

A SANCTUARY AND CEMETERY IN WESTERN CORINTH

(PLATES 1-11)

RECENT investigations at Corinth have brought to light evidence which points to the existence of important architectural monuments and a cemetery of the classical period in the western part of the ancient city. The precise location of the structures and the limits of the cemetery cannot as yet be established; and we can hardly expect additional information except as the result of chance finds. For this reason, and because of the historical and topographical interest of the new discoveries, it has seemed worthwhile to present the limited evidence now at our disposal.

In 1962 the American School of Classical Studies began the investigation of a large system of water tunnels and cisterns in the area popularly known as Anaploga (or Anapnoa), near the church and settlement of Haghioi Anargyroi, some 1000 meters southwest of the ancient Agora of Corinth.¹ Here has been exposed a long underground water supply tunnel; it brought water from some point at the southeast (possibly the ancient source now known by the Turkish name Hadji Mustapha²) toward a small and fertile valley at the northwest, where the water was presumably used for irrigation (Fig. 1).³ The tunnel has been traced over a distance of more than 600 meters; manholes (nos. 1-5, 6, 9, 12-14) occur generally at intervals of approximately 60 meters.⁴ Some of the water which flowed down this tunnel was diverted into at least two subsidiary tunnel cisterns (manholes 1-11 and 3-7-8-10), one collecting shaft (manhole 9-A) and one well (well 2).⁵ The two cisterns have a

¹ In times both of physical absence from Corinth and of physical disability, I was assisted in the excavation by my wife and by Mr. Charles K. Williams. Mr. Williams has advised me extensively on architectural problems and has prepared almost all the drawings. I have profited much from discussions of the ceramic remains with Mrs. Judith Perlzweig Binder and Professor G. Roger Edwards.

Brief notices of the excavations have appeared in: *B.C.H.*, LXXXVII, 1963, pp. 725-726; LXXXVIII, 1964, pp. 703-705, figs. 6-11; XC, 1966, pp. 754-756, fig. 10; *Archaeological Reports* (Soc. for the Promotion of Hellenic Studies), 1962-63, p. 11; 1963-64, p. 7; 1965-66, pp. 6-7, fig. 6; *Δελτ.*, XVIII, 1963, *Χρονικά*, pp. 78-79; XIX, 1964, *Χρονικά*, pp. 100-101, pls. 105, b, 106-108.

² P. A. MacKay, *Hesperia*, XXXVI, 1967, pp. 193-195.

³ No trace of cistern construction could be discovered in the scarp of the valley, where the tunnel emerged, or at a lower level in the valley floor.

⁴ Each stretch of the tunnel, from one manhole to the next, had been dug originally by two teams of miners working simultaneously and progressing toward one another; at several points it can be noted that the juncture of the two tunnel sections was imperfect and created a jog in the line of the tunnel (between manholes 4 and 3, 3 and 2, 1 and 6, 11 and 1, 13 and 14).

⁵ Well 1 was in use in the Geometric period. Its shaft happens to lie tangent to the tunnel, between manholes 1 and 2, but it had no functional connection with the tunnel.

Hesperia, XXXVIII, 1

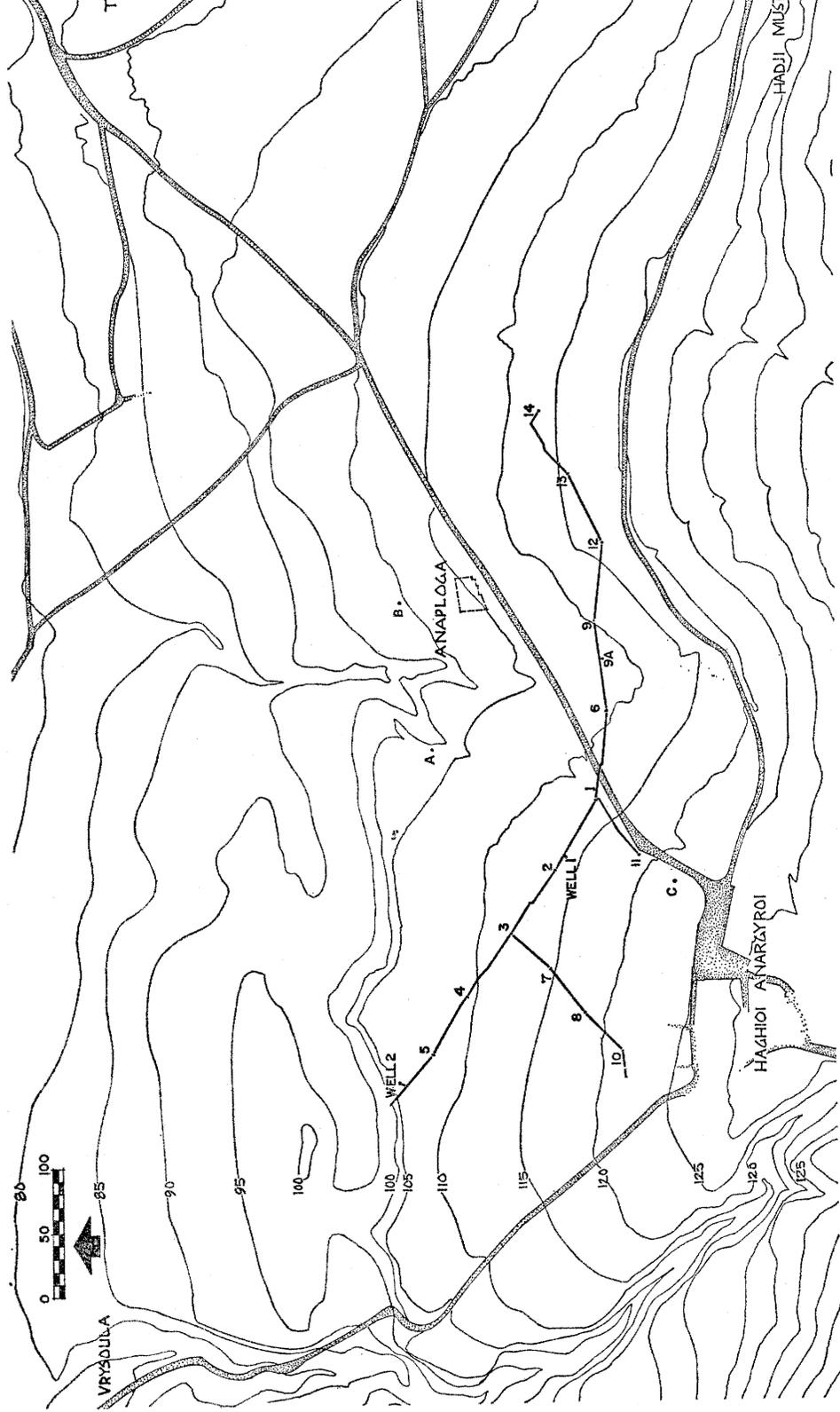


FIG. 1. Ancient Corinth. Map of Northwestern Part of City and Plan of the Anaploga Tunnel System.
 A = Well in Scarp of Ravine; B = Classical and Roman Graves; C = Classical Graves.

combined length of almost 200 meters; the total length of the system so far exposed is thus over 800 meters. Parts of this vast system went out of use in the late 4th century B.C., part at the time of the sack of Corinth by Mummius. The southeastern section seems to have been kept in use as a cistern in Roman times, when the flow of water was blocked by a barrier wall just west of manhole 12. The portion of the system with which I am here concerned is the cistern consisting of manholes 3, 7, 8, and 10 and of the stuccoed tunnel connecting them (Pl. 1). At manhole 3 the floor of the main tunnel lies at 98.84 m. above sea level.⁶ On the southwest side of the manhole shaft a secondary tunnel opens out. This extends 41.60 m. toward the southwest to manhole 7; 43.12 m. further on lies the principal manhole, no. 8; the distance from manhole 8 to no. 10 is 42.00 m.; beyond manhole 10 the tunnel extends a further 13.31 m. and then terminates in a dead end.⁷ The levels of the tunnel floor between manholes 3 and 10 are indicated in Plate 1.⁸ The highest point in the cistern is at manhole 3, the lowest at manhole 10; beyond that manhole the cistern floor rises slightly. The drop in level of the tunnel floor from manhole 3 to 7 is steep (about 1 in 30); further toward the southwest the slope is much less pronounced (1 in 100 between manholes 7 and 8, 1 in 70 between manholes 8 and 10). Whereas in the main tunnel the walls are stuccoed generally to a height of only 0.40-0.50 m. above the floor, in the tunnel leading southwest from manhole 3 the stucco on the walls rises to a much higher and uniform level. From a point 12.50 m. beyond manhole 3 the walls to their full height and the roof of the tunnel are completely covered with water-proof stucco. At manhole 7 the stucco rises within the shaft to a maximum level of 99.41 m. above sea level. At a point about 25.40 m. southwest of manhole 7 the roof of the tunnel rises suddenly and from there slopes up very slightly toward manhole 8;⁹ from this point to manhole 8 and for 20.35 m. beyond 8 the tunnel walls are

⁶ At the bottom of the manhole shaft is a settling basin 0.40 m. deep below the tunnel floor.

⁷ At the extreme southwestern limit of the tunnel a hole appears in the stuccoed end-wall; this hole reveals that, whereas the tunnel is cut in its entirety through hard rock, the barrier which closes the system beyond manhole 10 is a wall constructed of clay. Piercing through this wall we were able to see into another stuccoed tunnel cistern extending off for a distance of about 4.00 m. on a line 16° south of west toward a manhole blocked with earth fill. It appears probable that the further cistern is earlier than that with which we are dealing and that when our cistern was constructed the miners by chance broke through into the earlier tunnel and then built a wall of clay, stuccoed on the east side, to separate the new cistern from the old.

⁸ In general our cleaning of the tunnels extended only two to three meters in each direction beyond the manhole shafts. The earth which had fallen into the manholes usually spread out for a distance of several meters into the tunnels. This fill was removed far enough to enable us to measure the level of the tunnel floor adjacent to the manholes and to permit our passage, over the mud (and occasionally fallen rock) which covered the entire length of the tunnel floor, from one manhole to another. For this reason the line of the tunnel floor as indicated on Plate 1 is restored hypothetically from one to another of the successive measurements taken close to the manholes.

⁹ This offset in the tunnel roof and the similar one between manholes 8 and 10 are probably due to an error on the part of the workmen who dug the manholes and tunnels. One may reasonably assume that in digging manhole 8 (at a point where the starting ground level was some three

stuccoed to a height of only about 1.90 m. (i.e., to a maximum level of 98.93 m. above sea level); the upper part of the walls and the roof were left without stucco. From 20.35 m. beyond manhole 8, where the tunnel roof drops down about 0.50 m., the walls to their full height and the roof of the tunnel are again covered with stucco. At manhole 10 the stucco rises in the shaft to about 98.30 m. above sea level. The section on Plate 1 shows very effectively that so long as any water flowed in the main tunnel at a level sufficient to rise above the barrier between manhole 3 and the tunnel leading to manhole 7, the tunnel cistern would receive a regular water supply and theoretically could be filled to the level of the top of that barrier (*ca.* 99.00 m. above sea level). The tunnel is generally 0.50-0.60 m. wide and (except for the sections immediately adjacent to manhole 8) 1.50-1.60 m. high. We may estimate that the cistern, when full, could hold about 100 cubic meters of water (*ca.* 26,400 gallons). The three manholes which served for the drawing of water (7, 8, 10) may have served as many different households or industrial establishments.¹⁰ We have, of course, no means of ascertaining the normal daily consumption of water per person in classical times; but considering the sanitary conditions of the private houses in the Greek period we may perhaps estimate a maximum of 5 gallons per day per person. If we further assume that a single household may have consisted of twelve persons (free and slave), it will appear probable that the tunnel cistern, once filled, could have provided water for the entire needs of three households over a period of over five months; and since the water presumably ran in the tunnel and replenished the cistern through all but the hottest summer months, we can visualize that the cistern could have supplied quite adequately all the needs of each household using its manholes for the full twelve months of any year of normal rainfall.

The date of construction of this cistern cannot be determined with precision. That portions of it went out of use shortly after the end of the 4th century B.C. is clear; that it served for only a brief period of years is unlikely in view of the magnitude of the whole hydraulic installation of which the cistern is a part.¹¹ There is no

meters above that at manhole 7 and about four and a half meters below that at manhole 10) the miners failed initially to excavate the shaft deep enough; the tunnels leading off in both directions thus had insufficient depth, when united with the tunnels coming in from manholes 7 and 10, to provide the slope needed for draining the water supply southwestward. Under these circumstances the natural solution was to deepen manhole 8 and the tunnels leading toward 7 and 10 until the necessary slope was obtained.

¹⁰ In the sixth century B.C. a potter's kiln existed in this general area; wasters from it found their way into a well-shaft located some 260 meters east of manhole 3. A few meters to the north of that well have been found remains of what was probably a fulling establishment. Well and *fullona* were both excavated in 1962 (*B.C.H.*, LXXXVII, 1963, p. 726; *Δελτ.*, XVIII, 1963, *Χρονικά*, p. 79).

¹¹ Unless some irreparable damage had occurred in the system (of which there is no indication), or unless the water supply upon which the system drew was in some way altered (which seems improbable in view of the fact, noted above, that parts of the main tunnel continued to serve an hydraulic function into early Roman times).

reason to suppose that the system antedates the 4th century. It is possible that after the tunnel cistern ceased to function, the water supply for the area was provided from a large chamber cistern located near manhole 1. This cistern, dug into solid rock only a meter or two below the surface, is not connected in any way with the tunnel system. Its capacity is about two and one half times that of the tunnel cistern. For the chamber cistern a date of construction is provided by potsherds included in the earth filling thrown into a long rock-cut trench after the covered cistern-drain had been laid in the floor of the trench. This pottery is to be dated in the 3rd century B.C. (LOT 1113).¹²

All of the three manholes of our tunnel cistern (7, 8, 10) are oval in plan (no. 8 is about 2.15 m. x 0.70 m.; no. 10 is about 1.80 m. x 0.90 m.; no. 7 is about 1.15 m. x 0.65 m.; the dimensions of all vary from one level to another within a single shaft as a result of changes in the degree of hardness and in the character of the rock through which the shafts have been sunk); they are provided with foot-holds cut into the long sides of the shaft and at vertical intervals of about 0.50 m. All three manholes must have been kept open and accessible at all times;¹³ only manhole 8, however, retains traces of any cuttings on the rock surface around the mouth (Fig. 2). The several channels and two settling basins there exposed are shallow, irregularly cut and without stucco coating; they appear to have been designed to carry water *away* from the manhole and may at one time have had some connection with the stuccoed basin or watering trough found near the bottom of the manhole (see below, No. 15). East of manhole 8, and tangent to settling basin 1, appear quarry cuttings which presumably antedate the manhole and the surface channels near its mouth (Pl. 11, a-b). The channels have not been investigated further from the manhole mouth than is indicated in the plan, Figure 2.

The three manholes of the cistern seem all to have gone out of use at the end of the 4th century or in the early 3rd century B.C.¹⁴ The occasion for the abandonment cannot be ascertained, but it may have been associated with the disturbances resulting from the rivalries of the immediate successors of Alexander over control of the Greek

¹² See Δελτ., XVIII, 1963, Χρονικά, p. 79; B.C.H., LXXXVII, 1963, p. 726. For the system of pottery storage at Corinth by LORS, see *Hesperia*, XXXI, 1962, p. 100, note 7.

¹³ Most of the manholes of the main tunnel (2, 3, 4, 5, 6, 9, 12, 13, 14) seem to have been for service use only and were generally kept covered. Manhole 1 was regularly open; in the rock around its mouth are cuttings for the supports of a windlass.

¹⁴ To this date belong the amphorae, almost complete, found at the bottom of manholes 7 and 8. We must imagine that after the fall of these amphorae the cistern was not again in regular use. Ancient cisterns, as those used in modern times on the Greek islands, must have been cleaned out each fall just before the anticipated autumn rains. Such cleaning would have involved complete drainage (by bailing), washing down of the cistern walls and floor, and a second drainage. That the broken amphorae were not removed in the fall of the year they were dropped into the shaft indicates that regular use and maintenance of the cistern had terminated.

