris of Egyptian art. The mummy cases of about 600 B.C. certainly seem to exhibit a peculiar preference for vivid colouring of the hair: and on the whole I think we are justified in regarding these characteristics of our fabric as, directly or indirectly, borrowed from Egypt. To Egypt we must also turn for the explanation of various details in our design: the lotus is so far the leading motive of the decorative repertoire that even the pine-trees of the Centaurs fall under its spell;¹⁴ and the seated dog suggests the jackal which figures in the book of the dead, or the jackal-headed Anubis. The colossal lions' masks are I think due to the same source: the only analogous instance of such a mask similarly employed in Hellenic art is on the scabbard from Vettersfelde,¹⁵ where a mask which looks like a conventionalized form of our lion masks is set at right angles to the two friezes of animals in relief:¹⁶ the objects however of the Vettersfelde find have no relation with our fabric except in so far that they also offer a comparison with early Ionian art. Dümmler (*Arch. Jahrbuch*, vol. 1887, p. 63, note 25) adduces as a parallel instance the introduction of the animals' heads in the field of the Mycenaean gem (Schliemann, *Mycenae* p. 437, Fig. 530); but this seems rather a far cry. Here again I think we shall find the nearest solution in Egypt: in the British Museum there is a series of some seven or eight ivory implements of uncertain use, formed apparently of a thin longitudinal section of a horn, or tusk, and perhaps intended as the handles of flyflaps. The surface is decorated in each case with a frieze of figures in engraved outline, and almost invariably the decoration is terminated at one or both ends with a lion's mask treated exactly as the masks on our hydria, and set at right angles to the direction of the frieze. These ivory objects being light and easily transported may very likely have been extensively circulated in the course of commerce, and may thus have suggested the peculiar use of the lion's mask both at Polledrara and at Vettersfelde.

Graeco-Egyptian art naturally leads us back to Naukratis: and there seems in fact every probability that the products of this city are actually represented in the Grotta of Isis: the scarabs and porcelain objects with their bungled hieroglyphics are strongly suggestive of the Naukratite scarab factory: and the ostrich eggs with their peculiar designs part etched and part coloured and the Greek letters incised on them can hardly be otherwise

¹⁴ The stalks of the lotus in more than one case are drawn as if joined below and at the flower and bulging outwards between: an obviously Egyptian motive, which reappears also in the bone spoon found in the Grotta of Isis.

¹⁵ Furtwängler, *Der Goldfund von Vettersfelde*, Pl. iii. 1.

¹⁶ Wulff (*loc. cit.*) remarks that the lions in the Vettersfelde friezes are drawn like those of our hydria, with the muzzle indicated by a series of concentric curved lines.

explained.¹⁷ On the other hand, although the Naukratis excavations produced specimens of true bucchero nero with traces of colour on the surface (Petrie, *Ibid.* p. 49), no example of this imitated bucchero technique was found either there or at Daphnae: and if any fabric were exported from Naukratis we should expect it to be the specially Naukratite white-faced ware.

There is one centre of early Greek artistic influence which naturally suggests itself in any discussion of early Graeco-Italian fabrics. The influence of Corinth in Etruria in the seventh century, though probably centring in Caere, was certainly not confined to that city. In order to see how much in our hydria is due to Corinthian tradition, we have only to look at the early Corinthian metal work: such for instance as the gold reliefs published in *Arch. Zeit.* 1884, Pl. 8: it was from work like this that the Italian (or Sicilian) vases with bands of relief impressed from cylinders drew their chief inspiration. In these cylinder-impressions we see a parallel to the introduction of the pair of Centaurs with the bent tree over their shoulder in the midst of a scene with which they have no obvious connection:¹⁸ and in the early Corinthian painted plaques we see the same system of drawing the human faces in outline alone and of leaving the flesh of women not distinguished by white colour from that of men (a practice which came very early into use in the Ionian fabrics): it is moreover the Corinthian painters who first indicate the folds of the long chiton by parallel wavy lines in a different colour, and who draw their women with one hand holding the himation aside from the face. Lastly, in the Grotta of Isis there was found a large Corinthian jug of Ionic style and a Corinthian aryballos (Micali, *Mon. Ined.* Pl. v. Figs. 3 A and 5: now lost).

