

# AN INDUSTRIAL DISTRICT OF ANCIENT ATHENS

(PLATES 55-85)

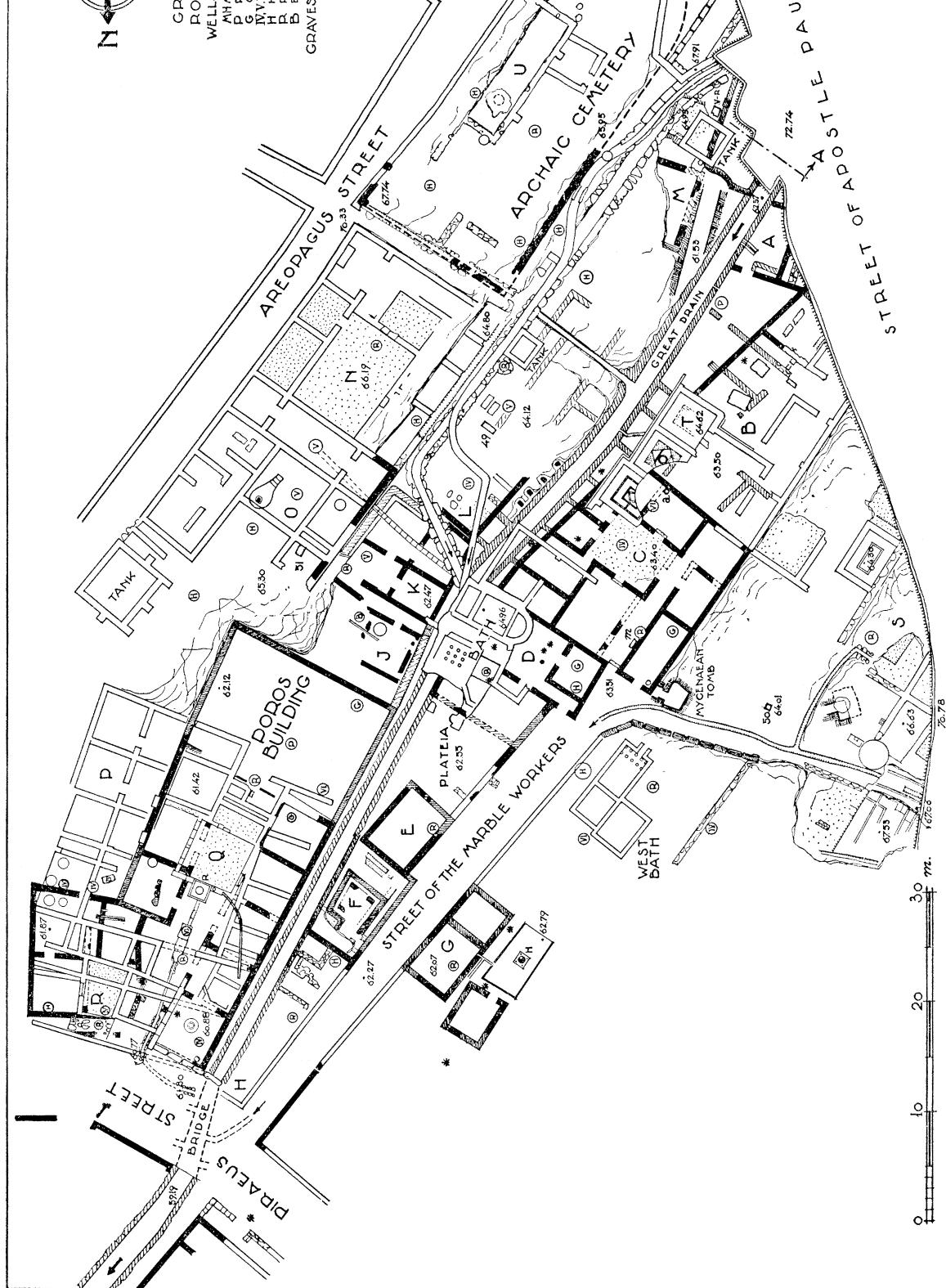
## TABLE OF CONTENTS

	PAGE
INTRODUCTION . . . . .	135
EARLY HISTORY OF THE AREA . . . . .	143
STREETS AND ROADS . . . . .	145
Areopagus Street . . . . .	145
Piraeus Street . . . . .	149
Street of the Marble Workers . . . . .	160
Melite Street . . . . .	167
THE POROS BUILDING . . . . .	168
HOUSES OF THE FIFTH AND FOURTH CENTURIES . . . . .	187
OTHER REMAINS OF THE FIFTH AND FOURTH CENTURIES . . . . .	252
THE SOUTH BRANCH OF THE GREAT DRAIN . . . . .	253
Fifth and Fourth Centuries . . . . .	253
The Roman Drain . . . . .	263
REMAINS OF HELLENISTIC TIMES . . . . .	267
WORKSHOPS . . . . .	269
HOUSES OF THE ROMAN PERIOD . . . . .	272
THE ROMAN BATHS . . . . .	279
The East Bath . . . . .	279
The West Bath . . . . .	283
LATEST HISTORY OF THE AREA . . . . .	284
CONCLUSION . . . . .	288

## INTRODUCTION

THE large triangular area outside the limits of the ancient Market Place to the southwest, and lying in the valley between the Areopagus at the east and the Hill of the Nymphs and the Pnyx at the west, was expropriated in 1938 by the Demos of the Athenians and the Greek Government and turned over to the American School of Classical Studies as an appropriate site for the permanent museum planned to house the antiquities found in the Agora Excavations (Pl. 55 a, b). It is bounded at the north by the modern Asteroskopeion Street, at the west and southwest by the Street of the Apostle Paul, and at the east by the fence of the Areopagus Park. It measures at a maximum from north to south about 170 meters, and from east to west about

*Hesperia*, XX, 3





80 meters; the total surface area is about 7,500 square meters, or a little less than two acres. With the demolition of the modern houses the whole area to the west and northwest of the Areopagus was cleared to the line of Apostle Paul Street, so that an archaeological zone extending from the Hephaisteion at the north clear around to the Odeion of Herodes at the south, and including the old excavations of Dörpfeld, could, after exploration, be included in the park of the Areopagus and the Agora. Such clearance was most desirable, for now that the Areopagus is completely free of modern encumbrances its relation to Acropolis, Pnyx and Agora has been clarified and the physical structure of the terrain is manifest.<sup>1</sup>

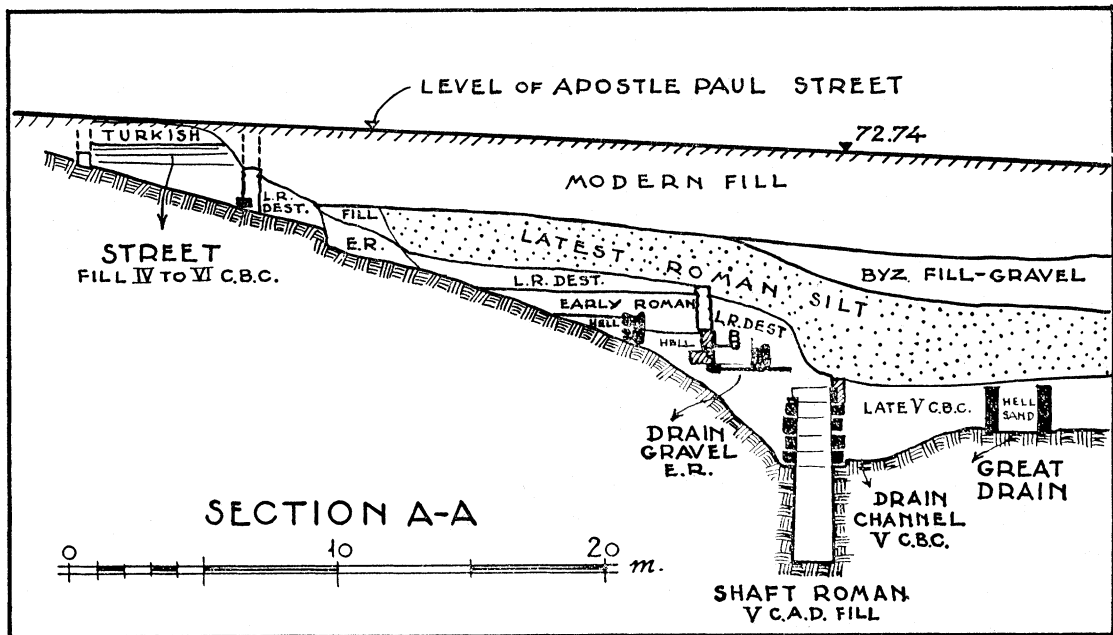


Fig. 2. East-West Section across South End of Area, Looking South at A-A (Plan, Fig. 1).

The excavation of the vast area was laborious and expensive. Nobody had foreseen the great depth of the fill, reaching in one place to a maximum of eleven meters (see section, Fig. 2). Dörpfeld, indeed, had sunk several trial trenches here many years ago, and in the later excavation it was possible to trace them; but his pits were too small and too widely scattered to allow of any conclusions at the time, and although the bits of foundations then uncovered appear on the plans of ancient Athens, no results were ever published.<sup>2</sup> The complete excavation of this large block, which

<sup>1</sup> This area was of course included in the zone to be reserved for excavation and park in the far-sighted plan of Kleanthes and Schaubert for the laying out of the new Athens after the liberation of Greece in 1831; cf. J. Travlos in *Hesperia*, Suppl. VIII, pp. 382 ff., plate 54.

<sup>2</sup> W. Judeich, *Topographie von Athen*<sup>2</sup>, 1931, plan I; *Antike Denkmäler*, II, pl. 37.

included at the north the modern Asteroskopeion Street, was started in the early spring of 1939, and up to the present one or more excavators has devoted his time and energies to its clearance through six campaigns, the seasons of 1939 and 1940, and 1946 through 1949.<sup>3</sup>

The removal of the deep mass of earth which had accumulated mostly in late Roman and in Byzantine times has radically changed our conception of the natural contours of the area. Instead of a nearly level surface sloping gently northward between the Areopagus and the Hill of the Nymphs, we find a deep valley, narrow and with precipitous sides at the south, widening and becoming shallower toward the north, with low spurs running out toward the east and northeast from the Hill of the Nymphs, and toward the west and northwest from the Areopagus. This valley afforded the only way of easy access between the northwest and the southwest quarters of Athens; all wheeled traffic had to pass through the narrow gap between Pnyx and Areopagus. Excavation has revealed the depth of the bottom of the valley to the north of this gap, and the precipitousness of its sides, and has thus shown why the main routes skirted the lower slopes of the hills at either hand in preference to following the middle of the depression. A road no doubt followed the bottom of the valley in early times,<sup>4</sup> but from the fifth century onward there was no through way by this route from the Agora and Kolonos to southwestern Athens. The area thus formed a self-contained block, bounded on three sides by important arteries. To the east passed the direct route from the Agora to the Pnyx; at the north the block was bounded by an important east-west thoroughfare connecting the quarters to the north of Acropolis and Areopagus with the Piraeus Gate at the west; and there can be no doubt that an equally important street passed along the west and southwest sides of the area, approximately on the line of the present Apostle Paul Street, to connect the southwestern quarters of Athens with the Piraeus and Dipylon Gates. These three major arteries of ancient Athens are discussed below in greater detail, pp. 145-160,

<sup>3</sup> The entire area was originally called Section Nu Nu, and the present writer has devoted all six campaigns to its exploration. Subsequently Nu Nu was limited to the southern half and apex of the triangle, and three new sections were created: Xi Xi, a triangular area at the west side, dug in 1940 by H. S. Robinson; Omicron Omicron, the part of the northern half lying to the east of the Great Drain, dug 1947-1949 by Miss Margaret Crosby; and Pi Pi to the west of the drain, dug in 1947 by G. R. Edwards and in 1948 by Miss Mabel Lang. Thanks are due to all of these for information and advice; also to Miss Alison Frantz and H. Wagner for photographs and to John Travlos, Piet de Jong and Mrs. Clayton Whipple for plans and drawings. Brief summaries of each season's work have appeared annually in the Field Director's reports: *Hesperia*, IX, 1940, pp. 300 ff.; X, 1941, pp. 1 ff.; XVI, 1947, pp. 203 ff.; XVII, 1948, pp. 163 ff.; XVIII, 1949, pp. 215 ff. The section on the fifth century Poros Building is by Miss Margaret Crosby who continued to dig it after my departure from Athens. Peter Corbett, now of the British Museum, wrote the sections on red-figured and black-glazed pottery, so important for the dating of drain and houses.

<sup>4</sup> That this was so has been suggested in *Hesperia*, XVIII, 1949, pp. 275 ff., fig. 1. But the upper reaches of this route seem to have been abandoned probably at the time of the rebuilding of Athens after the Persian sack, and the road was diverted toward the west. See below, p. 145.

167-168; for convenience of reference they have been named respectively Areopagus Street, Piraeus Street and Melite Street.

The slopes of the Areopagus above Areopagus Street to the east seem in Roman times at least to have been built up with the houses of the well-to-do; the unpublished excavations of Dörpfeld, in part included in our plan, Fig. 1, show the remains of houses elaborately decorated with painted stucco, floored with marble, and watered by capacious (and no doubt expensive) cisterns cut in the living rock of the hillside. Similar cuttings on the eastern slope of the Hill of the Nymphs opposite imply the existence there of dwellings equally elaborate. Within our area itself, at the north-west corner where a spur of the Hill of the Nymphs offers slightly higher ground, there are plentiful remains of similar commodious houses.<sup>5</sup>

It would appear, then, that the dwellings of the prosperous were built on the higher ground to east and west, while the lower-lying center of the valley, pierced by a minor street and narrow alleys giving access to its various parts, was built up with lesser houses, commercial establishments, and workshops. Of the activities carried on in the last we found plentiful traces from all periods; here lived and worked many of the coroplasts and bronze-workers, blacksmiths and marble cutters, of ancient Athens. So plentiful were the traces left by the workers of marble on both sides of the small street which divides the northwest corner from the rest of our area that we have named it the Street of the Marble Workers, all but yielding to the temptation to call it the Street of the Herm-Makers—the *διὰ τῶν ἑρμογλυφῶν παρὰ τὰ δικαστήρια* mentioned by Plutarch and no doubt referred to by Plato.<sup>6</sup> A large building which dates from about the middle of the fifth century lies close to the Street of the Marble Workers at the east; it was probably a public building of some sort, and may possibly have been one of the Lawcourts mentioned by Plutarch in the passage quoted above.<sup>7</sup>

The Roman houses to the west of the Street of the Marble Workers need further exploration before they can be published; these must be left for a later study. For present purposes, then, our study is concerned with the streets bounding the area and the south branch of the Great Drain, which bisects it, as well as with the more thoroughly excavated southern and central parts of the area which contain scanty traces of early habitation, a cemetery of the Geometric and Archaic Periods at the southeast, already published in a preceding article,<sup>8</sup> the remains of houses and workshops of the fifth and fourth centuries, houses and workshops of Hellenistic and Roman times, and two Roman bathing establishments. This area, lying in a hollow,

<sup>5</sup> *Hesperia*, XVII, 1948, pp. 169 f.; XVIII, 1949, pp. 217 f., pl. 40.

<sup>6</sup> Plutarch, *Moralia*, *de Genio Socratis*; X, Plato, *Symposium*, 215 A.

<sup>7</sup> *Hesperia*, XVII, 1948, pp. 167-168; XVIII, 1949, pp. 218 ff. See, however, Miss Crosby's discussion below, pp. 183-187.

<sup>8</sup> *Hesperia*, XX, 1951, pp. 67-134.

was less desirable than the slopes to either side, not only because it was cut off from the views to north and northeast and less airy, but also because it was exposed to the sudden freshets which descended from time to time from the slopes of the hills about. The drainage of this section of Athens was always a serious problem; it was solved eventually by the building of the south branch of the Great Drain at the very beginning of the fourth century B.C.

It may be asked, first of all, in which of the city demes was included this area which lay between three of the busiest streets of ancient Athens, and which was inhabited in large part by artisans. We were not so fortunate as to find in place a boundary stone to tell us. We know which of the demes lay in each direction: Kera-meikos to the north, Kydathenaion which included the Acropolis as is implied by its name, and perhaps also the Areopagus, to the east; Melite to the west, Kollytos to the south. Another deme, Kolonos Agoraios, lay to the north, occupying a part at least of the hill from which it took its name; it belonged, like Kollytos, to the tribe Aegeis, and those who believe the demes of a city trittys to have been contiguous would make Kollytos and Kolonos Agoraios co-terminous.<sup>9</sup> Part of the hill, however, belonged to Melite: the Eurysakeion, which we are told was in Melite,<sup>10</sup> can be approximately located a short distance to the southwest of the Hephaisteion,<sup>11</sup> where it perhaps lay partly in Melite and partly in Kolonos Agoraios. Melite, then, must have adjoined Kollytos.<sup>12</sup> All the eastern slopes of the Pnyx and the Hill of the Nymphs, and the Koilonos hill almost as far as the Hephaisteion, thus lay in Melite. Kollytos, bordering on Melite, probably included the old excavations of Dörpfeld at the west foot of the Areopagus, in which lay the Amyneion and the Sanctuary of Dionysos in the Marshes. The road passing through this area is the southward continuation of Areopagus and Melite Streets; it has been suggested<sup>13</sup> that this is the *στενωπὸς Κολλυτός* which passed through the deme and took its name from it. At the gap between Areopagus and Pnyx this street divided into two, of which the western branch skirted the lower slopes of the Hill of the Nymphs, running northwestward probably to the Dipylon. Since it must either have run through the deme of Melite, or bordered it along its east side, the name Melite Street seems not inappropriate.<sup>14</sup>

There is good reason to believe that the three streets which border our area go

<sup>9</sup> Cf. Judeich, *Topographie*<sup>2</sup>, p. 171.

<sup>10</sup> Harpokration, *Lexicon*, s. v.

<sup>11</sup> Ferguson, *Hesperia*, VII, 1938, pp. 1 ff., 16; also Judeich, *Topographie*<sup>2</sup>, p. 44, note 2, pp. 168, 368. A reference to Kolonos may cause confusion, where it is not specified whether the hill, the district, or the deme, is intended.

<sup>12</sup> Strabo I, 65-66, citing Eratosthenes; a boundary stone giving the names of the two demes, one on either side, is mentioned.

<sup>13</sup> Judeich, *Topographie*<sup>2</sup>, p. 169, note 1.

<sup>14</sup> *στενωπὸς Κολλυτός* is an example of a street taking its name from a deme through which it ran; Herodotos VI, 103, speaks of the street running through Koile: *πέρην τῆς διὰ Κοίλης καλεομένης ὁδοῦ*; cf. Judeich *Topographie*<sup>2</sup>, p. 180.

back to early times; certainly they were there when Kleisthenes made his reforms of the Athenian constitution and made membership in a deme the first requisite of citizenship. It is generally agreed that Kleisthenes made some readjustments in the areas and proportions of some of the old demes, which had of course existed long since, and that he created other new demes, especially in the city and its suburbs.<sup>15</sup> When he created new demes and adjusted the limits of some of the old ones he no doubt used as boundaries of division not only the natural lines suggested by the physical lay of the land, but also the main arteries of communication which already existed and made artificial divisions into sections and areas; on running a new boundary the natural thing to do is to follow the open lines of streets and roads, rather than to pass it through blocks already built up with houses. Thus Piraeus Street at the north very probably formed the southern boundary of the deme of Kerameikos. We know that the Agora lay entirely within that deme; its boundary stone, still in place at its southern limit, must therefore still be in the deme of Kerameikos. The first line of the division which suggests itself as an obvious southern limit for the deme is Piraeus Street, which passed by between sixty and seventy meters to the south, and which skirted the entire southern extremity of the later Market Place. If we accept Piraeus Street as the probable southern boundary of the deme of Kerameikos, it follows that our area cannot have been a part of that deme. The three possibilities remaining are Kolonos Agoraios, Melite and Kollytos.

Of these the first may be excluded as probably also bounded at the south by Piraeus Street, if it extended even as far to the south as Piraeus Street. Since, however, all of the Agora lay in Kerameikos and the Eurysakeion just to the southwest of the Hephaisteion lay in Melite, it becomes necessary to imagine a long narrow tongue of Kolonos Agoraios extending southward between these two demes as far as Piraeus Street, in order to make the two demes belonging to the city trittys of the tribe Aegeis meet with a common border. It is not generally agreed, moreover, that all the demes of the same city trittys were contiguous; and it is perhaps more natural to imagine Melite and Kerameikos as sharing a common boundary on the Kolonos hill to the south of the Hephaisteion, and the temenos of the temple itself as at the meeting-place of the three demes of Kolonos Agoraios, Melite and Kerameikos.

Our area, then, should be assigned either to Melite or to Kollytos. We know that the former lay to the west and the latter to the south; how far eastward Melite extended, or how far northward Kollytos, we do not know. An arrangement has been suggested to bring Kolonos Agoraios southward to meet Kollytos, which belonged to the same trittys; but this arrangement has seemed both artificial and unnecessary, and so we are not obliged to try to bring Kollytos northward to meet Kolonos

<sup>15</sup> See in general on the demes Milchhoefer, "Untersuchungen über die Demeordnung des Kleisthenes," *Abh. preuss. Akad. Anhang*, 1892.

Agoraios. In Milchhoefer's list<sup>16</sup> of the demes and the demesmen Melite stands fourth. The three demes which outranked it in population (as represented by the names of demesmen preserved on gravestones) are all country demes; Melite stands as the most populous of the city demes. Of the area which we know to have belonged to Melite, the eastward slopes of the Pnyx and Hill of the Nymphs, much of the space was taken up by public buildings: the Assembly Place, stoas, and various sanctuaries. The most thickly populated deme within the city<sup>17</sup> must have covered more than this limited area. We cannot expand it to west or to south; the bulk of its population must then have been established to the east or to the northwest in the direction of the Piraeus Gate. Perhaps our area should be assigned on these grounds preferably to Melite rather than to Kollytos, which stands number 47 in Milchhoefer's list, with about one third as many names of demesmen known as from Melite. These calculations, however, are vague and unsatisfactory, and our area is not really large enough to make a great difference in population if it is subtracted from one deme and added to another. Equally unsatisfactory in determining the deme is the character of the remains found: sculptors and marble-workers are known in plenty from all the demes. Melite and Kollytos were both industrial sections of Athens, and a comparison of the lists of metics residing in both demes, whose trades are given, with the actual remains of workshops found in our area is again indecisive.<sup>18</sup> Similarly unsatisfactory as indications of locality are casual finds from within the area. We know that there was a sanctuary of Herakles in Melite, but the finding of objects portraying the hero within our area may or may not be significant, since such objects were easily transportable.<sup>19</sup>

Though the probability is strong that Kollytos was confined to the region south of the gap between Pnyx and Areopagus, and that Melite extended eastward to the north of that point, it cannot be proved. We do not even know to which deme the Areopagus itself belonged. It might appropriately have been included with the Acropolis in Kydathenaion, in which case Areopagus Street might have been considered a

<sup>16</sup> *Op. cit.*, pp. 6 ff.

<sup>17</sup> Needless to say, all of the people whose names were counted in Milchhoefer's list did not necessarily live in Melite: their ancestors lived there in the time of Kleisthenes. Nevertheless, the probability is that the greater number of their descendants continued to live in Melite; and its industrial character must have drawn thither a large number of non-citizens.

<sup>18</sup> Wilamowitz in *Hermes*, XXII, pp. 117 ff. lists the metics known from inscriptions, with their trades, by the demes in which they resided. The demes in which the greatest number of metic artisans lived were Kollytos, Skambonidai and Melite, the last with by far the greatest number; but the trades plied in Melite and Kollytos were the same.

<sup>19</sup> An archaic marble head of Herakles: *Hesperia*, XVII, 1948, pp. 174-175, pl. XLIX—perhaps from the sanctuary itself? A terracotta plaque with Herakles mounted on a donkey, in relief: *ibid.*, p. 180, pl. LX, 2—a votive? An oinophoros bearing in relief on its sides two of the labors of Herakles: *ibid.*, pp. 183-184, pl. LXIV, found in the well of House N—perhaps merely a household object?

suitable boundary between Melite and Kydathenaion. We cannot draw any fast conclusions; the probability is that our area was a part of Melite, and the likelihood is very strong that one or more of the old-established streets which bordered it was taken as a boundary at the time of the reorganization of the demes by Kleisthenes.

### EARLY HISTORY OF THE AREA

The natural configuration of the land is such that this region of Athens must have been frequented by passers-by, if not actually settled, from the very earliest times. If, as has been postulated elsewhere, and as is suggested by Thucydides,<sup>20</sup> the early town lay to the southwest of the Acropolis, then communication with the areas to the north must have been channelled through the pass between the Pnyx and Areopagus and northward through our area, probably by footpaths along the slopes of the Hill of the Nymphs and the Areopagus on opposite sides of the valley, and perhaps also by another at the bottom. These footpaths, by which the early town was approached from the north, later became suburban roads, and with the northward growth of the town finally turned into city streets. Thus we can perhaps say with some confidence that Areopagus Street at the east and Melite Street to the west of our area came into existence as early as Athens was settled.

The oldest object found in our area is a pestle or grinder of veined white marble, an implement quite characteristic of Early Helladic times.<sup>21</sup> It was found in a Byzantine filling of heavy gravel, small stones, and broken tiles which we took to be waste left over after earth had been screened in Byzantine times for the making of mud bricks. All that we can conclude from this is that the Early Helladic pestle was in the earth in our area before it was screened, rather tenuous evidence on which to hypothesize settlement here so early, though there seem to be traces of Early Helladic habitation on the slopes of the Areopagus to the east. More substantial traces of habitation of the succeeding period were found: near the south end of our area (plan, Fig. 1 and above, p. 70, fig. 1) a pit dug in the bedrock contained sherds and fragmentary pots of Middle Helladic times, including Matt-Painted, Grey Minyan, and coarse wares. The pit was oval in outline, its greater diameter 1.26 m., its lesser 1.10 m.; the depth was only 1.70 m. into the hardpan. No water was found. The shallowness of the cutting and the lack of water suggest that the pit was a bothros or rubbish-pit rather than a well; its presence carries the implication that a dwelling of Middle Helladic times stood near by. Actually this pit is the westernmost of a series of pits and wells of Middle Helladic times which seems to have extended all along the north slopes of the Acropolis and the Areopagus.<sup>22</sup> Our westernmost pit is perhaps linked with the

<sup>20</sup> *Hesperia*, XVIII, 1949, pp. 279 f.; Thucydides II, 15, 3.

<sup>21</sup> Inv. ST 314. Cf. Blegen, *Zygouries*, pl. XXII, 18-21.

<sup>22</sup> Cf. *Hesperia*, VII, 1938, pp. 335 ff. for a series of Neolithic and Middle Helladic pits and

rest of the series to the northwest of the Acropolis by a small pit or bothros which was cut in the bedrock in front of the Church of Saint Athanasios on the north-westernmost spur of the Areopagus; it produced fragments of Matt-Painted pithoi, Grey Minyan ware, and animal bones. Occasional sherds of Grey Minyan turning up in the deeper fills in the bottom of the valley may have washed down from houses which lay higher on the slope to the east.

Except for an occasional fragment of a Mycenaean pot in the earth of the deeper fillings, the only remains from Late Helladic times in our area were burials. A Mycenaean chamber tomb, a cutting in the hillside above it which may have been a second, unfinished tomb, and a cist-burial near the dromos of the first, all on the lower slope of the Hill of the Nymphs, have been mentioned elsewhere.<sup>23</sup>

More certain traces of actual habitation on the spot were left by the Athenians of Protogeometric times. Two wells were found, each of which must have been the source of water for a near-by dwelling. Both yielded a quantity of pottery such as was used at the well-head to carry away water, especially amphorae and oinochoai, as well as drinking cups. One well lay in the bottom of the valley, just to the north of House A; the other under the north central part of the large room or courtyard at the south end of the Poros Building to the east of the Great Drain (plans, Figs. 1, 7).

Perhaps the successor of the latter Protogeometric well was another well of early Geometric times which lay only eight meters to the south, still under the south court of the Poros Building. The proximity of the two wells, one somewhat later than the other, suggests continuity of habitation in this part of the area; why the earlier well went out of use to be replaced, perhaps after an interval, by another, it is impossible to say. A third near-by well of Geometric times lay a little distance away in the southwestern room of the Poros Building proper, to the north of the court. This too may have had its place in a succession of wells used by the inhabitants of this part of the area, but it did not produce enough pottery (only one vase) to fix its place in the series. A group of wells so close together in space would be redundant if all the wells were contemporary; we must assume—and indeed the pottery shows—difference in date and the replacement of one well by another. The group, however, proves continuity of habitation.

Two more wells of Geometric times were dug, one under the westernmost room of House D, the other near the south end of the northwest corner room of House C (plan, Figs. 1, 7). Again these wells were separated by only a few meters, and they are not contemporary: the southern is considerably the earlier of the two. Thus the complexes of Protogeometric and Geometric wells in our section suggest that two

wells on the north slope of the Acropolis. The pit on the Areopagus spur which carried the church of St. Athanasios (Judeich, *Topographie*<sup>2</sup>, plan I) was mentioned in *Hesperia*, IX, 1940, p. 270.