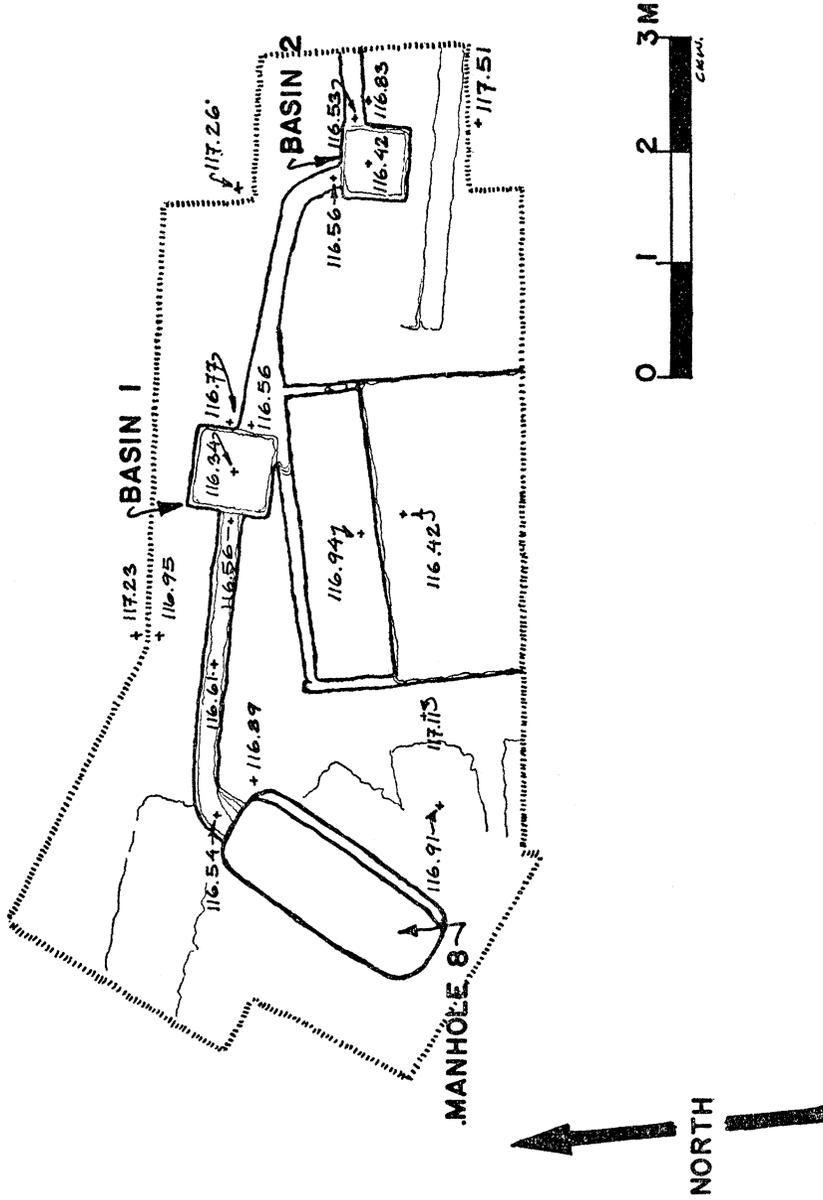


FIG. 2. Manhole 8. Plan of Rock-cuttings at Surface East of Manhole.

part of Alexander's kingdom.¹⁵ At all events, a serious disruption of the human settlement in the vicinity of the cistern must have occurred. The cistern went out of use and into its manholes were thrown many objects whose rejection suggests at least partial abandonment of the public or private buildings near by; the many fragments of architecture (see the catalogue below, Nos. **14, 15, 25, 40, 41, 45, 46, 51, 66, 67, 68**) must have been violently shifted from their original position, for some of them (Nos. **14, 15, 51**) went into the manholes with the earliest filling; others perhaps lay about on the surface of the ground, in the debris of ruined structures, to be thrown from time to time down into the manhole shafts which were gradually filling with rubbish. The numerous cippi (Nos. **26, 27, 28, 38, 39, 52, 53, 56, 57, 59, 69, 70, 71**) must be interpreted as markers: for graves, for boundaries of fields, for horoi of sacred areas. That they, too, were cast away into the shafts indicates that respect for and need for these markers had ceased (nos. **52, 53, 56** and **57** were discarded into manhole 10 in the early part of the 3rd century). Two of the cippi which are of sculptural form (Nos. **38, 39**) in all probability marked graves;¹⁶ others, which are of architectonic character, were probably *termini*, horos-stones. The latter may be divided into two groups: those carefully cut and finished with stucco (Nos. **26, 27, 28, 52, 69**), and the roughly finished, non-stuccoed variety (Nos. **53, 56, 57, 59, 70, 71**). The stuccoed cippi were possibly boundary stones of sacred areas (to be associated with the structures implied by the Doric and Ionic architectural members?); the others may have been grave or field markers.¹⁷ It is quite reasonable to

¹⁵ In 308 Ptolemy received Corinth from the daughter-in-law of Polyperchon, who had controlled the city since the death of Antipater in 319. Two years later Corinth was ceded to Cassander, whose general Prepelaos was driven thence in 303 by Demetrios. Demetrios' son Antigonos Gonatas still held Corinth in 253. In that year Alexander of Corinth, supporting Ptolemy, seized the city, only to lose it again to Antigonos in 247/6. In 243 Aratos captured the city from Antigonos.

¹⁶ Graves of the 4th and 3rd centuries B.C. have been discovered in the vicinity of the tunnel cistern (Fig. 1, C: *B.C.H.*, LXXXVIII, 1964, p. 705, figs. 10-11; *Δελτ.*, XIX, 1964, *Χρονικά*, p. 101, pl. 108; the grave from which came the bronze mirror should be dated in the early 3rd century rather than the late 3rd, as first reported); further east (Fig. 1, B: *B.C.H.*, LXXXVII, 1963, p. 726; *Δελτ.*, XVIII, 1963, *Χρονικά*, p. 79) have appeared burials of slightly earlier date (as well as Roman interments). It is quite possible that in addition to the sculptural markers Nos. **38-39**, other stones such as the conical cippus (No. **69**) and the stelai (Nos. **66-67**) might have marked graves in the vicinity of the cistern. See Addendum on page 35.

¹⁷ In Athens occur numerous examples of simple grave and boundary stones carved in columnar form (as our Nos. **26-28**) or as irregular slabs. A late 5th century grave marker for Hilarion from the Kerameikos (Pl. 10, a) is considered by Werner Peek to be the earliest columnar grave monument in Athens (*Kerameikos*, III, *Inschriften, Ostraka, Fluchttafeln*, Berlin, 1941, no. 32, pp. 41-42, pl. 14, 3); see also A. Conze, *Die attischen Grabreliefs*, IV, Berlin, 1911-1922, p. 11, pl. 376. A few other Athenian grave and boundary markers which seem comparable to the Corinthian cippi are illustrated on Plate 10, b-f (E.M. 10095 = *I.G.*, II-III², pt. 2, p. 751; E.M. 10175 = *I.G.*, II-III², 2580; E.M. 10152 = *I.G.*, II-III², 2578; E.M. 10164 = *I.G.*, II-III², 2622; E.M. 10176 = *I.G.*, II-III², 2593); cf. also Conze, *op. cit.*, III, Berlin, 1906, p. 303, pl. 291. Among the many such inscribed markers in the Epigraphical Museum in Athens I have seen none which have the form of an inverted T, as our Nos. **57** and **70**. Simple grave stelai, often very roughly

assume that if this quarter of the ancient city, for some political or military reason, had been severely treated by one of the occupying forces of the Hellenistic kings and strategoi and the inhabitants had been killed or enslaved, the agricultural lands might have been parcelled out among the soldiers of the permanent garrison of the great Macedonian stronghold at Corinth.¹⁸ The new allotments would have been larger than the old parcels and the new owners could dispense with many of the boundary stones which the previous generation of Corinthians had used.¹⁹ There is evidence to suggest that the area covered by this destruction was extensive. In 1960 a well was observed in the scarp of a ravine some 180 meters northeast of our manhole 3 (Fig. 1, A); this well proved to have been abandoned and filled with debris in the first quarter of the 3rd century B.C.; the shaft contained, along with pottery typical of the period, building debris such as large fragments of pebble mosaic flooring.²⁰ It does not yet seem possible to ascertain the particular political upheaval which wrought so much destruction in western Corinth in the early 3rd century; but we may hope that continued investigations in various sectors of the city will enable us to establish more precisely the date of the disaster and thus to make clear the part it played in the history of Corinth in the early Hellenistic period.

CATALOGUE

MANHOLE 7

Each of the tunnels leading toward manholes 3 and 8 was cleared for a distance of about three meters from manhole 7. Four nearly complete amphorae and a cooking pot of the late 4th to early 3rd century B.C. were found in this fill. We must assume

finished, are reported at Eleusis ('Εφ. 'Αρχ., 1889, cols. 175-176, 179 [archaic]; 1898, cols. 86-87 [geometric]); Amorgos (*Ath. Mitth.*, X, 1886, pp. 99-101); and Thera (H. Dragendorff, *Thera*, II, *Theraeische Graeber*, Berlin, 1903, pp. 108-111, 295). I am indebted to Dr. Franz Willemsen of the German Archaeological Institute in Athens for the photograph of the grave marker of Hilarion and to Mrs. Konstantina Delmouzou-Peppa, Director of the Epigraphical Museum in Athens, for permission to reproduce photographs of the grave and boundary markers from that Museum.

¹⁸ Distribution of lots of land (κλήροι) to (mercenary) soldiers is attested primarily in Asia Minor and the East in Hellenistic times (G. T. Griffith, *The Mercenaries of the Hellenistic World*, Cambridge, 1935, pp. 314-316; M. Launey, *Recherches sur les armées hellénistiques*, Paris, 1949, pp. 43-45, 349, 738; M. Rostovtzeff, *The Social and Economic History of the Hellenistic World*, Oxford, 1941, III, p. 1346). In most cases the land distributed was municipal or royal land, not previously in private ownership; but Griffith (*op. cit.*, pp. 315, 196) cites the cases of Dionysios I of Syracuse and Nabis of Sparta, who turned over to their mercenaries and supporters captured territories and confiscated private properties (Diodoros Sic., XIV, 78, 2-3; Polybios, XIII, 6, 3).

¹⁹ Nine other roughly finished boundary stones of poros (not stuccoed) were found in the filling of well 2, which connects with the Anaploga water tunnel near its northwestern extremity (Fig. 1): Inv. A 424-430 and two uninventoried fragments. One of these (A 424) bears on each face a roughly incised large letter: Π and W (Δελρ., XIX, 1964, Χρονικά, p. 101, pl. 107; *B.C.H.*, LXXXVIII, 1964, p. 705, fig. 9). The well was abandoned around 275 B.C., when the boundary stones and other debris were thrown into the lowest part of the shaft (LOT 1557).

²⁰ *Hesperia*, XXXI, 1962, pp. 116-117. G. R. Edwards informs me that he believes the abandonment filling may be as late as 250 B.C. (LOTS 465-471).

them to have been dropped to the bottom of the manhole (becoming detached accidentally from the well rope) and to have shattered there so that fragments of each scattered into *both* tunnels. In addition to the five almost whole vessels the tunnels produced numerous small fragments of classical pottery, from Geometric times to the 4th century B.C. None of these fragments joined to another and they obviously represent the same dumped filling as that which filled the shaft from its floor to 108.93 m. above sea level. The latter fill (LOT 1649) contained two coins²¹ and two fragments of terracotta figurines, a clay spindle whorl and a loomweight; no vases could be mended and none of the fragments of pottery was significant enough to inventory.²² The fill in the upper part of the shaft (108.93 m. to 112.63 m.—LOT 1648) was similar to that below (small fragments of classical black-glazed pottery) but contained several late Roman pieces. This fill may have been thrown into the shaft in the 5th century after Christ to “top up” the well filling.

OBJECTS FROM THE SHAFT²³

1. Terracotta head of child. Pl. 4.

MF 11578. Pres. H. 0.022 m.

Head only. Pinkish buff clay.

Solid; flat at back; made in a one-piece mould. A chubby child's face. Damage to the top of the head and general wear obscure much of the hair surface, which appears, however, to have been treated as irregular locks hanging down to just below the ears. Cf. G. R. Davidson (Weinberg), *Corinth*, XII, *The Minor Objects*, Princeton, 1952, nos. 352, 355.

OBJECTS FROM THE TUNNELS

2. Coarse amphora. Pl. 2.

C-63-689. H. 0.62 m.; max. Diam. 0.417 m.

Parts of body, neck and lip missing; restored in plaster.

Hard, coarse, gray clay with orange-buff slip inside and out. Dull, brownish black glaze paint applied irregularly over exterior of lip, neck, handles, shoulder and in swirling bands around upper part of body.

Plump, almost globular body terminating in short, blunt toe, bevelled at lower edge. Neck

²¹ a. Thespieae, silver obol (0.659 gm., ↗), 431-424 B.C. (Babelon) or 387-376 B.C. (Head).
Obv.: Boeotian shield

Rev.: crescent, horns upward; above, ΘΕΣ

Cf. *S.N.G.*, Copenhagen, Aetolia-Euboea, nos. 401-402.

b. Demetrios Poliorketes, bronze (4.306 gm., ↓), 306-283 B.C.

Obv.: head of Demetrios to right, wearing Corinthian helmet

Rev.: prow; above, ΒΑ (corrosion of surface makes it impossible to identify symbol or monogram)

Cf. *S.N.G.*, Copenhagen, Macedonia, nos. 1185, 1188; E. T. Newell, *The Coinages of Demetrius Poliorketes*, London, 1927, p. 149, no. 163, p. 151, no. 170, pl. XVII, 2, 9.

²² One fragment of a plate rim of the 5th century after Christ (from the shaft) and a small fragment of plain marble revetment (from the tunnels) are obviously intrusive, having worked their way far down into the fill as rains caused the earth filling to settle and to spread out into the tunnels.

²³ Three inventoried objects are of much earlier date than the rest of the filling and so are omitted from the following catalogue: spindle whorl (MF 11580), loomweight (MF 11579), terracotta figurine fragment (MF 11581).

widens slightly toward the heavy, overhanging rim, which is triangular in section. Handles, oval in section and with sharp spine on outside, from shoulder to below rim. In the upper wall, below the shoulder, appears a lead plug; its head on the exterior is round and flat, on the interior it is rough and flush with the surface of the vessel. There is no trace of flat bars of a clamp attached to this plug either inside or out; and the adjoining fragments of the body show no trace of other holes or plugs. It seems likely that the wall of the amphora was at this point imperfect and that a single lead plug was inserted to close a hole which had appeared during the firing. (The clay of this amphora, like that of the so-called Corinthian "blister ware" [cf. *Hesperia*, VI, 1937, p. 259; XVII, 1948, p. 233, E 10], contains some small bits of lime and other impurities. During firing some of these inclusions burned away completely; the gas which formed in that process created pockets within the fabric; sometimes the clay enclosing the larger pockets fractured on one or both surfaces of the vessel.)

This is a common Corinthian amphora type which has antecedents as far back as the 6th century (*Hesperia*, VII, 1938, pp. 605-606, nos. 201-203; XXII, 1953, pp. 108-109, under no. 166). For a late 4th century example parallel to our No. 2, see *Hesperia*, XVII, 1948, p. 233, E 13, pl. LXXXV.

3. Coarse amphora. Pl. 2.

C-63-690. H. rest. 0.64 m.; max. Diam. 0.355 m.

Much of neck and lip, part of body and tip of toe missing; restored in plaster.

Buff to pinkish buff clay.

Elongated piriform body ending (originally) in a pointed toe (cf. No. 9, from manhole 8). Broad, almost horizontal shoulder. Wide neck with everted rim; rim triangular in section, flat on top; two grooves around neck at base of rim. Broad handles, oval in section, from shoulder to below rim. The mouth (round when the vessel was being thrown by the potter) was indented at the sides by the firm application of the upper ends of the handles and

so is oval in plan. Around body, just below shoulder, a band (ca. 0.06-0.07 m. high) of parallel, vertical, shallow gouges resembling the narrower bands of "rouletted" ornament on Hellenistic and Roman pottery (H. A. Thompson, *Hesperia*, III, 1934, pp. 431-432, 316-317, A 1, 2, 6-9, and *passim*; H. S. Robinson, *The Athenian Agora*, V, *Pottery of the Roman Period, Chronology*, Princeton, 1959, F 22, G 85-86, M 4, M 36-37 and *passim*); here, however, the gouges were probably made by successive downward strokes of an instrument with multiple short teeth; the ridges resulting from this "combing" of the surface were partly smoothed down in the turning process.

Perhaps a Corcyraean amphora (cf. *Hesperia*, XXII, 1953, p. 108, under no. 166; *Hesperia*, Suppl. X, 1956, p. 167, no. 204), but the type is very common in Corinth.

4. Coarse amphora. Pl. 2.

C-63-688. H. 0.688 m.; max. Diam. 0.396 m.

Fragments of body and lip missing; restored in plaster.

Brown to reddish brown clay, hard and slightly micaceous.

Piriform body terminating below in a low knob which is concave on the under surface. Sloping shoulder; high, straight neck with plain, rolled lip. Handles, oval in section, from middle of shoulder to below lip.

(From the same filling of the tunnels came the upper part of a similar, but larger amphora—max. Diam. 0.425 m.; this has been discarded.)

5. Cooking pot. Pl. 2.

C-63-687. H. 0.203 m.; max. Diam. 0.182 m.; Diam. of lip 0.106 m.

Fragments of lip and body missing; restored in plaster.

Gritty, orange-buff clay with some lime inclusions; gray slip, much worn.

Globular body with concave depression (Diam. 0.06 m.) on base. Rather wide neck with flaring lip and round mouth. Single, narrow strap handle from shoulder to lip.

MANHOLE 8

Here, as in manhole 7, the fill in the tunnels and in the lower part of the shaft (from bottom at 96.63 m. to 97.73 m.—Fill I: LOT 1687) was thrown in during the late 4th or early 3rd century B.C. Again it appears that numerous amphorae (in re-use as water jars?) fell into the bottom of the manhole during its last season of use and shattered, scattering fragments into both tunnels. This debris was not cleared out during the fall months, the cistern was abandoned and fill accumulated gradually in the manhole. First, a large rectangular poros water basin (No. 15) was allowed to drop into the shaft; this lay at 97.70 m. to 98.15 m. and thus might have been below the water level (maximum height about 99.00 m.) if water continued to reach manhole 8 from the main supply tunnel. Above the basin fragments lay some ninety centimeters of fill containing a relatively small quantity of very fragmentary pottery of the late 4th and early 3rd centuries B.C. (Fill II: LOT 1686); no whole vessels occurred in Fill II, which probably represents debris from a dump. The same observation holds true for the third filling, from 99.08 m. to 103.93 m. (Fill III: LOT 1685); but here the sherds range in date from Geometric to the middle of the 2nd century B.C. From 103.93 m. to 105.73 m. occurs a filling (IV: LOT 1684) containing many complete or nearly complete vessels which seem for the most part to represent the middle of the 2nd century B.C., though one Knidian amphora handle (No. 33) is to be dated *ca.* 108-88 B.C. That handle, found in the upper part of Fill IV, may perhaps have filtered down from Fill V (105.73 m. to 114.53 m.—LOT 1683), which like II and III, is a mixture of material of varying date, without joins. Fill V may represent a clearing of the site at the time of the founding of the Roman colony, though no clearly Roman sherds occurred. From 114.53 m. to 116.73 m. the filling (VI: LOT 1682) of very fragmentary pottery contained some pieces as late as the 2nd century after Christ.