Allowing freely for difference of construction and perhaps a slight difference in date, the nearest analogy to the combination of borrowed elements we have traced in the Polledrara fabric is seen in the large terracotta panels from Caere in the British Museum and Louvre which also have the characteristic red and dotted outlines.¹⁹ From their size and construction it is evident that these panels were not imported, but of local product. In any case, we have in the wall-paintings undoubted evidence showing what was the local style of art: in the Veii paintings (Micali, *Mon. Ined.* Pl. lxviii, Figs. 1—3) many characteristic features recur, such as the seated dog, the elongated animals, the curious marking of the lion already noted, and the decorations of the field (a survival from Mycenaean tradition): the same three colours are applied with the same fantastic desire for variation and contrast: and in the wall-paintings given in Micali, *Storia*, Pl. 67, though they represent a considerably later stage than those of Veii, the same principle of colouring obtains, including even the blue tint of the man's hair. On the whole then, I think the best solution which presents itself for the Polledrara fabric is that it was a local Italian ware, made possibly at Caere

¹⁷ Murray, *Handbook of Archaeology*, p. 56: part of an ostrich egg decorated in the same methods was found at Naukratis, see

Petrie, *Naukratis*, i. Pl. xx., Fig. 15.

¹⁸ Micali, *Storia*, Pl. xx. Figs. 1 and 13.

¹⁹ Murray in *J.H.S.* vol. x. p. 243.

FIG. 1.

FIG. 2.

FIG. 3.

FIG. 4.

W. Gifford, Chronos 18th.

FIG. 5.

FIG. 6.

FIG. 1.

FIG. 2.

RELIEFS FROM POLLEDRARA TOMB.

under the combined influences of Ionian and Naukratian imports acting on an artistic basis principally derived from Corinth.

The Grotta of Isis has furnished another instance which seems to show that the local Italian potters were in fact imitating pottery like that of Naukratis. Although in this tomb no true Naukratian white-faced ware was found, we have one vase from it (Micali, *Mon. Ined.* Pl. v. Fig. 2) which can only have been suggested by that ware: it is a small two-handled cup of the form which was the prototype of the early Ionic kylix and of which many examples, usually decorated with eyes, were found at Naukratis (Petrie, *Ibid.* Pl. x., Fgs. 4—6). It is carefully made of dark red clay with a smooth surface, which has been covered with a black paint on which designs are laid in deep red, yellowish white, and blue: *ht.* 4 in., *diam.* $6\frac{1}{2}$ in. Unfortunately the black has much flaked off, especially on the exterior, owing to imperfection of firing or fusibility, and with it the design has also come away.

Exterior.—Around the offset lip is a band of simple meander between lines, all in white. Below on the shoulder a band of elaborately drawn lotus flowers, also in white: below this is the main frieze. *Obv.* A winged Sphinx between two lions, all moving to right: the body of the Sphinx is white, picked out with black; the lions seem to be drawn in red outline, with a wash of red on the mane. *Rev.* A Sphinx followed by a lion moving to right, both painted in white. In the field are linear patterns like those of Naukratis, such as a swastika with voluted ends, a lozenge with lattice. Within each handle is a large point rosette, of which the centre is red, the outside white. Below, a band of simple key pattern in white: and round the base rays alternately red and white.

Interior.—Lip as outside: below, concentric bands around a large central rosette which has twelve petals alternately red, white, and blue. Next to it is a band of 'triglyph' pattern (cf. the similar pattern on the hydria, *ante*, p. 207) with alternate metopes occupied with a white square or a point rosette in white: then a band of meander of unusual form, of which the main part is red dotted with white,²⁰ with a wavy white thread passing through the interstices: lastly, next the lip, is a band of point rosettes, formed of a large white centre with a red ring in it, surrounded by white disks. All the different bands are separated from each other by white lines.

It is clear that from its technique we may class this as one more specimen (no. iv.) of the Polledrara fabric. The clay is of the same character as the usual Italian 'red ware': the frieze of animals, the lotus pattern and the character of the linear ornaments all point to Naukratis: moreover it is specially at Naukratis that we find vases of this kind with bands of decoration covering both interior and exterior, and especially such ornament as the frieze of large point rosettes.

It would seem from what has preceded that the Polledrara method of decoration, originally applied in Italy to vases imitating the technique of

²⁰ The dotted line also occurs on the handles of the hydria and on the Caere slabs (*J.H.S.* vol. x. p. 250).