<sup>23</sup> *Hesperia*, XVII, 1948, pp. 163-165, pl. 45; XVIII, 1949, p. 215, pls. 38-39; XX, 1951, p. 69.



special areas, the south end of the Poros Building and the vicinity of Houses C-D, were continuously inhabited over a fairly long period during this early age, perhaps occupied by farmsteads. All the wells are set notably low in the valley; their diggers probably thought that more plentiful water would be forthcoming beside and under the line of the natural stream-bed. This stream was followed by a road or path running up the bottom of the valley; at one point along its east bank a few stones crudely thrown together form a short stretch of rough wall (plans, Figs. 1, 7), perhaps part of a parapet beside the road. In time this foundation became completely covered by the silt deposited in the stream-bed, which contained no sherds later than Geometric. The upper layers of the gravel deposit were hard-packed as though by traffic passing over a road or path. There can be no doubt that in Geometric times a roadway ran up the center of the valley, perhaps bordered at the west by a house of which no trace save its well is left. Two graves in this area, already discussed elsewhere,<sup>24</sup> may by their positions further indicate the early existence of this road, and of Areopagus Street paralleling it at the east. These streets, then, were early features of the Athenian landscape as well as important arteries, and a discussion of them follows. The Great Drain, an equally important feature of this part of Athens, was not artificially channelled or built until the fifth century; and since its earliest course as an artificial channel was materially affected by the houses which already existed when it was made, the discussion of the drain must be deferred until after that of the earlier houses which dictated its course.

## STREETS AND ROADS

The three important arteries of Ancient Athens which bounded our area have already been named: Areopagus Street at the east, Piraeus Street at the north and Melite Street to west and southwest. We will discuss them in turn (plan, Fig. 3).

### AREOPAGUS STREET

This street was the direct route from the Agora to the Pnyx and to southwest Athens. It left the Market Place near the inscribed boundary stone and ran southward beside the west end of the Middle Stoa, then past the archaic fountain house. At the southwest corner of the latter it seems to have met and crossed an east-west thoroughfare which passed beside the fountain house at the south, then behind the South Stoa, skirting the Agora at the south approximately on the line of the modern Asteroskopeon Street.<sup>25</sup> Beyond this crossing Areopagus Street bent slightly toward the southwest, running with one more slight bend further toward the southwest, for nearly two

<sup>24</sup> *Hesperia*, XVIII, 1949, pp. 275 ff.; XX, 1951, pp. 69, 72.

<sup>25</sup> See the plan, *Hesperia*, XVI, 1947, pl. XLIX; XVIII, 1949, p. 278, fig. 1.

hundred meters along the lower slopes of the Areopagus. A projecting spur of the hillside, which divides our area at the south from the old excavations of Dörpfeld,<sup>26</sup>

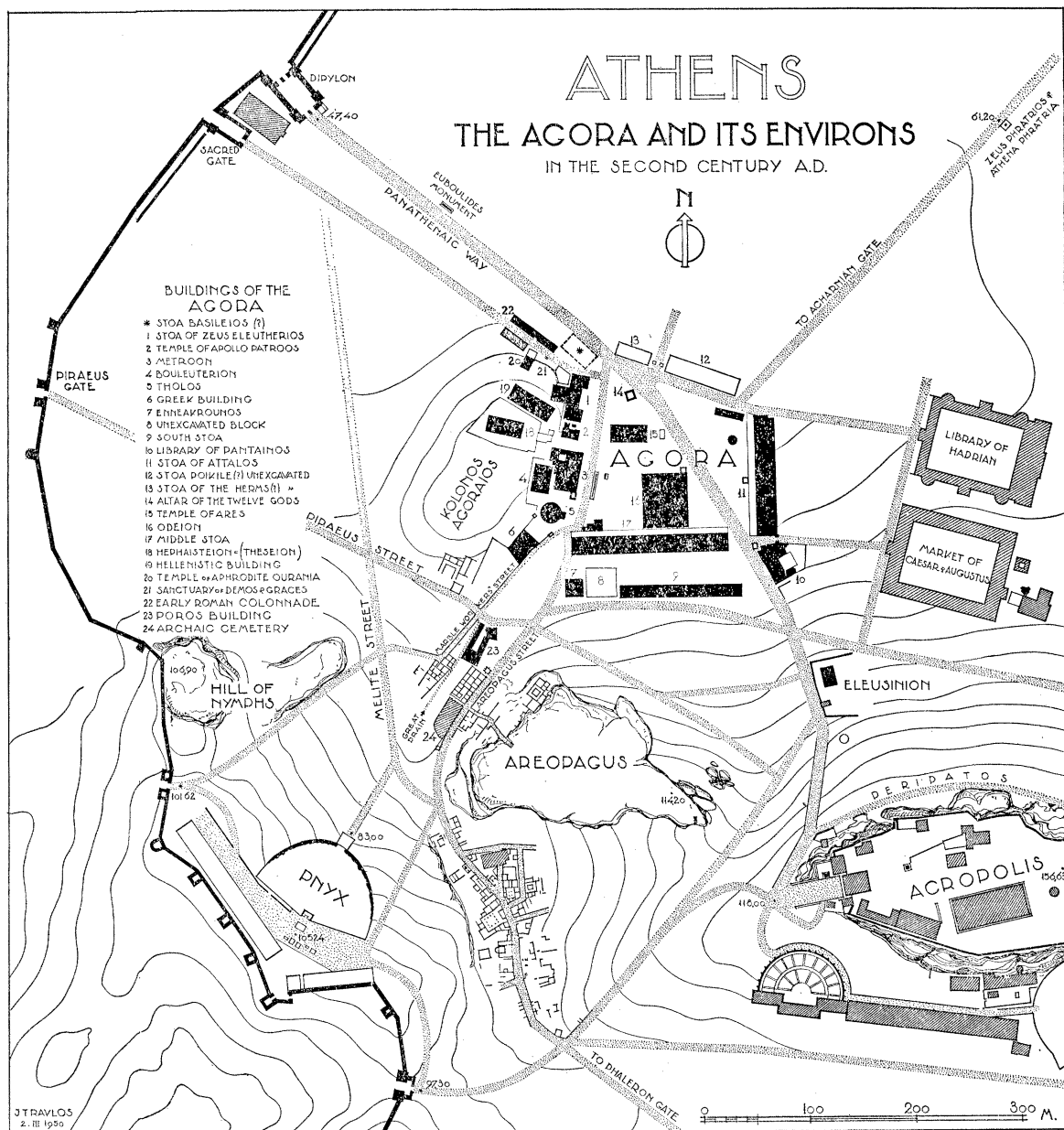


Fig. 3. Plan of Ancient Streets in the Northwestern Region of Athens.

served to deflect the street westward; the short detour which it made in order to bypass this obstacle lies under the modern Apostle Paul Street and could not be excavated.

<sup>26</sup> *Ath. Mitt.*, XIX, 1894, pl. XIV; *Ant. Denk.*, II, pl. 37; Judeich, *Topographie*<sup>2</sup>, p. 290, fig. 36.

Unfortunately at this point too must lie the fork where Melite Street diverged toward the northwest from Areopagus Street, to follow the slope of the Hill of the Nymphs on the other side of the valley. To the south of this fork, which lay at the narrowest part of the gap between the two hills, the two streets became one, and their common course was traced by Dörpfeld for a long distance in the upper valley. From the fork another branch led upward to the Assembly Place of the fifth century on the Pnyx.<sup>27</sup>

Evidence has been adduced elsewhere to show that Areopagus Street was probably in use from very early times.<sup>28</sup> The traffic that passed along it later, however, must have been limited to foot passengers at least in the northern section between the Market Place and the street crossing to the south, for here its course was interrupted by two short flights of steps which effectively barred the way to wheeled traffic.<sup>29</sup> The first of these lay beside the southwest corner of the Middle Stoa; three steps, put in as it seems when the Stoa was built in the second century before Christ. The second flight, of three or four steps, lay to the west of the fountain house, surmounting a slight rise to the level of the east-west street at the crossing. This flight has not yet been thoroughly investigated and at present we know neither the number of steps nor the exact date at which they were put in. The flight beside the Stoa quickly became covered with gravel and road metal and was buried in the gradually rising levels of the street. Though it was put in at a relatively late date and seems to have had a fairly short life, at least during the time of its existence across Areopagus Street, the passage of wheeled vehicles into and out of the Agora by this route was precluded. It seems fairly safe to infer that the steps would not have been built in the first place across a street which was used to carry any amount of wheeled traffic. The Agora, then, seems certainly to have been closed to such traffic by this street in late Hellenistic and early Roman times; and this certainty carries with it a strong probability that it was likewise closed in earlier periods also.

To the south of the crossing beside the fountain house Areopagus Street runs for a few meters through the area of the American excavations. This stretch was badly pitted by late disturbances and little of the road metal remained. The roadway was supported at the west by a retaining wall of which isolated stretches remain, some obviously of good period, others later patches and repairs. To the south of this area the street runs along the west edge of the Areopagus park, its course marked today by the iron enclosure fence. The foundation walls of the houses and buildings to either side are preserved over most of this stretch and they give the width of the street, which is irregular, but on the average about four meters wide, in places slightly narrower, in others wider by as much as a meter. Most of this width lies in

<sup>27</sup> For the approaches to the Assembly Place, cf. *Hesperia*, I, 1932, pp. 103, 126, 178, pl. I; XII, 1943, pl. XIV.

<sup>28</sup> *Hesperia*, XVIII, 1949, pp. 276 ff.

<sup>29</sup> *Hesperia*, XVIII, 1949, p. 213, pl. 37.

Dörpfeld's old excavation, where it has become covered over with modern fill and in places planted with trees. No cut was made across the whole width of the street, but a trial pit was sunk at its west edge where it passes the archaic cemetery. Here eight superposed layers of hard road metal were investigated; the uppermost produced sherds of the early fourth century before Christ, the lowest fragments of the sixth. No road filling of the Geometric Period was found here at bottom; but the test cut was in a very limited area at the western edge of the street. The upper levels of road filling had evidently disappeared long before excavation was undertaken, for the uppermost fourth century level was covered by a loose deposit of Turkish times. The orientation of the houses of the Roman period beside the street, however, and the absence of any walls across it which would have served to bar the passage of traffic, give adequate evidence that the thoroughfare remained in use throughout Roman times.

At the north of the Areopagus park large deep pits of late times give a good cross-section of Areopagus Street. Little digging has been done beyond the clearing out of these pits; but the cross-section they afford gives evidence adequate to show that no street drain ever existed under Areopagus Street. The rain-water apparently ran down the surface of the roadway, no doubt to be conducted at the north into one of the drains of the east-west street at the crossing. This must have been an unsatisfactory arrangement; a heavy rainstorm today demonstrates the extraordinary amount of water that rushes down from the slopes of the Areopagus, quite enough, indeed, to have undermined on more than one occasion the foundation wall of the modern fence beside the park. This flow was relieved somewhat in ancient times by a drain which ran westward from Areopagus Street, passing under an alley between the archaic cemetery and House N to the north of it, to empty into the main drain in the bottom of the valley. The alley continued up the slope to the east of Areopagus Street (see the plan, Fig. 1), and no doubt served to carry off some of the water from higher on the hillside. No other cross-streets were found and no traces of any other drains of earlier than Hellenistic times<sup>30</sup> to carry the water westward down the slope to the Great Drain in the bottom. The large cisterns cut in the rock of the Areopagus suggest, of course, that much of the water was collected for storage as it flowed down from the roofs of the houses, and that perhaps the residue that was left to flow down the surface of the street was not comparable to the unimpeded rush which comes down in modern times. Nevertheless, it is surprising to find no trace of a street drain, at least of Hellenistic or Roman times, beneath an important and much-frequented artery

<sup>30</sup> Remains were found of a drain of late Hellenistic or early Roman times running westward across the site of the Poros Building, and beside the two rooms of House P at the north. This must have carried the surface drainage of Areopagus Street to the Great Drain; but in the fifth and fourth centuries the entire area was occupied by the Poros Building, and there was no cross drain.

which skirted a hillside and was in consequence required to carry off a certain amount of water every time it rained.<sup>31</sup>

Areopagus Street, despite the fact that its north end from the fountain house to the Agora was closed to wheeled traffic by flights of steps, did carry such traffic over the southern part of its course, from the crossroads by the fountain house to its junction with Melite Street at the south. There is no evidence for any steps in this stretch, and the grade is gentle. Dörpfeld, too, reports the finding of wheel-ruts, apparently in this stretch of the street.<sup>32</sup> Its width of four meters seems adequate enough for the passage singly of carts and wagons, but hardly enough for two such vehicles going in opposite directions to pass in comfort. Four meters, however, was the width of the street farther to the south, in the narrow part of the gap between the hills, and four meters was the width of the same street still farther up the valley in the region of the Amyneion and the Dionysion.<sup>33</sup> This, in fact, seems to have been the standard width for even the more important streets of ancient Athens; Areopagus Street, then, was about average in width and neither too narrow nor too steep to be used by wheeled traffic. No doubt it was the scene of many an irate encounter between carters trying to pass in opposite directions; better, perhaps, to imagine the members of the Athenian Democracy, preoccupied with the affairs of state (or with one or another form of the state dole) as they passed upward on foot from the Agora to the Assembly Place on the Pnyx.

### PIRAEUS STREET

The position of the Piraeus Gate in the western part of the city wall to the north of the Hill of the Nymphs can be fixed within narrow limits. The direct route from Athens to its port led out through this gate, passing down to the Piraeus to the north of the Long Walls. In times of peace this must have been a very busy thoroughfare; much of the produce brought to the Piraeus by sea must have been carried up to Athens on carts and wagons over this street. On entering the city through the Piraeus Gate, which lay some four hundred meters to the west of our area, traffic could choose any one of three directions: toward the northeast and the region of the Dipylon; to the southeast and south by Melite Street; or straight east, past the Agora, to the region at the northern foot of the Acropolis. We should expect, then, to find an important artery running eastward from the Piraeus Gate and passing through our area, for

<sup>31</sup> Dörpfeld in his excavation to the west of the Areopagus found a drain of tiles, evidently of Hellenistic or Roman times, beneath the street outside the limits of our area to the south (*Ath. Mitt.*, XVII, 1892, p. 91; Judeich, *Topographie*<sup>2</sup>, p. 179). This lay, actually, south of the junction of Areopagus and Melite Streets; the northward continuation of this drain may have emptied into the Great Drain, or continued to run under Melite Street.

<sup>32</sup> *Ant. Denk.*, II, p. 2.

<sup>33</sup> Cf. the plan, *Ant. Denk.*, II, pl. 37; and Judeich, *Topographie*<sup>2</sup>, p. 179.

there was no route across the Agora from east to west, and at the south the Areopagus offers an effective barrier. The street leading westward to the Piraeus Gate has been designated Piraeus Street; its existence and approximate position have long been known or suspected.<sup>34</sup>

This street can now be traced all along the northern boundary of our area. Most of its extent has been cleared only to the later Roman levels, but its line is attested not only by the lay of the houses to either hand, but also by the recurring appearance of hard patches of road metal throughout its extent. At the crucial point where it met and crossed the south branch of the Great Drain and the Street of the Marble Workers, however, it has been more exhaustively examined. The name Piraeus Street should perhaps be limited to the stretch from this crossing westward to the Piraeus Gate, for to the east of the bridge or of its intersection with Areopagus Street the east-west road seems to have forked, one branch skirting the northern slopes of the Areopagus to join the Panathenaic Way somewhat above the Eleusinion, the other passing straight to the south of the Market Place beside the fountain house and behind the South Stoa. It has been suggested elsewhere that the southern or right fork of this street must go back to very early, perhaps to Mycenaean and certainly to Geometric times.<sup>35</sup> This was the main route from the western gate of the city to the Acropolis and to the public buildings and sanctuaries situated on its upper northern slope. The northern or left branch of the street has not yet been excavated; it lies beneath the modern Asteroskopeion Street which is still in use; but its existence is hinted by the presence of layers of ancient road metal under the modern street in the scarp at the south of the fountain house, by the situation and orientation of the South Stoa at the southern edge of the later Agora, and by the provision made for the entrance of its street drain into the south branch of the Great Drain under the bridge at the crossing. This street must have led directly to the region of the Roman Agora and thence to the northeastern parts of the city.

Piraeus Street, running westward as it did to the Piraeus Gate, met and crossed three north to south routes in the immediate vicinity of our area: at the east, Areopagus Street which connected the Agora with the Pnyx; in the central part of the area by the bridge over the Great Drain, the Street of the Marble Workers, connecting the region of workshops at the south with the Agora; and at the west, probably somewhere under the present Theseion square, Melite Street which connected south-western Athens with the Dipylon, passing to the west of the Hephaisteion. This was a busy section of Athens; the amount of traffic that passed along Piraeus Street is attested by the deep wheel-ruts worn in the surface of the roadway and in the paving

<sup>34</sup> On the Piraeus Gate, see Judeich, *Topographie*<sup>2</sup>, pp. 139 f.; a section of the street leading to it is shown on Dörpfeld's plan, *Ant. Denk.*, II, pl. 37, labelled *zum Piraeus Thor*.

<sup>35</sup> See the plan, *Hesperia*, XVII, 1948, p. 154, fig. 2, which shows the Mycenaean tombs found near the Agora up to 1947; also *Hesperia*, XVIII, 1949, pp. 277 ff., fig. 1.

slabs of the bridge where it crossed the drain. The width of the street at the bridge, 8.60 m., is more than twice that of Areopagus Street or of the street passing beside the Dionysion; but it is likely that in this area of much-frequented street intersections the Piraeus Street may have had more than its normal width. It may, in fact, have become a wide avenue for a short distance from Melite Street to Areopagus Street, perhaps the *σύμβολον* referred to by Plutarch.<sup>36</sup> The vicinity of Kolonos Agoraios, probably somewhat to the west of our area, was frequented by workers waiting to be hired, known as *κολωνέται* because of their place of waiting.<sup>37</sup> Their stand was well chosen, probably near the busy intersection of Piraeus and Melite Streets.

The width of the street is given by that of the bridge which carried it over the Great Drain. At the crossing the drain bends slightly from the line it has followed farther to the south, in order to meet the line of the cross-street at a right angle, and also to attain the line of the Street of the Marble Workers, which it follows northward from the bridge. Since this bridge is an integral part of the street as well as of the drain, it is best to describe it here. The south branch of the Great Drain was put in, as we shall see below, at the beginning of the fourth century. At the point where it was crossed by Piraeus Street provision had to be made for a bridge to carry over the traffic, and a specially constructed roofed section of drain 8.60 m. long, the width of Piraeus Street, was made. The bridge thus formed is straight; at either end, both to north and to south, there is a slight bend in the course of the drain. It would thus seem that the bridge took its orientation from that of Piraeus Street, which, of course, existed before the drain was built. The west wall of the bridge, dating from early in the fourth century, is almost intact (Pl. 56a); the east wall is partly original, at the north, and partly repaired or rebuilt.

The bridge was made in corbelled construction of squared blocks of conglomerate and poros (section, Fig. 4C). The first of these materials was used at the bottom for a bedding course, no doubt because it was considered more resistant to the action of water, and the faces of the blocks were left rough. The width from side to side between these bedding courses was 1.40 m. The second course is of large squared blocks of conglomerate rather carefully fitted and presenting a vertical face to the inside of the drain, a sort of levelling course. Above, the construction is of poros, three courses high, so corbelled that each course projects into the drain beyond the face of the course below. The inner faces of the blocks were cut to a curve, but in places a narrow projecting ledge was left between courses. By means of this corbelled construction the width of the gap to be spanned by cover slabs was reduced from

<sup>36</sup> Plutarch, *Moralia, de genio Socratis*, X; cf. also Judeich, *Topographie*<sup>2</sup>, p. 178, who places it in the northwestern part of Athens. It should certainly have been near the street of the Herm-Makers, according to the account of Plutarch. The modern Greek term for the meeting place of several streets or roads is *συμβολή*; the term is a general one, as it may also have been in antiquity.

<sup>37</sup> Harpokration, *Lexicon s.v. κολωνέται*.

1.40 m. to about 0.80 m.; exact measurements could not be obtained at the top because the action of water had eaten away the points of the soft poros blocks. The depth of the drain at the bridge was 2.40 m. from the under side of the cover slabs to bottom. The drain walls go to a thickness of 1.25 m.; much of the poros was reused, the upper faces of the top wall blocks on the west side and those of their backers showing clamp cuttings from a previous use (Pl. 57b).

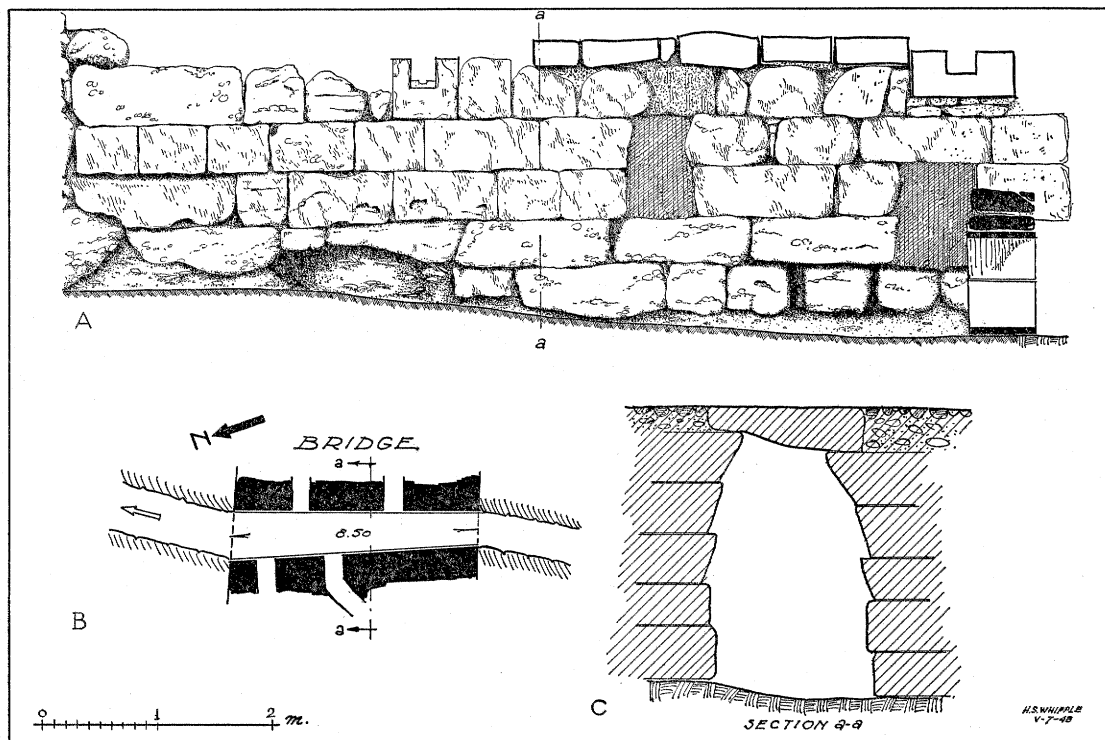


Fig. 4. Bridge over Great Drain at Piraeus Street. A—West Wall of Drain, Elevation. B—Plan of Side Drains. C—East-West Section at a-a, Looking North.

The bridge was attributed to the early fourth century as a part of the first construction of the drain; when the street filling behind its west wall was tested, confirmation of this dating was obtained. The uppermost layer of road metal which had definitely been cut through by the builders of the west drain wall contained sherds of the last quarter of the fifth century, among them a small fragment of a stamped black-glazed cup or bowl. The three layers above this, however, showed a deep crack near their edge and running parallel to the cutting made for the drain wall; no doubt these layers were also in existence when the street was cut through, and their surface cracked near the edge of the scarp, though the fill at the edge did not fall. These three



layers produced nothing later than did the one below them; but they suggest that the cut made through the street for the drain was slightly later than the date indicated by the sherds from the lowest layer; perhaps it was made at the beginning of the fourth century.

A parallel for corbelled construction in the early fourth century may be cited at the Kerameikos. Just to the north of the Sacred Gate, at the point where the Eridanos debouches through the city wall, the river bed was spanned by an arch made from blocks of hard limestone laid, like ours, in corbelled construction and finished on its inner face to a continuous arching curve (Pl. 56b).<sup>38</sup> The foundations for this arch are not to be separated from those of a tower of the second period of the Sacred Gate, which is usually dated early in the fourth century and attributed to the rebuilding of the walls by Conon. A later extension of the arch corbelled over the Eridanos was made toward north and south with voussoirs or wedge-shaped blocks; it probably dates from Hellenistic times. Our street bridge is so similar in construction and so close in date to the corbelled roof over the Eridanos that the two may well have been made by the same engineer or contractor.

In the building of the bridge over the Great Drain provision was made for the entry of side drains which ran under the streets. Four rectangular openings were left in the side walls of the drain when it was constructed, two at the west side and two at the east (plan, Fig. 4B). The southern of the two openings in the west wall, at the left in the elevation, Fig. 4A, brought in the waters of the drain under the Street of the Marble Workers. It passes over the levelling-course of conglomerate, in a gap 0.65 m. wide and 0.90 m. high, the height of the two lower corbel courses of poros. At this point the wall of the drain is thicker than elsewhere. Because the line of the Great Drain diverges toward the south from that of the Street of the Marble Workers, the street drain of the latter comes in at an acute angle to the main drain. To avoid this angle at its entrance, the side drain is turned at its north end and made to enter at right angles; and the wall of the Great Drain is carried back toward the west far enough to turn it (Fig. 4B). We could examine this junction only from the inside and for that reason all the details of construction were not obtainable. The cover slabs over the north end of the side drain before it starts to turn to join the Great Drain follow the orientation of the cover slabs of the latter.

The second opening in the west wall of the Great Drain (Fig. 4A-B) was left to allow passage for the street drain under Piraeus Street, coming in directly from the west. The opening lies near the north end of the bridge and one course lower than the opening to the south, entering over the bedding course and passing through the conglomerate levelling course and the first poros course above. The gap is 0.70 m. wide and 0.90 m. high. At the outer (west) end of the drain blocks appears the end

<sup>38</sup> See Noack in *Ath. Mitt.*, XXXII, 1907, pp. 477 ff., fig. 17, pl. XI, L-L<sub>1</sub>. Cf. also Judeich, *Topographie*<sup>2</sup>, pp. 137, 139, fig. 10.

of the Piraeus Street drain, a half-elliptical channel of tiles measuring 0.36 m. wide and 0.45 m. high on the inside. Only the upper covering course of half elliptical tiles was used; the lower or channel course is lacking at the inlet into the main drain, though under the street at the west the full ellipse was used. No doubt this tile drain dates from Roman times; it was probably laid in the years after Sulla and repaired many times thereafter. Its course can be traced beneath Piraeus Street as far to the west as we have dug.

Two similar openings in the east wall of the bridge call for two side drains to enter through them. The southern of these openings brought in the street drain of the southern branch of Piraeus Street, which ran along the northern slope of the Areopagus. This drain has been traced under the street for some distance toward the east. The bridge wall where it entered has been entirely rebuilt, partly with original and partly with added material. The level of its entrance is over the lowest or bedding course; the width of the gap as rebuilt is 0.60 m., and its height 1.00 m., *i. e.*, two courses.

The presence of a second opening for the entrance of a street drain through the bridge wall near its north end implies the existence of a second street. We have suggested above (p. 150) that evidence exists in addition to the presence of this opening for a second eastward branch of Piraeus Street which passed the Agora behind the South Stoa. This street must have had its own drain, which would empty into the Great Drain somewhat to the north of the one under the other branch of Piraeus Street. In the opening near the north end of the east wall of the bridge appears the beginning of a fully elliptical tile drain with both channel and cover tiles, not, as in the Piraeus Street drain at the west, only the upper covering half. These tiles have an inside height of 0.84 m. and an inside width of 0.43 m. They begin at the outer face of the drain wall, 1.25 m. in from the main channel and they appear to come from the southeast. It seems entirely probable that various alterations were made in the drainage system under Piraeus Street to the east of the bridge in Hellenistic and Roman times; the drain of the northern branch of Piraeus Street was perhaps diverted into that of the southern and the two ran as one for a certain space before forking again to enter the Great Drain through two separate inlets. The area east of the bridge has not yet been sufficiently excavated, however, to clarify exactly what occurred in the rather complicated history of these drains. The opening left for the northern street drain is three courses in height, 1.40 m. from the bottom of the drain through the bedding, levelling, and first poros courses, and 0.55 m. in width. Whatever may have happened in later times to the side drains at the east, the presence of this large gap, left by intention in the east wall of the Great Drain when it was built in the fourth century, is sufficient evidence that at that time there were two street drains coming from the east which required separate outlets into the main drain.