OBJECTS FROM FILL I

6. Cup, black glaze. Fig. 3; Pl. 2.

C-63-720. H. 0.05 m.; Diam. 0.085 m.

About one-third missing; restored in plaster.

Light pinkish buff clay; black glaze, fired red inside and on foot; one small area inside and another on base not covered by glaze.

Hemispherical cup on ring foot. The plain lip is rounded on top and very slightly everted.

7. Miniature bowl. Fig. 3; Pl. 2.

C-63-722. H. 0.019 m.; Diam. 0.035 m.

Intact. Buff clay; not glazed.

Small bowl with flat base; wall profile forms a double concave moulding. Two small horizontal lug handles attached to rim.

8. Coarse basin. Pl. 2.

C-63-719. H. 0.15 m.; Diam. 0.44 m.

About one-quarter missing; restored in plaster.

Hard, buff clay with inclusions of finely crushed stone and tile.

Basin with offset, flat base; convex wall; everted lip, flat on top. Rim pierced for suspension (only one hole preserved; the condition of the rim suggests that there was no other hole).

9. Coarse amphora. Pl. 2.

C-63-724. H. 0.66 m.; Diam. rest. 0.393 m.

Most of lip, one handle, and part of neck and body missing; restored in plaster.

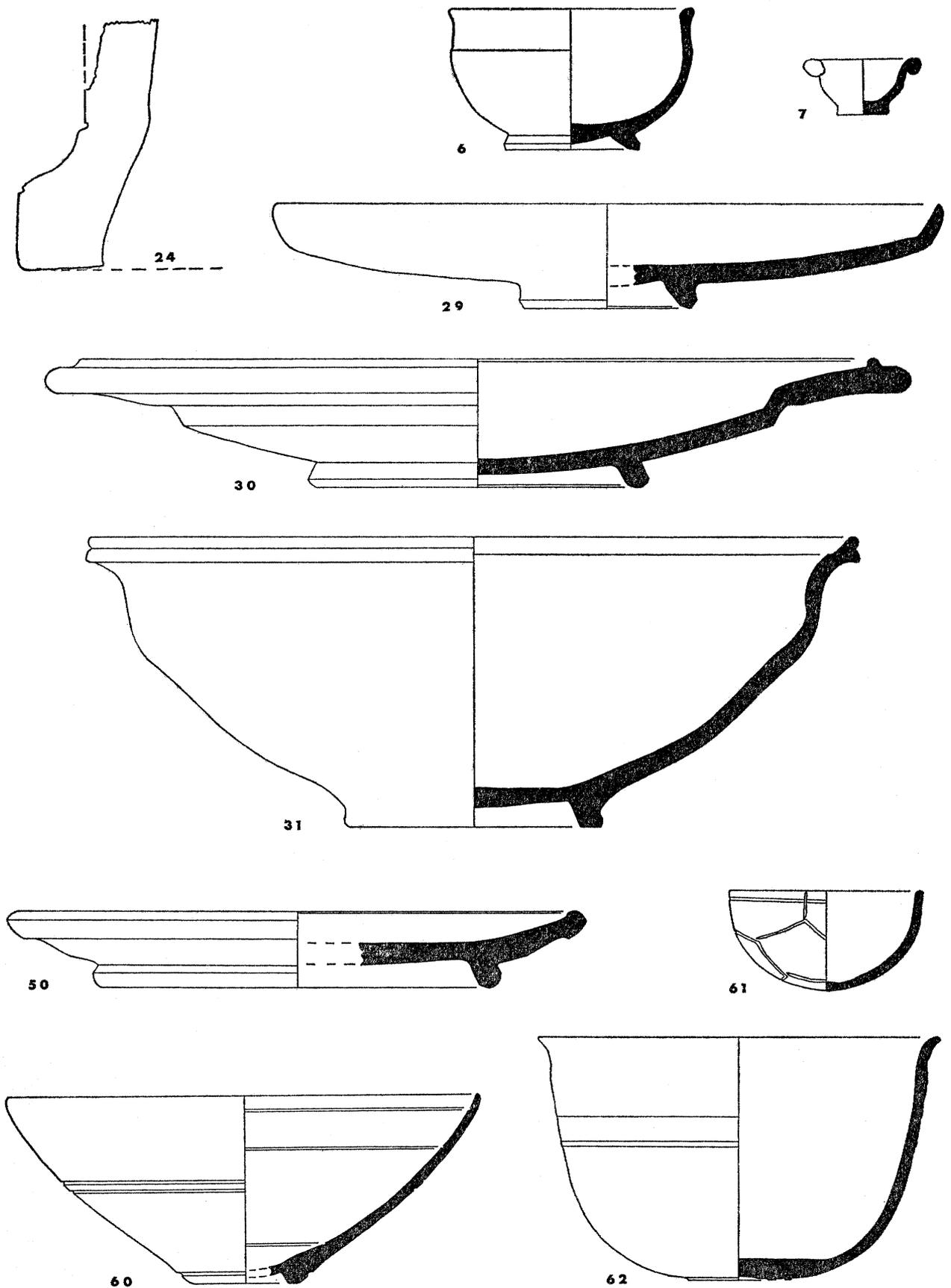


FIG. 3. Pottery and Terracotta Altar Fragment from Manholes 8 and 10. Profiles. Scale 1:2.

Pinkish buff to buff clay with some sand inclusions; light buff slip.

Shape as that of No. 3 (manhole 7), but the mouth is even more pronouncedly indented at the sides by the attachment of the handles and has almost the shape of a "Boeotian" shield; there are no vertical gougings around the body. Three other similar amphorae were

pressed stamp at top of one handle, near the rim; the die apparently slipped in use and the stamp is illegible.

11. Stamped amphora handle. Pl. 2.

C-63-721. Pres. L. 0.20 m.

Handle only preserved.

Buff to pinkish buff clay.

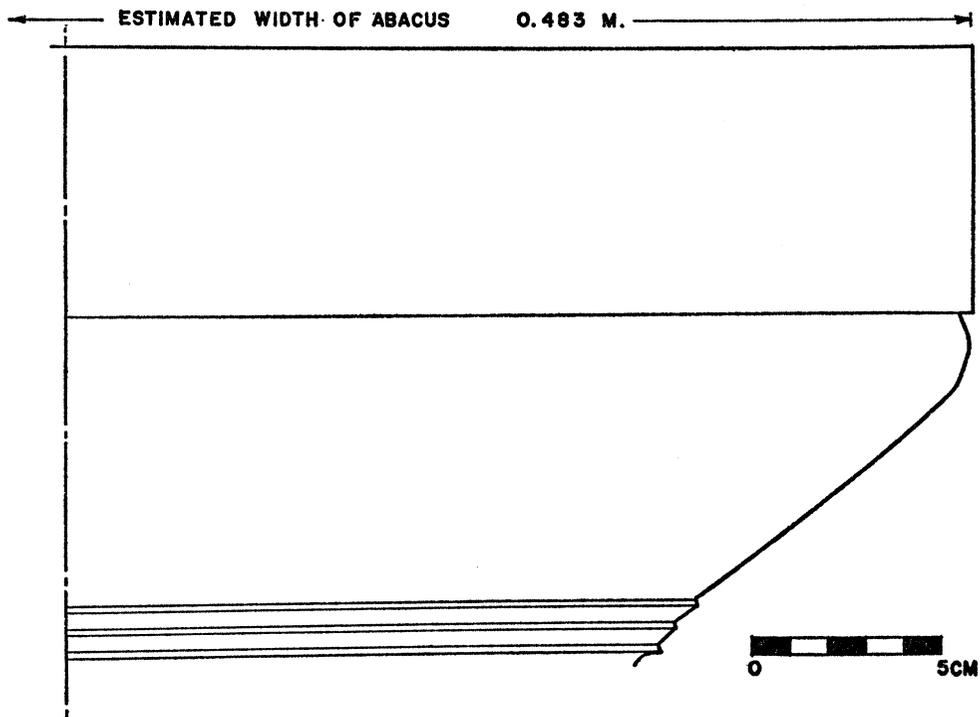


FIG. 4. Doric Capital (14) from Manhole 8.

found in the same fill, one of them smaller than the others by about one-quarter; all were discarded.

10. Coarse amphora with stamped handle. Pl. 2.

C-63-723. Pres. H. 0.47 m.; Diam. 0.37 m.

Foot and much of body missing; partly restored in plaster.

Brownish buff clay with fine slip of same color.

Shape as Nos. 3 and 9; band of vertical gouging around body, as on No. 3. An im-

Probably from an amphora as No. 9 above. At base of handle, a stamp of circular form, carelessly impressed: BA (in ligature).

12. Coarse amphorae.

Fill I contained also considerable fragments of two amphorae similar to No. 2 above (manhole 7); these were not inventoried.

13. Fragment of bronze bucket, inscribed. Pl. 6.

MF 11556. Pres. H. 0.075 m.; pres. W. 0.067 m.

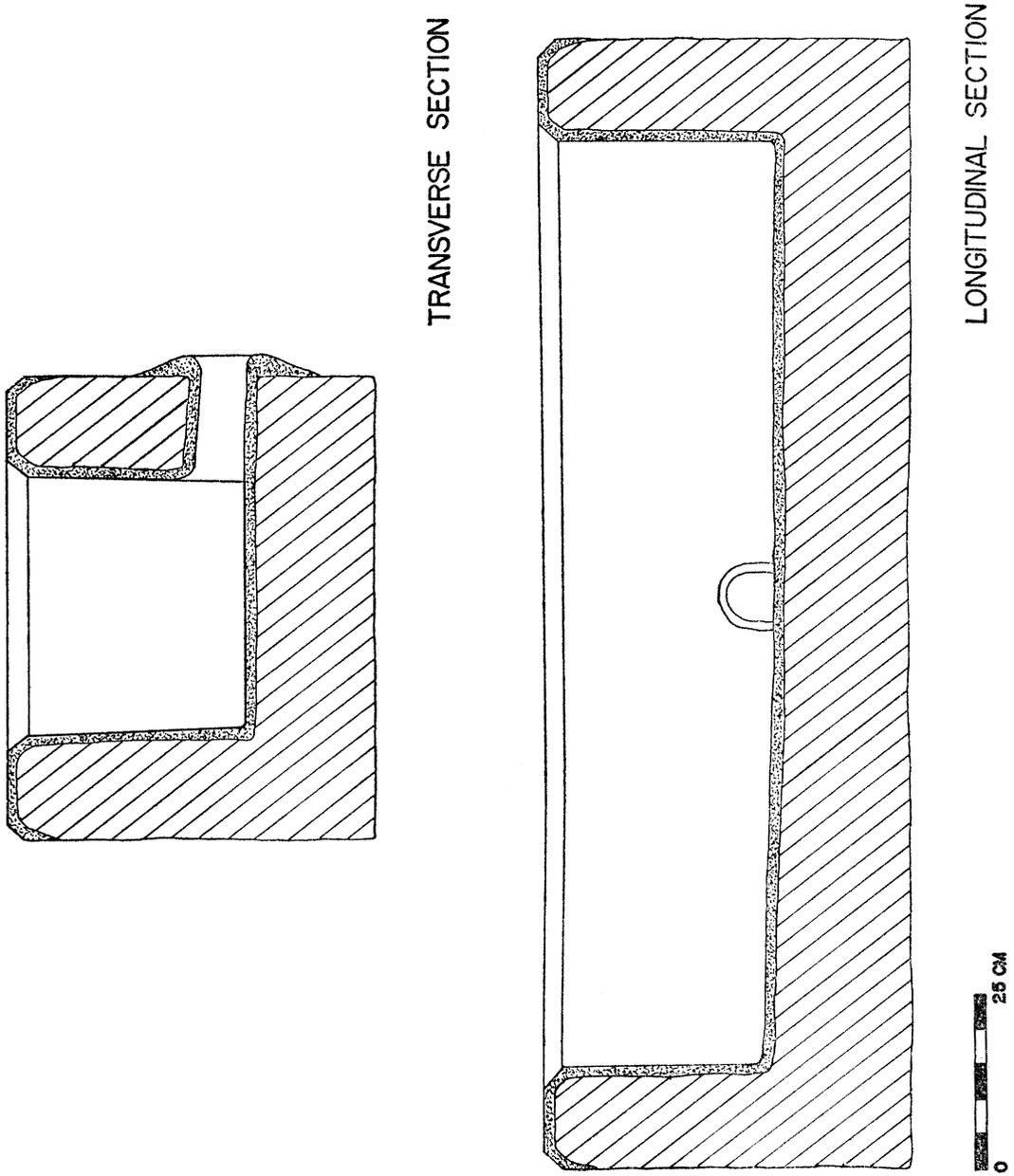


Fig. 5. Stuccoed Water Basin (15) from Manhole 8. Sections.

Probably from the wall of a heavy bronze bucket with rolled lip. Letters on exterior, executed with a series of punch marks:]ÇIO[

14. Poros capital fragment, Doric.

Fig. 4; Pl. 7.

A 422. Pres. H. 0.185 m.; H. of abacus 0.071 m.; est. Diam. of echinus 0.481 m.; est. Diam. at arris in necking 0.31 m.

Single, small fragment; no trace of resting surface preserved.

Rather coarse, buff poros limestone with fine white stucco.

The echinus has a full curve at the top but an almost straight profile below. Three annulets with sharply profiled edges; a trace of a flute on the neck, just below the lowest annulet. Within the groove between echinus and abacus are slight traces of a second coating of stucco, so thick that it must have altered materially the profile of the capital; the finished surface of this second coat is nowhere preserved. The drawing (Fig. 4) shows the original state of the capital. Little of the bearing surface is preserved and there is no trace of dowel cutting or of setting line.

15. Poros water basin, stuccoed. Fig. 5; Pl. 7.

A 582. L. 1.594 m.; W. 0.654 m.; H. (exterior) 0.515 m.; H. (interior) 0.332 m.

Broken into three large and three small fragments, plus many smaller bits and pieces; parts of floor, wall and rim missing, but all essential details are preserved.

Soft, grayish buff poros limestone; fine, creamy yellow stucco (over an undercoat of similar stucco mixed with fine sand and gravel) on interior and rim (the thickness of the stucco varies, according to the condition of the surface of the basin beneath, from 0.005 m. to 0.015 m.).

A large block of poros hollowed out to form a rectangular basin or watering trough. The edges of the rim are bevelled inside and out to minimize damage from chipping. At floor level, in the center of the back wall, a drain hole (interior Diam. 0.07 m.), sloping

down toward the exterior. The stucco of the interior is continued through this hole and out onto the exterior surface over a circular area *ca.* 0.25 m. in diameter around the drain hole; this thick boss of stucco probably served to provide a firm hold for a wooden plug. On the front vertical face appear two (?) incised letters: HÇ (letter height 0.13 m.). These are probably a mark of ownership. Mason's marks would not be expected on such a basin (unless from some previous use of the block, of which there is no indication); it does not seem possible to interpret the two letters as a mark of liquid capacity (the actual capacity would have been about 130 liters or 3.3 amphora-measures).

OBJECT FROM FILL II

16. Lead counterweight.

Pl. 6.

MF 11463. L. 0.105 m.; Diam. at base 0.02 m.

Damaged at upper end, but apparently intact.

A cast cylinder of lead, narrowing toward the top, where a suspension hole is pierced. Base flat, with rounded edges. Cf. *Corinth*, XII, no. 1212.

OBJECTS FROM FILL III

17. Terracotta figurine fragments.

Pl. 4.

MF 11458 A-D. Dimensions of principal fragment (A): H. 0.085 m.; W. 0.063 m.

Fragment A consists of the left leg from thigh to foot, left forearm, part of right leg and part of the resting surface of the figurine; non-joining fragments B, C and D represent parts of shoulder, chest and base.

Hard, dark reddish clay, fired gray at core (not Corinthian).

The figurine represents a woman draped in chiton and himation, seated on a rock (fragment D), with left hand in lap holding bunched folds of the outer garment. The figurine was not made in a mould, but was built up by hand; the condition of the interior shows that at least two (and in some areas three) layers of clay were used in the process. The fabric is

thick, not smoothly finished; the lower part of the figure is unfinished behind and shows traces of the fingers and tools of the coroplast. The bottom edge is rough and bears the marks of the grain of the wooden surface on which the figure was mounted while being modelled.

For seated figurines of the late 4th and early 3rd centuries, see D. B. Thompson, *Hesperia*, XXXI, 1962, pp. 249-253.

18. Terracotta figurine fragment. Pl. 4.

MF 11464. Pres. H. 0.074 m.; pres. W. 0.067 m.

The preserved part of the figure, modelled by hand, is attached to a flat background plaque (0.006 m. thick) which is broken away at bottom, right and top; the left edge is preserved in part.

Reddish buff clay, fired buff at core; surface faintly burnished; red glaze paint on background.

The relief appears to represent the legs of a draped female figure, *seated* (not standing, as the legs are closer together at the ankles than at the knees). The legs terminate in blunt ends, without modelling of feet. The distinction in depth between vertical planes at the lap may have been minimal. At the preserved top of the background plaque are traces of a neatly cut hole; since this coincides approximately with the position of the waist of the modelled figure, the hole cannot have been for suspension or attachment (for either of which the hole must be near the top of the plaque); it may have served to hold some object which protruded from the waist or rested in the lap of the figure.

Cf. MF 10360 (from the Sanctuary of Demeter on Acrocorinth).

19. Terracotta figurine, reclining youth. Pl. 4.

MF 11604. Pres. H. 0.043 m.; pres. W. 0.038 m.

Broken away at top and left.

Yellowish buff clay.

A male figure, naked to waist, reclining on a couch, his legs to left; chest frontal. The left

forearm rests on a cushion. The front of the couch is covered by drapery.