Bucchero nero, came to be applied to Bucchero proper. Whether the principle of polychrome painting on Bucchero ever attained any importance outside Italy is at present difficult to determine. Most of this ware as yet found outside Italy, representing a large variety of sites, is unpainted: it is true that some of the fragments from Naukratis inscribed with Lesbian dedications have faint, but unmistakable traces of colour, but in these instances the colour (red) is usually painted within the engraved letters of the inscription, and at any rate does not suggest any independent scheme of ornament.²¹ So far as I know it is only from Rhodes that we have yet got vases resembling the Polledrara style. A trefoil oinochoe of Ionian form in the British Museum, found in Rhodes in 1884, belongs to this category; it is decorated in two, or possibly three colours, of which only a brilliant red (corresponding to the red of our hydria) is well preserved: the patterns on the neck consist of single maeanders within parallel lines: on the shoulder, a lotus flower and bud design, inverted: the central petal of the flower is edged with dots: on the body, single maeanders as before: and below, a band of lotus flower and bud, the flower more calix-form. Two other oinochoae of the same fabric but with the design more faded, were found in the same excavations and are also in the British Museum. The vases are lightly modelled: the clay is reddish in tone, and the surface has a greyish black slip, like that of our hydria: in fact the whole technique is closely analogous to the true Polledrara fabric. Biliotti's diary of excavations shows that this ware was found under conditions very similar to those of the Grotta of Isis, and that it is probably of the same date.²² From a later series of Rhodian tombs we get the true Bucchero nero: in a tomb at Camirus for example was found a kantharos of the characteristic Etruscan heavy form and construction (Gsell, *Fouilles de Vulci*, suppl. Pl. A—B, no. 54, p. 468). If therefore we are correct in assigning the Polledrara ware to an Etruscan origin, it would seem that Rhodes must have imported both Polledrara and Bucchero ware from Italy: when we consider the important position of Rhodes as a centre of commerce, this does not seem an impossible contingency.

Judging from present evidence, the Polledrara ware does not appear to have continued later than the early part of the sixth century B.C. Stephani in *Compte Rendu* 1874, p. 42, describes a series of vases painted with designs in the polychrome on black: from the description these seem to be of Polledrara technique, but from the character of the subjects they must belong to the fourth century: perhaps with the new growth of Italian vase-painting in that century, there may have been a brief revival of this almost forgotten technique.

²¹ The fragments alluded to by Mr. E. Gardner in *Naukratis* ii. p. 47, type J, have of course no real resemblance to Polledrara ware: their designs are painted in white and red on a glaze which is characteristic of Naukratis pot-

tery: they belong more properly to the class described by Six in *Gazette Arch.* 1888, p. 193 and p. 281.

²² *Naukratis* i. p. 49.

Returning now for a moment to the early Italian pottery, I am inclined to agree with Gsell in his conclusion that the *Bucchero nero* was introduced into Italy about the end of the seventh century B.C. Previous to this date there had existed in that country two principal local fabrics of pottery; the primitive handmade greyish brown ware of the class to which the hut-urns belong; and the finer wheelmade, but still primitive red ware or *impasto Italico*. On both these fabrics painted decoration of a rudimentary character had been occasionally employed. The large hut-urn in the British Museum has both on its sides and lid a geometric pattern painted in a whitish red colour which has almost faded: and on a large lebes from Falerii in the same collection a rude design consisting of waterbirds and linear patterns is painted in a white pigment, also faded. The introduction of the *Bucchero nero* brought with it a new system of decoration by means of bands of figures impressed from cylinders, and this system was applied to the red ware as well. The habit of painting the design however still continued. Local artists attempted to imitate first on the red ware, afterwards on the *Bucchero*, friezes suggested by the imported Corinthian and Ionic vases, while adhering still to their own technique. Hence arose a series of vases decorated in the same methods as that of the wall-paintings. The Grotta of Isis contained a specimen of this ware in the large diota (Micali, *Mon. Ined.* Pl. v., Fig. 1). This is decorated with two friezes of animals moving to right, including reindeer, lions with protruding tongue, sphinxes, horses, and an ibex: in the field are rude palmettes. In the upper frieze is drawn an archaic ship (figured in Torr, *Ancient Ships*, Pl. 3, fig. 12). These animals have the faces drawn in red outline, the bodies in particoloured silhouette, which is sometimes spotted (like the animals on the Veii wall-paintings) with yellowish white. The chief bands of pattern are a rude cable, a strip of crossed lines, and below, a series of concentric semicircles. A similar diota exists in the Louvre (*Salle des Vases de style Corinthien*, Case B. no. 660), and has also a ship among animals, between bands of cable pattern: but the style appears to be later than ours, and it has occasional incised lines. A still later stage of the same fabric is shown by the two vases published in *Gazette Arch.* 1881—2, Pl. 28—9, 32—4. Both were found at Caere: they are of the usual Etruscan red-brown ware, on which the designs are painted, apparently in yellowish white and red: unfortunately the prints are too defective to enable one to ascertain definitely the technique: but the general character corresponds with our diota, while the ornament, the crossed lines and the simple cable pattern are all characteristic of the style in question. One of these vases is a pot (marmite, chytra) on roughly modelled legs, similar to *Mus. Greg.* ii., Pl. 100, Fig. 8 (which seems to be of the same fabric): the other is a cup on a circular foot: the buttons on the sides of one and lid of the other are suggestive of *Bucchero*: both are purely Italian forms. But the most conclusive evidence of their local manufacture is the occurrence on the pot of an Etruscan inscription, which somewhat recalls the Aristonophos vase and the Italiot hydria in the British Museum, B 60, and in point of date seems to stand between them: on the reverse is a man in a chariot attacked by a

lion, a scene obviously suggestive of Mesopotamian influence. The pot has three distinct scenes, two lions confronted, the birth of Athene, and the Calydonian boar, and seems to suggest the influence of the so-called Corintho-Attic amphorae. It seems to belong to the first quarter of the sixth century: in that case the diota of the Grotta of Isis, the earliest of the series, would date from shortly before 600 B.C.