The entire west wall and the northern half of the east wall of the bridge are

original construction intact, except at the top. Of the original covers none remains. The southern half of the bridge, a stretch of four meters, was stripped of its covers in Byzantine times; over the northern half six cover slabs were found in place, though none of these belongs to the fourth century bridge. The layers of road metal immediately overlying these blocks, which were at the same time cover slabs over the drain and paving stones in Piraeus Street, produced sherds as late as the first century before Christ. Most characteristic were many small bits of the ware called Pergamene.<sup>39</sup> The deep ruts worn by wheels in the upper faces of these blocks imply the passage of traffic for some time before the first protective layer of gravel accumulated (Pl. 56d). The covers are of various materials: one block of conglomerate, two of marble and three of poros. The relatively soft poros was much more easily worn and the deepest rut appears in the surface of one of the slabs of this material. The conglomerate block, which is the southernmost, shows wheel ruts in its under face—evidently it was turned over after previous use at the bridge before being put in its present position. The variety of material suggests a repair or reconstruction; and in fact the covers are all reused material. The west ends of only two of the slabs rest on the topmost course of poros corbelling; the west ends of the others and the east ends of all, rest on small stone packing put in at a later date to level off, the tops of both walls having evidently suffered damage. One of the covers is a marble grave stele with a small sculptured relief leaded into its face, now turned downward and badly worn by the flow of water in the drain. The east end of another cover is supported on a second marble grave stele adorned on its narrower sides with carved rosettes. These reused grave monuments were probably brought from the neighborhood of the Dipylon. We know that in 86 B.C. Sulla's army forced its way into Athens between the Dipylon and Piraeus Gates;<sup>40</sup> a great deal of damage was done in that quarter and no doubt the devastated area soon became a source of building material. Stones from this source were used freely in the bridge and its vicinity. An inscribed grave stele bearing the names of ten persons all of one family (Pl. 56c, d), was used, as we shall see, just to the west of the bridge, probably to support the side of a water channel. Another grave relief, its carved face carefully chiselled down, was used as a cover over the drain which ran beneath the Street of the Marble Workers. Two large slabs of marble, each with a shallow round cutting in its upper face, bedding stones for columnar grave monuments of Hellenistic times, were found, one embedded in the road metal of Piraeus Street, where it may have been used as a cover over the terracotta street drain (Pls. 56d, 58d) and the other spanning the Great Drain to the south of the bridge, where it served to carry across the north wall of a house of Roman times. The hypothesis that all this material was made available for reuse through the devastation wrought by Sulla's army in and near the Dipylon cemetery accords very

<sup>39</sup> *Hesperia*, II, 1933, pp. 285 ff.; III, 1934, pp. 471 ff.

<sup>40</sup> Cf. Judeich, *Topographie*<sup>2</sup>, pp. 95 ff.

well with the date for the repaving of the bridge suggested by the sherds from the layers over it: some time in the first century, probably before the reign of Augustus.

The northernmost cover slab over the drain, belonging to this rebuilding, is a block of poros with a water channel cut in its upper face. The channel is rectangular in section, 0.25 m. wide and 0.21 m. deep (Pl. 56c, d). The poros block is itself 0.45 m. thick, much thicker than any of the other cover slabs. Allowance was made for this thickness when the block was laid by taking out the topmost poros corbels and rebuilding a bedding of small stones to about half the height of the top course of the drain wall. The top of the channel block, set on this lower bedding, did not reach as high as the tops of the other slabs over the bridge (Fig. 4A). This was done intentionally because the channel block carried fresh water across the drain and allowance had to be made for the thickness of the covers over the stream which ran in the channel beneath the street surface. Provision was made for the continuation of this water-channel toward the west, perhaps in a terracotta conduit. At the west end of the channel block a packing of small stones evidently served as a bedding and an inscribed marble grave stele, mentioned above, served as a support along the north side of the continuation (Pl. 56c, d). What form the continuation of the channel so supported and so bedded took, we are unable to say because it had entirely disappeared.

The use, to span the drain, of a block with a channel cut in its upper face, and the careful adjustment of its level, make it evident that fresh water was carried across the bridge and beneath the street. The direction of flow was from east to west. The source, then, lay somewhere to the east; where we cannot yet say, except that the levels are too high for water to have been brought across the bridge from the fountain house at the corner of Areopagus Street. Rather the source must have been well up on the slope of Areopagus or Acropolis; the Klepsydra suggests itself as the only possible place of origin. In late Roman times water from Klepsydra was evidently stored and let out from time to time to turn a water mill at the east of the Agora;<sup>41</sup> possibly the water of Klepsydra was similarly impounded in much earlier times and allowed to flow out on occasion alternately by a number of channels in various directions to supply several areas of northern and northwestern Athens.<sup>42</sup>

The channel block still in place across the drain was placed there in post-Sullan times; but it was only one of a series of successive channels which carried fresh water westward under Piraeus Street, and all of them had to cross the Great Drain. Another

<sup>41</sup> *Hesperia*, V, 1936, p. 89. The rather vague conclusion there offered as to a source of water for the mill now becomes more specific, since later digging has disclosed a great cistern on the northern slope of the Acropolis, built in later Roman times to store water overflowing from the Klepsydra; cf. *Hesperia*, XII, 1943, p. 249.

<sup>42</sup> The irrigation of gardens around Athens in modern times, e. g. at Amaroussi, is done by letting the water from a single source flow in turn into a series of channels leading in various directions, according to a fixed schedule. "Water day" is something of an event to the local gardeners.

channel block is still in place in the west wall of the bridge, to the south of the existing covers. The block is set into the topmost course of the drain wall, but evidently not as a part of the original construction because it does not fit the gap through which it passes (Pl. 57a, c, d and Fig. 6A); the gap is wider than the block and the superfluous space is filled with a packing of broken poros. At this level the watercourse in the channel would have been covered by the regular cover series of the bridge itself. A footing trench for the channel slab could be traced along its south side (Pl. 57d); the sherds from it were Hellenistic, possibly as late as the second century before Christ. This channel, then, dates from Hellenistic times and was the predecessor of the post-Sullan channel at the north. It went out of use at the time of the later repair or before; there is no trace of any continuation toward the west, except for a packing of small stones along the north side which are still in situ for a distance of about 0.40 m. where its successor toward the west had lain. The area to the west was occupied by the drain under the Street of the Marble Workers, here repaired in the first century at about the time of the repaving of the bridge. In this repair all traces of the westward continuation of the channel were obliterated. The older channel, then, was made at some time in the Hellenistic period and probably damaged at the time of Sulla's siege; it was replaced in the general first century rebuilding.

The channel block is broken off at its east end (elevation, Fig. 4A; Pl. 57a, c), but the break comes so close to the inner face of the drain wall that not enough space remains to bed the end of another block lying to the east, and we must conclude that the block still in place originally extended across to the east side of the drain. Since its preserved length is 1.82 m. and a nearly equal length is required to carry it across the gap and to bed its east end securely on the opposite drain wall, the block must have been a sizeable one, about 3.50 m. in length. The channel in its upper face is 0.24 m. wide and 0.23 m. deep; in its bottom coarse mortar preserves the impression of a round pipe with an outer diameter of nine centimeters. The pipe suggests that drinkable water was brought across the bridge in the channel.

Yet a third channel block which extends across the bridge was the latest in the series. It crosses the bridge near its north end (Pls. 56c, d; 57a, 58a) where it rests on a filling of gravel and road metal which overlies the paving of the bridge to a depth of about half a meter. The channel of which this block forms a part is continued toward the east by another channel block, also of poros. At the west a hole made very late in Roman times separates the block from another at the same level; the hole between the two blocks was used to carry a small terracotta drain down at a steep angle from the west to empty into the drain of Piraeus Street. At the time when this tile drain was put in, the western channel block had obviously ceased to serve its original function, which was to carry clean water from east to west, and had been reused to carry dirty water in the opposite direction. Both the western block and the

long block over the drain have settled because they rest on relatively soft fill, and the direction of flow is no longer determinable; but their place in a long series of channels conveying water from east to west makes it a practical certainty that the flow was from east to west. The long channel block was evidently laid at some time after the Herulian sack of Athens. The level at which it lies demands this; the filling which had been cut through for its bedding produced sherds as late as the third century after Christ; and all the filling along its south face was as late as the end of the fourth or the beginning of the fifth century.

The block is of hard greyish poros carefully cut, its surface tooled. Along its north face it is divided by horizontal drafting into two plane faces, the lower recessed. Two pairs of small square holes, 1.60 m. apart, in the case of each pair one above the other, appear in the same face (Pl. 58a). The south face is plain. The bottom face is well finished, and shows two sets of three small square holes to correspond to the two pairs of holes in the north face, and at the same distances from the ends of the block. The channel in its upper face is 0.27 m. wide and 0.21 m. deep. The end of the block is carefully finished, perhaps as a resting surface. The block measures 3.98 m. in length, 0.65 m. in width, and 0.40 m. in thickness. Along the entire length of the upper edge at the north side the surface is very worn, as by feet passing over it. The cuttings in the under side of this channel block prove definitely that it is reused in its present position; perhaps it originally formed part of a building destroyed at the time of the Herulian sack in A.D. 267.<sup>43</sup>

The laying of elliptical terracotta conduits in the course of the Great Drain in late Hellenistic or early Roman times—two conduits to the north of the bridge, one to the south—made it possible to fill in what had been formerly a wide uncovered channel; the terracotta tiles were strong enough to bear the weight of the superincumbent fill. Thus it was possible to fill in the drain to the north of Piraeus Street and to carry the Street of the Marble Workers over the course of the formerly open channel, perhaps surmounting the change in level between Piraeus Street and the Street of the Marble Workers to the north with a gradually rising ramp. The wear on the north side of the second cover block still in place at its upper edge (the first cover, it will be remembered, was the channel block of Augustan times, which once had covers of its own over the channel and therefore was not itself exposed to wear) is very even along the whole edge, suggesting that traffic from north to south had passed over it, coming from the Agora by the Street of the Marble Workers and passing up to Piraeus Street

<sup>43</sup> I am grateful to John Travlos for making an investigation of the under side of this block after my departure from Athens. He reports that he cannot positively identify the original use for which it was made. Homer Thompson suggests that it may have been a door-jamb. The cutting of the water channel in its present upper face for its latest use has of course obliterated any evidence as to its original purpose which may have been afforded on the fourth side. The very heavy wear along its north edge indicates that it lay exposed in the surface of the street for a very long time.

at the centre of the bridge at its north side. In the making of the ramp the north end of the drain under the bridge would have had to be closed in order to hold back the earth of the ramp and retain it from spilling into the space under the bridge. The terracotta drain tiles begin just inside the bridge at its north end; a wall of small stones 0.50 m. thick was built over them and its lower course is preserved (Pl. 56c, 58a; Fig. 4A). Though a wall of this thickness seems hardly adequate to hold back the earth of the ramp, this bedding of small stones is all the evidence we have to show that the drain was closed off at the north end of the bridge after the ramp was made.

From the third to the fifth centuries water was carried in two successive lines of tile channels which crossed the bridge on the cover slabs. The earlier channel was made of rectangular terracotta tiles 0.645 m. long and with inside depth of 0.24 m. and width of 0.24 m. The joins between these tiles were carefully sealed with hard white mortar to prevent leakage; the tiles must have had flat covers. Little of this line remains; it was later replaced by a line of elliptical drain tiles which followed the same course. The full ellipse of this channel was made up of a lower line of channel tiles and an upper line of cover tiles, carefully packed at the sides and with all the joints sealed by a coarse pink mortar (Pl. 58c). To the southern edge of the last cover slab of the bridge still in place at the south still adhere bits of the hard white mortar of the first, and the coarse pink mortar of the second terracotta channel. The tile channels evidently crossed the bridge on the next cover slab toward the south, now missing, but which must still have been in place after the Herulian sack. In the packing beside the later tile channel was found a lamp of Broneer's Type XXVIII,<sup>44</sup> but an early example of the type, dating probably from the second half of the third century. We may therefore ascribe the later of the two water-channels to a post-Herulian reconstruction of the water system; the period of service of the two conduits falls between that of the post-Sullan repair and the late channel which included the long reused block.

At the east side of the bridge these channels appear (Pls. 57a, 58d) as two ellipses side by side, the end of the earlier southern one carefully blocked by a stone wall built into it; it evidently changed in form from elliptical to rectangular somewhere on the bridge. The direction of the flow of both tile water-channels is from east to west. The later channel can be traced under Piraeus Street as far to the west as we have dug; at one point in this stretch it passes under the tiled street drain, which flows in the opposite direction, west to east, to empty into the Great Drain under the bridge.<sup>45</sup>

<sup>44</sup> *Corinth IV, ii, Terracotta Lamps*, pp. 102 ff.; cf. no. 1405, pl. XIII.

<sup>45</sup> The later of these tile channels seems certainly to have been reused to carry off the drainage from the large late Roman bath which occupied the area to the east of the Poros Building, at the corner of Piraeus and Areopagus Streets. Side drains enter it at various points along its course. But the care with which the tiles were laid and sealed with mortar at the joints to prevent leakage, together with the clear indications that the channels were carried over the Great Drain on the

At the time when these tile water-channels were laid the level of Piraeus Street had risen the better part of a meter through the accumulation of layers of gravel and road metal. We dug through seven layers of hard road metal overlying the post-Sullan layer at the level of the bridge. All of these, which ran through the first and second centuries after Christ, showed evidence of recurrent road repairs: potholes and wheel ruts had been patched with new fill, which in time became packed down to a surface as hard as that of the rest of the street. The post-Sullan road surface which was left (Pl. 58d), shows a definite slope from east to west at the west end of the bridge. Piraeus Street, if the channels for fresh water under its surface continued to the west of the point to which we dug, must have passed through a saddle between the Hill of the Nymphs and the Kolonos Agoraios much deeper than the level of the modern square to the south of the Hephaisteion would suggest, else the flow of water would have been stopped by rising ground.

The great width of the street at the west of the bridge seems to have remained fixed until Roman times. At the northwest corner a house of early Roman times seems to have encroached to a distance of 1.80 m. over the north edge of the street. At the south the line of the street seems to have remained constant from Greek times to the Herulian destruction. The line of the north walls of the houses succeeding one another from Greek to Roman times between the Great Drain and the Street of the Marble Workers remained constant, which suggests that the bridge itself retained its full width equally long. At the southwest corner of Piraeus Street and the Street of the Marble Workers, the houses of both periods extended somewhat farther toward the north (plan, Fig. 5) than at the southeast corner, but their line remained constant. In post-Herulian times the houses gradually encroached a distance of 1.50 to 2.00 m. over the street from the south; its width was reduced to little more than four meters. The same phenomenon is to be observed to the east of the bridge, though the encroachment of houses into the street from the south started earlier than at the west; and the line of the street was thereby gradually shifted northward. But by these late times Athens had become a far less populous center than formerly, and no doubt there was far less traffic carrying up produce from the port over the dwindling Piraeus Street.

#### THE STREET OF THE MARBLE WORKERS

Mention has already been made on several occasions of this street. It has been called the Street of the Marble Workers because of abundant evidence of the working of marble during the fifth and fourth centuries before Christ in the houses or workshops bordering it at either side. It ran southwestward from the Agora, diverging

bridge at a time when the Great Drain was still functioning, seem to be sufficient proof that these channels were originally intended to carry fresh water. The laying of the latest conduit of poros blocks of course freed the tile channels for reuse as drains.



from Areopagus Street to the west of the Middle Stoa and following the line of the Great Drain as far as the bridge at Piraeus Street. To the south of the bridge the line of the Great Drain diverged from that of the street, which continued in a straight line toward the southwest up the bottom of the valley (Pl. 57c; Fig. 1). Some fifty meters to the south of the bridge lay a small open square or plateia, 7.60 m. in width, between the street and the Great Drain; through this plateia access was to be had from the street to the south end of the Poros Building which lay to the east of the drain. Here too, until the building of the south branch of the Great Drain, the street seems to have forked into two branches, the one continuing up the valley on the line taken by the drain, the other curving westward to mount the slope of the Hill of the Nymphs in the direction of the gate in the city wall in the saddle between the Pnyx and the Hill of the Nymphs.

The street evidently goes back to very early times. It is not unlikely that the east end of the dromos of the Mycenaean chamber tomb (plan, Fig. 1) opened from a street which passed up the valley when the tomb was made. No traces were found of a road as early as this; but in Geometric times a road undoubtedly followed the winding course of the stream bed in the valley. Grave A probably lay beside this road;<sup>46</sup> and under the open square at the diversion of the two later streets a heavy deposit of gravel and road metal of Geometric times was found, in one place completely covering a short stretch of crude wall which may have been part of a parapet beside the early thoroughfare (plan, Fig. 1). The road of Geometric times seems to have passed to the south under Houses B-D.

The left branch of the later street southward of the square ran somewhat to the east of its Geometric predecessor. It may once have continued up the valley to meet Melite Street north of its junction with Areopagus Street; but about the middle of the fifth century through-passage was blocked by the building of House A. Thereafter this branch of the road became merely a passage giving access to the houses beside it, A-B and J-M. Its width of between four and five meters is given by the walls of the houses which bordered it to east and west before the drain was built. The open space between them was left primarily as a passage for the drainage, though no doubt it was also a convenient way of approach to the houses. The Great Drain in its first form seems to have been merely an open ditch dug in the bedrock, but the ditch was not wide enough to fill the whole of the space between the houses and passage ways were left along either side. All evidence for the date and arrangement of this street was obliterated when the Great Drain was put in, and we found no traces of its filling or road metal. It replaced the street of Geometric times which lay somewhat to the west; it was apparently the line of natural drainage from post-Persian times onward, and the houses beside it took their orientation from it. We found no evidence to show

<sup>46</sup> Cf. also *Hesperia*, XVIII, 1949, pp. 275-276. For Grave A, *Hesperia*, XX, 1951, pp. 69, 72.

that it had been in use in the sixth century, though it probably was. With the building of the south branch of the Great Drain early in the fourth century this street must have gone out of use; in two places, between the Poros Building and House E and between Houses D and K (plan, Fig. 5), the drain narrows to bottlenecks only seventy centimeters wide between the inner faces of its walls—too narrow to pass in comfort.

The westward branch of the Street of the Marble Workers continued in use from archaic through late Roman times. A cut made in its filling at the bend in its course revealed six successive layers of road metal, of which the uppermost produced fourth century B.C. sherds, the lowest sherds of the late sixth or early fifth century. Beneath lay a layer of soft red earth which evidently predated the use of this area as a street and which contained sherds of the sixth century. This branch of the street, then, seems to have come into use early in the fifth century. Perhaps it led from the Agora to a gate in the early city wall on the crest of the Pnyx ridge.<sup>47</sup> In any case this branch seems to have displaced the other even before the other was replaced by the Great Drain; otherwise it is hardly likely that the builder of House A would have been permitted to block a thoroughfare for which there was no alternative route.

Over long stretches of the extent of the street the road metal is intact at either side, cut through down the middle by a trench in which a street drain was laid in early Roman times. Unfortunately the line of this drain continued as the line of natural drainage from the slopes of the Hill of the Nymphs into very late times. Masses of coarse gravel washed down from the west and deposited by water were found all along it, in places going into deep pockets. Some of the coins from this deposit were as late as the eleventh and twelfth centuries of our era. Nearly the entire length of the west to east slope of the drain was occupied by this filling; at its west end the drain disappears into a tunnel cut in the rock of the hillside. Wherever the packing beside the tiles of the drain itself is preserved it suggests an Augustan or first century B.C. date for its laying: a favorite packing material was the amphora of heavy fabric, often with a Latin stamp on its rim, usually dated about the turn of the era. The east to west stretch of the drain was made with an elliptical tile conduit, which extended as far as the bend in the line of the street. Beyond that for a certain distance a late repair had been made of curved tiles stood on edge and tangent at the top over the

<sup>47</sup> No trace of a wall as early even as Kleon's "diatichisma" was found on the ridge during the excavations on the Pnyx; cf. *Hesperia*, XII, 1943, pp. 301 ff. The Themistoklean walls passed well to the west of the ridge, including the district of Koile within their circuit. No doubt this gate was left in the "crosswall" when it was built in the fourth century because the road which passed through it already existed, but perhaps also because it was the site of a gate in the hypothetical earliest wall attributed to Peisistratos or his sons, *Hesperia*, XX, 1951, p. 133.

On the question of the pre-Themistoclean wall cf. now also O. Walter, "Zur Frage der vorthemistokleischen Stadtbefestigung Athens," *Anzeiger der phil.-hist. Klasse der Österreichischen Akademie der Wissenschaften*, Jahrgang 1922, pp. 518-527. Walter argues for the existence of a pre-Persian circuit wall but does not venture to decide between Hippias and Kleisthenes as author.

center, forming a pointed arch. Farther to the north the drain is made with elliptical tiles or with roughly built side walls covered by flat stone slabs. As the levels of the street rose with time the flat cover slabs were in places taken out and half-elliptical tiles substituted for them; these were late repairs, but the junctions where the two types of cover met and where the tiles stood to almost their full height above the slabs no doubt provided convenient manholes for the cleaning of the drain beneath.

In most places the strips of road metal to each side of this channel date from the fifth or fourth centuries before Christ; apparently the upper levels of the road filling were dug away in very late Roman or in Byzantine times. That the street brought down a quantity of water in the fifth century B.C. is apparent from the provision made for its reception into the Great Drain through an opening left in its west wall under the bridge when it was built. The drain of Roman times has, however, obliterated the remains of any earlier street drain that may have existed. In two places, to the east of House G and to the east of the unnamed house at the intersection with Piraeus Street, there remain short stretches of light walls—the southern 0.30 m., the northern 0.16 m. thick—set into the surface of the street. These walls are too light to have served as foundations; their upper faces are worn by the passage of feet over them, their vertical faces toward the middle of the street are worn by water. Usually they do not follow the line of the street but run obliquely into it, starting close in near the house walls at the south and gradually encroaching farther into the street toward the north. The slope is from south to north; these low bits of light wall were evidently set into the street in front of the houses in order to turn away water flowing down the surface of the roadway and to prevent it from undermining the foundations. They formed, then, the west side of a sort of gutter or shallow channel in the middle of the street; its width could not be determined because no corresponding gutter walls were found at the east—they had probably been cut away when the street drain of Roman times was laid. Further, the gutters seem not to have been continuous, else they would have followed the line of the street; rather they seem to have been put in by sections in front of each house that lay beside the street. They date from the fourth century and their presence in the surface of the street argues against the existence of a street drain beneath it at that time. Somewhere at the crossroads, however, there must have been an opening of some sort to carry down the water running over the surface of the roadway into the opening left for its passage in the west wall of the main drain.

The Street of the Marble Workers had a normal width of approximately four meters throughout most of its extent. It widened somewhat before the bend in its course from southwest to west. Here it passed House D at the east, the house opening from the street at a short jog in its line (plan, Fig. 5). At the corner formed by Houses C and D the south side of the street turned west at a right angle, passing the door of House C at the south. The north and west sides of the street were bor-

dered by a curving parapet or retaining wall of large squared conglomerate blocks put in somewhat later than the houses opposite, in the third century.

At the north, however, as it neared its intersection with Piraeus Street, the Street of the Marble Workers gradually narrowed. At the north end its width was only about 2.80 m., and this width seems to have been constant, the walls of the houses to either side following the same line from Greek to late Roman times. A deep groove at the east side of the Street of the Marble Workers at the opening into Piraeus Street is perhaps a wheel rut; its line is curved as though made by traffic turning eastward into Piraeus Street as it came from the south, and it passes as close as possible to the foundation stone of the house at the southeast corner of the intersection.

It is significant that this wheel rut, if such it is, turns eastward instead of going straight across Piraeus Street. In the latter were found many traces of wheel ruts, but all running east-west, none north-south on the line of the Street of the Marble Workers. This indicates a lack of cross traffic; and there was none, because the Street of the Marble Workers, like Areopagus Street farther to the east, was closed by a flight of steps or a ramp which prevented wheeled traffic from continuing northward toward the Agora from Piraeus Street. Unfortunately few traces of this arrangement remain because of a very deep disturbance of Byzantine times just to the north of the bridge. The difference in level between the fifth century surface of the north-south street to the north of the bridge, and the fifth century surface of Piraeus Street to the west of the bridge, is nearly a meter; there must always have been a rise at the line of Piraeus Street and the building of the bridge at the beginning of the fourth century does not seem to have greatly increased it. But except for a few blocks with extremely worn surfaces which may once have served as steps in a flight and which were later built into house walls, nothing remains of a stair. An indication is given by the foundations of the house which stood at the northwest corner of the intersection in the fifth and fourth centuries. The east wall of this house, which dates from the fifth century, bordered on the north-south street. At some time in the fourth century an addition was made and the house was extended by about two meters toward the south. An extension of the east wall of the house was made toward the south, and a new corner; and the extension was not bedded as deep as the fifth century street level at the east. We know from farther to the north that the surface of the street in the fourth century was very little higher than in the fifth and that the foundation of the extension would not have reached even to the fourth century street level (Pl. 58b). Therefore somewhere to the north of the corner of this house the street level in the fourth century must have started to rise rather sharply in order to attain the level of the bridge, either by a flight of steps or by a steep ramp. Only such a rise in level could conceal the shallow bedding of the house wall; and only if such a rise already existed would the builders have made their foundation beside the street so shallow.

The numerous blocks with very worn faces reused in the immediate vicinity suggest that a flight of steps should be restored in preference to a ramp.

In any case the stretch of street connecting the Agora with the bridge at Piraeus Street can have been little more than a footpath once the Great Drain was put in. It was narrowed to the shelf only about 1.90 m. wide which lay between the west wall of the drain and the houses bordering the street at the west. On the east side, at the intersection, a house of the fourth or third century bedded its west wall directly on top of the east wall of the drain, effectively barring passage beside the drain at the east. The passageway on the west side, however, narrow as it was, seems to have been in continuous use. Between the drain and the houses bordering the street at the west we dug eight successive layers of hard road metal, which bore witness to the passage of considerable traffic over a long period. The highest street level left beneath the deep Byzantine fill was of the early fourth century; the successive layers beneath became gradually earlier, the seventh producing an ostrakon of Themistokles together with early fifth century sherds, and the last containing fragments of the sixth century, together with some Geometric. We did not dig to bottom, though more than half a meter of filling remains, perhaps of sixth century and earlier road levels.

The change in level at the crossroads and the narrowness of the north-south street to the north, where it was confined to the space between the drain and the houses at the west, preclude the passage of wheeled traffic into the Agora from Piraeus Street by this route after the drain was built. Before the drain was put in, the Street of the Marble Workers was a wide (about 5 m.) passage between the houses, left no doubt for the drainage from the south to pass through, and used at the same time as a street for foot traffic.

Early in Roman times the line of the street north of the bridge was shifted to the east, over the course of the drain itself. The installation of a double line of tile conduits made possible the filling in of the space between the drain walls, formerly an open ditch. As has already been suggested, this new road was carried up to the bridge on a ramp; again there are no traces of wheel ruts on the cover slabs of the bridge which could have been made by traffic passing up to Piraeus Street from the Agora at the north. The houses at the west seem to have encroached over the line of the older street, narrowing the later one. A few blocks still standing on top of the west wall of the drain may belong to Roman houses built directly on the drain wall beside the later street. The inscribed marble grave stele already mentioned (Pls. 56c, d, 58a), which lies just to the west of the post-Sullan channel block over the drain, seems to have been built over by the corner of a later house; the letters along the east and south sides of the stele are very fresh where they were protected by the walls built over them; the rest of the letters, which were presumably exposed in the floor in the house, are so worn as to be in part illegible. The top lines of the stele, lying toward the east, are very fresh; and a block of stone lying beside the stele to the north,

perhaps a bedding stone of the house still in place, lies exactly in the line projected northward of the letters which have been preserved because they were covered by the wall corner. Thus the width of the Street of the Marble Workers at its entrance to the Piraeus Street from the north was narrowed by houses in Roman times to little more than three meters.

Two narrow streets or alleys branching from the Street of the Marble Workers may be mentioned here. Each had its own drain, and the course of each can best be traced by its drain, since little other evidence for either is left. The first of these ran eastward up the slope of the Areopagus, leaving the older left branch of the Street of the Marble Workers nearly opposite the north end of House B (plans, Figs. 1, 5). It passed the archaic cemetery to the north, crossed Areopagus Street and continued up the slope between the houses to connect with a rock-cut stair leading to the upper heights. The drain under this alley brought down much of the Areopagus rain-water to the Great Drain in the bottom of the valley. In Hellenistic times the lower end of the side drain was blocked off; a series of wall beddings cut in the virgin soil crosses its line and one of these beddings is carried over the drain channel by a packing of stones. Evidently a house was built across the line of alley and drain in Hellenistic times and access to the bottom of the valley from Areopagus Street was closed.

The second branch street or alley (plan, Fig. 1) left the Street of the Marble Workers part-way up the lower slope of the Hill of the Nymphs, running toward the south. It passed just to the east of the unfinished Mycenaean chamber tomb, its line marked by a tile drain, and skirted the lower slope toward the south. Parts of the retaining wall along its west side, patched and repaired in Roman times, seem to go back to the fifth or fourth century before Christ; and the bedrock where it was exposed along the line of the alley is worn smooth by foot traffic. This alley evidently gave access to houses at the south, along the lower slope of the Hill of the Nymphs, and remained open perhaps well into Roman times or until it was blocked by the construction of House S.