Cf. MF 4030 (*Corinth*, XII, no. 291 [where inventory number is given incorrectly as MF 4050]), which is from the same mould and comes from a deposit dated by Mrs. Weinberg at the end of the 4th or the early 3rd century B.C. -

20. Terracotta figurine, bird. Pl. 4.

MF 11460. Pres. H. 0.04 m.; pres. L. 0.065 m.

Legs, head and tip of tail missing. In the illustration the figurine is pictured from the side, with tail at left.

Rather coarse, buff clay with some lime inclusions, fired gray at core; surface cracks resulting from expansion in firing.

Solid; handmade. Each wing was made in two pieces, attached separately. The figurine has a more monumental character than most contemporary terracotta birds, as does also No. 21.

21. Terracotta figurine, bird. Pl. 4.

MF 11461. Max. dim. 0.054 m.

Head and neck only preserved; beak missing.

Buff to pinkish buff clay, fired gray just below the surface.

The bird, perhaps a dove, has a rather long neck. The eyes are large and well executed, with careful modelling around the eye-sockets. Made in a two-part mould with vertical seam extending lengthwise through the body.

22. Terracotta stela fragment. Pl. 4.

MF 11602. Pres. H. 0.052 m.; max. W. 0.026 m.

Top missing.

Pinkish buff clay. Mouldmade.

Stela mounted on plinth; on the face, a serpent in relief, tail down. The top of the stela probably supported a helmet.

Cf. *Hesperia*, XI, 1942, p. 113, fig. 4, p. 130.

23. Terracotta mould fragment. Pl. 4.

MF 11601. Max. dim. 0.063 m.

Small fragment, broken all around; back smooth.

Pinkish buff clay with grits, fired buff at surface.

A mould, possibly used in metal work, to

From the bottom of an altar. On the front, a cyma reversa moulding with leaf pattern in relief; the moulding did not continue around the side. The main block of the altar, so far as preserved, is without decoration; the orna-

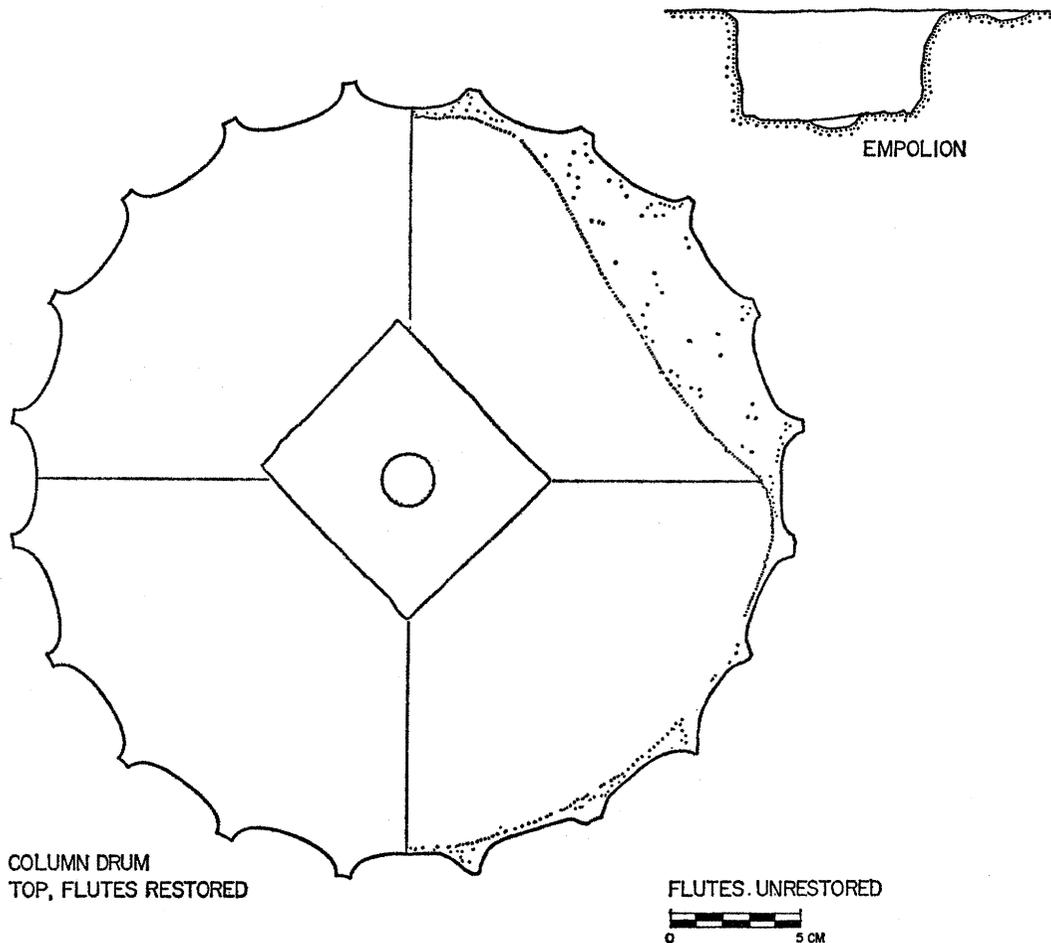


FIG. 6. Ionic Column Drum (25) from Manhole 8. Plan of Bearing Surface and Section of Empolion Cutting.

create an anthemion pattern with bead and reel (?) below.

24. Terracotta altar fragment. Fig. 3; Pl. 4.

MF 11603. Pres. H. 0.071 m.; pres. W. 0.105 m.

Fragment of lower right corner.

Pinkish buff clay with grits; buff slip.

ment at bottom was produced in a mould. Cf. *Otchet Imperatorskoi Archeologicheskoi Kommissii*, 1908, St. Petersburg, 1912, pp. 75-76, figs. 49-52.

25. Ionic column drum, poros. Fig. 6; Pl. 7.

A 421. H. 0.41-0.42 m. Diam. at depth of flutes: top, 0.287 m.; bottom, 0.305 m.

Damaged and chipped.

Rather coarse, brownish buff poros limestone.

A short drum of twenty flutes; the channels are broad and shallow. On the bearing surface, an empolion cutting 0.073 m. x 0.09 m. x 0.043 m. deep. Two engraved guide-lines, drawn at right angles to one another and from the centers of diametrically opposed flutes, fixed the position of the initial cylindrical hole of the empolion cutting, around which the rectangular depression was less precisely hollowed out. There was no empolion cutting on the resting surface, but near the outer edge of the resting surface appear five deep (and apparently intentional) incisions which seem to form the mark ΠΠΠ (mason's marks?). The exterior surface of the shaft was presumably finished in stucco, but no traces of this are now visible.

26. Cippus, poros. Pl. 9.

A 418. H. overall 0.35 m.; Diam. of shaft 0.16 m.; H. of base 0.12 m.; W. of base 0.195 m. (base was probably square in plan, but full depth is not preserved).

Part of base and of shaft broken away, but full height is preserved.

Buff poros limestone covered with white stucco.

A cylindrical shaft with flat top rises from a cubical base, the whole cut from one block of stone. The stucco covers the shaft and the top of the base; the sides and bottom of the base were not stuccoed and were presumably imbedded in the earth. The stucco is much weathered and pitted, but the original surface, preserved at a few points, was extremely fine and smooth. The shaft is flat on top and may have been a few millimeters smaller in diameter at the top than at the base. No trace of cuttings or attachments.

27. Cippus, poros.

A 416. Pres. H. 0.22 m.; Diam. 0.166 m.

Base missing. Buff poros limestone covered with white stucco.

As No. 26, but the diameter is uniform from bottom to top.

28. Cippus, poros.

A 417. Pres. H. 0.24 m.; Diam. 0.188 m.

Base missing. Buff poros limestone of very rough surface; inequalities of surface filled out with a hard, coarse cement and the whole covered with a fine, white stucco.

As Nos. 26 and 27; the diameter is uniform from bottom to top.

OBJECTS FROM FILL IV

29. Red-glazed plate. Fig. 3; Pl. 3.

C-63-714. H. 0.038 m.; Diam. 0.236 m.

Almost complete; restored in plaster.

Fine, dark buff clay; reddish glaze overall (darkened by contact with fire on interior).

Plate with sloping floor, curved rim and ring foot. The shape is an imitation of a Pergamene form of the early 1st century B.C. (cf. *The Athenian Agora*, V, F 1 and 2; also *Hesperia*, III, 1934, pp. 422, 433, E 151-152); the color of the glaze on the exterior is very similar to that of the lighter Pergamene fabric, but the clay is darker than Pergamene and there is no "double-dipping streak" (for this streak, an invariable feature of certain early Roman wares, see: *Athenian Agora*, V, p. 6; F. O. Waagé, *Antioch-on-the-Orontes*, IV, 1, *Ceramics and Islamic Coins*, Princeton, 1948, fig. 19, 1).

30. Red-glazed plate. Fig. 3; Pl. 3.

C-63-715. H. 0.045 m.; Diam. 0.308 m.

Almost complete; restored in plaster.

Reddish buff clay with some inclusions and air pockets visible at the surface; inner surface much worn and scratched.

Plate with sloping floor on ring foot; broad, offset horizontal rim with ridge near lip. The shape is reminiscent of some Pergamene forms (as *Athenian Agora*, V, F 5), but the fabric and glaze are definitely of other manufacture. The shape occurs also in black glaze, as P 626 of the Athenian Agora (*Hesperia*, III, 1934, pp. 370-371, D 1), which is to be dated around the middle of the 2nd century B.C.

31. Coarse cooking bowl. Fig. 3; Pl. 3.

C-63-717. H. 0.102 m.; Diam. 0.275 m.

Almost complete; restored in plaster.

Coarse, reddish brown clay with grits; thin red slip on interior.

Bowl with flaring wall and everted rim, on ring foot. Groove on outer edge of lip; ridge (to hold a lid?) on inside of rim. No handles. Fragments of another similar bowl appeared in Fill IV but were not inventoried.

32. Fusiform unguentarium. Pl. 3.

C-63-716. H. 0.181 m.; Diam. 0.049 m.

Almost complete; restored in plaster.

Rather coarse, reddish clay with darker reddish slip.

Typical late Hellenistic unguentarium shape; the fabric is unusual. The shape seems closer to those of the early 2nd century B.C. (cf. *Hesperia*, III, 1934, p. 368, C 76-77) than to those of the middle of that century (*ibid.*, pp. 391-392, D 77-78; pp. 418-419, E 137-138).**33.** Stamped amphora handle, Knidian. Pl. 3.

C-63-459. Max. dim. 0.087 m.

Upper part of handle with attachment to neck.

Reddish brown clay with slip of same color.

Circular stamp on top of handle: bull's head encircled by inscription, *A]νδρων Ἀπολλοδώρου Δ[ιογνήτου. Miss Virginia Grace informs me that this handle should be dated ca. 100 B.C. (her type KT 1517).

34. Coarse amphora. Pl. 3.

C-63-718. H. 0.418 m.; Diam. 0.325 m.

About one-third missing; restored in plaster.

Rather soft, yellowish buff clay with some gritty inclusions; slip of the same color.

Ovoid body on low ring foot. Broad, sloping shoulder; low, wide neck; rolled lip. Ribbed strap handles from below lip to middle of shoulder. Many fragments of another similar amphora from the same Fill have been discarded.

35. Lamp. Pl. 3.

L 4319. L. 0.084 m.; W. 0.058 m.; H. 0.03 m.

Almost complete; restored in plaster.

Coarse reddish clay with slip of same color; nozzle blackened by flame.

Wheelmade body. Rim curves down toward filling hole. Short, blunt nozzle; slightly raised, flat base. No handle. This is a Corinthian lamp, of Broneer's Type XVII, which he places at the end of the 1st century B.C. The association here with pottery of earlier date, however, suggests that the manufacture of this simple form of lamp may perhaps start earlier than had been supposed (O. Broneer, *Corinth*, IV, ii, *Terracotta Lamps*, Cambridge, 1930, pp. 60-61).**36.** Terracotta figurine, head. Pl. 5.

MF 11459. Pres. H. 0.048 m.; W. 0.028 m.

Head and neck only. Buff clay with some small lime inclusions.

Female head wearing stephane, the hair parted at center and drawn down and back into two buns at nape of neck. Solid; the front made in a mould, the back modelled by hand.

37. Bronze fibula. Pl. 6.

MF 11465. L. 0.106 m.

Spine and catch-plate preserved; pins missing, except for part of the springs.

Spine, catch-plate and spring-plate of bronze; the pins and springs of iron.

A single, long bronze rod has been hammered and bent to form the spine, catch-plate, spring-plate and a reinforcing rib which extends under the spine and connects the catch-plate to the spring-plate.

The spine has the shape of a lance blade and haft, the haft decorated with four transverse incised lines. Catch-plate has form of an elongated arrowhead, the edges of the blade bent up on both sides to hold the points of the pins. To the flat, rectangular spring-plate adhered, on either side, parts of the spiral iron springs of the two pins (in the course of cleaning the spring was detached from one side of the plate).

This type of fibula appears to have its origin in the northern Balkans, more specifically in the area of Dalmatia. It is a variant of the middle

La Tène fibulae. For examples from Dalmatia, see: V. Čurčić, "Alter und Herkunft einiger Fibeln und Tongefäße aus Bosnien und Herzegovina," *Jahrb. für Altertumskunde*, II, 1908, p. 6, note 18; Č. Truhelka, "Ein Tumulus der La-Tène-Periode in Mahreviči," *Wiss. Mitth. aus Bosnien und der Herzegowina*, XII, 1912, pp. 24-25, figs. 27-30. For other examples from Greece: Chr. Blinkenberg, *Fibules grecques et orientales*, Copenhagen, 1926, p. 15, fig. 2 (with double pin; from Thisbe in Boeotia?); P. Perdrizet, *Fouilles de Delphes*, V, Paris, 1908, p. 112, no. 593, fig. 402 (with double pin; from the Pronaia sanctuary in Marmaria). Truhelka notes that some of the fibulae of this type from Mahreviči are made from a single piece of metal; but one (that illustrated in his figs. 29-30) is made in two pieces; the springs and pins are separate from the spine, catch-plate and spring-plate as in our Corinthian example. The Mahreviči tumulus is dated by Truhelka (p. 16) in the middle La Tène period (300-100 B.C.; or, according to Truhelka, after 250 B.C.), but the pottery and bronze vessels from this and other contemporary tumuli cited by Truhelka include Greek imports which must go back to the end of the 5th century or the beginning of the 4th. For other examples of bronze fibulae with iron pins, see Blinkenberg, *op. cit.*, p. 117, no. VI.12.a, p. 125, no. VI.25.h, p. 222, no. XII.13.u (in the first two instances the iron pin may represent an ancient repair).

38. Aniconic head, poros. Pl. 8.

S 2714. Pres. H. 0.232 m.; W. 0.142 m.

A single fragment comprises the "head," broken away at neck; bun of hair at back missing.

Fine, grayish buff poros limestone. The locks of hair are modelled in a rather thick coat of stucco, over which the final coat of fine, white stucco (with marble dust) is applied. Over the hair the final coat was applied roughly with a brush; on the neck it is smooth.

A cippus having the character of either a sacred boundary marker or an aniconic tomb portrait. It appears to represent a female head

without modelled features of the face. Long locks of hair, rendered in moderate relief, are drawn up from the nape of the neck and back from what would be the middle of the face, and are united at the back in a bun (broken away).

Mr. C. K. Williams has called to my attention the aniconic heads of Persephone used as grave markers at Cyrene: cf. Alan Rowe, *Cyrenaican Expeditions of the University of Manchester 1955, 1956, 1957*, Manchester University Press, 1959, pp. 3-4, pls. 2, 27 a, 28, 29 a; E. Rosenbaum, *A Catalogue of Cyrenaican Portrait Sculpture*, London, 1960, pp. 14-15, pl. II, 4. See also: R. Koldewey, *Neandria*, 51. Winckelmannsprogramm, Berlin, 1891, pp. 16-17, fig. 30; the anthropomorphic but aniconic stelai from the Hellenistic necropolis at Tanais at the mouth of the river Don (D. B. Schelov, *Nekropol' Tanaisa* [Materialyi i Issledovaniy po Archeologii S.S.S.R., no. 98], Moscow, 1961, pp. 12, 15, pl. XXXI, 1-4) and those from Chersonesos (*Otchet Imperatorskoi Archeologicheskoi Kommissii*, 1908, St. Petersburg, 1912, pp. 107-108, figs. 135-137); and the similar stelai, terminating above in a schematic head, flat on both front and back surfaces, from Pantikapaion and Chersonesos (G. von Kieseritzky and C. Watzinger, *Griechische Grabreliefs aus Südrussland*, Berlin, 1909, pp. 138-139, nos. 755-764, pls. LV-LVI).

39. Symbolic cippus, poros. Pl. 8.

A 415. Pres. H. 0.268 m.; max. pres. Diam. 0.198 m.; Diam. of shaft 0.144 m. above, 0.121 m. below.

Nine joining fragments; lacunae partly filled out in plaster. Surface much damaged; broken away at bottom.

Dark buff, fine-grained poros limestone; white stucco overall.