It would seem therefore that this painted red ware went on being made in Etruria side by side with the Polledrara fabric, each probably reflecting the successive phases of foreign influence brought to bear on Etruria. Towards the middle of the sixth century, the fine b.f. vases began to pour in, and must have been the cause of the extinction (for a time at any rate) of both classes; the painted red ware on the one hand gave way to the orthodox b.f. style: the Polledrara succumbed to its inherent difficulties, and henceforward Italian *Bucchero nero* was unpainted, and probably received but little figured decoration either stamped or moulded.

To sum up, the conclusions to which the preceding remarks seem to point are as follows:—

(i.) Polledrara ware includes

(a) Vases of reddish clay with black slip.

(b) True *Bucchero nero*.

both with polychrome decoration (red, white or yellow, perhaps both, and blue) on the black surface.

(ii.) This ware is a local Etruscan fabric of about 600 B.C. and reflects the various influences which at this period were affecting art in Etruria.

(iii.) The series (a) gave way to (b), as *Bucchero* became more common in Italy.

(iv.) The Polledrara ware found in Rhodes is of the (a) series, and may have been imported from Italy.

(v.) The development of Polledrara ware went on *pari passu* with a series of Italian vases painted in similar methods on a red surface (*impasto Italico*).

PLATE VIII.

These two bands (reproduced in full size) form part of the decoration of the bronze 'bust' found in the Grotta of Isis (Micali, *Mon. Ined.*, Pl. vi. Fig. 2). The upper band (Fig. 1) curves outwards so as to fit the hips of the figure: the lower band, as placed at present, comes immediately below. Judging from its present condition, the figure was found in fragments and has been put together in modern times on a core of deal, roughly carved to follow the present form as far as the top of the waist band: from this point upwards the thin sheets of metal seem to have been backed with stiffened paper glued to them. From the head to the lower part of Fig. 1 the bronze is fairly well preserved; Fig. 2 is considerably broken, and the restorer seems to have exercised his imagination upon it: some of the band is wholly destroyed: from that which remains, it is evident that when complete it must have

covered a still larger space than the circumference on which it is now fastened and which is itself too large to fit on to the band above: some of the sheets have been nailed down overlapping others in such a way that portions of the design are hidden [the unshaded outline in Fig. 2 represents an instance of this]. When perfect, it must have included at least six chariot groups and the Sphinx. Under these circumstances I am inclined to think that the bronze represented originally not a bust, but a full-length figure. It is true, as Mr. Murray suggests, that the bust as a form in art was familiar at this period and place, as is seen from the alabaster vases found with it in the Grotta. But in any case it is certain that the artist has modelled the figure (after his lights) as far as the hips: and that point seems to me an unlikely spot at which to break off. It is possible that the bands formed the upper and lower border of a dress; from a comparison with the marble figure from the Grotta, it would seem that the bronze must in that case have been about 25 inches high: this would leave about 1 inches unaccounted for: these were probably represented by a plain sheet of copper, which in the excavations got misplaced or rejected as valueless. In Micali's drawing the 'bust' rests on a square plinth decorated apparently on the upper surface and on the four sides with animals. Micali, p. 53, says 'si ripetono differenti animali.' Unfortunately this plinth has completely disappeared, or it might afford some evidence of the original disposition of the bronze.

The general idea of such a figure, nude to the waist, with broad tightly fastened waistband²³ and decorated skirt, is exactly analogous to the figures on the early Corinthian gold reliefs (*Arch. Zeit.* 1884, Pl. 8, Figs. 2 and 3). It is obvious that it is to such work as this that we must look for the motives which inspired our bronze reliefs. The lion in Fig. 1, the dotted surface of the skins, and the peculiar form of the horses' bits recur in Protokorinthian pottery: the large tail of the animal on the left with decorated end, and the browsing ibex, belong to Asiatic Greek art: the form of cable pattern and the eight-spoked wheel are probably local contributions to the design.

CECIL SMITH.

²³ The waistband is decorated with a simple maeander pattern slightly *repoussé*, in a field which is filled with diagonal notched lines.