Was the Agora closed to wheeled traffic? The only streets entering it came in at the corners. Long buildings of Hellenistic times, the Middle Stoa and the Stoa of Attalos, effectively closed off the Agora to south and east. The Panathenaic Way passed between the ends of these buildings;<sup>48</sup> a branch ran eastward from it, between the south end of the Attalos Stoa and the Library of Pantainos, leading to the Roman market of Caesar and Augustus. A short flight of steps led into this street. As noted elsewhere,<sup>49</sup> this entrance to the Agora was thereby closed to wheeled traffic in the second century of our era.

On the opposite side, the slope of Kolonos Agoraios, rising sharply behind the

<sup>48</sup> Proof for the identification of the Panathenaic Way is given, *Hesperia*, XVIII, 1949, pp. 134 ff.

<sup>49</sup> *Hesperia*, XVI, 1947, p. 203, pls. XLIV, XLIX; XVIII, 1949, p. 213.

older public buildings on the west side of the square, made access to the Agora difficult. A passageway between the Temple of Apollo Patroos and the Metroon gave access to the temenos of the Hephaisteion; but this too was crossed by steps, at any rate in the Roman period. At the southwest, two roads, Areopagus Street and the Street of the Marble Workers, led southward; but both were closed to wheeled traffic by steps.

The only avenue through the Agora open to wheeled vehicles seems to have been the Panathenaic Way itself. This wide thoroughfare, which took its name from the processions which passed along it, had to be sufficiently broad and of such gentle gradient that the ship on rollers which was part of the Panathenaic procession could pass upward to the Acropolis. It seems to have been the only way of passage through the Agora which could be used by wheeled traffic; whether it was normally so used or whether only on the occasion of processions like that of the Panathenaia, we do not know. Wheel ruts appear in the pavement laid early in Imperial times both beside the east end of the South Stoa and well outside the Agora to the southeast, but these may have been made by traffic which skirted the Market Place at the south by the street which passed behind the South Stoa, then turned into the Panathenaic Way after it had emerged from the market square between the Middle Stoa and the Stoa of Attalos. There was evidently "no thoroughfare" for wheeled traffic through the Agora from east to west and from north to south. If it had been considered advantageous that vehicles pass through the market square, relatively slight adjustments in the streets to southwest and southeast could have opened the way; since these adjustments were not made, the inference is that the Agora was purposely kept free of carts and wagons, and the likelihood increases that even the Panathenaic Way which passed through the square from northwest to southeast was normally kept closed to wheeled traffic.

#### MELITE STREET

We can indicate very briefly the need for a street along the southwest and west limits of our area, and sketch its probable course. It has been named Melite Street because we know that the slopes of the Pnyx and the Hill of the Nymphs as well as part of Kolonos Agoraios<sup>50</sup> were included in the deme of that name. A street running along the lower eastern slope of the Hill of the Nymphs would pass either through or along the eastern border of the deme of Melite; we do not know how far it extended toward the east. The street must have existed from early times; it led through the gap between Pnyx and Areopagus which was the only way of communication from north to south, and which must have been used from the time when Athens was first settled. The road along the slope of the Hill of the Nymphs was the counterpart of Areopagus Street on the opposite side of the valley. The latter led down to the Agora, passing to the east of the Kolonos; the former must have gone along the ridge of

<sup>50</sup> See above, p. 140, notes 10 and 11.

Kolonos and been the main thoroughfare from southwestern Athens to the region of the Dipylon and the Sacred Gate, an intersection with Piraeus Street giving westward access to the Piraeus Gate. Since passage from north to south through the Agora by way of Areopagus Street and the Street of the Marble Workers was closed to wheeled vehicles by flights of steps in both, the only way open to carts and wagons entering Athens by the Dipylon and headed for the southwestern part of the town must have been by a street which passed outside the market square and behind the Hephaisteion at the west. Thus all the traffic entering the city by the Dipylon or the Piraeus Gate and heading for southwestern Athens must have passed up Melite Street. In its course between Piraeus Street and the gap between Pnyx and Areopagus it must have been crossed by two others: near the gap by a branch of Areopagus Street heading for the Assembly Place on the Pnyx, and further down the slope by the Street of the Marble Workers, heading upward toward the gate in the city wall in the saddle between the Pnyx and the peak of the Hill of the Nymphs.

A short stretch of Melite Street is shown on Dörpfeld's and Judeich's plans.<sup>51</sup> It lies entirely outside our area; most of its course, in fact, must be covered by the modern Street of the Apostle Paul, which follows the same line for reasons of topographical necessity. Part of its course may lie under the houses on the west side of the modern street. A year or two before the war trenches were dug in the west side of Apostle Paul Street to lay a modern drain; and traces were found near its entrance to the square south of the Héphaisteion of an ancient drain running from south to north, no doubt under the course of Melite Street.

## THE POROS BUILDING

BY MARGARET CROSBY <sup>52</sup>

In the middle of the fifth century B.C. a large building, characterized by the use of massive poros blocks in its foundations, was set into the valley below the northwest slopes of the Areopagus about 100 meters south of the southwest corner of the Agora square. Its north wall fronted on Piraeus Street, the street which ran south of the Agora and westwards to the Piraeus Gate. Its long west wall bordered the early open drain, subsequently incorporated into the Great Drain, which ran northward in the bottom of the valley between the Areopagus and the Hill of the Nymphs (Pl. 55b; Figs. 1, 5; in the photograph arrows indicate the corners of the building).

<sup>51</sup> *Ant. Denk.*, II, pl. 37; *Topographie*<sup>2</sup>, plan I.

<sup>52</sup> I wish to thank my colleagues at the Agora, particularly Homer A. Thompson, for their assistance and many helpful suggestions.



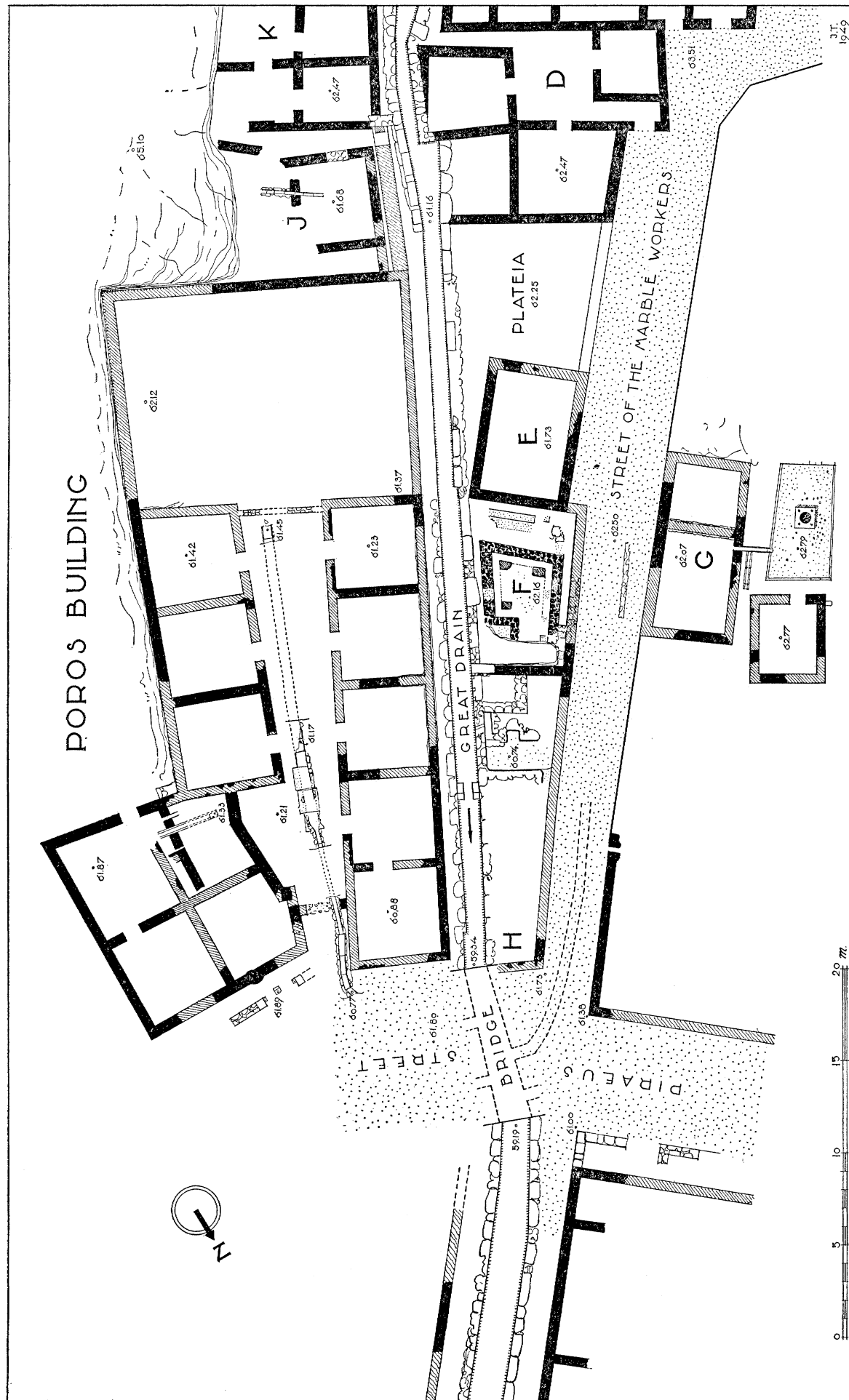


Fig. 5. Plan of the Northern Part of the Area in Pre-Roman Times.

## EARLY HISTORY OF THE AREA

The remains of the building and of its successors have obscured much of the earlier history of the area and a considerable depth of deposit below the fifth century floors still remains unexplored at the west and north. One well of the Protogeometric period, two of the Geometric and two of the Archaic beneath the southwestern part of the building and scraps of walls of the sixth or early fifth century at the northeast are probably to be assigned to private houses.

A heavy polygonal limestone wall, partially exposed just north of the building at the south edge of Piraeus Street, clearly is not a house wall (Pl. 62b, c). It has finished faces four meters apart and apparently it continues northeast into the street area under firm road metal. No evidence for the date of its construction nor for its purpose has been found; it had passed out of use by the middle of the fifth century when the north wall of the Poros Building Annex was built. Beneath the floor level of the northernmost room of the east wing of the Poros Building three large stones of another heavy limestone wall have been exposed. These are set against bedrock at the east and may represent an early terrace or drain wall marking the east side of what seems to have been the original low point in the valley. Blocks of another heavy wall, or walls, set on bedrock a meter and a half below the fifth century floors, have been exposed in the sides of two wells and at the bottom of a late pit in the west and central part of the area.

## GENERAL SCHEME AND PRESENT STATE OF THE BUILDING

The Poros Building consists of a large open courtyard at the south with small rooms to either side of a central corridor in the northern two-thirds, five rooms forming the west wing but only three the east wing.<sup>53</sup> Instead of two rooms at the northeast corner corresponding to those at the northwest there is a complex of rooms, probably four, on a different orientation extending both east and north of the main building and forming a rectangle about twelve by eight meters. Most of the walls assigned to these rooms at the northeast, referred to below as the Annex, seem to be contemporary with the main building. There are, however, traces of earlier walls and it is not impossible that there was an earlier building here around which the main building was fitted. Nowhere has any direct connection between the two been established. It is therefore uncertain whether the Annex was part of the main building or a separate structure.

The main entrance to the building must have been from Piraeus Street at the north, probably by way of the corridor. A second entrance directly into the court from the open square beside the street of the Marble Workers may have existed for those approaching from the southwest. At the southeast a projecting spur of the

<sup>53</sup> The building is 37.56 m. long and 16.50 m. wide at the south. The courtyard measures 11.60 m. from north to south by 15.60 m. at the south, 14.80 m. at the north. The rooms are *ca.* 4.50 m. square.

Areopagus was cut back to make room for the building and the higher level outside precludes any access from this direction. Prior to the construction of the Great Drain at the beginning of the fourth century the western rooms could easily have been entered directly from the street or alley beside the then open drain at the west. It seems more likely, however, that these rooms were entered only from the corridor.

A glance at the plan and photographs (Pls. 55b, 59-64; Figs. 1, 5) will show the sorry state in which we found the building. It suffered heavily from the constant use and successive rebuilding of the area throughout the classical, Roman, and Byzantine periods. In the tenth and eleventh centuries after Christ, when the ground level was two and a half to three meters above the floors of our building, the local residents were still digging down into the earlier levels in search of building blocks and material. Long stretches of its original walls are now empty of all blocks and others are obscured by later walls built on the same lines. The original plan of the building proper (although not of the Annex) and its floor levels have been fairly well established but many details of plan and construction are far from clear.

## CONSTRUCTION

The wall socles are partly of soft white poros, partly of Acropolis limestone. Eight squared poros blocks, 0.55 m. wide, are still in place in the south wall (Pl. 60a) and disintegrated bits of poros found against the bedrock scarp at the east suggest that similar blocks were used for the east wall of the court. North of the court the east wall is of large polygonal limestone blocks chinked with smaller stones, some of which are laid in a ladder pattern and are set against the higher bedrock at the east (Pl. 59b). The faces of the blocks are somewhat rough. Of the original west wall there remain only two poros blocks at the southwest corner of the southern room, two similar blocks at the northwest corner of the building and a foundation of small cut limestone blocks beside the two northern rooms. The two blocks at the southwest corner of the building, measuring 1.25 m. x 0.45 m. x 0.60 m. and set on bedrock with their tops 0.10 m. above the original floor, form the corner of the room (shown at lower left in Pl. 59b). Uneven bedrock against the east and south faces of the southern block stands 0.10 to 0.25 m. higher than the bottom of the block and so precludes the restoration of blocks of similar dimensions either in the south wall of the room or in the west wall of the court, at least at its north end. The two poros blocks at the northwest corner of the building are somewhat smaller, measuring 0.80 m. and 0.70 m. in length, and their tops are 0.25 m. and 0.35 m. above the original floor. The foundations beside the two northern rooms, 0.45 m. wide, are of cut grey limestone, with the individual pieces measuring 0.30 m. to 0.55 m. long, 0.10 m. to 0.20 m. thick and with a maximum height of 0.30 m.; they are set irregularly side by side with flat picked surfaces on the faces of the wall and are chinked with small stones. The construction

suggests that we have the bottom of a rubble wall rather than a bedding for large blocks.<sup>54</sup>

The cross walls between the rooms (with one exception noted below), the original corridor walls, and most of the west wall of the building were carefully constructed in their lower parts in rubble masonry, 0.45 m. wide, of small cut limestone blocks, which probably served as socle for a mud-brick upper wall.

The rooms, but neither court nor corridor, were roofed with simple convex and concave tiles of which quantities were found in the destruction debris of the building. The rooms were floored with smooth rolled clay. The floor of the corridor originally seems to have been a hard gravel surface, not unlike a road except in being smoother. When the corridor drain was inserted late in the fifth century a layer composed of tiny bits of dark grey bedrock was put in as flooring. The floor levels were adjusted somewhat to the natural contours, those along the east side being slightly higher than those at the west, while those in the northwest rooms were the lowest.<sup>55</sup>

#### COURTYARD

No traces of interior supports were found in the large area which forms the southern third of the building, so we must assume an unroofed enclosure open to the sky. The main entrance to this open courtyard was probably from the corridor at the north, although, as noted above, a second entrance directly from the west is possible. At the south end of the corridor part of a light rubble wall, 0.20 m. wide, of the late fifth century has survived (Pl. 59a, b). The central part of the wall has been destroyed by a Roman well. The wall is perhaps a light screen or parapet on either side of an entrance (now lost in the well) from corridor to court, built at the same time as the corridor drain somewhat after the original building. The full width of the corridor may have been left open in the original plan. Of the north wall of the courtyard only the poros block at its west end and a corner cutting in bedrock at the east remain. Wide, small-stone foundations of later walls have destroyed all other traces. Except for the corner blocks the wall was probably of limestone rubble like the other interior cross walls, since, as noted above, there was not a poros block next to the one preserved at the west end of the wall.

The floor of the court sloped up gently from west to east. Near the southwest corner stood a light rubble construction, covered with good red stucco made from marble dust. It may have been an altar, bench or platform of some sort, but only a very small corner remained.

<sup>54</sup> The poros blocks which now rest on these foundations, two beside the north room, three beside the next room, are assigned to the fourth century rebuilding.

<sup>55</sup> The original floor level in the southeast room is 61.42 m. above sea level, in the southwest room 61.25 m., in the northwest room, 60.88 m., and in the northeast annex *ca.* 61.30 m.

## CORRIDOR AND ROOMS

The interior walls which separate the rooms from the corridor run parallel to the exterior walls on east and west and, since the latter are not quite parallel to one another, the corridor narrows towards the north, from 4.50 m. at the south (the same width as the rooms to either side) to 3.00 m. beside the north end of the third room from the south. No certain trace of the east wall of the corridor has been found north of this point where the annex projects into the east side of the building.

Beside the third room from the south on the east side the corridor wall is of limestone rubble similar to the other interior walls, with a rough limestone block used as a doorjamb, 1.20 m. south of the corner (Pl. 60b, the doorjamb is just beyond the well curb at right). Further south the wall has been observed in the side of a Roman well and below a marble-chip pavement of a house of the Augustan period. Here a poros block is in place at both the north and south end of the middle room and a trench with limestone foundations is partially exposed between them. These poros blocks, of which only the northern one has been fully exposed, probably date from a rebuilding like those in the west wall of the northwest room.

The course of the west wall of the corridor is occupied for the most part by later walls built on the same line, but bits of the original limestone rubble wall have survived beside the southern room, and other original blocks are visible under the later wall beside the two northern rooms, including a squared limestone block, 0.42 m. wide, which marks the northern side of an entrance into the fourth room from the south (Pl. 60a). At the northeast corner of the central room however, where the cross-wall separating the two rooms is wider than elsewhere, no trace of a contemporary east wall leading south was found. Instead there was only the corner of a later wall, one row of rough cut foundation stones, resting on hard packed fill with much broken pottery which dated from the first quarter of the fourth century.

The cross-walls between the rooms, with one exception, are of limestone rubble, 0.45 m. wide. In the western wing the wall between the two southern rooms is preserved to a height of 0.50 m. (Pl. 59b). Its east end was covered by a pebble mosaic floor of the fourth century. Two clay floors were used with it, viz., the original floor of the building, and a late fifth century floor some 0.12 m. higher. Between the next two rooms the lower part of a similar wall is visible at the bottom of a plundered wall trench and below a conglomerate block of a later wall. Between the two northern rooms of the west wing the two ends of the original wall have survived. The scrap at the west is preserved to a height of 0.10 m. above the original floor; at the east there are a few pieces of cut limestone and then a roughly finished boulder, 0.40 m. wide and 0.25 m. above the floor, possibly a door jamb (Pl. 60b, 61b). The floor, however, did not carry across the line of the wall, so a solid wall between these two rooms is not precluded.

The cross-wall between the third and fourth rooms (numbered from the south)

in the west wing, wider and heavier than those to the north and south, is of squared blocks of limestone and hard granular poros chinked with small stones. At the one point between the later walls where its full width is exposed this wall is 0.70 m. wide. A break in the limestone foundations of the west wall and two bits of limestone in place beside it mark the western end of this wall.<sup>56</sup>

In the eastern wing a limestone rubble cross-wall is partially preserved between the second and third rooms. Part of the north face of the original wall at its west end was exposed under a wall of the Augustan period and its eastern end is marked by a slight cutting in bedrock in the east wall trench. It was later rebuilt, apparently with the same blocks, slightly south of its original position. At that time it did not carry down to the original clay floor of the room. In its second period it had passed out of use by the end of the fourth century. Later walls now occupy the line of the cross wall between the two southern rooms.

The north wall of the eastern wing is preserved in a few scattered small stones at the bottom of a shallow trench in firm earth, 0.05 to 0.10 m. below floor level. Hellenistic and Roman deposit rested on these stones and the line of this wall was followed by a late house wall. The original north wall of the western wing is preserved at either end under later walls and in plundered wall trenches (Pl. 61a). At the west about one meter of the original wall remains, including the poros corner block and a limestone block adjacent to it.<sup>57</sup>

A gutter or open drain runs the full length of the corridor parallel to its east wall (Pl. 60a, b). At the north it just cleared the west wall of the corridor and, passing out into the street, curved sharply to the northwest to join the main north-south drainage line about a meter and a half north of the building. Concave roof tiles of Laconian type, 0.87 x 0.52 m., were used as the drain in the south half. About midway in its course three large poros slabs supported the drain over the mouth of a well of the Archaic period. North of the slabs the water was carried in U-shaped cover tiles to a point two meters south of the north wall of the building where the open gutter changed to a covered drain, and broken water pipes set between poros walls were used. North of the building, the westward continuation of the corridor

<sup>56</sup> As noted above, there is no trace of a contemporary wall leading south, that is, of the east wall of room three. In fact the eastern end of this wall looks very much like an outside southeast corner. It is perhaps significant that this heavier wall between rooms three and four at the west is in the position corresponding to the break found in the line of the east wall of the building.

<sup>57</sup> About 2.75 m. east of the corner, part of a wall of small cut limestone with a finished west end is exposed under a conglomerate block of a later wall. This finished end suggests an entrance directly into the northwest room from the street. But a small drain built of poros and set against the north face of the wall runs across the approach to the hypothetical doorway. The small stones used in the wall of this drain do not seem heavy enough to have carried a cover on which people walked. Therefore, in spite of the apparently finished end of the wall, it seems unlikely that there was an entrance here. When the corridor drain was in use (in the late fifth century) the higher outside level at the north would have made it impossible.

drain has been exposed near the wall of the Great Drain; its southern wall is built of small poros stones preserved to a height of 0.60 m.; here no trace of pipe or tile was found (see Fig. 1; the westward extension does not appear on Fig. 5).

This drain was not part of the original building. The poros slabs and roof tiles in the central part of the corridor postdate both the east corridor wall in its original form and a very firm, slightly gravelly floor level associated with that wall 0.10 to 0.15 m. below the drain. To the north of the building this drain presumably replaced and so postdates the small drain set against the north face of the original northwest corner of the building. It antedates, however, the construction of the Great Drain, for a block of the Great Drain wall (somewhat tipped but apparently part of the original wall) lies athwart its line. The little pottery found in association with the drain suggests that it was built late in the fifth century and ceased to be used, in its original form, at the beginning of the fourth century, probably when the Great Drain was built.

A floor of tiny bits of dark grey stone (chips of bedrock) was found associated with the drain in the central portion. The light screen wall separating the corridor from the court to the south is probably contemporary with the drain. Perhaps a similar wall with an entrance is to be restored near the north end of the corridor close to the point where the open gutter becomes a covered drain. Later walls and a large irregular pit of late Roman or Byzantine disturbance have confused all evidence here.

#### NORTHEAST ANNEX

The Annex is clearly defined at the north by a slightly polygonal wall of poros and Acropolis limestone blocks running due east and west. The change in orientation corresponds to (or is followed by) that of Piraeus Street immediately to the north which approaches the middle of the city in a southeasterly direction and then jogs due east some five meters after crossing the Great Drain and so continues probably as far as its junction with Areopagus Street (Fig. 3).<sup>58</sup> The north wall of the Annex is of the mid fifth century and so contemporary with the building proper. On present evidence the exact date and relationship of the other walls, shown on the plan, are far from clear. The division into rooms, and especially the restoration of the broken west wall beside the corridor, must be considered tentative. Its eastern limit as now shown on the plan is a wall used in varying forms from the late Archaic to the late Roman period. In the fifth century this may have been an interior cross wall rather than an exterior one, and the Annex may have continued further east under the Roman bath

<sup>58</sup> Near the eastern limit of the excavated area, some 40 meters east of the Great Drain and 5 meters west of the line of Areopagus Street, approximately the same orientation is preserved in the north wall of a bath of the early Roman period and in a limestone wall of classical or Hellenistic date. The street thus continued due east at least to this point.

where the lower levels have not yet been investigated. The most striking feature of the area as found was the layer of fine marble dust and chips which covered the entire region of the Annex from the end of the fifth to about the middle of the fourth century. It seems clear that marble was being worked on the spot at that time.

The north wall, 0.70 to 0.80 m. wide, stands to a height of three courses, 1.20 m., near its west end, but only a few centimeters of this height rose above the contemporary ground level (Pl. 62a, b). Several scattered paving slabs (Pl. 62c), rough finished blocks 0.40 x 0.50 m., were found on the outside ground level to the north of this wall, and a hard clay floor at the same level was found inside. At the west the wall abuts against the early pre-building wall mentioned above. No certain trace of it has been found further west where wide foundations of small stones probably to be associated with the fourth century phase of the building proper obscure its line. The corridor drain, however, changes from an open gutter to a covered channel just at the point where the line of this wall, if projected west, meets the drain. This suggests a relationship of some sort between the corridor and the Annex wall and is the strongest evidence for the association of the Annex and the building proper. Further east a section of the wall was completely removed in late Hellenistic times. Near the northeast corner four courses are preserved, the bottom one a roughly shaped poros boulder against whose southwest corner a cistern was built in the third century. At the corner the top course has a finished north face, against which are set two relatively small poros blocks of a wall leading north. These are later in date, and are probably contemporary with marble workers' floors to the south. Near the west end of the wall the exposed top of a limestone block, a centimeter or two higher than the floor, is considerably worn and must have been walked across at some time (Pl. 62b). The slightly curved top surface of the block argues against restoring an original entrance here. The wear occurred at the end of the fifth century and in the early fourth at a time when the lowest marble dust floor was in use. Quantities of grey and blue limestone working chips found in the construction fill north of the wall show that limestone was the material used for much of the wall, probably for all above ground level. A construction date near the middle of the fifth century is established by the bits of pottery found with the chips and in the clay fill from its footing trench.

The Annex east wall, exposed for a length of eleven meters, is of different construction in the northern and southern halves (Pls. 61a, 63a, b). The east face is nowhere visible for it is overlaid by the high walls of the Roman bath.<sup>59</sup> In the

<sup>59</sup> This high bath wall and the post-Herulian marble-chip floor just to the east may give a deceptive impression of a natural rise in levels on this line. Bedrock has nowhere been exposed under the western half of the bath; a well-head in place 1.50 m. below the marble-chip floor is about the same level as the mouth of an early Roman well just north of the northwestern room of the Annex.



northern half there is a rubble wall of rounded field stones used with a hard floor of marble dust and chips, which is set on an earlier wall of small cut limestone. This lower wall, very like the interior walls of the building proper, is associated with a floor at the same level as the fifth century floor in the northwest room of the Annex. The few sherds found on this floor, however, were no later than the sixth century B.C.

Beside the southern room the east wall of the Annex is of large grey limestone blocks of angular polygonal construction chinked with smaller stones mostly set horizontally. The wall face is rough-picked, designed to receive stucco, some of which is still in place. The wall is standing to a maximum height of 1.40 m., and is set on bedrock just below the marble-dust floor. The north and south walls of the southeast room, of squared limestone blocks, are set against apparently finished ends of the polygonal east wall.<sup>60</sup> The southern wall continued in use after a cistern had been opened against its south face in the late fourth century, and it was again used in the early Roman period. The western ends of both the north and the south walls of the southeast room in their present form, including the doorway in the south wall, are probably part of the late fourth century, post marble-workers, rebuilding. The door in the north wall of the room, for which one of the limestone blocks was cut down, seems to have been part of the original wall and was used with the marble-dust floor. There is no direct archaeological evidence to show that any of the walls of this room were earlier than the marble-dust floor. We have not, to be sure, dug below the floor except where it was broken by later disturbances, but it seems safe to assume that here, as elsewhere in the area, the earliest floors of marble dust were of the end of the fifth century. It seems unlikely, however, that workers in marble would have built as impressive a wall as the polygonal eastern one simply for a workshop. Therefore, since this length of wall continues the line of an earlier wall at the north and is at right angles to the north wall of the Annex, we have tentatively assigned it also to the middle of the fifth century.

Of the interior walls, the wall separating the two northern rooms (lying slightly west of the east wall of the paved court of the Augustan house) is contemporary with the north wall. Part was later rebuilt, but the foundations and a small block of the first course clearly bond with the north wall. The line of this wall, parallel to the east wall of the Annex, can be traced to a point nine meters further south where some stones of a fourth century or Hellenistic rebuilding rest on heavier limestone blocks, presumably part of the original wall. The two eastern rooms of the Annex thus are each 4.50 m. wide (the same as the rooms of the building proper).

The west wall of the Annex, which here serves as the east wall of the corridor,

<sup>60</sup> Only the inside corners are exposed. At the south the exterior corner is still concealed by the wall of the Roman bath, and at the north the situation is much confused by the four cross walls partly overlying each other, of which two are later, and one earlier than the wall that ties in with the east wall.

is in three parts, short legs at north and south with the same orientation as the building proper, and a longer central section set at a slight angle. Of the central section there remains a string course, 0.60 m. wide, of irregularly cut limestone slabs set on a foundation of small poros stones. It seems to be contemporary with the building, for both the grey floor associated with the corridor drain and an earlier clay floor just below it carried against the string course. It was also used in the rebuilding in the late fourth century; a limestone orthostate of this rebuilding has survived at the north end. The exact position of the northern and southern legs of this wall is uncertain. To the southern leg we have assigned a few small poros stones and a small limestone boulder which are just west of the house wall of the Augustan period. For the northern leg we have used two large building blocks which underlie later walls, but which seem to have no relation to them. There is no direct evidence for the date of either the northern or the southern end of the wall, but the levels and positions seem appropriate for the fifth century building and so we have attributed them to the original construction.