A cylindrical shaft (widening toward the top) rested on a broader base of which only the barest trace remains. Above the shaft rises an omphaloid or mushroom-shaped finial, the lower edge of which is missing all around so that the precise nature of the juncture with the shaft cannot be ascertained (the drawing on

Pl. 8 suggests a probable restoration of the profile). Like No. 38 above, this cippus may have had the character of a sacred boundary stone or of a grave marker.

the shaft are perhaps arguments against this interpretation. However, the phallus is recognized as a common form of grave marker in many parts of Asia Minor, and in some cases

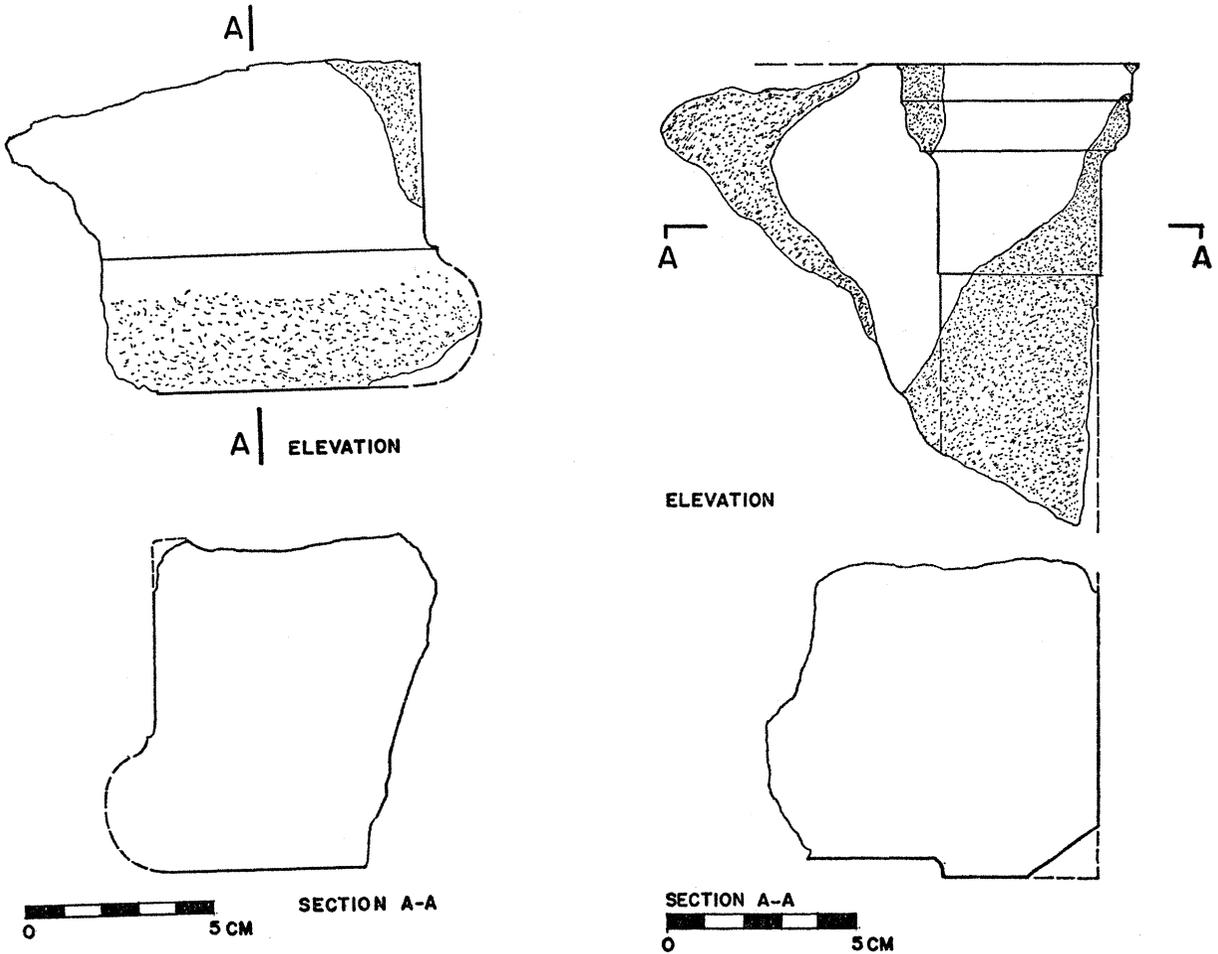


FIG. 7. Poros Altar (40, left) and Pilaster (41, right) from Manhole 8.

G. Daux has suggested (*B.C.H.*, LXXXVIII, 1964, p. 705) that this cippus may represent a phallus. The shortness of the shaft and the presence of a spreading base at the bottom of

the form is not dissimilar to that of our cippus. For general discussions of the phallic grave marker in the Near East, see: A. Koerte, *Ath. Mitth.*, XXIV, 1899, pp. 6-10, pl. I, 1; V. R.

Paton, *J.H.S.*, XX, 1900, pp. 67-73, figs. 4, 7, 8; E. Akurgal, *Phrygische Kunst*, Ankara, 1955, p. 90. The rock-cut Phrygian tomb façade at Yapuldağ appears to present a close analogy to our cippus (F. von Reber, *Die phrygischen Felsdenkmäler*, *Abh. der k. bayer. Akad. der Wiss.*, III. Cl., XXI. Bd., III. Abth., Munich, 1897, pp. 30-31, fig. 3; G. Perrot and Ch. Chipiez, *Histoire de l'art dans l'antiquité*, V, Paris, 1890, p. 123, fig. 75). For other phallic markers in Asia Minor, see: Perrot and Chipiez, *op. cit.*, V, pp. 272-273, fig. 165; R. Leonhard, *Paphlagonia*, Berlin, 1915, p. 268, fig. 91; H. T. Bossert, *Altanatolien*, Berlin, 1942, figs. 201, 203; *Arch. Anz.*, 1939, cols. 171-174, fig. 40.

The suggestion of an omphaloid character in our cippus is belied by the shaft beneath the head. It is worth noting, however, that the omphalos form is used as a capstone for graves, for cinerary urns and for sacrificial pits: Aegina—*Arch. Anz.*, 1932, cols. 162-163, fig. 21; G. Welter, *Aigina*, Berlin, 1938, pp. 100, 131, fig. 85; Pergamon—F. Winter, *Alterthümer von Pergamon*, VII, 2, *Die Skulpturen*, Berlin, 1908, pp. 341-342, nos. 426-432; Mytilene—*Δελτ.*, XI, 1927/28, *παράρτ.*, pp. 20-21, figs. 12-13.

For a general discussion of knob-like finials on grave monuments (Roman), see: B. Schröder, *Bonner-Jahrb.*, CVIII-CIX, 1902, pp. 70-79; E. Pfuhl, *Jahrb.*, XX, 1905, pp. 88-91.

40. Altar fragment, poros. Fig. 7.

A 419. Pres. H. 0.095 m.; max. W. 0.123 m.
Single fragment from corner of altar.

Rather coarse, buff poros limestone; no trace of stucco is visible.

The cubical body or die of the altar terminates below in a projecting moulding, very badly worn. Base flat; part of the flattened top is preserved, but only a trace of the ridge which enclosed the top surface.

41. Pilaster capital, poros. Fig. 7.

A 420. Pres. H. 0.122 m.; max. pres. W. 0.129 m.

Single fragment of the principal face and one side of the capital and of part of the pier beneath.

Fine, buff poros limestone. Slight traces of white stucco on the crowning moulding.

From the jamb of a window opening or from a small niche. The carved moulding on the face (Fig. 7, elevation) is extremely well cut; on the side, however, the surface is roughly treated and in a crude moulding which does not correspond to that of the face. Similar, but larger pier or anta capitals from Corinth: A 389 and A 438 (both of which were found in fillings of early Roman times but are doubtless of much earlier date).

OBJECTS FROM FILL V

42. Terracotta figurine fragment. Pl. 5.

MF 11599. Pres. H. 0.052 m.; pres. W. 0.037 m.

Small fragment, broken all around. Buff clay.

From the mid-part of the torso of a female figure wearing a chiton.

43. Terracotta figurine fragment. Pl. 5.

MF 11600. Pres. H. 0.035 m.; pres. W. 0.059 m.

Fragment of neck and shoulder, broken all around. Buff clay.

From a draped figure, probably male, wearing a form of chiton.

44. Terracotta relief fragment. Pl. 5.

MF 11598. Pres. H. 0.05 m.; pres. W. 0.04 m.

Small fragment, broken all around. Pinkish buff clay, fired buff at surface; faint traces of white paint.

A flat piece, probably applied to a vessel or plaque. Legs of a male figure facing right; he leans back slightly against a mass of rock (?).

45. Doric corner triglyph, poros. Fig. 8; Pl. 7.

A 431. H. 0.494 m.; W. of triglyph proper 0.307 m.

All faces damaged, but all significant dimensions can be ascertained.

Compact, brownish buff poros limestone with many pitted areas; no certain trace of stucco now visible.

0.014 m. of the top of the block without any trace of projection; a moulding less than 0.014 m. high would be almost impossible to cut in poros; the small size of the triglyph argues against the elaboration of a crown moulding.

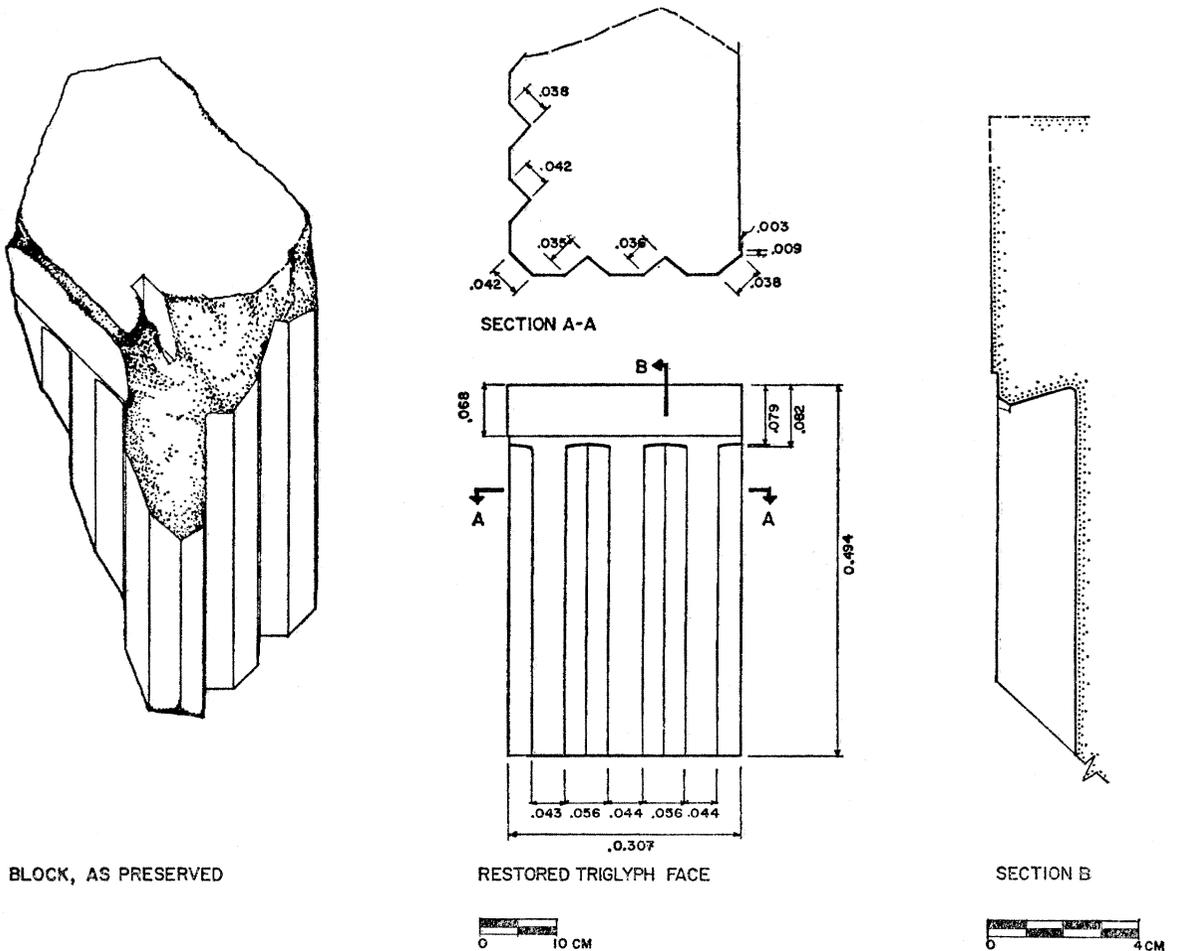


FIG. 8. Doric Corner Triglyph (45) from Manhole 8.

The taenia at top almost certainly had no ovolo or other crowning moulding; in spite of damage to the surfaces, the vertical face of the taenia is preserved at one point to within

The head of each glyph is deeply undercut on an oblique (not concave) plane; the oblique faces of the glyphs extend straight up into the undercutting and meet the oblique upper sur-

face at an angle. The head of the glyph is slightly arched, but the extremities of the arch meet the sides of the glyph at an angle; the outer edge of the arch is slightly bevelled (see Fig. 8, section B).

On the bearing surface appears a dowel hole (0.07 m. deep, 0.02 m. wide and at least 0.06 m. long), placed near the exterior corner. It lies parallel with the left face of the triglyph, set 0.07 m. in from the left face; it extended to a point 0.07 m. (or less) from the right face.

On the bottom, at the outer edge, a relieving surface *ca.* 0.015 m. wide follows the contours of the glyph cuttings (a similar relieving surface can be observed on the triglyphs of the triglyph wall of the Sacred Spring at Corinth). The left face of the block, though broken away at left, is now 0.35 m. wide; it must therefore have comprised a metope (or metope-backer) as well as a triglyph. At the right of the right face a slight undercutting of the back of the vertical edge of the glyph provided an overlap for the adjoining metope.

46. Altar fragment, poros. Pl. 7.

A 423. Pres. H. 0.29 m.; pres. W. 0.335 m.

Single fragment; broken away behind, at bottom and at right edge; the top is damaged but was probably flat.

Coarse, dark buff poros limestone; no trace of stucco.

Apparently an altar (or a large cippus?) with rectangular basis surmounted by a cylindrical shaft. Est. Diam. of shaft 0.36 m.; est. W. of basis 0.36 m.; pres. H. of basis 0.095 m.

OBJECTS FROM FILL VI

47. Terracotta figurine, head of Hypnos (?). Pl. 5.

MF 11454. Pres. H. 0.06 m.

Head, neck and bust preserved.

Fine, buff clay; red glaze paint on hair, white slip on flesh. Presence of glaze on *interior* (at junction of head and shoulders) shows that it was applied before firing (perhaps as a thin slip designed to facilitate the proper adherence of the parts). Face made in a mould; back of head and neck modelled by hand, along with

the tenon for inserting into the shoulders. Front of body made in a mould, back made by hand. The thick strands of hair (and the wing, see below) were applied after the head was taken from the mould.

Apparently a male figure; the hair hangs in long locks to the shoulders. On the proper right side of the head, above ear level, appears a small wing; faint traces of the attachment of a second wing on the left side. The wings suggest that this figure represents Hypnos or Hermes; the heavy, drooping eyelids are perhaps more appropriate to Hypnos, as is also the arrangement of the hair.

48. Terracotta figurine, female grotesque.

Pl. 5.

MF 11455. Pres. H. 0.05 m.

Head and left breast preserved; attachment on top of head missing.

Buff clay; white slip. Hollow figurine; front made in mould, back modelled by hand.

A grotesque female doll. The horizontal hole through the left shoulder shows that the figurine had jointed arms. The face wears a broad and inviting smile. The hair extends far out to the sides of the face. Through some attachment or bun of hair on the top of the head passed a vertical hole to permit suspension by a string.

Cf. F. Winter, *Die Typen der figürlichen Terrakotten*, II, Berlin, 1903, p. 456, nos. 2-3; D. B. Thompson, *Hesperia*, XXIII, 1954, pp. 90-91 (2nd half of the 4th century).

OBJECT FROM MANHOLE 8 (DEPTH UNCERTAIN)

49. Terracotta figurine, Kriophoros. Pl. 5.

MF 11462. Pres. H. 0.051 m.; pres. W. 0.051 m.

Head of man and part of animal preserved.

Buff clay, fired pinkish buff at core and gray in interior.

Bearded male head with mustache; on the head a skullcap with projecting brim at forehead. Behind head and to right of it appears an animal, its neck on the figure's proper right. This could be a Hermes Kriophoros, or it may be a Moschophoros.

MANHOLE 10

As in the case of manholes 7 and 8, so here we cleared the two tunnels for a short distance only. The fill in the tunnels and in the shaft from bottom to 99.77 m. (Fill I: LOT 3202) was uniform and contained many fragments of amphorae similar to Nos. 2 and 3 above; none of the amphorae was sufficiently complete to permit restoration. In addition the fill contained numerous fragments of imported Attic black-glazed ware of the end of the 4th century B.C. and of Corinthian black glaze of the same period.²⁴ This fill seems likely to have been thrown into the shaft at the time of abandonment in the late 4th or early 3rd century, since many of the vessels were clearly complete or nearly so when they fell in. Fill II (99.77 m. to 105.82 m.—LOT 3203) appears to contain nothing later than Fill I, but the character of the material is different: no vessels appear to have been anywhere near complete when thrown into the shaft; and many small pieces of fine ware of earlier periods (as early as Geometric) also occur. Fill III (105.82 m. to 111.17 m.—LOT 3204) is like II in the fragmentary condition of all the vessels represented and in the broad chronological range; but here some pieces seem to represent the first half of the 2nd century B.C.²⁵ Fill IV (111.17 m. to 114.92 m.—LOT 3205) produced one coin²⁶ and a number of nearly whole vessels, several of which are listed below. These appear to be no later in date than the sack by Mummius in 146 B.C. Uninventoried material from the Fill confirms this chronology.²⁷ Fill V (114.92 m. to 119.32 m.) contained some early Roman wares²⁸ plus one fragment of pottery of the 3rd century after Christ and a fragment of a late Roman lamp. In Fill V occurred another Corinthian bronze coin of the Pegasus/trident type (symbol illegible). In the upper levels (119.32 m. to modern surface; the rock-cut shaft of the manhole first appeared at about 120.60 m.) there were no significant sherds, but one coin of the 4th century after Christ.²⁹

²⁴ Attic black-glazed kantharos as Thompson's A 28 (*Hesperia*, III, 1934, p. 319, fig. 5); black-glazed kantharoi and skyphoi similar in shape to Thompson's A 28-31, A 26; Attic fragments with rouletted and stamped ornament such as occurs in Thompson's Group A.

²⁵ Non-inventoried pieces which confirm this dating are: a small fragment of Megarian bowl comparable to Thompson's D 49; a black-glazed kantharos rim fragment with incised zigzag ornament; some imitations of early Pergamene fabric; and a lamp nozzle of Broneer's Type XI.

²⁶ A Corinthian bronze of the Pegasus/trident type, the symbol illegible.

²⁷ Simple bowls with poor brownish to black glaze, similar to Thompson's D 9 and 5; an unguentarium comparable in body profile to Thompson's C 76; a coarse cooking ware bowl on ring foot identical in shape with Corinth C-47-827 (from a manhole in the Southeast Building, a group dated by G. R. Edwards to ca. 146 B.C.); fragments of late West Slope ware.

²⁸ Two non-glazed basins (almost complete) similar in profile to the vessel from the Athenian Agora, G 100 (*The Athenian Agora*, V, p. 31); fragments of an amphora such as Agora G 198; deep, round-bodied cooking pots with horizontal handles, similar in shape to Agora F 84 but with rims such as those of the casseroles Agora F 76 and G 190. No ceramic material from Fill V has been retained.

²⁹ Valens or Valentinian I (364-378). Reverse type, *Securitas Reipublicae* (cf. J. W. E. Pearce, *The Roman Imperial Coinage*, IX, London, 1951, pp. 95-97).

OBJECTS FROM FILL I

50. Attic black-glazed plate. Fig. 3.

C-65-289. H. 0.026 m.; est. Diam. 0.205 m.
About half preserved; restored in plaster.
Pinkish buff clay; fine black glaze overall.
Shallow plate on wide ring foot; rounded lip.
Slight offset in wall on exterior. Three bands
of rouletting on floor inside the position of the
ring foot. Cf. Athenian Agora P 2858 (*Hesperia*, III, 1934, p. 327, A 70).

51. Coping stone, poros. Fig. 9.

A 521. Pres. H. 0.102 m.; pres. W. 0.21 m.
Small fragment; part of top and of front
moulding preserved; broken away below and at
back.

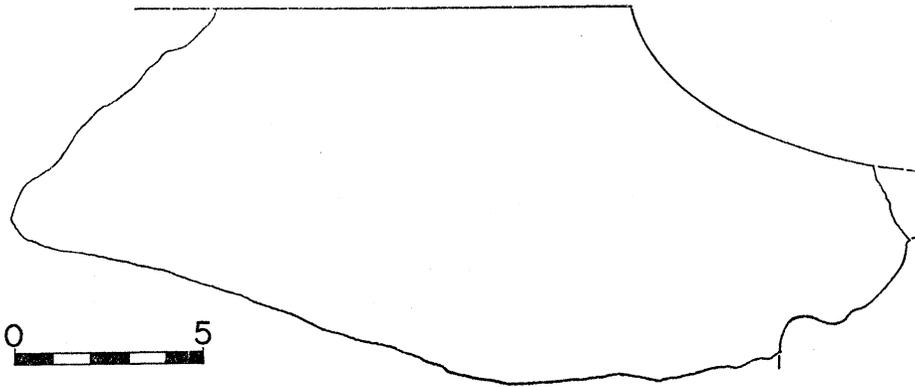


FIG. 9. Poros Coping Fragment (51) from Manhole 10. Profile.

Fine, grayish buff poros limestone; white
stucco, which on the top surface of the stone
has an undercoat of pebble cement.

The broad cavetto at the top suggests that
this is from a coping stone (cf. C. Roebuck,
Corinth, XIV, *The Asklepieion and Lerna*,
Princeton, 1951, p. 67, fig. 18).

52. Cippus, poros. Pl. 9.

A 548. Pres. H. 0.34 m.; pres. dimensions
of shaft in plan: at top, 0.12 m. x 0.12 m.; at
bottom, 0.18 m. x 0.125 m.

The shaft is broken away on one side, cut

off obliquely on the other; base apparently
missing.

Fine buff poros limestone; stucco on top and
on one side of shaft.

The shaft may originally have been square
in section; it has apparently been cut back
obliquely on one side for a distance of 0.22 m.
down from the top to adjust the stone to some
adjacent block or monument. It is perhaps not
impertinent to call attention to the poros pillar
from the Argive Heraion (C. Waldstein, *The
Argive Heraeum*, I, Boston, 1902, pp. 42-43,
139-140, figs. 15, 70) which Waldstein sug-
gested might be the primitive "kion" or pillar-
image of Hera mentioned by Pausanias: from
a block originally square in plan each of the
four corners has been bevelled vertically from

the top to near the base, creating a shaft with
six oblique facets.

53. Cippus, poros. Pl. 9.

A 520. H. 0.50 m.; W. of base 0.26 m.; W.
of shaft 0.155 m.; H. of shaft 0.165 m.; Th.
0.16 m.

Intact (?); the bottom is very irregular but
probably constitutes the original base.

Coarse, brownish buff poros limestone; no
trace of stucco.

A very rough marker, flat on both faces; the
larger base element designed for burial in the
ground.

OBJECTS FROM FILL II

54. Iron hammer head. Pl. 6.

MF 12092. Pres. L. 0.205 m.; W. 0.055 m.; max. Th. 0.045 m.

Heavily corroded by oxidation; partly broken away at cutting edges.

Iron hammer head with two cutting edges set at right angles to the haft. The hole for the haft is quite small (Diam. *ca.* 0.015 m.).

55. Iron hammer head. Pl. 6.

MF 12078. L. 0.16 m.; W. at blade 0.07 m.; W. at haft 0.058 m.; max. Th. 0.038 m.

Complete, but much corroded by oxidation.

Iron hammer head with cutting edge at one end (parallel to haft) and hammering surface at opposite end; the hole for the haft is oval (*ca.* 0.015 m. x 0.025 m.).

56. Cippus, poros. Pl. 9.

A 511. Pres. H. 0.49 m.; H. of shaft 0.192 m.; W. at base 0.29 m.; W. at top 0.15 m.; Th. 0.125 m.

Intact; the lower portion is irregular in shape but certainly represents the original condition.

Coarse, buff poros limestone; no trace of stucco.

The upper third of this flat slab has been cut down to form the marker proper and is slightly bevelled or rounded at each of its four corners. Flat on top.

57. Cippus, poros. Pl. 9.

A 502. H. 0.29 m.; W. of base 0.28 m.; Diam. of shaft *ca.* 0.12 m.

Part of base broken away; top chipped.

Coarse, buff poros limestone; no trace of stucco.

A shaft 0.15 m. high, roughly cut into eight vertical facets, rises from a rectangular base. The whole has the form of an inverted T (cf. No. 70 and note 17 above).

OBJECTS FROM FILL III

58. Black-glazed plate fragment, stamped. Pl. 3.

C-65-99. Max. dia. 0.051 m.

Single fragment of foot and floor.

Pinkish buff clay; dull black glaze overall.

From a plate with ring foot. At center of floor, a stamped star pattern enclosed by deep circular grooves; over position of foot, stamped palmettes (only one preserved), enclosed by deep circular grooves.

59. Cippus, poros.

A 501. Pres. H. 0.258 m.; Diam. 0.165-0.180 m.

Base broken away.

Rather coarse, brownish buff poros limestone; no trace of stucco.

A very roughly cut, irregularly faceted shaft; at bottom a trace of the projection of the rectangular (?) base.

OBJECTS FROM FILL IV

60. Pergamene conical bowl, West Slope decoration. Figs. 3, 10 top; Pl. 3.

C-65-96. H. 0.065 m.; est. Diam. at lip 0.172 m.

About one-third missing; restored in plaster.

Buff clay; reddish glaze, much worn; double-dipping streak (see No. 29 above).

Broad, conical bowl; recessed base. Grooves on exterior, at mid-point of wall and at base. On interior, decoration of grooves incised through the glaze and of patterns executed in yellowish buff paint after firing: just below lip, a painted wave pattern between grooves; at center of floor, rosette; in main zone, three dolphins.

The fabric and glaze of this piece are clearly those of the familiar Pergamene ware; the shape and style of decoration appear in Corinthian black-glazed ware of the late 3rd and the early 2nd century B.C. (C-34-37 [*A.J.A.*, XXXIX, 1935, p. 71, fig. 14] of the late 3rd century; C-47-107 of the early 2nd century; and C-47-50 of *ca.* 150 B.C.) and the shape occurs also in Hellenistic gray ware of the mid 2nd century (C-34-153 [with relief head at center of floor] and C-34-1621). The painted

ornament is most unusual in Pergamene ware. I suspect that this must be one of the earliest products of the Pergamene potteries and it may justifiably be dated as early as 150 B.C.

About one-half missing; restored in plaster. Buff clay; black to brownish glaze overall; double-dipping streak.

Miniature hemispherical bowl without foot.

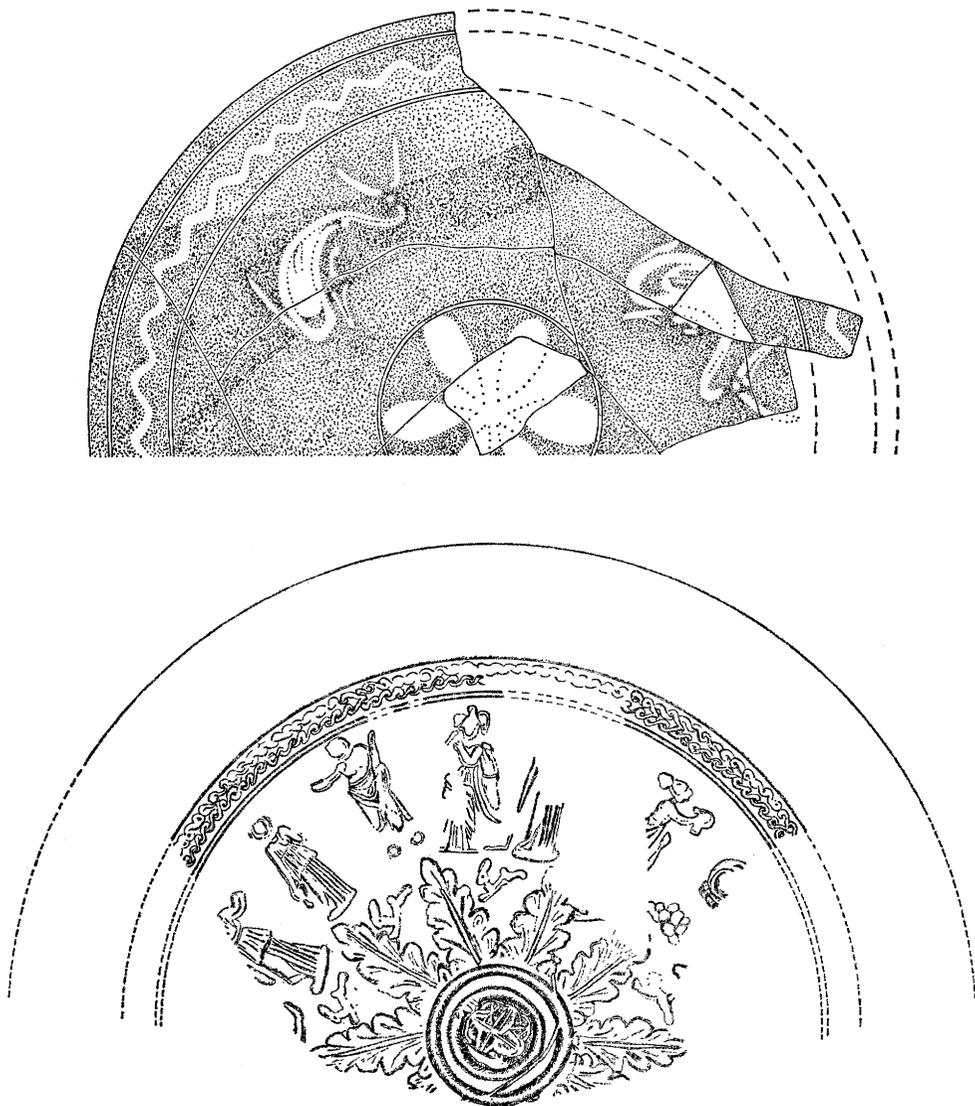


FIG. 10. Pergamene Bowl (60, above) and Megarian Bowl (62, below) from Manhole 10. Development of Ornament. Drawn by Helen Besi. Scale 1:2.

61. Hemispherical black-glazed bowl.
Fig. 3; Pl. 3.
C-65-97. H. 0.036 m.; est. Diam. at lip
0.065 m.

On exterior, pattern of incised lines forming contiguous pentagons; incised groove below lip. Cf. J. Schäfer, *Hellenistische Keramik aus Pergamon*, Berlin, 1968, p. 117, fig. 10,2.

62. Megarian bowl. Figs. 3, 10 bottom; Pl. 3.

C-65-98. H. 0.086 m.; est. Diam. at lip 0.142 m.

About two-thirds missing; partly restored in plaster.

Grayish buff clay; a few traces of black to brownish glaze remain. Probably Corinthian fabric.

At the top of the relief field, a simplified guilloche pattern. In the field, from left to right: standing female figure, Amymone and Poseidon standing apart, helmeted Athena facing (?) with shield, standing female figure, girl advancing right to crown a trophy. Below, a single row of acanthus leaves with running rabbits between the tips of the leaves; on base, a rosette with four large and four small leaves. The Amymone-Poseidon group is familiar on Attic bowls, where, however, the god generally has his right hand on the shoulder of Amymone (W. Schwabacher, *A.J.A.*, XLV, 1941, pp. 188-190, Group 2); the girl crowning trophy also occurs on bowls from Athens (*ibid.*, pp. 191-193, Group 4).

With this should be compared other related bowls from the Corinthia: Corinth C-64-335 (Corinthian fabric) and CP 1927 (probably not Corinthian fabric); Isthmia IP 1475 and IP 3352. On C-64-335 (from the upper filling of manhole 11 of the Anaploga tunnel system) appear two figures similar to those used for C-65-98 (Athena [but she is moving right, with head facing], girl crowning trophy); on CP 1927 appear the figures of Amymone and Poseidon. All three of the bowls from Corinth have similar bands of simplified guilloche above the figured zone and at the bottom have rosettes or rabbits between the tips of the single row of acanthus leaves. The group of girl crowning trophy occurs on both the fragments from Isthmia and on a number of bowls of Corinthian manufacture from Corinth (as, C-65-373).

The mould for C-65-98 was prepared from badly worn dies and was already cracked when this bowl was produced. Although it is prob-

able that some of the same dies were used for producing each of the three separate moulds from which C-65-98, C-64-335 and CP 1927 were made, the state of the dies differs from bowl to bowl. On C-64-335 (which G. R. Edwards considers the earliest of the figured Megarian bowls from Corinth, around the end of the 3rd century B.C.) we have the earliest and freshest state of the dies. C-65-98 appears to be the latest of the three; the dies used for its mould were worn and had probably been retouched, and the bowl appears to have shifted while in the mould, so that the figures have a double outline. The Megarian bowl of Corinthian fabric C-28-52 was made from a mould in which the Poseidon (without Amymone) and girl (crowning a non-existent trophy) were produced from dies of smaller size; the rabbits in the field are very similar to those on C-65-98. It is probable that C-28-52 is later than any of the other three noted above; it was made with new dies which were impressed into the mould at random, without consideration of the original iconographical relationship of one to another.

63. Stamped amphora handle. Pl. 3.

C-65-290. Max. dim. 0.122 m.

Fragment of neck with top of handle.

Pinkish buff clay; buff slip.

From an amphora with tall neck; handle oval in section. Rectangular stamp on top of handle: 'Ερμα[-. Possibly Chian; see *Hesperia*, Suppl. X, pp. 166-167; *B.C.H.*, LXXVI, 1952, pp. 519, 539, pl. XXV, 37-38.

64. Terracotta mirror (?). Pl. 6.

MF 12082. Pres. H. 0.047 m.; W. 0.037 m.

Single fragment, broken away above and below.

Pinkish buff clay.

A thin disc of clay with a semi-lunate attachment at top (the tips are broken; this may originally have been a complete ring of clay for suspension); at bottom, a horizontal strip of clay above the attachment of what may have been a handle. On the front of the disc,

pattern in red glaze paint: two intersecting lines form four quarters, each of which is decorated with short tapering brush-strokes of paint.

Perhaps a toy mirror.

almost certainly have retained some traces of stucco if it had been applied.

The stone was clearly worked (perhaps incompletely). It may have served as a rough field marker.

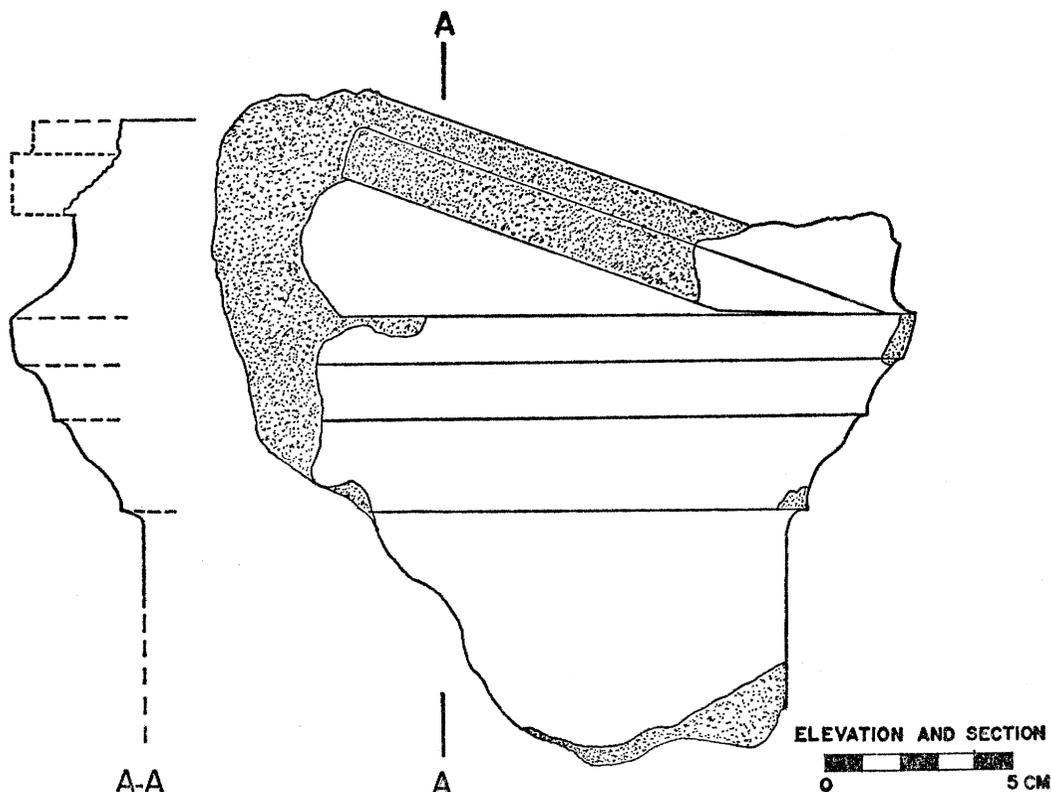


FIG. 11. Poros Stela Crown (66, A) from Manhole 10.