The north-south wall shown on the plan along the east side of the southwest room of the Annex seems to antedate the building (Pls. 63a, 64a). The southern end of the wall, a single course of rough limestone blocks about the size of a man's head, is crossed by two drains. The northern one with poros walls set on grey limestone slabs is incorporated into the wall and so contemporary with it. This was replaced by a small terracotta drain just to the south. The small amount of pottery found in association with wall and drain suggest that the wall and northern drain had passed out of use by the mid fifth century, and so antedated the building, and that the southern terracotta one was in use in the second half of the century, and so was in use with the building. Presumably it flowed into the corridor drain. The northern half of this early wall is set in a slightly more westerly direction. The slight angle at which the two parts met was covered by a Roman house wall, under which a return to the east of the northern half was discovered. The disturbance caused by the Roman wall made it impossible to tell whether the southern part originally abutted against this return, or whether there was a gap or possibly a doorway between the two parts of the wall. The tiny scraps of pottery found in association with this northern part suggest that it also had passed out of use by the middle of the fifth century. Then it was apparently replaced by a wall about a meter further east which continued the line of the crosswall between the two northern rooms (see above).

#### DATE OF CONSTRUCTION

Some of the filling of the building lay undisturbed under the courtyard at the south. This area had been much eaten away in earlier times by water flowing down the hillside at the south and east; the gravelly deposit left by the water contained pottery of the Geometric and Protogeometric periods. A deep filling had been dumped

over this to level the area for the floor of the courtyard. A large quantity of pottery from this filling was of the first half of the fifth century, the greater proportion of the second quarter, a few pieces as late as just before the middle of the century. Five ostraka were found in this filling; one of Themistokles, probably from an *ostrakophoria* of 471/70 B.C., three of Kimon, who was ostracized in 461 and one of the Elder Alkibiades, probably ostracized in 460.<sup>61</sup> The pottery and the ostraka thus suggest a date for the construction of the building at about the middle of the fifth century. The small amount of pottery associated with the construction which was found further north in the rooms and corridor is of the same period as that from the filling below the courtyard floor.

The corridor drain was added after the original construction but before the major rebuilding of the fourth century. Some of the pot sherds found under the drain are of the third quarter of the fifth century, but none needs be later than the early part of the fourth quarter. Thus the drain was probably built in the fourth quarter of the fifth century.

Soon after, at about the end of the fifth century, the building suffered considerable damage both to the walls and to the roof as shown by the masses of broken roof tiles found on the fifth-century floors.

In the Annex no mass of construction filling was dug that could be associated with the walls; the tiny scraps of pottery found in scattered spots have been mentioned above. These showed that the heavy north wall was built about the middle of the fifth century and so was contemporary with the building proper. The presence of earlier walls with the same orientation as the Annex and the awkward relation between Annex and building proper suggest that the building proper may have been fitted around or adjusted to a pre-existing building, which however was rebuilt at the same time, that is about the middle of the century. No masses of destruction fill were found in the Annex corresponding to that found in the rooms of the building. Marble chips and dust covered the whole area, in most cases resting directly on the floors of the Annex. The lowest layers of chips seem to date from about the end of the fifth century. The marble workers thus moved into the Annex at about the same time as they did into the northern rooms of the building.

#### LATER HISTORY OF THE BUILDING

After the building had been damaged at the end of the fifth century, marble workers moved into the northwest room of the main building where they were established in the first quarter of the fourth century. They used also the north half of the corridor where their drain, found full of marble chips, overlay the original corridor drain. Work was started on a well in the northwest room, but was given up

<sup>61</sup> Inv. P 18557, P 18339, P 18536, P 18555, P 18537. The date 460 for the ostracism of the Elder Alkibiades is suggested in an article by Eugene Vanderpool to be published shortly in *Hesperia*.

because of a collapse in the soft bedrock at the sides. The abandoned shaft was filled with marble chips and broken pottery of the first quarter of the fourth century. The walls of this room were rebuilt sometime before the middle of the century; the north and south walls were each pushed a trifle further north, large conglomerate blocks were used for the corridor wall, and poros blocks, of which two are in place, were set on the limestone foundations of the original west wall (Pls. 61b, 64b). The eastern

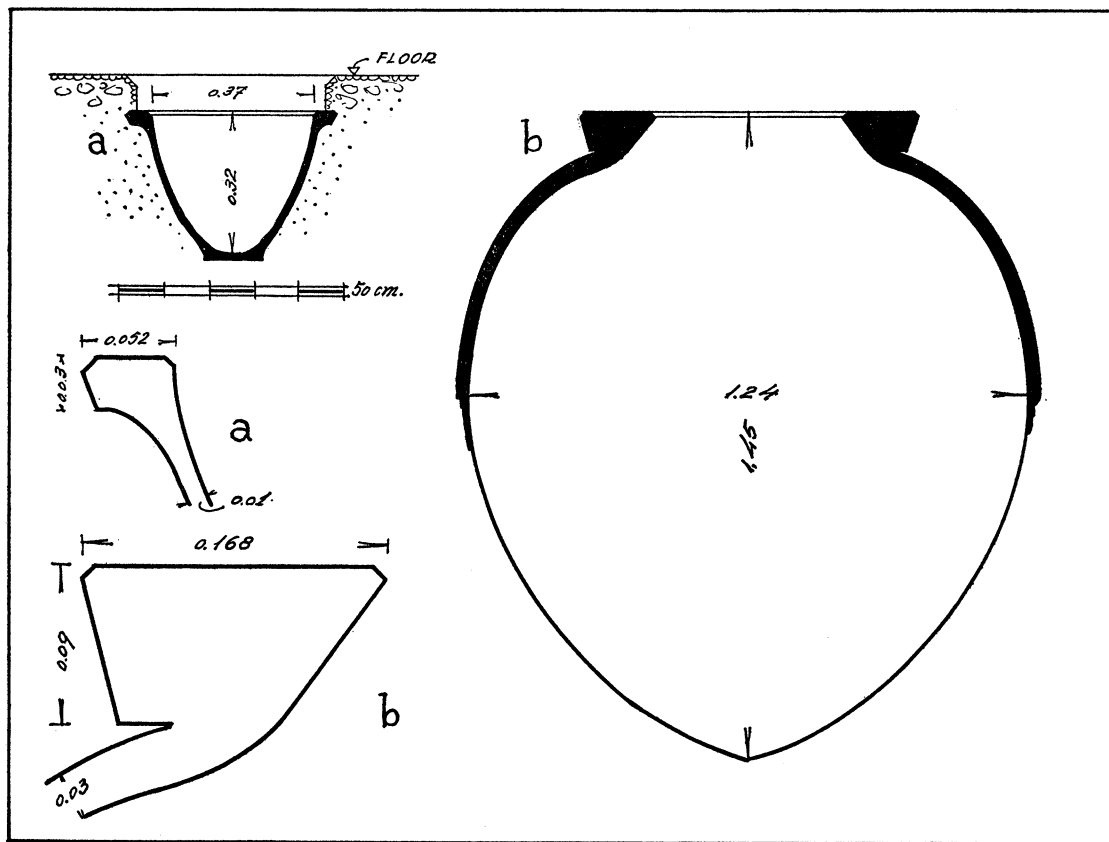


Fig. 6. Sections of Basin and Pithos.

block of the southern wall of the room rests on some marble chips and the conglomerate blocks of the corridor wall are later than the first drain used by the marble workers; hence the re-building postdates the earlier workers in marble. A terracotta basin in the northwest corner of the room and a pithos<sup>62</sup> near the center (Pl. 64b; Fig. 6), were both found filled with marble chips, as was also the footing trench for

<sup>62</sup> Inv. P 19423 and P 19422. Part of a graffito is preserved on two broken non-joining rim fragments which reads  $\Delta\Delta\Delta \dots \text{III}$ . For pithoi with similar graffiti, probably representing the price, see Robinson and Graham, *Excavations at Olynthus*, VIII, pp. 312-316; XII, p. 205, note 65. The numbers at Olynthus range from 53 dr. 4 obols to 31 dr. 1 obol.

the pithos. The basin seems to be later than the rebuilt north wall, of which only the trench was preserved at the west end. The fourth century levels here were badly broken and the exact relation of pithos and basin to the rebuilt walls is uncertain.

A pyre burial of the mid fourth century (*Hesperia*, XX, 1951, pp. 114-115) which was laid close against the face of a conglomerate block of the rebuilt corridor wall gives a terminus *ante quem* for the rebuilding.

The details of the fourth century reconstruction are less clear in the rest of the building. The survival of most of the original wall lines, interior as well as exterior, into later periods, the absence of fourth century and Hellenistic wells and cisterns within the area of the building proper, and scraps of fourth century pebble-mosaic floors found in many parts of the area suggest the possibility that the building was restored on much the same plan and presumably for the original use, rather than that it was converted into houses or workshops. The only certain change in plan at the time was the elimination of the crosswall between the two southern rooms in the west wing. The chief obstacle, perhaps an insurmountable one, to this hypothesis is the pyre burial of the mid fourth century in the northwest room. Such pyres are usually considered evidence of a period of abandonment; they certainly seem to have no logical place within the walls of a public building. If some explanation of the pyre could be found we could assume that the building proper survived well into the third century.

The later history of the northeast Annex, and the specific walls used in any given period is much confused. At the end of the fifth century a very hard floor of marble dust and chips formed over the whole area and extended beyond its walls both north and south. A second layer of dust and chips was found above the first in the northern rooms; the upper layer at the northeast, composed of very fine dust, apparently a mixture of marble dust and emery, seems clear evidence of marble working on the spot. A small marble perfume bottle<sup>63</sup> (Pl. 64c) found among the upper chips is perhaps an example of the work done here. The latest pottery associated with the marble workers is a fragmentary red-figured lid of about the middle of the fourth century (Pl. 64d).<sup>64</sup>

<sup>63</sup> Inv. ST 450. Diameter 0.061 m.; preserved height 0.083 m. It was made in two pieces, then joined with marble cement of which traces are visible in the photograph. The top of the neck is broken off, but the surface is fairly smooth and the bottle may have been reused in this condition. The diameter of the hole is 0.006 m. The bottle is of creamy white crystalline marble with smooth soft finish outside, tool marks inside. The average thickness of the wall is 0.005 m. Black-figured Attic vases of similar shape, though larger, are known, *Jahrbuch*, LXI-LXII, 1946-47, p. 65, pls. 13 and 14. Our marble bottle, dating probably from the first half of the fourth century, will, if related at all, be a very late descendant.

<sup>64</sup> Inv. P 20853. H. with knob, 0.075 m. Diam. est. 0.205 m. Egg pattern on the down-turned rim; the edge of the rim reserved, the underside of the lid glazed black; much of the glaze outside fired red; white for the Eros. The following note was provided by Miss Lucy Talcott. A late example of Schefold's Type B (Karl Schefold, *Untersuchungen zu den Kertscher Vasen*, Berlin

Later two cisterns were built, one in the northwest room of the Annex, the second against the south face of the south wall toward its east end, and the two were connected by a channel 10.35 m. long. Subsequently the channel was blocked and the northern cistern was used for a short period close to the end of the fourth century. Its stucco was preserved to a point some 20 centimeters above the upper layer of chips, on which its built walls rested, and against which the cistern stucco was laid. The cisterns were originally built perhaps in the third quarter of the fourth century, clearly before the fill accumulated in the draw shaft, and after the highest layer of marble chips had gathered. A limestone wall, *ca.* one meter north of the fifth-century north wall of the Annex, with a wide door leading in from the street, replaced the original north wall in the period of the cistern. (The east end of this wall is shown in Pl. 62c).

South of the Annex, east of the building proper, an unfinished well and a rectangular shaft with two tunnels leading southwest from it, were dug and abandoned in the second half of the fourth century. Masses of clean red clay found in the well suggest that an industrial establishment in which clay was used may have stood near by. In Piraeus Street just north of the mouth of the corridor fragments of moulds from bronze working were found with pottery of the second half of the century.

In the second half of the third and in the early second century considerable reconstruction took place in the northern half of both building and Annex. No significant Hellenistic levels were found in the southern half where the floor levels of the fourth century B.C. continued into the Augustan period.

In the northeast corner of the Annex a third cistern was built, apparently in the late third century, and was connected by a channel with the earlier channel from the southern cistern. These two remained in use until the second century. Some of the earlier walls were reused and the orientation was the same, but no clear plan is preserved. A small north-south stone-built drain, about eleven meters west of the Annex east wall, and one meter east of the original corridor drain, belongs also to the third century and suggests the survival of the open corridor.

A north-south wall was built through the two northern rooms in the west wing. With this wall is associated a terracotta drain, which at the south lies above the corridor's west wall, then turns west through the new wall and across or through the original west wall of the Poros Building to empty into the Great Drain. These are the earliest certain intrusions into the lines of the building proper, and probably date from the late third or the second century B.C.

and Leipzig, 1934, p. 138). The scheme is the same as the more careful lid in Naples (Schefold, *op. cit.*, no. 41; *Mon. Ant.*, XXII, 1914, p. 680, fig. 233), but the style and hand nearer to *Olynthus*, V, pl. 111, no. 216. Compare also a lid from the Pyxis Workshop (Schefold, *op. cit.*, pl. 16, no. 581), close to the middle of the fourth century. *Ca.* 360-350 B.C.

Precise details of the late Hellenistic period are lost in the confusion caused by Sulla's sack and by the subsequent rebuilding, late in the first century B.C. Masses of destruction debris are clear indications that this area was plundered. A great deal of iron slag was found in the debris especially at the northeast. The pottery found with the slag runs well down into the first century B.C., clearly postdating Sulla, but it seems probable that iron was being worked here before Sulla and the deposit as we find it is a mixture caused when blocks were pulled out of the earlier walls in preparation for the next rebuilding.

Near the end of the first century B.C. the area was rebuilt. Two private houses, of which the courts with marble-chip pavements are well preserved, replaced the Poros Building.<sup>65</sup> The floor of the southern house (P-Q) lies at about the same level as that of the fourth-century building. The northern house (R) lies some 50 cm. higher, corresponding to the Hellenistic levels in that part of the area. At the same time as these houses, or shortly thereafter, a large bath was built to the east of our area, a structure which was remodelled several times, and which continued in use probably into the fifth century of our era.

The Augustan houses were replaced in the second century by other houses. Now for the first time the north wall bordering on Piraeus Street carried in a straight line from the east side of the Annex to the bridge over the Great Drain, so eliminating the jog caused by the different orientation of the north walls of the Annex and of the building proper, which had hitherto been preserved.

For the later Roman (post-Herulian) period scraps of walls, plundered trenches, house drains, etc. show that the area was almost continuously lived in and was constantly being rebuilt, into the sixth or the seventh century of our era, but no plans of house or houses can be recovered. At the east, the bath was again in use in the second half of the third century; its elliptical tile drain now crossed the Great Drain Bridge. The bath will have been quickly rebuilt, it would seem, after the Herulian destruction of A.D. 267 and it remained in use, with some rebuilding, until latest Roman times.

#### IDENTIFICATION

A fifth-century building of the size of our Poros Building placed near the Agora would almost certainly have been a public building of some sort. The plan, large court and small rooms either side of a central corridor, is a simple one that might have served a variety of purposes. It does not seem to have been a common one, however, for I have found no similar buildings in the published reports of other Greek sites. The only parallel noted to date is also in the Athenian Agora, the so-called "Greek Building" southwest of the Tholos. This is a trapezoidal enclosure, measuring 26 meters by 20.80 meters, with a large area at the north and almost certainly three

<sup>65</sup> See below p. 277 where P and Q are treated as separate houses.

rooms on either side of a central corridor in the southern three-quarters of its length.<sup>66</sup> It was built in the second half of the fifth century and apparently was destroyed by the soldiers of Sulla in 86 B.C. Squared blocks of soft white poros were used in its exterior walls, and small pieces of Acropolis limestone for the interior walls.

The two buildings of approximately the same date, construction, and ground plan, both standing near the southwest corner of the Agora, were presumably planned to serve similar purposes. The size and the central location, particularly that of the northern one at the corner of the public square only twenty-two meters south of the Tholos, where private ownership seems most unlikely, suggest that they were public rather than private buildings.

If the similarity between the two buildings does not, however, seem sufficient to be conclusive as to their common character, one must consider the possibility that the Poros Building may have served some semi-private purpose. In this case it might have been one of the *συνοικίαι*, the lodging or apartment houses known to have existed in ancient Athens.<sup>67</sup> The ground plan, with its series of small rooms that could have been rented separately, would suit some such use. There are two practical objections to such a theory. First is the location of the Poros Building, set strategically at one of the main cross-roads of the city. And second is the fact that in the area of the Poros Building there is no provision for any adequate water-supply for domestic purposes, such as we would expect to find in connection with any building designed as living-quarters. No single well in the vicinity has as yet been found which can be associated with the Poros Building at the time of its construction, or at any time during the second half of the fifth century. Attractive, therefore, though the description of our building as an apartment house may at first appear, the difficulties in the way of this identification seem considerable, and we must turn to the possible uses of both structures as public buildings.

The suggestion has been made that the two buildings were law courts, *dikasteria*.<sup>68</sup> Topographically this is very appealing. Most of the dikastic courts met in or near the Agora. Although some trials were held in buildings not primarily designed for court use and others were still held in the Heliaea, the old open-air meeting place, at

<sup>66</sup> The building, mentioned in *Hesperia*, XVII, 1948, p. 168; Suppl. IV, p. 111, has not been published in detail but appears on all the recent plans of the Agora. Most of the area was stripped to bedrock in later times, and little except the cutting in the slope of Kolonos for its west side and the plundered wall trenches remains. The three rooms along the west side, each *ca.* 4.50 m. square, are certain. The evidence for those along the east side is less clear.

<sup>67</sup> Demosthenes, XXXVI, 6; XLV, 28; Aeschines, I, 124, 125, *et al.* Two references from the Lexicographers to a large house in Melite (the deme in which our building probably lies, pp. 140-143 above) are given by Curtius, *Stadtgeschichte von Athen*, 1891, p. xciv. The earlier of the two texts, Zenobius, II, 27, from which the second, Hesychius, seems to be derived, is so garbled as to make the reference to the deme Melite doubtful. (cf. Aristophanes, Oxford text, II, *fragmenta* Γεωργοί, 115). It is thus merely another reference to a large house in which rooms were rented.

<sup>68</sup> *Hesperia*, XVII, 1948, p. 168.



least one specific court building, the Parabyston, and probably more, was standing in or near the Agora already by the fourth quarter of the fifth century.<sup>69</sup>

A specific location for one or more law courts in the southwestern part of the Agora area is supported both by literary and archaeological evidence.<sup>70</sup> Plutarch, *Moralia, de Genio Socratis*, X, 580 E-F, describes a misadventure met with by Socrates' disciples, *πορευομένοις δ' αὐτοῖς διὰ τῶν ἑρμογλύφων παρὰ τὰ δικαστήρια*. That the southern building was in a district used by marble workers is abundantly clear. Its position would also fit admirably the lower court mentioned by Bekker, *Anecd. Gr.* I, 253: Ἐπάνω δικαστήριον καὶ ὑποκάτω : ἐπάνω μὲν δικαστήριον τὸ ἐν Ἀρείῳ Πάγῳ· ἔστι γὰρ ἐν ὑψηλῷ λόφῳ· κάτω δὲ τὸ ἐν κοίλῳ τινὶ τόπῳ.

Further the only finds of appropriate date thus far identified with the courts, the fourth century bronze ballots and dikasts' name plates, have been found in largest numbers near the southwest corner of the Agora. Eleven of the twenty-nine dikast ballots, found during the excavations, are from near the Tholos and the "Greek Building," four are from our southwest area between the Areopagus and the Hill of the Nymphs, and three were found in the intervening area. Of the thirteen bronze dikasts' name plates, four are from this southwest area, and three from the northwest slope of the Areopagus, not far to the east.

The plan of the two buildings, however, does not seem one that would have been specifically designed for a fifth century dikastic court building. The courtyards are both too small to seat a panel of 500 dikasts, the normal number in trials of public cases, although they could easily have accommodated one of the smaller panels of

<sup>69</sup> Antiphon's speech on the Murder of Herodes was delivered, ca. 417 B.C., at a trial held in a roofed building in the Agora (Antiphon, V, 10-11). Since the case was presumably tried before the Eleven, the building will have been the Parabyston, which was, according to Antiphon as quoted by Harpokration, the court of the Eleven. More than one court building seems to have been standing in or near the Agora in 392 B.C. for Praxagora, *Ecclesiastousae*, line 676, boasts τὰ δικαστήρια καὶ τὰς στοιαὶς ἀνδρῶνας πάντα ποιήσω. The evidence for the names and numbers of specific court buildings in any given period is slight. For the fifth century, four or five meeting places of the dikastic courts, not including the Heliaea, are attested, but only two or three specific court buildings. Aristophanes, *Vespaie*, ll. 1108-1109 (422 B.C.) lists four separate meeting places for the dikasts:

οἱ μὲν ἡμῶν οὐπὲρ ἄρχων, οἱ δὲ παρὰ τοὺς ἑνδεκα,  
οἱ δ' ἐν ᾧδείῳ δικάζουσ', οἱ δὲ πρὸς τοῖς τειχίοις

A court building, τὸ καινόν, is also named in the same play, line 120. This may have been the court of the archon or even that πρὸς τοῖς τειχίοις, or again the archon may have held trials in one of the stoas. Thus, the specific court buildings, in addition to the Heliaea, known for the fifth century are the Parabyston (the court of the Eleven), the courts πρὸς τοῖς τειχίοις and τὸ καινόν; and the second and third may be the same. See Lipsius, *Das attische Recht und Rechtsverfahren*, I, 1905, pp. 167-175 for the court buildings attested for the different periods.

<sup>70</sup> For convenience this evidence, given in *Hesperia*, XVII, 1948, p. 168 and note 21, is repeated here.

200 dikasts.<sup>71</sup> Furthermore the series of small rooms, which form an integral part of the ground plan, serve no known functional purpose in connection with the courts of the fifth century. Some such series of rooms might be suitable for the single court complex, the *dikasteria*, of the next century described by Aristotle ('Αθ. Πολ. 63-68). But the elaborate method of daily sortition of jurors for which the single court complex was needed was not introduced until early in the fourth century.<sup>72</sup> In the fifth century, when our buildings were built, the jurors were assigned to a panel for the year and knew in advance the court in which they were to serve (Aristophanes, *Vespae*, lines 1108-1109), so there would be no need for such rooms.

Since the plans do not seem suited to the needs of a fifth century law court and since there is still space available for one or more court buildings near the southwest corner of the Agora, if we accept the topographical evidence for their location in this region, it seems best to reserve judgment. If at some future date this region is fully explored and no other candidate for a law court is found the question will have to be reconsidered.

The southern building, however, on the assumption that the Annex was an integral part of it and that it thus had at least ten small rooms, has some features in common with the court complex required for the fourth century jury system as described by Aristotle in the last chapters of his Athenian Constitution. Could the building, whether originally designed for a law court or not, have been rebuilt in the fourth century as the single court complex, the *dikasteria*? It is not possible to reconstruct from Aristotle's text a clear plan of the complex which he had in mind.<sup>73</sup> Ten entrances, *εἰσοδοί*, one for each tribe, are certain and the candidates gathered at these entrances for the allotment process. The text seems to imply that most if not all of the meeting places were included in the one complex.<sup>74</sup> The Poros Building offers possibilities for the ten entrances in its ten (?) small rooms, but does not seem to

<sup>71</sup> The smaller panels of 200 and 400 used in private suits are only attested for the fourth century, but were probably also used in the fifth, Lipsius, *op. cit.*, pp. 136, 142, and Hommel, "Heliaia," *Philologus*, Suppl. Bd., XIX, Heft II, 1927, pp. 111-112. The courtyard of the Poros Building has an area of *ca.* 175 sq. meters, that of the Greek Building *ca.* 115 sq. meters as compared with 314 sq. meters for the auditorium of the Bouleuterion in the Agora (*Hesperia*, Suppl. IV, p. 150).

<sup>72</sup> Daily sortition was introduced after 388 B.C., the date of Aristophanes' *Plutus*, perhaps in the reform year of 378/7 (Hommel, *op. cit.*, pp. 126-132).

<sup>73</sup> See Dow, "Aristotle, the Kleroteria and the Courts," *Harv. Stud. Class. Phil.*, L, 1939, pp. 18-23. Dow's identification of *kleroteria* as allotment machines rather than allotment rooms makes much of the modern literature on the subject obsolete.

<sup>74</sup> Since the cases for the day were not assigned to the specific courts until after the jurors had taken their seats, § 65, 2 and 66, 1, the possibility of effective bribery if the dikasts walked through the open square with their colored batons would seem very slight. Further, the specific reference to the Heliaea, § 68, 1, implies, in my opinion, a separate place; and a court meeting in the Stoa Poikile, which cannot have been part of the single complex, is named in a record of the late forties of the fourth century: *I.G.*, II<sup>2</sup>, 1641, lines 28-30.

provide sufficient space around the entrances. Further it provides only one meeting place and that too small for the larger panels. As we have seen, the building was rebuilt in the second quarter of the fourth century. This date would be most appropriate for the court complex which was not required until after 388 B.C. On the other hand, the presence of the pyre burial of the middle of the fourth century in the north-west room suggested that the building was not serving any public purpose at that time. Thus, again with this assumption, the difficulties are such that they cannot be ignored until all other possibilities have been excluded.

If the buildings were not law courts, and if the assumption that they are public buildings is correct, one further suggestion may be offered. They might perhaps have served as civic offices for some of the many city officials and commissions. The plan would seem eminently suited to some such use, with each small room assigned to one specific board and the courtyard and corridor used by all. This hypothesis of a common building for several offices might explain why we have so little direct evidence for the offices, such as the *strategeion*, *hipparcheion*, *poleterion*, etc., known to have been in or near the Agora.<sup>75</sup> Is it then possible that the northern building near the Tholos, housing more than one group of officials, was in fact the building occasionally referred to as the *synedrion* or *archeion*?<sup>76</sup>

## HOUSES OF THE FIFTH AND FOURTH CENTURIES

All along the Street of the Marble Workers in the bottom of the valley lay houses of the fifth and fourth centuries. Though some of these suffered considerable damage at the hands of pit-diggers of Byzantine times, the very depth at which they lay served as a protection and some of them have survived in surprisingly good condition. These houses are spoken of as houses of the fifth and fourth centuries because in general they all had two phases: a fifth century phase earlier than the building of the south branch of the Great Drain, and an early fourth century phase when in consequence of the building of the drain most of them underwent alteration or partial rebuilding. It must be borne in mind that all of these houses existed before the drain was built in the opening years of the fourth century, and that the course of the drain was itself dictated by the position of the houses. Thus the various slight bends and curves in

<sup>75</sup> For the various offices see Wachsmuth, *Stadt Athen*, II, 1890, pp. 344 ff.; Judeich, *Topographie*<sup>2</sup>, 1931, pp. 346, 357, and Kahrstedt, *Untersuchungen zur Magistratur in Athen*, 1936, pp. 296-299. It may be noted that a fragmentary decree in honor of a hipparch, *I.G.*, II<sup>2</sup>, 895 (188/7 B.C.), names the *hipparcheion* in line 6 and then the phrase ἐν τῇ ἀλλῇ τῶν — — occurs in line 8, apparently as the place of erection of the stele.

<sup>76</sup> For a recent discussion of the *synedrion* and *archeion*, see McDonald, *The Political Meeting Places of the Greeks*, 1943, pp. 295-298, where all known references to the *synedrion* in Athens are given. See also *Hesperia*, VI, 1937, p. 215, note 4, where the suggestion is made that *synedrion* may have been another name of the bouleuterion.

the line of the drain are accounted for by the necessity for bypassing houses and buildings which were already in existence when it was made. In order to visualize the layout of streets and houses in the fifth century it is necessary to think away the Great Drain as it appears on the plan, Figs. 1, 5, 7 and to substitute for it the left branch of the Street of the Marble Workers, already noticed, running southward from the little square opposite the court of the Poros Building. There is left a passageway of irregular width, reaching a maximum of nearly five meters between Houses C and L, which gave access to Houses A-B at the west and south, and to Houses J-K-L at the east. The west limit of the street is given by the east fronts of Houses B-C-D, the east by the west fronts of Houses J-K-L. To the south of House L the eastern limit of the street is not fixed; probably it lay parallel to the western, but it disappeared with the building of the drain. Passage farther toward the south by this road was blocked with the building of House A, but no doubt it continued to be used as a way of access to Houses A-B and J-K-L until it was finally blocked still farther north by the building of the drain. Houses C-D, and the houses farther to the north, E-F-G, opened directly from the main line of the Street of the Marble Workers; the Poros Building could be entered from Piraeus Street at the north, perhaps also from the square in the Street of the Marble Workers at the southwest. With the blocking of the southern branch of the Street of the Marble Workers by the drain we must assume that Houses A-B were approached from the south or west, and the houses to the east of the drain from the east. All the houses have been lettered, from south to north along the west side of the drain, A to H, then back from north to south, J to M, on the east side. We will take them up in order, one by one.