65. Poros stela or boundary stone.

Not inventoried. Pres. H. 0.675 m.; W. at top 0.335 m., at bottom 0.368 m.; Th. at top 0.155 m., at bottom 0.19 m.

Rough slab of poros limestone, broken above and below.

The front and back surfaces are rough, representing the condition of the slab as it was split out of the quarry bed. One side has been smoothed with a flat chisel; the other side, though much worn, was probably also worked with a tool. Probably not stuccoed, as the very rough surface of the front and back would

OBJECTS FROM FILL V

66. Pedimental crown of stela. Fig. 11; Pl. 8.

A 503 (A, B). Max. dim.: A, 0.23 m.; B, 0.14 m.

Two non-joining fragments preserve: part of the upper right corner of the stela and the right portion of the pediment (A); and part of the peak of the pediment (B).

Fine, buff poros limestone.

From a stela which was rectangular in section, surmounted by a crowning moulding and

a pediment. Irregularities of the surface of the stone were filled out in a coarse stucco; the whole was then covered with a fine, white stucco.

67. Poros stela. Pl. 7.

A 504. Pres. H. 0.94 m.; W. at base 0.48 m., at top 0.47 m.; Th. at base 0.275 m., at top 0.246 m.

Broken away at top; deep gouge on front face and many scratches on all surface areas.

Moderately fine, grayish buff poros limestone.

A stela, rectangular in plan, tapering in width and thickness toward the top. A tenon at base, projecting down 0.095 m., has the full thickness of the stela but is only 0.35 m. wide. All faces of the stela (except for the tenon) are covered with a fine, white stucco, beneath which irregularities in the surface of the stone have been filled out in a coarser, yellowish pebble cement. At front and back the stucco curves out slightly just above the tenon; it is likely that the stucco was applied after the stela had been set into its base. No inscription nor any trace of paint on the preserved surfaces. It is possible that the stela crown No. 65 may belong to this stela.

68. Column shaft, poros, faceted. Pl. 8.

A 505. Pres. H. 0.73 m.; Diam. at base, 0.373 m., at top 0.35 m.

The top is broken away.

Moderately fine, grayish buff poros limestone without trace of stucco.

A shaft with slight taper, cut into twenty flat, vertical facets; the facets are *ca.* 0.06 m. wide at bottom, *ca.* 0.055 m. at top. At the center of the resting surface is a tiny hole (for the point of a drawing compass?), located at

the point of intersection of two lines incised at right angles to one another and meeting the perimeter at the mid-points of diametrically opposed facets.

69. Cippus, poros. Pl. 9.

A 500. Pres. H. 0.22 m.; Diam. at top 0.14 m., at base 0.102 m.

Broken away at base; sides and top chipped. Coarse, buff poros limestone.

A slender stone marker apparently intended to be set up as an inverted (truncated?) cone; flat on top. Top as well as sides covered with moderately coarse, white stucco.

70. Cippus, poros. Pl. 9.

A 519. H. 0.425 m.; W. of base 0.415 m.; W. of shaft 0.24 m.; H. of shaft 0.20 m.; Th. 0.17 m.

Intact.

Coarse, buff poros limestone; no trace of stucco.

Base and shaft cut from a flat slab of stone in the form of an inverted T (cf. No. 57 and note 17 above); the edges of the shaft have been rounded off very crudely.

OBJECT FROM MANHOLE 10 (DEPTH
UNCERTAIN)

71. Cippus, poros.

A 547. Pres. H. 0.17 m.; W. 0.13 m.; Th. 0.10 m.

Top of shaft only; top surface is probably original.

Coarse, buff poros limestone; no trace of stucco.

From a boundary stone of which the shaft is rectangular in section.

THE ARCHITECTURE

The architectural remains found in the manholes, particularly Nos. 14, 25 and 45, permit some deductions as to the chronology and the character of the architectural monuments of the area. No. 45 (Fig. 8, Pl. 7) is a Doric corner triglyph/metope block well enough preserved so that all its dimensions (except the width of the metope)

can be ascertained; it comprised the adjoining triglyphs and one metope (on the left side of the block). The elevation of the triglyph (heads of the glyphs) resembles that of the very much larger exterior order of the peristyle of the temple of Zeus at Olympia, while the section of the glyph at the top is very similar to that of the pronaos order of the same temple.³⁰ The triglyph is very small, smaller than those of the Megarian Treasury at Olympia or of the Athenian Treasury at Delphi, about the same width as those of the Syracusan Treasury at Olympia (W. 0.306 m.; H. 0.460 m.). It cannot derive from anything larger than a distyle *in antis* façade. It might with greater likelihood belong to a triglyph altar or to a triglyph frieze forming a parapet wall, as at the Sacred Spring in Corinth.³¹ It can hardly have served for the frieze of a normal Doric building, since the corner cornice block in such a structure would almost certainly have been a true corner block, shading both faces of the corner triglyph beneath; such a cornice block would normally have been held in place by means of dowels in the side joints (at right angles to the two faces) rather than by a hidden dowel in the middle of the resting surface as is implied for the cornice associated with our No. 45.³²

³⁰ E. Curtius and F. Adler, *Olympia*, Tafelband I, *Die Baudenkmäler*, Berlin, 1892, pls. XIII, 1, XV. It is not feasible to attempt to date the triglyph on the basis of proportions of width to height, since in normal Doric construction triglyph widths may vary considerably across the principal façades; and the proportion of height of taenia to height of triglyph in the frieze of a building may be quite different from that in an altar or a parapet wall. For the dating of our single triglyph the best parallels are those of elevation and section of the top of the glyphs, as noted above.

³¹ B. H. Hill, *Corinth*, I, vi, *The Springs*, Princeton, 1964, pp. 138-145, 177-185; cf. also *Hesperia*, XXIX, 1960, p. 231, note 12, fig. 3.

³² The use of a hidden dowel in the resting surface of a corner cornice block is attested in the poros construction of the Propylon of the Gymnasium at Epidauros. This building was erected in the 3rd century B.C. according to G. Roux (*L'architecture de l'Argolide aux IV^e et III^e siècles avant J.-C.*, Paris, 1961, p. 412). One corner cornice block and two corner triglyphs can be seen adjacent to the east side and the northeast corner of the Propylon. On the resting surface of the corner cornice block (Pl. 11, c, d) appears a square dowel hole (its shape at the surface of the stone much altered by the violent removal of the metal dowel) measuring 0.08 m. x 0.08 m. x 0.135 m. deep; some of the lead which held the dowel in place survives in the depth of the cutting. The hole is placed 0.23 m. in from the edge of the resting surface on the front, 0.26 m. in from the edge on the side. The corner triglyph which lies adjacent to this cornice block (Pl. 11, c) has on its bearing surface a corresponding dowel cutting which measures 0.04 m. x 0.04 m. x 0.065 m. deep; its position fits very well with that of the dowel hole in the undersurface of the cornice (allowing *ca.* 0.03 m. overhang of the resting surface on front and side). There is no indication of lead in the dowel hole of the corner triglyph block. Presumably the metal dowel was slightly less than 0.04 m. square in section; this metal pin must have been leaded into the cutting in the resting surface of the cornice block before that stone was set in position. Since the pin could not also be leaded into the cutting on the top of the triglyph, the dowel hole there was made smaller in order to provide as tight a fit as possible for the dowel when the cornice block was carefully lowered (in absolutely level position) onto the frieze course.

It should be noted that the corner cornice block as well as at least one other cornice block (not from a corner) of the Propylon of the Epidauros Gymnasium were provided also with T-dowels on the resting surfaces at both side joints (Pl. 11, c, e; the latter block is incomplete at left, where

A corner triglyph at the Heraion of Argos, which Roux assigns to a triglyph altar,⁸³ has a dowel hole on its bearing surface, placed within 0.12 m. and 0.15 m. of the two outer faces (Pl. 7). The northwest corner triglyph of the triglyph altar at Corcyra has a dowel hole near the center of its bearing surface.⁸⁴ Dowel holes on corner triglyph blocks, placed as on our block No. 45 and on the triglyphs from the Heraion of Argos and Corcyra, could most easily have served to hold in place *two* cornice blocks meeting over the corner in a diagonal joint; just such a joint is preserved at the exterior angle of the cornice of the triglyph wall at the Sacred Spring in Corinth,⁸⁵ although no dowel appears to have been used there. It is most reasonable to assume that the corner triglyph block No. 45 served as part of a triglyph altar or of a triglyph parapet wall; it appears to belong to the first half of the 5th century B.C.

The Doric column capital (No. 14) also shows some resemblance in profile to the capitals of the temple of Zeus at Olympia; the abacus, however, is rather shallow in proportion to the height of the echinus.⁸⁶ The width of the abacus (est. 0.483 m.) appears to be too small for association with a triglyph even of the small dimensions of our No. 45, for which one would expect an abacus at least 0.62 m. wide (2 to 2½ times as wide as the triglyph). It may be that the capital is from a votive or funerary column.⁸⁷ Unfortunately its bearing surface is not sufficiently well preserved to indicate whether the capital supported any further member. Like the corner triglyph, the capital appears to be of the first half of the 5th century B.C.

The Ionic column drum (No. 25) has broad, shallow flutes which suggest a date in the 4th century B.C. One may compare with them the shallow flutes of the interior order of the South Stoa at Corinth⁸⁸ and of the Ionic columns of the Abaton at

the overhang with mutules and viae is broken away). These dowels, like that at the outer corner of the corner cornice block, must have created very difficult conditions for the masons in the setting of the blocks of the cornice course. T-dowels are known as early as the 6th century (Delphi, Treasury of the Knidians, W. B. Dinsmoor, *B.C.H.*, XXXVII, 1913, p. 10) and are common from the middle of the 5th century (base of the Athena Parthenos, W. B. Dinsmoor, *A.J.A.*, XXXVIII, 1934, pp. 93-94, fig. 2; Erechtheion, G. P. Stevens *et al.*, *The Erechtheum*, Cambridge, 1927, pp. 194-195; frequently in Epidauros in the 3rd century, Roux, *op. cit.*, pp. 210-211; see also 'Α. Κ. 'Ορλάνδος, 'Η 'Αρχαία 'Ελληνική 'Αρχιτεκτονική, Μέρος Α', Τὰ 'Υλικά Δομῆς, Τεύχος 2, Athens, 1958, pp. 198-199, figs. 150, B, 156).

⁸³ *Op. cit.*, pp. 62-65, pl. 22, 3, a.

⁸⁴ H. Schleif, K. Rhomaios and G. Klaffenbach, *Korkyra, I, Der Artemistempel*, Berlin, 1940, pp. 65-66, fig. 49.

⁸⁵ *Corinth*, I, vi, p. 181, fig. 112.

⁸⁶ Cf. also a capital from the Heraion of Argos, Waldstein, *op. cit.*, I, fig. 51, G. For proportions in 5th and 4th century Doric capitals, see P. Amandry, *Hesperia*, XXI, 1952, pp. 257-259; the proportions of our capital would place it at the head of most of Amandry's (or, rather, de la Coste Messelière's) tables and so clearly in the first half of the 5th century.

⁸⁷ It is even smaller than the isolated Doric capital from the Corinthian Kerameikos, the abacus of which is 0.63 m. wide (A. Stillwell, *Corinth*, XV, i, *The Potters' Quarter*, Princeton, 1948, pp. 69-70, 80, fig. 11, pl. 25, B).

⁸⁸ O. Broneer, *Corinth*, I, iv, *The South Stoa and its Roman Successors*, Princeton, 1954, pp. 46-47, figs. 24-25.

Epidaurus.³⁹ The number of flutes, twenty, is common in Peloponnesian Ionic architecture.⁴⁰ The absence of an empolion cutting on the resting surface of an Ionic column drum is unusual. In the Doric order of the classical period the resting surface of the lowest drum of the shaft (which rests on the stylobate) is usually without empolion; in the Ionic style, however, the lowest drum (which rested either on the column base or on a short section of shaft incorporated into the base block) and also all other drums usually have the empolion on both the resting and the bearing surface.⁴¹ If we assume our drum to have been the uppermost one in the shaft, then, on analogy with the proportions of the order in the South Stoa at Corinth, our column should have had a base diameter of about 0.48 m. and a height (with capital) of about 4.53 m.; if our drum had been the lowest in the shaft, the entire column (with capital) would have been about 2.88 m. high.⁴² It is not impossible that this drum derives from a votive or funerary column (as suggested above also for the Doric capital No. 14) or from one of the supports of a baldachino such as was erected about 400 B.C. over the triglyph altar at the sanctuary of Hera Akraia at Perachora.⁴³ The base diameter of the Ionic columns in the Perachora baldachino is 0.37 m.; the lower diameter of our drum (No. 25) is 0.305 m.

Thus we find it possible to suggest that in the vicinity of the cistern (manholes 3-7-8-10) of the Anaploga water tunnel system there existed in the 5th and 4th

³⁹ P. Cavvadias, *Fouilles d'Épidaure*, I, Athens, 1893 (1891), p. 18, pl. VIII, 5, α-γ; II. Καββαδίας, *Τὸ Ἱερόν τοῦ Ἀσκληπιοῦ ἐν Ἐπιδαύρῳ*, Athens, 1900, pp. 121-128; Roux, *op. cit.*, p. 417.

⁴⁰ Roux, *op. cit.*, pp. 334-336.

⁴¹ It is curious to note that in a room on the west side of the Gymnasium at Epidaurus (room D on the plan, J. Delorme, *Gymnasion*, Paris, 1960, fig. 19) there were three Ionic columns, of which the bases of two survive; the central base has an empolion cutting on its bearing surface, the southern base has none. Such an irregularity can be attributed, in all probability, to carelessness on the part of the contractor or mason; a similar factor may be responsible for the absence of empolion cutting in the resting surface of our Corinthian drum.

⁴² The columns of the Temple of Athena Nike on the Acropolis at Athens are 4.066 m. high; those of the baldachino around the triglyph altar at Perachora have been estimated to be 2.50 m. to 3.00 m. high.

⁴³ H. Payne *et al.*, *Perachora*, I, *The Sanctuaries of Hera Akraia and Limenia*, Oxford, 1940, pp. 89-91; H. Plommer and F. Salviat, "The Altar of Hera Akraia at Perachora," *B.S.A.*, LXI, 1966, pp. 207-215. Parallels for the baldachino at Perachora are to be found at Corinth in the area of Temple A, one covering a small shrine erected over the dismantled temple, the other covering an altar in front of the same shrine (R. Stillwell *et al.*, *Corinth*, I, ii, *Architecture*, Cambridge, 1941, pp. 4-16, pl. I. Excavations by Mr. Charles Williams in 1966 established that the construction of the two baldachinos is probably to be dated at the end of the 4th century or the beginning of the 3rd: cf. *B.C.H.*, XCI, 1967, p. 633). It may be noted that a baldachino appeared on the bier of Alexander the Great, surrounding the sarcophagus (Diodoros Sic. XVIII, 26-27; K. F. Müller, *Der Leichenwagen Alexanders des Grossen*, Leipzig, 1905); and it is possible that the "peristyles" which occur on sarcophagi (as that of the Mourning Women) and on numerous funerary monuments (as the Nereid Monument of Xanthos) were intended to imply baldachinos over a place of offering to the dead rather than temples which would symbolize the deification of the dead (cf. Müller, *op. cit.*, p. 49).

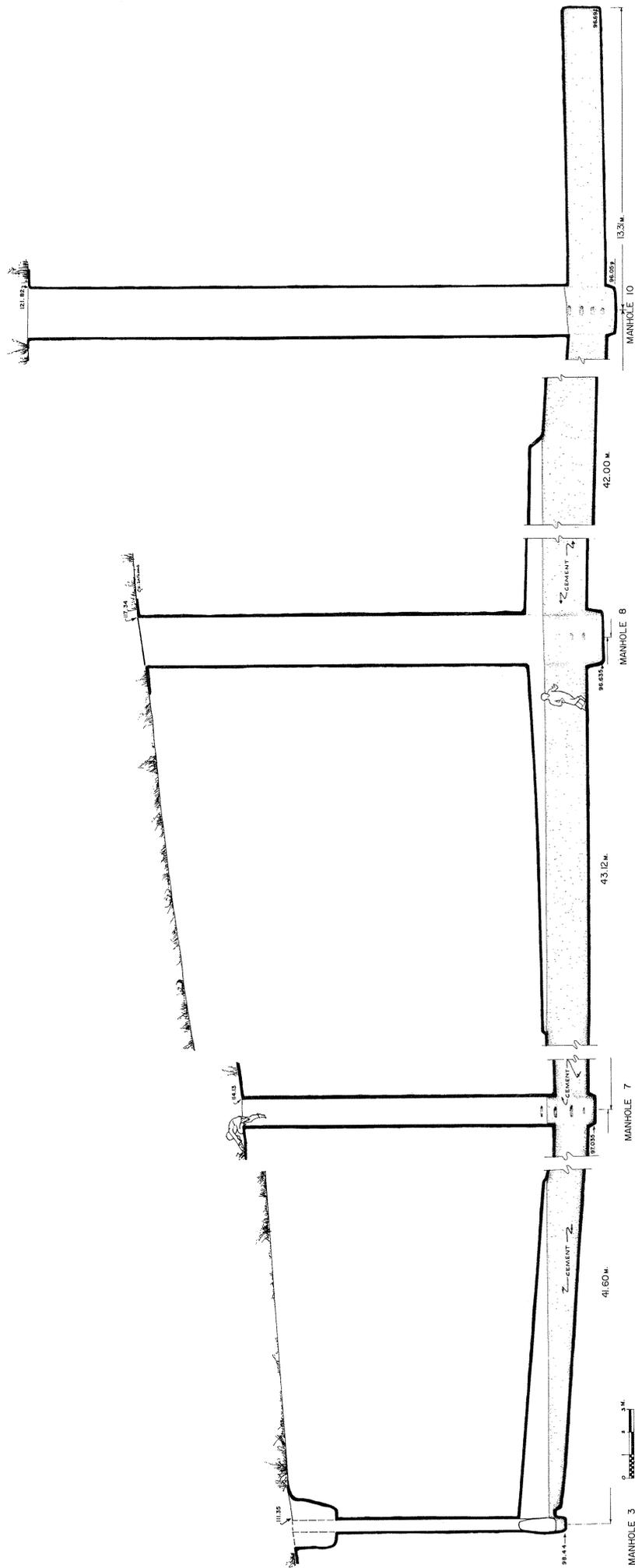
centuries B.C. a sanctuary or cemetery whose area was clearly marked out by stuccoed boundary stones; that in this area there existed a triglyph altar, built in the first half of the 5th century and perhaps covered by a baldachino of the Ionic order in the 4th century; that at least one votive or funerary column of the Doric order and a large stela stood there. There is no certain evidence in all our material for any roofed buildings. Graves are known to have existed in the vicinity of Anaploga and some of them were probably marked by poros stones (especially Nos. 38 and 39). The architectural members noted above may have adorned the cemetery or a sanctuary, which, in close proximity to the grave areas, might well have been devoted to a hero cult or to chthonic divinities. It is to be hoped that the activities of the farmers in the area, ploughing their fields, may yet bring to light some remains of such a sanctuary still *in situ* which will render possible a complete excavation of this presently elusive monument.

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ADDENDUM (see note 16 above)

In January, 1969, additional graves were discovered about 200-250 meters to the northwest of the tunnel cistern. These graves (more than 20 have been opened by early February) range from middle Geometric to early Hellenistic times; the majority appear to be of the 5th century B.C.



Manholes 3, 7, 8 and 10. Section of the Tunnel Cistern.

HENRY S. ROBINSON: A SANCTUARY AND CEMETERY IN WESTERN CORINTH

PLATE 2



2 (1:10)



4 (1:10)



3 (1:10)



5 (1:5)



6 (1:3)



7 (1:2)



10 (1:1)



11 (1:1)



9 (1:10)



8 (1:5)



29 (1:5)



30 (1:5)



32 (1:3)



34 (1:10)



33 (1:1)



31 (1:5)



35 (1:3)



60 (1:3)



58 (1:2)



62 (1:2)



60, Interior (1:3)



61 (1:3)



63 (1:1)

Pottery from Manhole 8, Fill IV, and Manhole 10, Fills III-IV

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PLATE 4



1



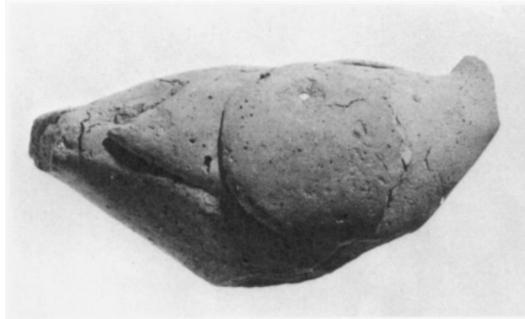
17, A



18



19



20



21



22



23



24

Terracottas from Manhole 7 and Manhole 8, Fill III
(1:1 except 24, 1:3)



36



36



43



42



44



48



47



47



49

Terracottas from Manhole 8, Fills IV, V, VI (1:1)

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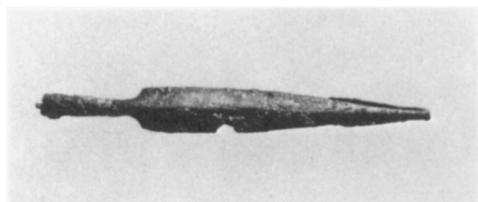
64 (1:1)



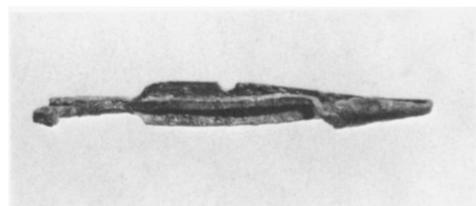
13 (1:2)



16 (1:3)



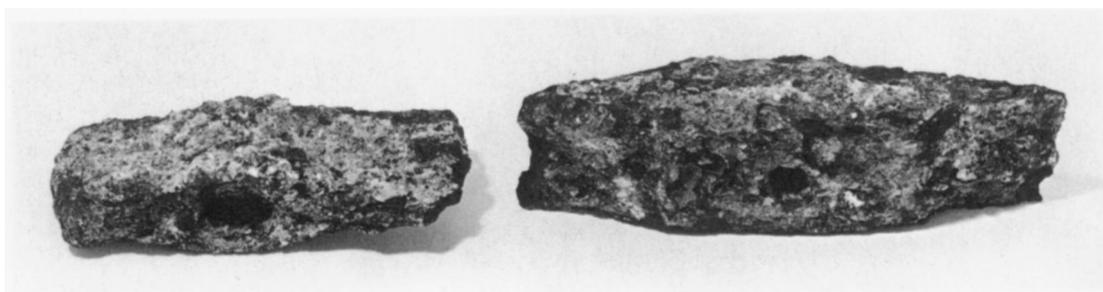
37, Spine (1:2)



37, Interior (1:2)



37 (1:2)

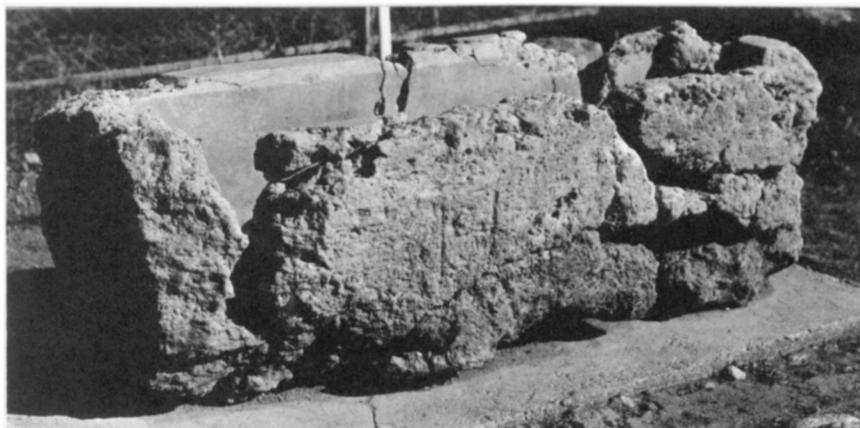


55

(1:3)

54

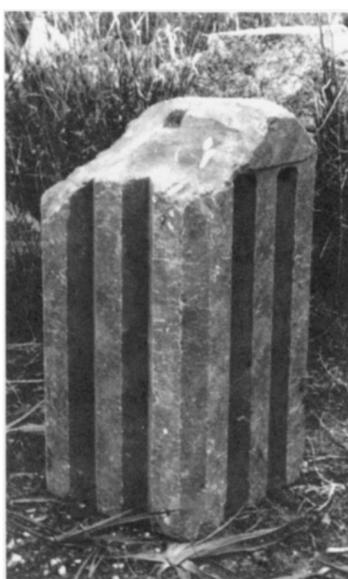
Objects from Manholes 8 and 10



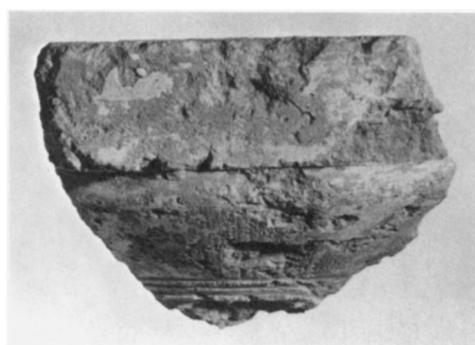
15



45 (1:7)



Corner Triglyph from
Heraion of Argos (Note 33)



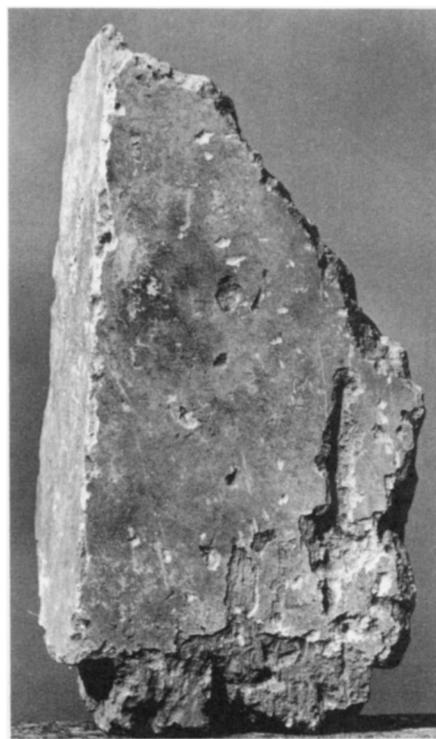
14 (1:5)



25 (1:7)



46 (1:7)



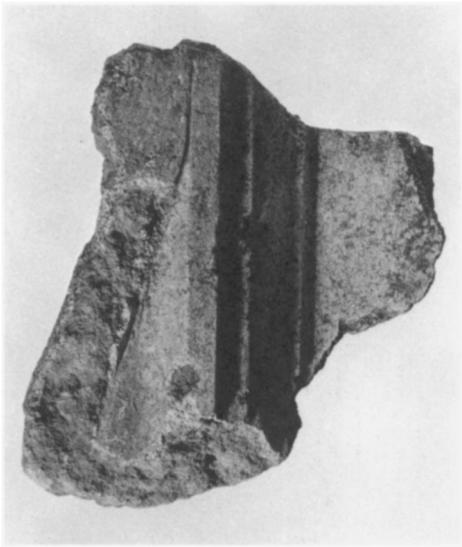
67 (1:10)

Architectural Fragments, Manholes 8 and 10

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66, B (1:3)



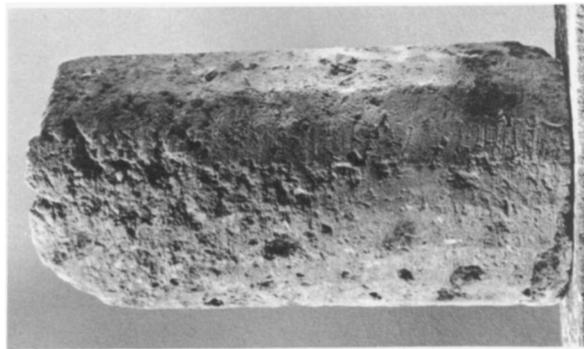
66, A (1:3)



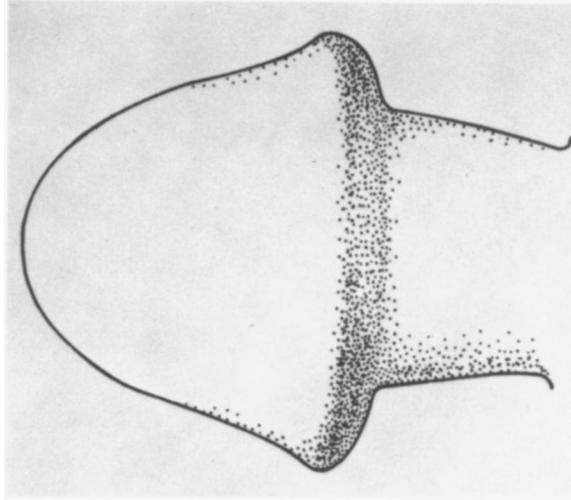
38, Front (1:4)



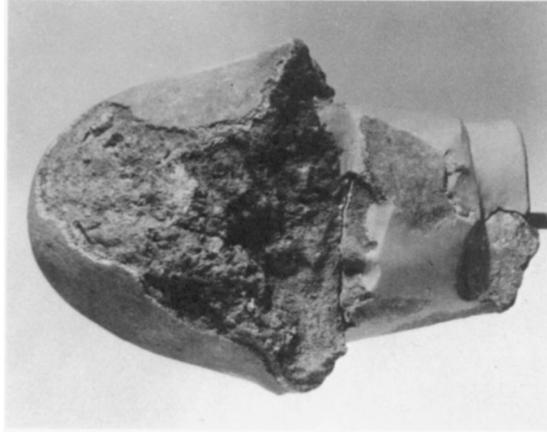
38, Profile (1:4)



68 (1:10)



39, Reconstruction



39 (1:4)

Architectural and Sculptural Fragments, Manholes 8 and 10

HENRY S. ROBINSON: A SANCTUARY AND CEMETERY IN WESTERN CORINTH



26



52



52



53



56



69



57

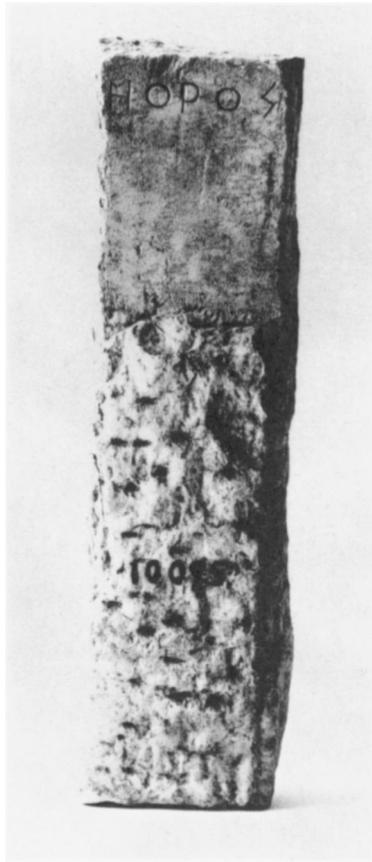


70

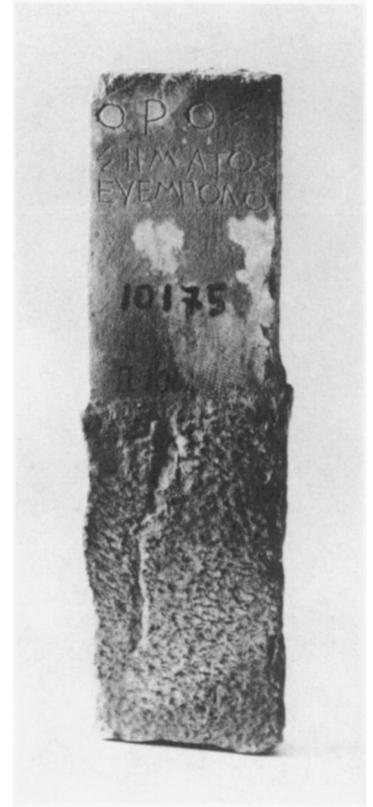
Limestone Cippi, Manholes 8 and 10
(1:7, except 26 and 69, 1:5)



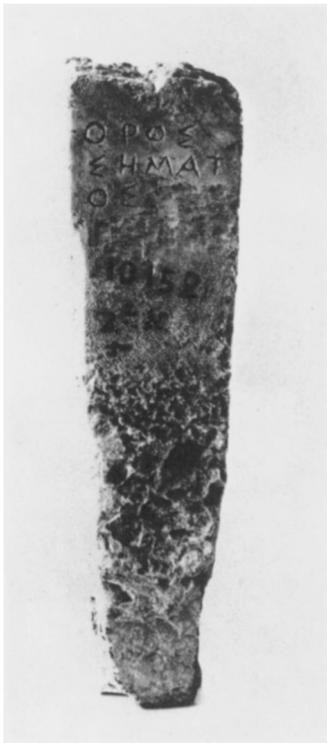
a. Hilarion from Kerameikos



b. E.M. 10095



c. E.M. 10175



d. E.M. 10152



e. E.M. 10164



f. E.M. 10176

Cippi from Athens
(Note 17; 1:7 except E.M. 10164, 1:5)



a. View Eastward from Manhole 8: at Left, Water Channels; at Right, Quarry Cuttings



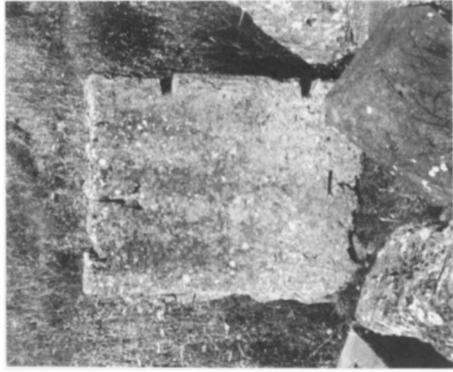
b. Settling Basin 1 and Quarry Cuttings near Manhole 8, from North



c. Corner Cornice Block



d. Corner Cornice Block, Detail



e. Cornice Block, Resting Surface

c.-e. Epidaurus, Propylon of the Gymnasium (Note 32)

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