### HOUSE A

Plan, Figs. 1, 7

Of the southernmost of these houses we could excavate only a corner (plan, Fig. 7); the rest runs under the scarp which supports the modern Apostle Paul Street. This is unfortunate because House A has the best preserved walls and floors in this area due to the fact that the filling and the stratification around it were undisturbed by pits of Byzantine times (section, Fig. 8). We uncovered enough of the room which lay at the northeast corner of the house to secure its dimensions in both periods of construction, and the stratification served to give us an approximate date for the first period.

#### *First Period*

The house was built in the bottom of the valley, right across the line of the roadway, effectively blocking it. Access to the house itself was by the road, however, and a door was left in the north wall of the house fronting on it. Since this roadway also carried the drainage from the hills to south and southwest we must assume

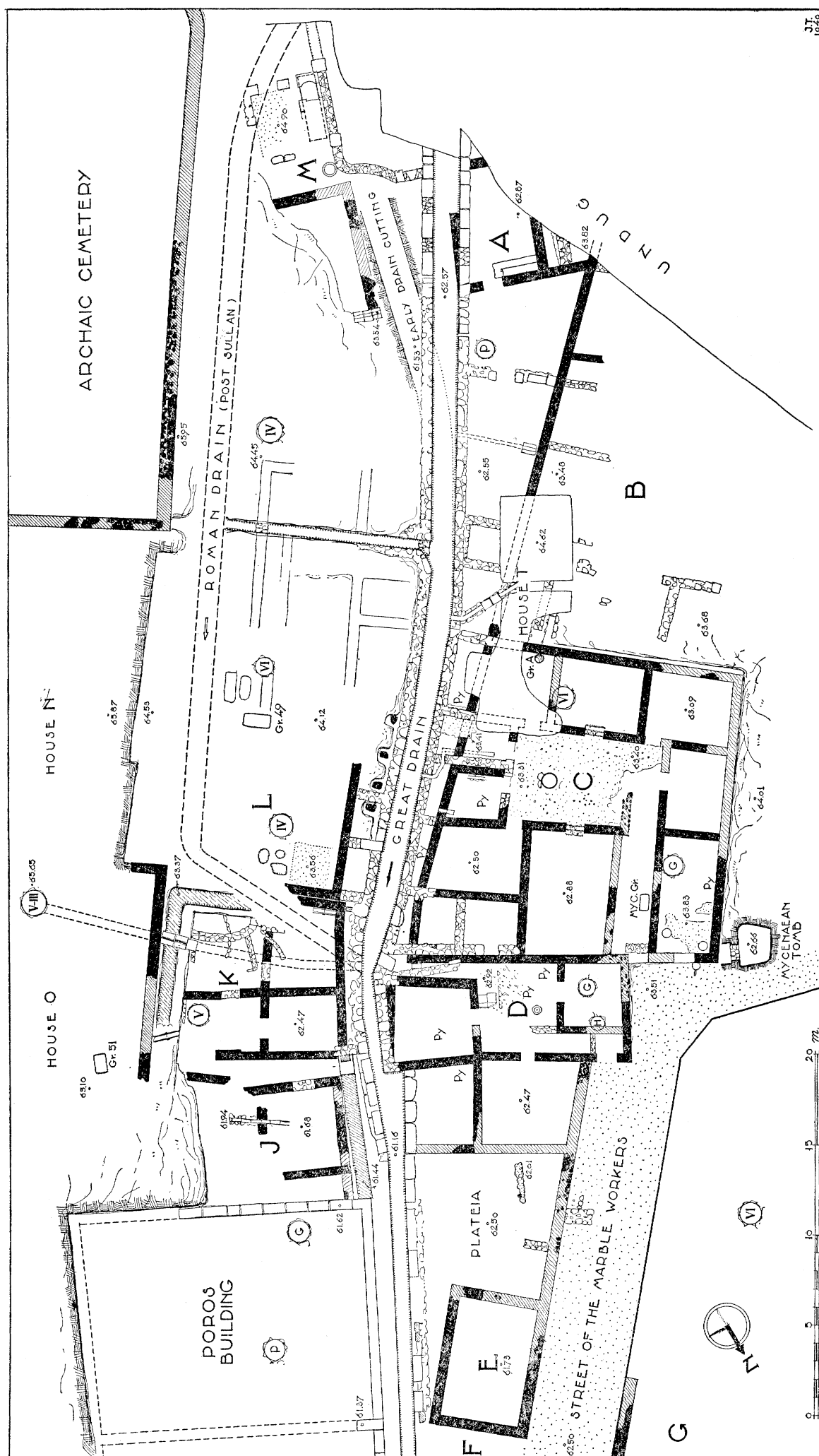


Fig. 7. Plan of the Central and Southern Parts of the Area in Pre-Roman Times. Gr=Grave. Py=Pyre. In the Wells  
P=Protogeometric, G=Geometric, H=Hellenistic, others by Centuries.

that when House A was built across it provision had already been made for the drainage by the digging of the deep ditch farther to the east (plan, Fig. 7), which was the forerunner of the built drain (see below, p. 254). It is noteworthy that the east wall of the original House A is approximately parallel to this early drain cutting; it is also impossible that a house could have been built in the natural line of drainage unless the flow had already been diverted to another channel. The problem of the drainage running through the area having been taken care of by a new channel, we

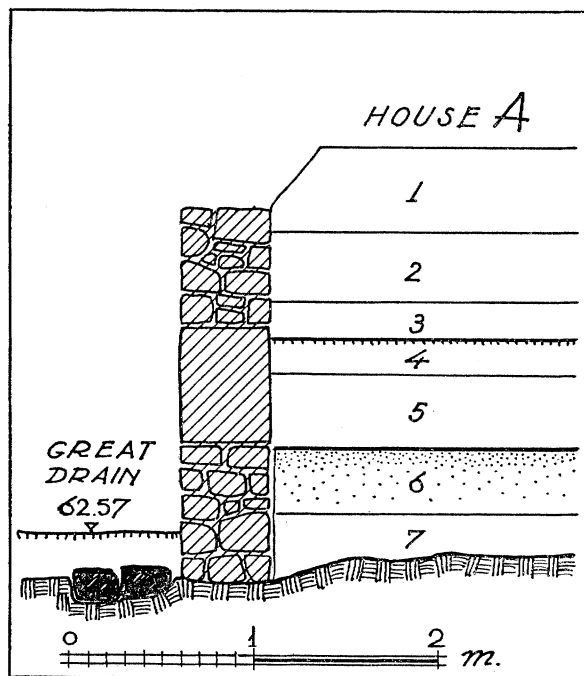


Fig. 8. East-West Section in House A, Showing Drain (left) and Stratification inside House A.

must also assume that the southwestern branch of the Street of the Marble Workers was already in existence to take care of the traffic which had formerly passed up the roadway in the bottom of the valley. Only after such disposal of the drainage and the traffic was this low-lying area available as a building lot.

The long polygonal east wall of House B, fronting on the roadway, was already in existence when House A was built. The north wall of House A was made to abut against the face of the east wall of House B, which no doubt farther to the south served also as a party wall between the two houses. The north wall of House A was not laid at a right angle to the east wall of House B; the two together form an acute angle at the corner. This was probably because the east wall of House A was

laid to take its orientation from the new drain channel at the east. The north wall of House A was carried eastward from House B to a distance just short of six meters; the northeast corner of the house formed a right angle. A doorway 1.25 m. wide was left in the north wall 1.50 m. west of the corner, giving entrance from the roadway (Pl. 65a). The east wall of the original house was demolished when the Great Drain was built, but in the bottom of the drain (Pl. 65b) remained the cutting in bedrock in which it had been bedded, and some of the rough bedding stones of the wall itself below its ground level. The original corner of the house formed a right angle and was strongly built of large limestone blocks, carefully fitted. These remain in place to a height of two courses, where they were incorporated into the construction of the later drain wall. Since the line of the drain wall was not the same as that of the earlier house wall it was necessary to trim the faces of the earlier blocks still in place. At the northernmost edge of the corner the original surface was left, but to the south of that the tooling is very visible where the faces of these blocks were trimmed down to the plane of the face of the drain wall. This tooling was carried down only to the level of the bottom of the drain; below, the original face of the lowest block in part remains as it was exposed in the face of the east wall of the house (Pl. 65c).

The rest of the walls of House A in its first period were built of limestone in a careful rubble construction with blocks much smaller than those at the corner, which was naturally made stronger. The wall and jamb to the east of the door belong to the first period (Pl. 65a); to the west only the lower part of the north wall as far as House B belongs to the first period, and all the upper part to the later rebuilding. An interior wall running southward from the north wall divided the space into two parts, a narrow passage at the west beside the wall of House B, and a room 3.90 m. wide at the east (plan, Fig. 7). Another wall running west from the drain wall at the south served the first as well as the second period of the house; its lower construction is the same as that of the other walls of the early house, clearly a stone socle prepared for the reception of a superstructure of sun-dried bricks. The stone socle thus rose to a height of 0.45 m. above the ground level, which could be fixed both inside and outside the house. We found no trace of a door sill, though there must have been one; the rough bedding course of the north wall of the house carried across the door well below floor level and probably supported a stone door sill of some sort, which may have been removed and reused in the later reconstruction of the house. The floor inside (section, Fig. 8) was made of beaten earth; a thin layer of clean red clay had been laid over an earth filling and smoothed and tamped hard. Probably this floor was renewed by a fresh layer of clay from time to time; we did not find evidence for it here, though we did find such evidence in some of the similar floors above, and the lowest floor as we found it had worn very thin. The sherds from below this floor level are crucial for the dating of the first period of the house. All belonged to the first half of the fifth

century, or were earlier. Two of the most characteristic and identifiable pieces suggest a dating for the construction of the house at about the middle of the fifth century.<sup>77</sup>

A. *Fragment of a Red-Figured Stemless Cup*. Pl. 66b.

Inv. P 19880. Max. dim. 0.086 m.

Fragment of a heavy-walled stemless cup, the moulded ring foot as on the Euaion painter's cup in New York (Beazley, *Attic Red-Figure Vase-Painters*, p. 531, no. 95; Richter and Hall, *Red-Figured Athenian Vases*, no. 107, pls. 107, 181). Inside, within a narrow reserved circle, a satyr standing right; behind him a staff (?). The style and date are near that of the New York cup noted. *Ca.* 460-450 B.C.

B. *Fragment of a Red-Figured Vase*. Pl. 66a. Inv. P 17137. Max. dim. 0.075 m.

Fragment from the shoulder of a large closed vase, probably an amphora. Part of a decorative band at the base of the neck preserved at the top. Below, the head of a woman, left, with a kerchief over her hair; in front a hand.

The fragment is assigned by Beazley to the Perseus painter, *Paralipomena* to *Attic Red-Figure Vase-Painters*, p. 383: "add as no. 9." The work of this painter, an early classical mannerist, is dated to *ca.* 475-465 B.C.

### *Second Period*

The second period of the house dates from the time of the building of the Great Drain in the opening years of the fourth century. To the east of House A the ground rises rather sharply toward the Areopagus. Though the natural contours of the time of the first period of the house are no longer visible because they are masked by the east wall of the drain, it is clear that the builders of the drain were forced to pass their channel between this slope at the east and House A at the west. At the north by the corner of the house there was barely room, but the space available so narrowed toward the south that passage was impossible without either cutting back the hillside or altering the east front of House A. The latter course was adopted; the east wall of the house was demolished, as we have seen, and a new one built which served at the same time as a west wall for the drain channel and an east wall for the house. Thus when the drain was built House A was reduced by a long wedge-shaped section, its point toward the north, along the east side. The new drain wall was of peculiar and original construction (Pl. 66e; Fig. 9). It was built of large squared blocks of conglomerate so interspersed with equal areas of polygonal masonry in limestone as to form a sort of checkerboard of alternating and contrasting rectangles. The neatly fitted limestone masonry, often with stacked work at its corners, recalls construction of the fifth century; the large conglomerate blocks must be included among the earlier examples of the use of that material for building, which seems to have become common only in the fourth century. I can find no parallels for this checkerboard pattern of construction except in our own area where another stretch of the west wall of the drain farther to the north beside House F is built in the same way (Pl. 81a). It

<sup>77</sup> I am indebted to Peter E. Corbett and Miss Lucy Talcott for the identification and attribution of the red-figured pottery.



would seem to be a definite and original style of masonry; a builder merely using what material was at hand might well have laid his big conglomerate blocks as a lower course and built the upper part in limestone. It would seem to require some imagination so to intersperse the materials as to form a checkered pattern. No doubt there was a

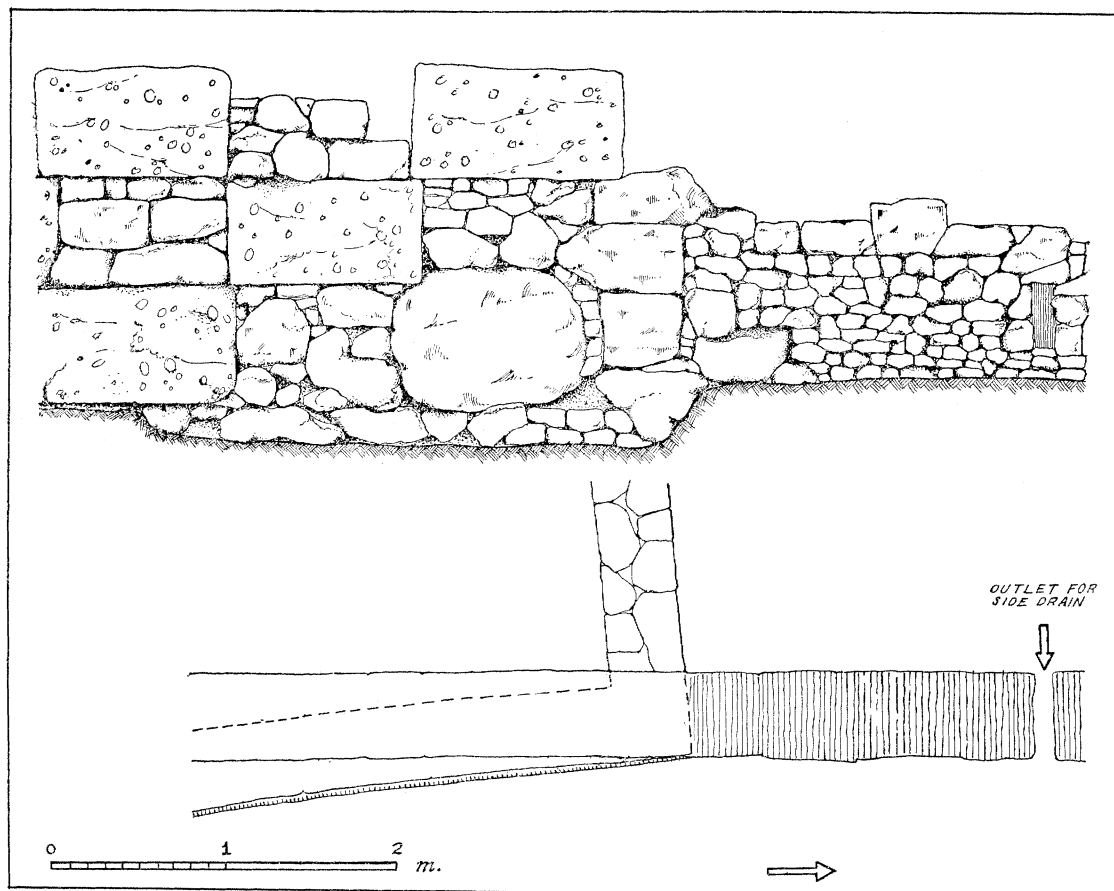


Fig. 9. Houses A and B: Elevation of East Wall of Second Period, and Plan to show Line of East Wall in both Periods.

certain saving of labor in this method of building: the vertical joints of the big conglomerate blocks did not have to be trimmed to an exact fit because the space between them was filled with limestone polygonal work. Since no other examples can be cited elsewhere we seem to have a very local style of masonry, confined to Athens at the turn from the fifth to the fourth century; probably the same mason built both sections of the west drain wall which are in this style.

The wall stands to a height of three courses, ending in a continuous flat surface 0.50 m. wide at the top, no doubt a socle to carry an upper wall of sun-dried brick,

its bottom set 1.60 m. above the floor of the drain, well above any danger of being undermined by water flowing in the channel. The north wall of the house, at least at its east end, seems also to have been carried to this height in stone: the north end of the topmost block of the drain wall is cut not at a right angle to the inner and outer faces, but at an angle to meet the north wall of the house at the corner. The raising of the levels of the stone socles in order to protect the upper construction of sun-dried brick from damage by sudden floods in the drain reflects an awareness of the necessity for a general raising of levels throughout, which was shown inside the house also by the raising of the floor level (section, Fig. 8). A filling was thrown over the floor of the earlier house to a depth of 0.45 m., and its surface covered with a new floor of clean red clay. In the filling under this floor was observed a large number of fine limestone chips which probably came from the trimming on the spot of limestone blocks of the drain wall when it was built. This new floor extended westward unbroken over the old interior wall which had divided the house into two rooms. A new wall was built still farther to the west to serve as the west wall of the corner room, which was thus enlarged to an east-west width of 5.20 m. (plan, Fig. 7). The length of the room from north to south remained the same as before, 6.20 m; but in the south wall there is a gap in the later construction over the old wall just beside the drain, which suggests that a door was left here. This door, if such it was, was blocked in a still later reconstruction, when the south wall was carried right across it to meet the drain wall.

To the second period of the house belongs also a westward extension into the area of House B. The north wall of House A was carried westward across the front wall of House B, not in a straight line, but with a slight bend where the old and the new construction met. This bend was probably made because the new house took its orientation from the west wall of the drain, on a slightly different line from that of the older house. The southward continuation of the east wall of House B was plundered of its upper courses, which would have projected through the new floor level; of the old wall of House B there remain only the deep bedding stones.

The second period of House A seems to have lasted throughout the fourth century. The clay floor was relaid many times; on one occasion, perhaps in consequence of a flood in the adjoining drain, the floor level was raised by about 0.30 m. when a filling of earth and gravel was thrown over the old floor (Layer 4 in the section, Fig. 8). To the same raising of levels belong the closing of the door in the south wall and the making of a large rectangular pit at the north, beside the doorway to the west. Perhaps at this time, too, the north door was closed; a new room was built outside at the north, which probably belonged to House B rather than to A. The pit extended for 1.95 m. along the north wall (Pl. 66d), slightly overlapping the west jamb of the doorway; it was 0.40 m. in width, and lined at its east and south sides by thin walls of dry rubble. It contained a mass of fragments of coarse pottery, mostly amphoras,

of the fourth century. Its use was not determined; it was made through the latest floor of the house, and deep enough to cut through the earlier floor of the second phase of the house also. In the pit itself and in the filling of both levels of the floor of the second house were found four black-glazed sherds bearing the same graffito, a *kappa*, incised on them (Pl. 66c); these probably belonged to the table service of the house in the late fifth and early fourth centuries and were marked with the initial of the owner, whose name apparently began with a K.<sup>78</sup> The rest of the pottery from under the floor levels of the second house served well enough to date house and drain: from under layer 5, the floor laid when the house was altered, came sherds of the late fifth century, while from the upper layer the sherds were as late as the middle of the fourth. The three upper layers which appear in the section, Fig. 8, all formed after the abandonment of the house; the lowest of them, layer 3, covered the tops of all the interior walls to north, west and south. The sherds from this layer were late fourth and third century, suggesting that the house was abandoned and its upper parts taken away for reuse elsewhere at some time in the third century. There were no traces anywhere of a violent destruction of the house.

### HOUSE B

Plan, Figs. 1, 7

House B, lying to the north and west of House A, was somewhat older. We have noted above that House B was already in existence when A was built against the face of its east wall. House B is less well preserved than A; except for its long east wall beside the roadway the foundations of this house have suffered very badly, in part at the hands of the builders of the Roman house, T, which overlay it, and in part, especially toward the west, from the Byzantine pit-diggers. Again we cannot make out a complete house plan, particularly for the first period; for the second the remains are rather tenuous, but they suggest that the area of House B had been divided between two houses by the time the drain was built.

#### *First Period*

The long eastern wall of House B extended for more than 21.50 m. along the roadway, from the corner of House C at the north to House A at the south (plan, Fig. 7). The measurement given was taken from the inner face of the north wall of House A northward; House B extended originally still farther toward the south, though we do not know how much, before its southern end was appropriated in the fourth century by the owner of House A. For nearly half of this extent the wall is covered by House T, but we were able to verify its continuation underneath the

<sup>78</sup> Inv. numbers, on Pl. 66c, from left to right: above, P 20175, P 17422; below, P 20176, P 20174.

Roman house and to fix its north end, where a large boulder of limestone, well below ground level, lay beside the south wall of House C as a cornerstone for the north end of House B. Along the north side House B shared a party wall with House C;<sup>79</sup> the foundation of this wall lay in a cutting in the hardpan made as a bedding for it throughout its east-west length. The wall as found is not very well centered in the cutting, lying as much as 0.30 m. off center to the north; possibly it was at some time rebuilt. The western limits of House B were probably the same as those of House C at the north; there were no traces of a continuation of the north wall of House B farther to the west, where the bedrock rises. The western part of the house had been disturbed to bedrock in Roman and Byzantine times, as already noted. The only

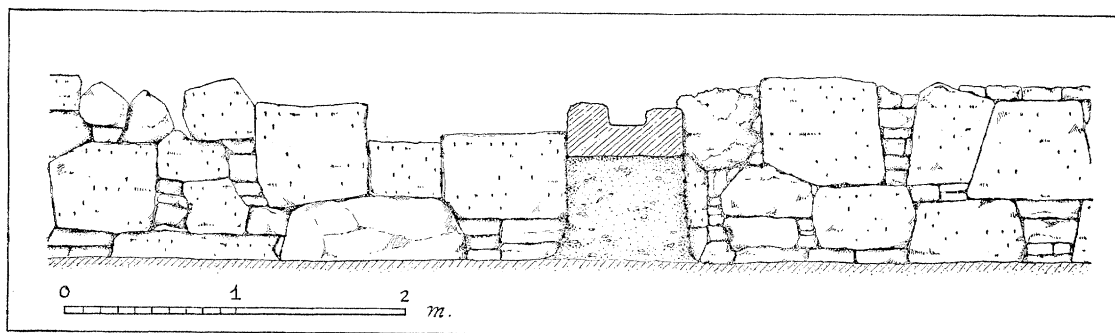


Fig. 10. House B: East Wall, Elevation, and Poros Channel Block of Second Period in Section.

interior wall which could be identified with certainty as belonging to the first period of House B lay near its southern end; it is shown in black on the plan (Fig. 7). At its east end it bonded into the long polygonal east wall, and it rose to the proper height to go with the inside ground level of the earlier house.

The east wall (Pl. 67a; Fig. 10) of the house is characteristic fifth century work, and since we can date it before the middle of the century it is probably characteristic work of the first half of the century. The little temple of Dionysos in the Marshes which lay not far away to the southward was built in exactly the same sort of masonry.<sup>80</sup> Our wall was built of limestone throughout in a careful polygonal

<sup>79</sup> The use of a party wall between houses was common in this area; Houses C and D also shared a party wall. The famous episode in which the Plataeans dug through the party walls separating their houses is recounted in Thucydides, II, 3-4.

<sup>80</sup> *Ath. Mitt.*, XX, 1895, p. 174, fig. 9. It is illustrated only by a drawing, as is the north wall of the peribolos, *ibid.*, p. 165, fig. 3. It is difficult to find parallels for our house walls in publications dealing with Greek masonry. Wrede in *Attische Mauern*, illustrates very few examples of the less monumental constructions; Scranton, in *Greek Walls*, deals exclusively with monumental masonry. Perhaps some criteria for the more carefully built walls of a lesser sort in the fifth century may emerge when more examples like ours have been collected and adequately published.

and rubble style of masonry. The joints of the big polygonal blocks were carefully trimmed and fitted where they met; where gaps were left between them they were filled with neat patches of stacked work. The entire outer face of the wall was tooled to a smooth plane, probably with the hammer. Below its ground level the tooling of the east face stops; the wall was carried to bedrock, the joints still carefully fitted, but the blocks were left with their faces unfinished. This wall served at the same time as a foundation and a retaining wall; the level inside the house at the west was 0.90 m. higher than outside at the east. Probably it was thought desirable to raise the floor levels inside well above the street level at the east, since the drainage apparently ran down the surface of the roadway at the time the wall was built. The stone wall served as a socle for a superstructure of sun-dried brick, finished on top in a surface 0.50 m. wide and flat to receive the bricks. The beginning of the brick construction lay 0.30 m. above the inside floor level and 1.20 m. above the street level outside, as in the case of the east wall of House A, well above the danger of being undermined by flood. The back face of the wall was rough to just below its inner ground level; there the rather heavy foundation which served as a retaining wall narrowed to the thickness of the stone socle for the mud-brick wall above, 0.50 m. The narrowing left a ledge about 0.20 m. wide along the inner face of the wall. The house must have been approached from the street by steps leading up to a door. We found no trace of these in the stretch of wall which we exposed; possibly it lay farther to the north, in the area still covered by House T.

The construction of the wall itself showed the ground level required both inside and out. The stratification, where it was preserved, agreed exactly with this requirement. Inside the house a firm floor covered at the surface with clay lay just high enough to conceal the projecting ledge beneath the good construction of the socle, which was intended to be visible. Beneath this floor the fill contained many small chips of limestone, no doubt left on the spot by the trimming of the blocks for the polygonal wall when it was built. At the east a good road surface lay at the level of the bottom of the tooling on the face of the wall; the filling below this was of sand and gravel, road and drain deposit which had been cut through for the building of the wall. The sherds from below ground level both inside and outside the wall of the house were early fifth century, with some fragments of the sixth. Most useful for the dating of the wall were the ostraka from beneath these fillings: from below ground level outside at the east came two ostraka, both of Hippokrates;<sup>81</sup> and below the inside ground level were found five more, one of Hippokrates, two of Themistokles, one of Kallixenos the son of Aristonymos, and part of a fifth, on which were preserved only the letters ΑΠΙΣΤ[, and which could be attributed either to Aristides the son of Lysimachos or to Kallixenos the son of Aristonymos.<sup>82</sup> In any case the ostraka were

<sup>81</sup> Inv. Nos. P 17224, P 17432.

<sup>82</sup> Inv. Nos. P 17291, P 17226, P 17278, P 17290, P 17225.

all of Athenians who had been voted against in *ostrakophoriai* of the late eighties of the fifth century—the years immediately preceding the Persian invasion.<sup>83</sup> Their number, seven, suggests that they were not merely strays; they were still lying about together in sufficient numbers so that we may assume that the fill which included them was used in the house not too many years after the *ostrakophoria* in which they were cast. We have dated House A about 450 B.C.; House B was older, and the ostraka from its filling suggest that it was as much as fifteen or twenty years older. The house may even date from the rebuilding of Athens after the Persian destruction; perhaps a conservative dating would place its construction in the years between 470 and 460 B.C.

Over the street at the east lay a layer of earth 0.30 m. thick, surfaced with a floor of good yellow clay. The filling had evidently been dumped over the street surface all at once in order to raise the level. It contained sherds as late as the middle of the fifth century. Before House A was built (about 450 B.C.) the line of the drainage had been shifted eastward; and with the building of House A the roadway became merely a passage giving access to Houses A-B. We have no evidence beyond the clay flooring laid at about this time that House B was expanded toward the east; perhaps a part of the old roadway was appropriated as a garden or a court, and covered with a good clay floor outside the house proper. This floor was in turn buried under a dump of red earth and dug bedrock 0.30 m. thick, perhaps some of the hardpan dug out when the channel was made for the drain. The sherds from this layer ran as late as the last quarter of the fifth century. It in turn was covered by a dump of earth 0.45 m. thick, which brought the ground level high enough to cover the bedding courses of the west wall of the Great Drain, evidently also a filling thrown in at the time when the drain was built. The sherds from this layer were also late fifth century.<sup>84</sup>

With the building of the Great Drain the first period of House B came to an end; but before passing on to its second phase we may mention an observation made elsewhere: that when the drain was built holes were left in its west wall to serve as

<sup>83</sup> Other possibilities for the fragmentary ostrakon are Arist--- Charop--- or Aristarchos (ichmos?) Timo(kratous): cf. *Hesperia*, Supplement VIII, p. 396. But both of these are represented by a single ostrakon, whereas Kallixenos and Aristides both fall very happily into the company of Hippokrates and Themistokles. Ostraka bearing the names of each of the four were found in the upper filling of the rectangular rock-cut shaft, which was closed before the Persian sack of Athens; cf. *Hesperia*, XV, 1946, pp. 265 ff. and pp. 271 ff. On Kallixenos, see *Hesperia*, XIX, 1950, pp. 376 ff.

<sup>84</sup> The building of the drain is dated from filling in three places: in House C, west of House L, and in the deep cutting which was its forerunner and which went out of use and was allowed to fill when the drain itself was built. Reference should be made to these three fillings for the dating of the drain (below, pp. 211-212, 247-248, 255-256). It has not seemed worth while to labor the point by presenting evidence from all along its line, especially from such places as in front of House B where the pottery was very fragmentary and undistinguished. From this filling may be mentioned fragments of stamped black glaze and of lamps of Broneer's type VI.

inlets for the small drains of the houses which already existed to the west. Two such inlets were left in the stretch built in front of House B: one well to the south, only a few meters from the corner of House A, and one at the north, close to the corner of House C. It was not possible to determine whether a corresponding outlet for drainage passed through the wall of House B opposite the northern drain inlet; but at the south there was none.

### *Second Period*

Southward of House C the course of the new drain did not follow the line of the old roadway but diverged on a more southerly course to bypass House A at the east. Thus the east front of House B was separated at the south from the drain by the whole width of House A, 5.80 m., while at the north the distance from house wall to drain was only 1.50 m. This divergence of the line of the drain left a large triangular area open in front of House B and to the north of House A. The southern part of this area was occupied by a new room extending out to the drain wall along the north side of House A; the northern part seems to have remained open.

In order to enclose the new room at the north a new wall was built from the east wall of House B to the drain, 4 m. to the north of the front of House A, and a wall was built on top of the drain wall from there to the corner to House A to enclose its east side. To south and west the walls of the two houses already standing served as walls for the new room. The new north wall was roughly built of limestone blocks, some of them perhaps reused; only its foundations are now preserved. It did not extend merely from the drain to the east wall of House B, but crossed it and continued westward into the house itself. For this reason and because the construction of the drain wall changes at the corner of House A (Pl. 65c; Fig. 9) it seems preferable to assign the new room to House B rather than to House A. Of the east wall only the bedding course remains. It was built over the west drain wall, here of small rubble construction. On top of the small rubble socle was laid a series of rough limestone blocks, trimmed smooth only on their east faces toward the inside of the drain. The upper surfaces and the backs of these are rough; the blocks are longer than the thickness of the drain wall on which they rest, and overhang somewhat at the back. This row of stones was clearly the bedding course for a wall, and it lay about at ground level or just below. The unevenness of its upper surface calls for stone rather than sun-dried brick above, and invites the restoration of a low stone socle to carry an upper wall of brick. A good floor of clay lay to the west at a level where it covered most of the rough bedding course; it was the floor of the room after the building of the drain, and lay at the same level as the first post-drain floor of House A to the south. The room may have been entered by a door in the north wall, though the gap through its foundation which appears on the plan is merely a place where all the foundation stones had been stolen in later times.

The construction of the west wall of the drain changes sharply at the corner of House A, from heavy "checkerboard" masonry to light rubble construction (Fig. 9). North of the new room the drain wall is in large part missing; where we find it well preserved again at the north it is of polygonal limestone masonry. The length of the stretch of drain wall in front of House B is 18.30 m., from the corner of House A to the corner of House C. Some distance from its northern end (5.80 m.) this stretch of drain wall shows a vertical joint throughout the height of its face, which seems to represent a wall corner built when the drain was made and at a point where a wall runs westward from the drain. This wall, of which the east end was incorporated into the construction of the drain wall, can be traced westward to a distance of more than 7.00 m. where we picked up its end again to the west of the Roman house T; and it suggests that in its second phase the area of House B was divided between two houses, one with a frontage of 5.80 m. on the drain at the north, the other with a frontage of 12.50 m. at the south. To the southern house belonged the new room added in front of House A (unless it should be assigned to House A) and the westward continuation of its north wall. One other wall also belonged to this house, running westward from its east wall 3.10 m. to the north of the other. All these walls were found broken off toward the west, and they can offer little in the way of a suggestion for the house plan. The area to the north of the new room in front of House A, between the drain and the east front of House B, seems to have remained open as a sort of recessed courtyard. The drainage from the house at the west was carried across it in a line of poros blocks with a channel cut in their upper faces. The line was laid to span the gap between the east front of the older house and the new drain; one of its blocks, the first at the west (Pl. 67a; Fig. 10) was found in place in front of the house wall, and three others lay to the east in a tumbled and fragmentary heap. The channel apparently had been laid at the time when the drain was building; the block in place rests on the filling of dug hardpan thrown over the clay floor in front of the earlier house, mentioned above as probably a dump of the material dug out when the drain channel was made. The thickness of the block was 0.45 m., just that of the layer of gravel and earth thrown in behind the drain wall after it was built in order to level off the area. Apparently the line of poros blocks carrying the water channel lay with its top at the surface of the new floor. The older House B stood right beside the roadway, and though we found no arrangement for the drainage of its time there can be no doubt that it sent its waste water directly into the street. It is not unlikely that the new poros drainage channel was laid on the line of the drainage of the older house.

The northern part of the new house was extended eastward so that its east wall could rest on the west wall of the drain. There were two rooms at the east side; a cross wall runs westward from the drain, leaving a room 3.40 m. wide at the north, and a narrower one to the south. In the southern room an attempt was made to rectify the angles at which the north and south walls met the drain by building a foundation



beside the back of the drain wall, thick at the south and thin at the north so that the corners of the room could be right angles (Pl. 67b). These rooms may have been closed at the west by a wall of which we exposed two short bits under House T. This wall certainly belongs to the later phase of House B because its orientation seems to be that of the new east (drain) wall rather than that of the old house wall. Beside its north end at the west was found a rectangular rubbish pit lined with walls crudely constructed of dry rubble, similar to the one in House A. The sherds from this pit were of the fourth century; it contained also some animal bones and cinders, perhaps from a kitchen dump. Two objects found in it are of interest: a fragment of a dikast's ticket, and a red-figured sherd.

1. *Bronze Dikast's Ticket*. Pl. 67c.

Inv. B 847. P.L. 0.026 m. W. 0.022 m.

Both ends broken off; at the lower right a rectangular countermark, stamped: owl right, head turned to face. Two lines:

--- ΛΕΙΔ ---

--- ΡΡΙΣ ---

Part of the ticket of [---] kleides; the demotic may have been *Κυθήρρι(ο)s* or *Φεάρρι(ο)s*.

2. *Fragment of a Red-Figured Stemless Cup*.

Pl. 67d.

Inv. P 19537. P. H. 0.022 m.; max. dim. 0.056 m.

The profile of the foot is near that of the incised cup shown below (Pl. 72f) but slightly coarser; the kerchiefed head recalls the lid, Pl. 72b, c. Outside, a trace of red-figured decoration, probably from a rough handle-palmette, remains. End of the 5th century B.C.

A few meters to the west of the pit and the wall beside which it lay was found another bit of wall foundation running north-south and apparently parallel to the old east house wall. At its south end this stretch returned toward the east and west, about on the line of the wall dividing the two east rooms of the later house, T. All the filling around these bits of wall had been disturbed in Roman times, and we got no evidence on which to assign them to the first or the second period of the house. Their orientation suggests that they belonged to the original House B, but probably they were reused in the later rebuilding.

The end of a long drain channel running into the Great Drain from the southwest was uncovered between the drain wall and the Roman house. It was rather carefully built with parallel walls of dry stone covered by tiles and flat slabs. It belonged to the later period of House B; perhaps it conducted water to the drain from the court of the northern of the later houses. The inlet hole left in the west wall of the drain when it was built was probably left where it was because the main line of drainage of the older House B ran along its northern limit; the subsequent rearrangement of the house made necessary the diagonal line taken by the house drain to find the inlet into the Great Drain.

The size of House B, more than 21.50 m. in length (we do not know its full southward extent) and the careful masonry of its east wall at first suggested that we

had the remains of some large enclosure, perhaps a sanctuary, rather than a private house. The later phase, however, when it was apparently divided between two private dwellings, disproved this theory.

### HOUSE C

Plans, Figs. 1, 7, 11.

House C, which lay to the north of B, is the most intelligible of all the houses beside the drain. Though it had suffered considerable damage from the digging of pits in Byzantine times, especially at the west side, and though its southeast room remains covered by House T of Roman times, it is possible to trace its complete plan, and to follow its history through three phases from before the middle of the fifth century to the latter half of the fourth.

To the north of House B the next house also fronted on the roadway which passed by at the east before the drain was built. The east front of House C along the street continued the line of the east side of House B without any deviation as far as the northernmost room of the house, where there was a slight bend toward the north. To south and north the house shared party walls with Houses B and D respectively. At the west, part of the outside wall is preserved; the rest was stripped in Byzantine times, but the cutting in bedrock in which it was set fixes its course absolutely. The northwest corner of the house opened from the Street of the Marble Workers at the bend in its course from southwest to west; House C was apparently always entered from this street rather than from the roadway to the east. The orientation of the house and its limits in three directions, to south, east and north, were set by three conditions which had to be taken into account in laying out the house: the existence of House B to the south, the line of the roadway at the east, and the corner of the Street of the Marble Workers at the northwest. Thus pre-existing conditions imposed on the planner three limits for his house; he was free, as far as we know, to fix only the western line for himself. The northern and southern limits of the area were not parallel to each other. The planner, having fixed the desired western limit of the house, laid its west line in such a way as to divide the discrepancy at the corners. The west line of the house was laid at an angle of ninety degrees to neither the north nor the south wall but on a course which made both corners equal, forming slightly obtuse angles of about ninety-six degrees. Thus the house had no ninety degree angles in its plan. The east side of the house was longer (18.40 m.) than the west (15.90 m.) and the north side longer (17.10 m.) than the south (14.40 m.).<sup>85</sup> Space was made for the west side of the house by cutting back the hillside which rose toward the west.

<sup>85</sup> None of these dimensions represents an even number of feet on the Attic-Euboeic standard suggested by the stone wall socles which were 0.45 m. thick, presumably to carry bricks measuring one and a half feet on a side. Here again the house plan seems to have been influenced by the pre-existing limitations of the plot.

*First Period*

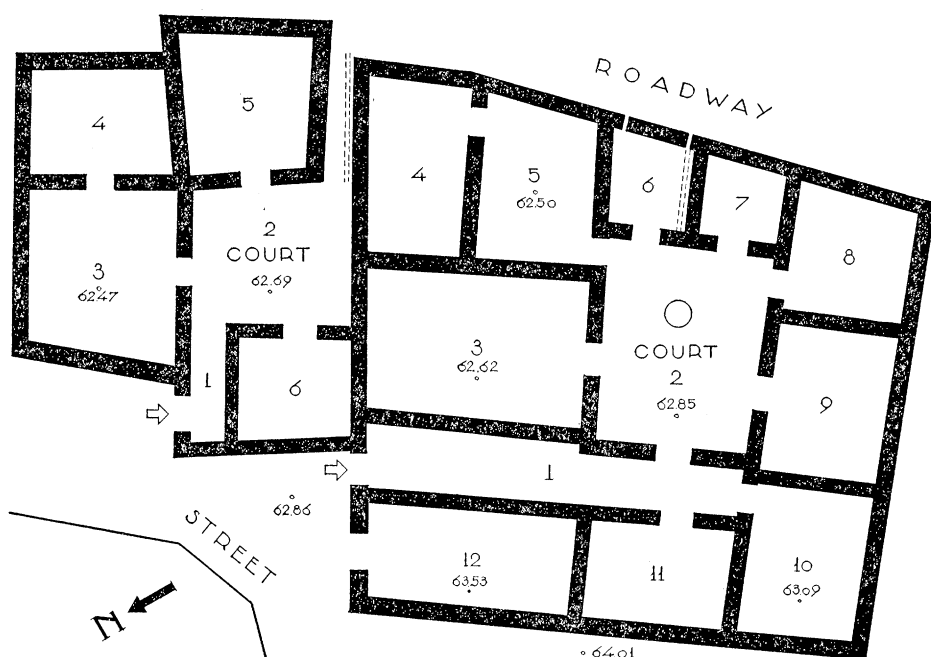
Within the rather irregular building lot the house was laid out on a plan of central courtyard surrounded by the various rooms. The court was not laid exactly at the center but rather toward the south, leaving space at the north for the larger and more important rooms. It was likewise set closer to the east than to the west limit of the house, probably for two reasons. In the first place, the entrance to the house was from the Street of the Marble Workers near its northwest corner, and space had to be left for a passage from the outside door to the center of the house and the court, from which most of the rooms opened; in order not to reduce by too much the width of the rooms at the west the court was shifted eastward. This was compensated at the east by placing what were probably the kitchen and bathroom, small rooms both, to the east of the court, where their drainage could be carried directly into the street drain. The rooms to north and south of the kitchen-bathroom complex were not squeezed so far toward the east by the court; by extending them westward to overlap the east end of the court by about a meter doorways could be made to give them direct access to the court.<sup>86</sup> In its proportions the court reflected the irregularities of the house itself: its east end was about half a meter wider than its west and there was a slight discrepancy between the length at north and at south. Measured across its central axes the court was 6.25 m. long and 5.00 wide. We were unable to determine whether the well in the court went back to the first period of the house; probably it did.

The house was entered from the street through a long passage leading to the court. The two rooms at the southwest corner of the house opened from this passage; all the other rooms, with the exception of those at the northeast and northwest corners of the house, opened directly from the court. They have been numbered on the plan, Fig. 11, 1 for the passage, 2 for the court, and the rest clockwise around the house, starting from the north, 3 through 12. The lines of the interior walls which divide them carry through the house, though with some slight irregularities. The walls which divide off the southern and western rooms run straight through, though they are not absolutely parallel to the outside walls of the house. The walls to north and east are less regular; probably an attempt was made in the case of each wall to adjust to the irregular outside lines of the house. We may take up the rooms one by one, noting anything of interest or which needs discussion in the case of each.

Room 1, the passageway, was about 2.00 m. wide; it gave access from the street not only to the court at the center of the house, but also direct access to rooms 10 and 11 which did not open from the court. Thus it was not only a way of access to

<sup>86</sup> The southeast corner room, 8, is still covered by House T; its doorway is restored by analogy to that of Room 5. A small piece of the wall between rooms 8-9 has survived in the bottom of the Byzantine pit to the west of House T.

# HOUSES D·C V CENTURY PRE-DRAIN



# HOUSES D·C' AFTER MID. IV CENTURY

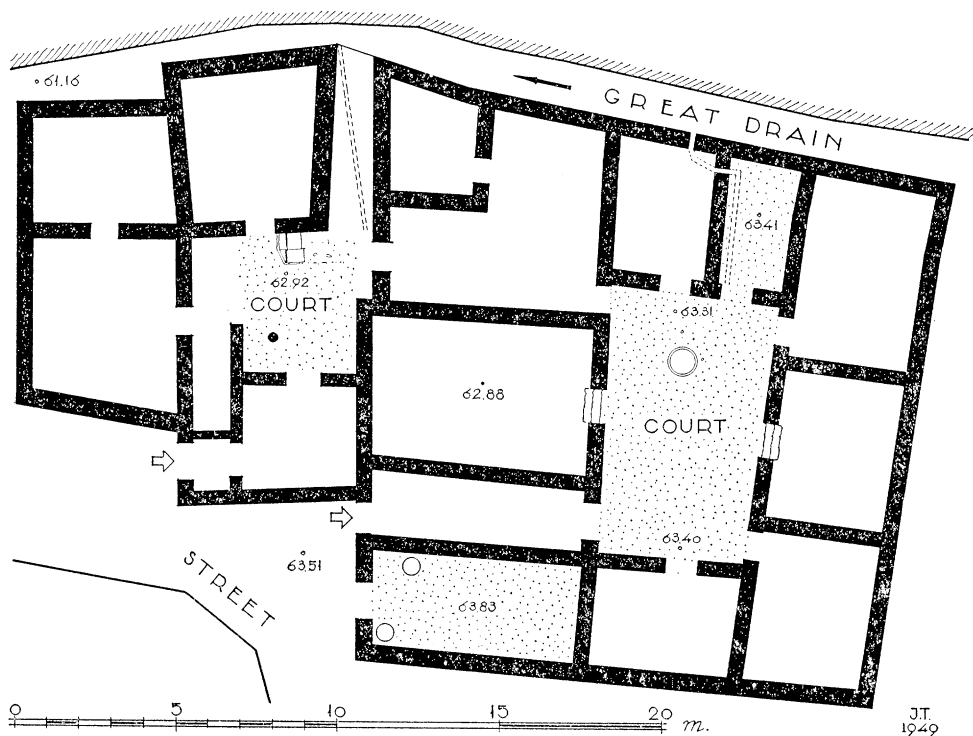


Fig. 11. Houses C and D: Above, Plan of Fifth Century Pre-Drain Phase. Below, Plan in the Later Fourth Century, after the Alterations of the Middle of the Century.

the house from outside, but also a link between the rooms inside the house. The street door at its north end is missing and the remains of the wall which divided it from Room 3 at the east are tenuous, but enough remains to indicate its line. The passage was slightly narrower at its south end than its north; the line of its east wall was apparently taken from that of the west wall of the court. This long passage which borders the court and carries through to one extremity at least of the house might be described as a *pastas*, though it lies to the west rather than to the north of the court, and was divided from it by a wall rather than a colonnade.<sup>87</sup> The position of the corridor was dictated by the position of the house with reference to the street, and it may better be called the *prothyron* of the house than the *pastas*.

Room 2, the court, has already been noticed in some detail. There was certainly no space for a peristyle around the court though whether there were columns along any one side we cannot be sure since the court of the first house is covered by the floor of the third. Two or three columns along the east side of the court, to make a roofed porch in front of the doors to Rooms 5-8, would not be inappropriate, and they may have existed. Such a porch, however, would have cut off some light from Rooms 6-7 and the court would have been reduced to a small area of nearly equal length and width. In the later periods of the house the court was apparently considered not big enough as it was, for it was lengthened westward by including the southern part of the corridor, 1. This was almost the only major alteration made in the house plan, and it is probable that if a colonnade had existed at the east end of the court in the first house it would have survived in the later phases. On the whole we should probably reject the idea of this colonnade, attractive though it may seem in some ways.<sup>88</sup>

The court of the first house had an earth floor which was probably drained toward the east through Room 6: the floor of the latest period of the court was made with a definite slope toward the east. Along the south side of Room 6 part of a drain of inverted roof tiles was still in place, running westward at some depth below the floor. As the inlet for side drainage left in the west wall of the Great Drain when it was built lay opposite this drain, we may assume that this was the main drain of House C and probably drained the court. Room 6 had another drain of its own near its north wall and at a higher level than the other. It will be noticed on the plan that the floor level of the court was slightly higher than that of the rooms to north and northwest, even in the earliest phase of the house. This fact is difficult to explain,

<sup>87</sup> *παστάς*: "at Olynthus means the large open corridor to the north of the *αὐλή* and south of the three or four living rooms which open on it from the north." Robinson, *Olynthus*, XII, pp. 466-467. A typical Olynthian house plan with *pastas* and *aule* is A-viii-8, plan *ibid.*, pl. 26.

<sup>88</sup> In the immediate vicinity of Houses C-D two stone bases for wooden columns, similar to the base still in place in House D, were found in later fills or built into later walls. They may have been stolen from House C or D, or both; their dimensions differ between themselves and from those of the base in House D. One is of poros, the other of limestone.

since the court was open to the sky and presumably collected much of the rain water from the roof of the house; and this made an outlet for drainage from the court all the more necessary. Stone thresholds, now missing, probably served to prevent water from the court from flowing into the rooms beside it. We found it difficult to believe at first that the court could have had a floor higher than those of the rooms around; but the discovery of beddings for steps leading down from the court into the room at the north, 3, in the third period of the house seemed to clinch the matter.

Room 3 at the north was the largest room in the house and occupied the best position, facing southward to the court. It was therefore probably the *andron*, the men's sitting room or dining room, though we found no trace of any change in the floor surface for the placing of couches at a higher level around the sides, as was common at Olynthus.<sup>89</sup> The room was irregular in shape, with no two walls parallel; it measured on its central axes 6.60 m. from east to west and 4.45 m. from north to south.

The area at the corner of the house was divided into two nearly equal rooms, 4-5, the latter opening directly from the court, the former accessible only through Room 5. The door between the two rooms has been restored where it is on the plan (Fig. 11) because the door to the small corner room of the later house must have been in its south rather than its west wall, and the place of the doorway probably remained constant.

We have already noticed the two drains in Room 6, and suggested that it was the bathroom of the house. The northern of the two drains (Pls. 68a, 69b) passed under the east wall of the house just at the level of the street to the east, as well as that of the floor of the room itself. The drain of inverted roof tiles was probably embedded in the surface of the floor and served to drain the room. As this was the only room in the house which had its own drain we take it to have been the bathroom, though it was floored only with clay. The next room to the south, 7, may have been the kitchen. Room 8 at the southeast corner of the house is entirely covered by the Roman House T, and it was not excavated.

The south room, 9, was the largest in the house after the *andron*, 3. It measured 3.70 m. in width from north to south by 4.50 m. in length. Twenty loomweights and a whorl found overlying its floor suggest that this was the room in which the women did their weaving and other work. This room, and the two to the west, 10 and 11, suffered badly at the hands of the Byzantine pit diggers and only small patches of their floors were preserved.

Room 12 at the northwest corner of the house fronted on the Street of the Marble Workers and had a street door of its own, of which the western jamb is still preserved, together with later arrangements for carrying waste water from the room

<sup>89</sup> Robinson-Graham, *Olynthus*, VIII, pp. 174 ff.

out into the street drain. The floor level of this room was considerably higher than those of the other rooms of the house, and in the later period at least provision was made for a separate water supply—a well in the northwest corner and a cistern near the east side. Taking these factors into consideration we have thought of this room as unconnected with the rest of the house, perhaps a room which could be rented out as a shop fronting directly on the street. Its position made it of greater value than the other rooms, and we shall see reason to believe that it outlived the rest of the house by some years, perhaps simply because its frontage on the street made it valuable as a shop.

We have now been right around the house, room by room, noticing the features of each that are of interest. The total number of rooms was twelve, counting in corridor, court and shop. The house was a sizeable one; its dimensions, though irregular, compare rather closely with those of the houses at Olynthus, which were laid out regularly in accordance with a fixed town plan.<sup>90</sup> Many of the houses at Olynthus had a second storey; this is usually shown by the lowest step blocks of stone of the stairways leading upward.<sup>91</sup> No trace of any such step block remains in our house, but its absence does not preclude there having been one, though we might be hard put to it to suggest a suitable place for the stairs. The lowest step block could have disappeared as completely as have the threshold blocks of the doors leading to the street and from the court to the various rooms. The thresholds must have been sizeable blocks: the door from the court to Room 3 was 1.10 m. wide, that to Room 9 was also 1.10 m. wide. No doubt these blocks were raised and reused in the successive rebuildings of the house, and finally carried away for reuse elsewhere when the house was abandoned after the middle of the fourth century.<sup>92</sup> The walls of House C were just as thick and as strong as those of the houses at Olynthus,<sup>93</sup> and therefore perfectly capable of carrying a second storey; but whether one existed or not we cannot say with absolute certainty.

The walls were of sun-dried brick laid on stone socles 0.45 m. thick; this seems to have been the standard thickness for house walls at the time, one and a half Attic-Euboeic feet, as already noted in House A. The socles of the interior walls seem to have been very low, only 0.15 to 0.20 m. in height; but little of the original construction of House C was left, partly because of the later rebuildings and partly because the foundations were in large part stripped for reuse elsewhere when the house was

<sup>90</sup> *Olynthus*, VIII, pp. 29 ff.; and pp. 33 ff. The blocks were laid out to contain ten houses each sixty feet square: a little more than 17.50 m.

<sup>91</sup> *Olynthus*, VIII, pp. 271 ff.

<sup>92</sup> The level of the court, higher than that of some of the rooms opening from it, would seem to require some sort of stone thresholds in the doorways, to serve at least as dams and prevent water from flowing into the rooms.

<sup>93</sup> *Olynthus*, VIII, p. 277. The adobe walls of Olynthian houses uniformly measure from 0.40 to 0.50 m. in thickness.

abandoned. No complete or even partially complete mud bricks were found; though the house was in large part covered by a mass of earth which had obviously once been mud brick, the individual bricks had dissolved. One corner was found, giving the thickness of the bricks, 0.075 m. They seem to have been flat and rather thin; probably they measured a foot and a half square.

The outside wall at the east seems to have been built of squared poros blocks and limestone. In front of Rooms 6-7-8 some of the original poros blocks are still in place, below ground level; they seem to have formed a bedding course for polygonal construction in limestone above. Over the rest of its extent as far northward as Room 4 the east wall of the house is represented by a mere tumble of small stones in the plundered wall trench, or by the trench itself stripped clean (Pl. 68b). The east wall of the first house was taken down when the second one was built, and doubtless much of its material was reused. The north end of the wall beside Room 4 not only had a slightly different orientation from that of the rest of the east wall, but it was also of different construction: rough limestone blocks stacked together without careful fitting at the joints. The corner of the house, however, was quite definite and clean, with a return toward the west (Pl. 68c). The northeast corner of House C was separated from House D to its north by a narrow alley or passage, probably open to the sky, through which a drain of inverted roof tiles carried the water perhaps from the roofs of both houses and probably from the court of House D as well.

There is little evidence to show how the house was roofed. A few fragments of roof tiles overlay the mass of dissolved mud brick and probably belonged to the latest period of the house, which therefore had a tiled roof, as might have been expected.<sup>94</sup> Since at the south the house shared a party wall with House B, and at the north also with House D, over all the central part of its extent (beside Rooms 2 and 6 of House D) we should assume a roof with an inward pitch toward the court. To the east a roof with an outward pitch would get rid of the rain water into the street; but toward the west a roof pitched outward would carry the water down to an outside slope from west to east, toward the house, set into a cutting in the hillside. At three sides then—to north, west and south—it seems best to assume a roof pitched inward toward the court, and the east side probably followed suit. The north side was deeper than the others, and some special arrangement may have been necessary at the corners.

The first period of House C is difficult to date. Its floors were of clay like those of House A; but House C in large part overlay the old natural stream-bed and road of Geometric times, and wherever cuts were made through the floor of the first house in order to verify its date, we came on the gravelly Geometric fill immediately beneath the clay floors of the house. Not much more helpful was the well in Room 9 (plan,

<sup>94</sup> Because the plan of the house remained essentially the same throughout its history, it seems safe to assume that the uses to which the rooms were put, the arrangement of the roof etc. remained constant.



Fig. 7) ; it was earlier than the house, and might have had to be filled when the house was made, but it had been filled long before the house was planned and it produced nothing that could be dated later than the sixth century. The layout of House C beside B, sharing a party wall and continuing the line of the east wall without deviation suggests that House C was contemporary or very little later than B. It was very likely already standing when House A was put up, else the builder of A would not have been forced to occupy the less desirable space in the old roadway at the bottom of the valley. A bit of the west wall of House C which is still preserved is built of large blocks of limestone carefully trimmed and fitted, the spaces between filled with stacked work (Pl. 68d) ; it is reminiscent of the early fifth century stretch of wall, C, at the west side of the archaic cemetery.<sup>95</sup> On the whole it would seem safe to date House C before the middle of the fifth century.

*Second Period (Plan, Fig. 11)*

The building of the Great Drain was the occasion for various alterations in the house of which we have described the plan. We have noticed that to the east of House B the lines of drain and house front gradually converge toward the north, leaving a triangular open space to the north of House A. The east front of House C continued the line of the front of B and presented an obstacle to the continuance of the drain on its own line ; in consequence the drain began to bend slightly northeastward at the corner of House C, finally itself taking the line of the house front and running parallel to it over the greater part of its extent. The builders of the drain did not merely follow the front line of House C ; they also respected its ground level, and they left the inlet for side drainage from the house opposite its main drain in Room 6 (Pl. 69a). The rough bedding courses of the west drain wall were carried to just below the outside ground level of House C ; above that the drain wall was built with a good face toward the west and toward the house to a height of 0.75 m. (Pl. 69b).

The new drain wall over most of its course lay 0.80 m. to the east of House C. The owner of the house took advantage of the opportunity to enlarge his house by building a new east wall on top of the west drain wall. He was more fortunate than the owner of House A, who had lost a long wedged-shaped piece of his house along its east side ; by taking the drain wall as the line of his new east front the owner of C was able to add a strip about 1.25 m. wide—the thickness of the old wall, 0.45 m., plus the strip between house and drain, 0.80 m. wide—to his house all along its east side. All the east rooms of the house, Rooms 4-8, were thus increased by that much.

This alteration took place at the time when the drain was built and immediately thereafter. This is proved at the north, in front of Rooms 4-5, where there was a slight anomaly. A glance at the plan will show that the east room, 5, of House D

<sup>95</sup> *Hesperia*, XX, 1951, pl. 34b.

at the north projected about a meter farther eastward than did the front of House C. The drain, then, in order to bypass this projecting corner of House D, had to swing still farther from its former line toward the northeast. This slight bend was begun to the south just in front of the wall separating Rooms 4-5 of House C. At this point, too, the construction of the drain wall changed: at the south it had been polygonal work in limestone over its whole extent in front of House C; here it changed (Fig. 12)

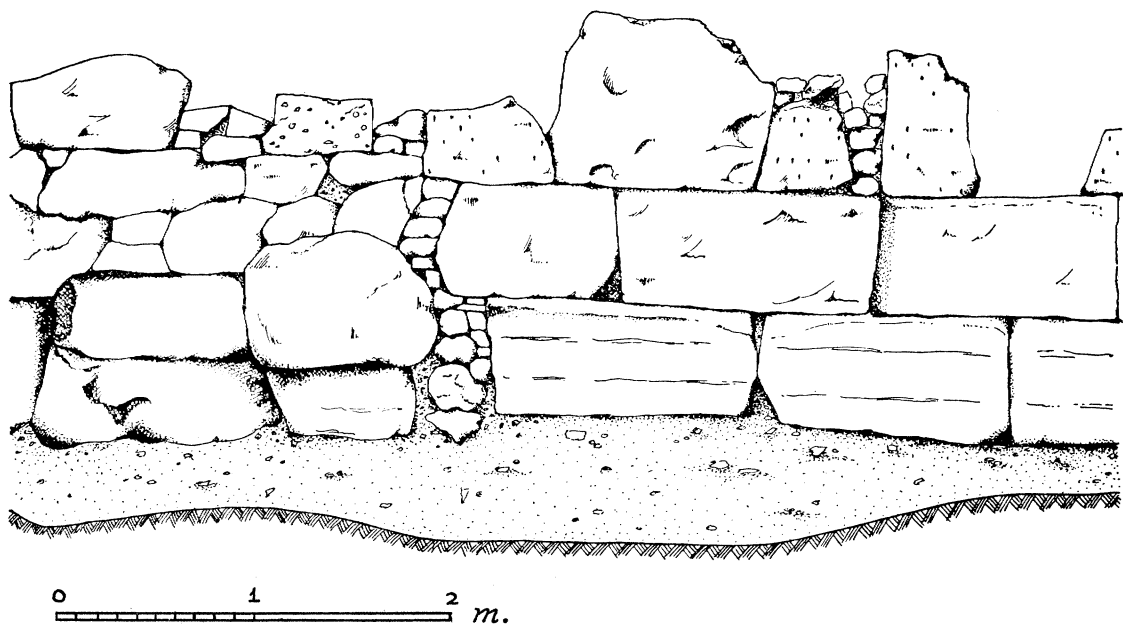


Fig. 12. Elevation of West Drain Wall in front of House C, Rooms 4-5, Showing Change of Construction.

to polygonal limestone blocks bedded on poros. One would like to think, though it cannot be proved, that the poros blocks of which this part of the drain was built had been taken from the foundation of the old east wall of House C, in which three poros blocks may be seen still in place, and reused in the drain wall. Further, at this point the old internal wall separating Rooms 4 and 5 of House C was extended eastward and bonded into the back of the drain wall at its east end, perhaps to give the west wall of the drain more stability at its bend. All the area in front of Rooms 4-5 of House C had to be dug out in order to build the eastward extension of this internal wall as far as the drain. In the northeast corner of Room 5 we found the trench cut when the wall was extended; the filling in it had been thrown in on the completion of the extension, which bonded into the back of the drain wall and which therefore must have been made when the drain was built. This filling was of greenish sand and quite unlike the road gravel in front of House C farther to the south. In all probability

it was some of the deposit of the older drain in the road, dug out when the new channel was made and reused to fill in behind the new drain walls. A mass of sherds was found in this filling, of which six fragments, selected because they are characteristic, are presented here. Thanks are due to Peter Corbett for examining the pottery from this fill and selecting the pieces. The following description of the pottery and the conclusion as to the date of the filling were written by him.

1. *Fragmentary Red-Figured Lebes Gamikos*, Type B. Pl. 72.

Inv. P 17946. H. 0.135 m. Diam. as restored, 0.124 m.

The mouth and about half the body restored. One side of the figured decoration survives. In the centre is a wreathed woman, seated to left in a chair; she wears a Doric chiton and a himation wrapped round her waist and legs; her raised right hand holds a casket. Before her is another woman, in a Doric chiton; she stands frontally, her arms outspread, and looks toward her mistress holding an alabastron in her right hand. From below the handle to the left of her a Nike flies toward the centre of the scene, bearing two torches. Behind the chair is the lower part of a woman to left; below the handle to the right of her is another Nike, also flying toward the centre and carrying a patterned scarf, the lower end of which is preserved. On the shoulder, tongue pattern. Relief contour for the chair and the faces of mistress and maid.

2. *Fragmentary Red-Figured Pyxis-Lid*, Type B. Pl. 72.

Inv. P 18896. P. H. 0.077 m.

About a third of the wall and part of the top are preserved. Domed top; projecting, rounded rim on the upper surface of which is a groove. On the wall are vertical zig-zags, between two glazed lines. On top, preserved of the medalion, the start of a human neck and the point of the chin. No relief contour; streaky black glaze within.

Other similar lids make the decoration of the top intelligible. Compare Pl. 72, 7, a fragmentary example from an Agora well: Inv. P

18344. Diam. 0.115 m. A single piece preserves the top and part of the wall; some chips are missing from the top, which is slightly domed. In the centre is a hole, pierced before firing. On the top is a female head to left, with the hair bound in decorated sakkos. The central hole presumably held a bronze handle, which would also serve as her earring. Dull glaze; no relief contour; dull glaze wash within. In front of the nose the background has not been completed.

There can be little difference in time between our No. 2 and this lid which comes from the same well-deposit of the last quarter of the fifth century as that which produced the ostrakon of Hyperbolos and the two red-figured oinochoai illustrated in *Hesperia*, XVII, 1948, p. 186, fig. 8, pls. LXVI, 3, LXVII, 1, 2. Compare also *A.R.V.*, p. 760; painter of Florence 4217, Nos. 1 and 2.

3. *Red-Figured Stemmed Kylix Fragment*. Pl. 72.

Inv. P 18897. Max. dim. 0.096 m.

Two joining pieces give part of the wall and floor. I. Outer border, meander and cross-square, with large dots in the corners. Within, the lower left corner of a piece of drapery. On the outside is part of the handle-ornament. No relief contour.

Extremely close to the vase figured in *Hesperia*, Supplement IV, p. 129, fig. 96, which is there dated "About 410."

4. *Fragmentary Black-Glazed Ribbed Stemless Cup*. Pl. 72.

Inv. P 18913. H. 0.049. Est. diam. 0.140 m.

Much of the rim and wall is missing, with both handles. Flaring lip; ribbed body, the ribs

ending above in semi-circular arcs. Moulded ring foot, the moulding consisting of two neatly rounded equal members. Underside moulded, and decorated with glazed zones. Impressed decoration within.

For the form, compare *Hesperia*, XVIII, 1949, Pl. 86, 35; for the impressed decoration, *ibid.*, Pl. 88, 143; both vases are from deposits of the last quarter of the fifth century.

5. *Fragment of a Black-Glazed Stemless Cup*. Pl. 72.

Inv. P 18915. Max. dim. 0.063 m.

Two joining fragments give part of the floor and rounded ring foot. In the center of the floor is a single impressed palmette, around which are two zones of palmettes separated by rings of ovules. The motifs are unusually large and somewhat clumsy, but the form of the cup and the originality of the impressed decoration

preclude a fourth century date. Good black glaze all over.

6. *Black-Glazed Stemless Cup*. Pl. 72.

Inv. P 18914. H. including handles, 0.055 m. Diam. of rim as restored, 0.144 m.

One handle and parts of rim and wall restored. The cup is unribbed, but the form resembles that of No. 4. Three scraped grooves on the lower wall. Moulded ring foot. The underside is moulded and decorated with glazed zones. Within, incised rays and petals, around which is a hatched zone. Glaze fired grey and brown in places.

The nature of the incised decoration suggests that the cup can scarcely be later than the twenties of the fifth century; for the hatching, compare *Hesperia*, VI, 1938, p. 52, fig. 32; see also *Hesperia*, XVIII, 1949, pl. 89, 146, and the discussion on pp. 322-323.

The material published above consists of the significant red-figured pieces from the deposit and three representative examples of the black-glazed ware. The lebes is the earliest of the figured vases and, from its style, is to be dated around 430. The kylix fragment seems from the parallel quoted to belong to the years around 410 B.C., and for the pyxis lid a date within the last quarter of the century is indicated. The black-glazed pottery agrees with this dating; in addition to the three pieces Nos. 4, 5 and 6, fragments from vases of the forms current during the last quarter of the century were also discovered; note especially two skyphoi which show the same degree of development as examples from an Agora well-filling of the same period (*Hesperia*, XVIII, 1949, pp. 319-20, no. 27, fig. 2, pl. 85).

It will be noticed that the latest piece from this filling can be dated around 410 B.C. We have dated the building of the drain slightly later than this, in the opening years of the fourth century, because the sherds from another crucial place run slightly later than those from here (see below, pp. 255-256). We must date the alterations made in House C at the same time.

These alterations did not involve any serious changes in the plan. The east wall of the older house was taken down and a new wall, probably of sundried brick, was built on top of the drain wall which ended in a continuous flat surface to receive the brick superstructure. This flat surface is visible as a conspicuous horizontal line in the back of the drain wall (Pl. 69b); the stone construction above it apparently belongs to the third period of the house. The top of the stone socle left to receive

sun-dried bricks lay 1.80 m. above the bottom of the drain—apparently a height considered safe enough at the time. The floor levels of the house were raised throughout; in Rooms 5 and 6 the floors of the second period of the house carried unbroken over the line of the foundation of the east wall of the older house. The other changes and alterations, some necessitated by the construction of the east side of the house and others made independently, follow.

All the east-west walls at the east side of the house, both internal and external, had to be extended eastward to meet the new east wall. It is amusing to note that with two exceptions where new walls were built, the extensions took a line at a right angle to the drain wall instead of continuing that of the older house wall straight through. Thus the outside wall at the south flares slightly outward at its east end, because the added piece was not made as a straight extension of the old wall. It was made when the drain wall was made and bonded into its back face; apparently the masons who were building the drain made a spur running west from it at a ninety degree angle to the new drain wall and then ran it westward to meet the older house wall. The lighter interior wall between Rooms 5 and 6 was not bonded into the drain wall; its rubble foundation nevertheless was laid at a right angle to the drain wall and extended as far as the face of the old east wall of the house to meet the older partition wall at a slight angle (Pl. 69b) which was no doubt concealed by the upper structure of mud brick, carried straight through to the drain wall.

Between Rooms 6 and 7 a new partition wall was built and the old one was ripped out. This seems to have been an afterthought because the east end of the new wall abutted against the back face of the drain wall and did not bond with it (Pl. 69c); also because it unnecessarily complicated the drainage of the house. The new wall was carried straight through without a bend along the south face of the old: thus Room 6 was increased by the width of its old south wall, Room 7 was reduced by the width of the new one. The main drain of the old house as we have seen ran eastward through Room 6 beside its south wall, and this had been taken into account in the building of the Great Drain by leaving an inlet on the line of this channel. When the new partition wall was built between Rooms 6 and 7 it had been decided to shift the drainage and carry it under room 7 instead of Room 6; perhaps Room 7 now became the bathroom. In any case the new line of drainage—part of the channel of inverted roof tiles was found in place in Room 7—running eastward through Room 7 found no outlet through the wall of the Great Drain and therefore a small rectangular opening was left in the partition wall near its east end when it was built. The house drain therefore ran eastward through Room 7, turned at a right angle toward the north to pass through the opening left in the partition wall—one tile was found in place in the opening—and then again turned eastward at a right angle to find its exit through the inlet into the Great Drain in Room 6 (Pls. 68a; 69c).

More considerable changes were made at the northeast corner of the house. A

new north wall was built inside the line of the old, leaving the foundation of the corner of the older house outside (Pl. 68c). The new wall was carried as far to the west as Room 3: from there westward the north wall of the house remained unchanged. At the same time the arrangement of Rooms 4 and 5 was altered. A new partition wall was built from north to south dividing the old Room 4 into two nearly equal parts, and the western half of the partition wall between 4 and 5 was taken down and its foundation buried under the filling thrown in to raise the floor level. This alteration resulted in a tiny room, 5, at the corner of the house, and a large L-shaped room, 4, on two sides of it (Pls. 68b and 69d). This latter connected with House D through a door left in the new north wall. We could find no good explanation for this door. In the first period of the house there was none, even though the passage or alley running eastward between Houses C and D might have been useful as a way out to the road at the east. The building of the drain obliterated the road at the east and made the passage between the houses useless as a way of access to them. The owner of House D was fully cognizant of this, and appropriated the passage to his own use, as we shall see, by building a new south wall for his east room, 5, which blocked it. The door, then, can only have led to House D. It is possible that the owner of House C took over House D at this time, or that the owner of House D took over a part of House C, perhaps Rooms 4 and 5; or even that the door was left so that House D, which had no well, could be supplied from the well of House C. Whatever may be the explanation, in the third period the door was blocked up and the houses again became separate without internal communication between them.

All of these changes except the making of the door and the redivision of the corner area between Rooms 4 and 5 resulted from the building of a new east wall over the drain wall.<sup>96</sup> There were apparently no changes in the western rooms of the house. At this time the court was extended westward to include the south end of the corridor, 1 (plan, Fig. 11). Its floor level was raised by 0.24 m. and the new floor was carried without a break westward over the foundation of the old west wall of the court. This arrangement was an improvement; it made use of the waste space at the south end of the corridor, gave direct access from the court to rooms 10 and 11, and no doubt also brought more light from the court to both of them.

At the same time the well was lined with a curbing of terracotta tiles, which started just at the level of the new floor of the court. There was no way of proving

<sup>96</sup> The new north wall seems to have bonded into the drain wall at the corner, but the space here was too narrow and occupied by too many various foundations for deeper digging to be possible. It is unfortunate that precisely between Houses C and D and opposite the passage between them the south wall of the Roman drain abuts against the inner face of the west wall of the Great Drain, concealing any inlet there may have been for drainage from the passage between the houses. The abutment of the Roman drain also involved some rebuilding at the higher levels; gaps occur exactly at the corners of the two houses, where the corner blocks, lying at each side of the abutting Roman wall, were taken out for reuse.

whether the well had been dug at this time, or merely lined with tile drums. The latter seems the more probable; an indication that the well itself was not dug at this time was the absence of any great amount of dug bedrock under the floors of the second period of the house. Had the well been made at this time a great quantity of spoil would have been available from its digging and this would have been a most useful filling for the raising of the floor levels of the rooms to east and north. No such filling was found; the gravelly earth which was used instead seems to have been brought from elsewhere, perhaps from the digging of the channel for the new drain at the east. It was spread over the old floors and surfaced with clean clay. The sherds found in it agree with those from the filling behind the drain wall in dating the second period of the house at the beginning of the fourth century.

### *Third Period*

The third period of the house involved no changes in its plan. The rebuilding which took place at this time perhaps was done in consequence of a flood in the Great Drain at the east. We have noticed in House A a raising of the level of the fourth-century phase of the house, and the two houses were probably re-levelled at about the same time and in consequence of the same cause. In House C the change involved a new reconstruction of the east wall. The height of the stone socle carrying the wall of sun-dried brick was raised. On Pl. 69b appears the new stone socle, nowhere preserved to its full height, which was put in on top of the drain wall on the bedding which had carried the brick wall of the second house. The new socle raised the bottom of the brick wall still higher above the channel of the drain; apparently the old one had not been high enough, perhaps because the drain had raised its bed by silting. At the same time the levels of the floors of all the rooms were raised. In some places this involved a heightening of the stone socles for the interior walls: the north-south wall between Rooms 3 and 4 was built higher, and it now shows (Pl. 70a) a good finished face at the level of the floor of the first house, on top of which lies a rough bedding course to carry the socle wall, again with a good face at a higher level, of the third period of the house. New and higher stone socles for mud brick walls were observed also in all the rooms of the northeast part of the house, especially between Rooms 4 and 5. At this time, too, the door in the north wall connecting with House D was blocked up. The level of the court itself was raised by 0.28 m. With each raising of floor levels in the house the court was also raised, and its floor continued throughout the history of the house higher than those of the rooms around. A flight of steps was put in to lead down from the court to Room 3 at the north; the rough stone beddings of the steps themselves were found in place (Pl. 70b) and their presence proves beyond the shadow of a doubt that the court was really higher than the other rooms. At this time the court, Room 7, and Room 12 were paved with floors of fine terrazzo, small pebbles in cement laid on a heavy bedding of stones. The paving of the

court, which was open to the sky and which contained the well of the house, was sensible; the paving of Room 7 suggests that it was the bathroom. It will be noted on the plan, Fig. 11, that the floor of the court was made with a definite slope from west to east, toward Room 7 and the drain. Room 12 had its own water supply, well and cistern, and paving in this room where water was apparently used was also very suitable. The raising of its floor level, though only by 0.30 m., was probably done to keep even with the gradually rising surface of the street outside at the north. The presence of both well and cistern in the same room at the same time implies some discrimination in the use of water; probably the well water was used for drinking, the cistern water for washing and other domestic purposes.<sup>96a</sup> The raising of the floor level of the court involved a change in the arrangements for its well. The top of the tiling was now left considerably below the new floor level. Two rough pieces of limestone were found in place at the east side of the well, overlying the tiles, and a gap in the flooring at the west was probably once occupied by similar blocks. The south face of one of the blocks still in situ shows a cutting for a horizontal wooden beam, and two rough round holes in the limestone block no doubt were used in fastening the beam in place. This was the foundation which carried a windlass, or some similar device, that stood over the mouth of the well (Pl. 70c).

These alterations in House C seem to have been made at about the middle of the fourth century, or slightly later. It was not so easy to get material for the dating of the third period as for the second; the upper levels of the house had suffered in Roman and Byzantine times and also from a picking-over for building material for reuse when the house was abandoned. From below the third floor level of the court at its west end, where we made a cut to clear the west end of the court of the first house, the latest object was the lower part of a characteristic black-glazed skyphos of the mid fourth century, of the sort found at Olynthos and attributed to the last years before its destruction in 348 B.C.<sup>97</sup>

One object found under the floor levels of the third period of the house (in Room 4) is published here. It is of interest because it was found near the Poros Building which, as has been suggested, may have been a law court.

*Bronze Dikast's Ticket.* Pl. 71b.

Inv. B 822. P. L. 0.102 m. W. 0.012 m. The right end broken off. Very thin bronze, inscribed with punched letters. ΔΗΜΟΦΑΝΗΣ ΦΙΛΙ[|ΚΗΦΙΣΕΥΣ The name does not seem to

be otherwise known, though a Demophanes of Kephisia is mentioned in a prytany list dated 211/10-202/1 B.C., possibly a descendant: cf. *Hesperia*, Supplement I, no. 37, line 17 (=I.G., II<sup>2</sup> 913).

<sup>96a</sup> Vitruvius (VIII, 3, 6) writing in the time of Augustus observed that the Athenians did not drink from the conduits which brought water into Athens because the minerals in that water hardened the muscles and the joints; they used the conduit water for baths, etc., while they drank from wells. The Agora Excavations have shown that in the time of Vitruvius cisterns were comparatively rare in Athens; in the Hellenistic period when cisterns were certainly common the cistern water presumably served many of the domestic needs.

<sup>97</sup> Like *Olynthos*, V, nos. 971-980, pl. 185; dated in the first half of the fourth century.



## HOUSE D

Plan, Figs. 1, 7, 11.

House D lay to the north of C and was entered at the west through a door facing the Street of the Marble Workers at its bend. The north side of the house bordered the little square between the street and the south end of the Poros Building; at the east lay the old roadway and its successor, the south branch of the Great Drain. The house had suffered rather more damage than had House C at the south; its eastern part was overbuilt by a Roman bath, and its entire northwestern corner had been cut away in Byzantine times. The house was considerably smaller than C, with only six rooms, half as many as in House C. It was entered by a corridor leading to the court, numbered respectively 1 and 2 on the plan; the rest of the rooms have been numbered as in House C, clockwise starting from the north, 3-6. The house measured at a maximum 13.50 m. in length from east to west and 10.40 m. in width from north to south. Its plan was irregular; the construction was the same as that of House C, sun-dried brick on socles of stone. Like House C, House D had three periods.

*First Period*

The house contained a courtyard placed at the middle of its south side and sharing a party wall with House C at the south. The court was entered by two corridors leading east and west; one led from the southeast corner of the court to the roadway at the east, the other from its northwest corner to the front door facing northward to the Street of the Marble Workers. A small room, 6, lay to the south of this corridor, sharing a party wall on its south side with House C. To the north of the court lay the largest room of the house, 3, perhaps the *andron*; from it opened another room, 4, at the northeast corner of the house. Between Room 4 and the corridor from the southeast corner of the court lay another room, 5, which opened directly from the court at the east.<sup>98</sup>

The line of the north wall of the house is given by a large block of limestone which is still in place, though it probably belonged to the latest period of the house; the northern limit of the house, bordering on the square, must have been constant. This block was built over by the Roman bath, which preserved it from the depredations of Byzantine times since it would have been too much labor to cut away the overlying mass of Roman rubble and concrete in order to get at it. The west wall of Room 3 is preserved only by the south end of its trench, filled with a bedding of small stones belonging to the latest period of the house. This trench falls exactly on the line of a wall of well-cut polygonal limestone blocks with broached faces toward the

<sup>98</sup> The width of the corridor, 1, was 1.20 m. The court measured 4.30 m. from east to west and 4.80 m. from north to south. On its central axis Room 3 measured 5.20 m. from east to west and 4.60 m. from north to south.

east, of which one is still *in situ* just to the north of House D, and several more at the west side of House E; the rough bedding of small stones for similar blocks, now disappeared, was found in other places on the line of the wall, which seems to have been a retaining wall along the east side of the Street of the Marble Workers from the corner of House F at the north to the projecting corner of House D at the south<sup>99</sup> (plan, Fig. 7). This street retaining wall must have been used as a foundation for the west wall of Room 3 by the builders of House D.

At the east Room 5 projected about a meter beyond the face of the room at the north, 4, and beyond the east face of House C to the south. This projecting room was separated from House C by the narrow alley or passage between the houses, which carried the drainage of the court of House D to the roadway at the east. One tile of the drain was found in place, and there were traces of gravelly deposit left by the water.

House D was already in existence when the drain was built, as we have seen, since blocks taken from the street retaining wall which served as foundation for the west wall of Room 3 were built into the drain wall. Like those of House C its clay floors immediately overlay the gravelly deposit of Geometric times under the earliest road and in the stream bed. The well in Room 6 (plan, Fig. 7) was also Geometric. The date of the original construction is therefore difficult to fix; it probably falls not long after that of House C, and before the middle of the fifth century. The house was already built and inhabited when a shallow pit was made through the floor of Room 2, the court, and a pyre of some sort was burned in it. The pit was a shallow hollow scooped in the floor, 0.40 m. in diameter. Its bottom and sides were reddened and baked by the fire which had burned in it. The floor was overlaid by a heavy deposit of cinder and charcoal, and fragments of a number of small pots which had been broken and burned lay among the charcoal. The red-patterned *lekanis* lid, No. 6 below, lay with most of its pieces together as it had fallen into the fire and broken. Except for the fact that it was round and very shallow, this pit was reminiscent of the pyres in the archaic cemetery and of Grave 50, and also of pyres exactly like it of the fourth century.<sup>100</sup> There is good reason to believe that these pyres of the fourth century were the remains of infant cremations, and the burned pit in the court of House D may have been another such, though it was earlier by nearly a century than any other which we have found. Scattered through the cinders was a number of small bits of burned bone, of which some could be identified as belonging to animals, while

<sup>99</sup> Somewhere along the square there must have been a stair or ramp in front of the retaining wall; the level of the street was higher than that of the square. We found no traces of it. At some time before the drain was built the central part of the retaining wall must have been damaged and abandoned; several stones in exactly the same style as those of the wall, and with broached faces, were noticed built into the wall of the drain.

<sup>100</sup> See *Hesperia*, XX, 1951, pp. 110 ff.

others were not definitely identifiable as animal or human. The pit must have been made at some time toward the end of the third quarter of the fifth century. It was covered by a new floor laid over the court, still during the first period of the house and before the alterations were made at the time of the building of the drain. The pottery found in the burned deposit of the pit is described and dated below by P. E. Corbett.<sup>101</sup>

1. *Black-Glazed Stemless Cup*. Pl. 73.

Inv. P 19315. H. to top of preserved handle, 0.032 m. Diam. as restored, 0.12 m. One handle and about half the body and foot restored.

Small rounded ring foot. Completely glazed save for a band round the outer face of the foot, the resting surface, and the underside which bears two glazed circles and a dot. The glaze much worn on the surviving handle.

A vase from the katharsis pit on Rheneia closely resembles our cup in shape and in the decoration of the underside; for Agora examples from the third quarter of the fifth century see *Hesperia*, IV, 1935, p. 507, Nos. 34 and 35; V, 1936, p. 339, fig. 7, right.

2. *Black-Glazed Skyphos, Corinthian type*. Pl. 73.

Inv. P 19314. H. 0.09 m. Diam. of rim 0.095 m.

Small pieces of foot, wall and of one handle restored. Delicate fabric; flaring ring foot. Completely glazed save for a small reserved disc on the underside in which is a glazed circle and a dot. Good glaze, with some grey patches.

Parallels for the profile, fabric and decoration of the underside can be found in Agora well-deposits of the third quarter of the fifth century; cf. *Hesperia*, IV, 1935, pp. 505-6, No. 26, 30 and 32.

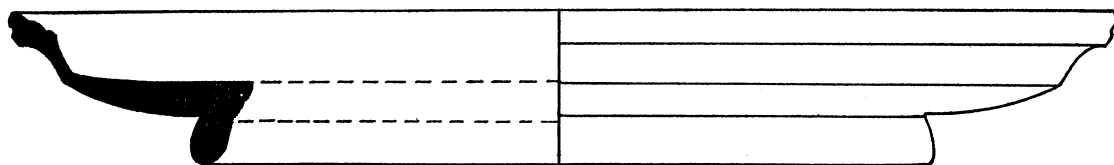


Fig. 13. Profile of Plate, No. 3.

3. *Black-Glazed Plate*. Pl. 73, Fig. 13.

Inv. P 19318. H. 0.027 m. Diam. as restored 0.182 m. About half of the rim preserved, with parts of the foot; the centre of the floor is lost.

Double grooved rim, sloping toward the centre of the vase. Slightly spreading rounded ring foot. On the floor is part of the impressed decoration; it consists of a double ring of ovules. All of the plate that survives is covered with good black glaze.

There is a general similarity of profile between this plate and two others from an Agora well-deposit of the last quarter of the fifth century (*Hesperia*, XVIII, 1949, p. 325, fig. 3), but the differences of detail are significant: the greater depth of the vertical "wall," the sharp angle which it makes with the floor, and the comparatively narrow rim betray an earlier stage of development.

<sup>101</sup> This pit or pyre is briefly mentioned and described in *Hesperia*, XVIII, 1949, p. 216, and the pottery illustrated, *ibid.*, pl. 39, 3-5.

4. *Fragmentary Black-Glazed Squat Lekythos*.  
Not Illustrated.

Inv. P 19316. P. H. of main portion, 0.055 m. Four joining pieces give part of the foot, wall and shoulder; four other non-joining scraps include part of the handle.

Angular shoulder; concave moulding at inner junction of foot and floor. Underside reserved; the glaze much peeled. An oval hole, length *ca.* 0.035 m., breadth *ca.* 0.03 m. was cut in the side after firing.

The concave moulding beneath the foot dates the lekythos to the second half of the fifth century; see *Hesperia*, XVIII, 1949, p. 329.

5. *Black-Glazed Lekanis-Pyxis*. Pl. 73.

For the name, see *A.R.V.*, p. 911, end.

Inv. P 19317. Overall height as restored, including lid, 0.094 m.; max. diam. 0.126 m.

Parts of lid, bowl and handle restored; the knob restored by analogy with a similar lid on the Agora shelves (P 10287; no context). The upper surface of the lid is moulded into five broad and carefully modelled rings. The rim of the bowl is flanged to take a lid; beneath the flange on the outside is a thickening of the wall, marked off below by a shallow groove. The bowl has a single cup handle and a rounded ring foot. Lid and bowl are completely glazed; though the glaze is good in appearance it has a tendency to peel, particularly in crannies.

Vases of this form generally have two handles; compare *Clara Rhodos*, III, pp. 155-6 (found with a lebes gamikos in the manner of the Meidias painter; *A.R.V.*, p. 837, 29) and *C.V.A.*, Oxford, 2, pl. 65, 13. The one-handed version does not normally have a cup-handle; e. g., *C.V.A. Fogg Museum*, pl. 24, 10; Richter and Milne, *Shapes and Names of Athenian Vases*, fig. 150; Watzinger, *Griechische Vasen in Tübingen*, pl. 50, G 35. Examination of our vase shows that it was originally canonical, but that after it had been glazed one of the handles was removed, the roots smoothed over and more glaze applied to cover the raw areas;

presumably the unfired pot met with an accident, and it was not thought worth while to replace the damaged handle. A lekanis-pyxis from Gela (*Mon. Ant.* XVII, 1906, p. 344) was found in a grave which contained figured vases of the second quarter of the fifth century; a second example from Rhodes (*Clara Rhodos*, VI-VII, p. 466, middle row, sixth from the right) comes from a grave which contained *inter alia* a palmette lekythos; it resembles the other vase from Rhodes mentioned above; for a still later stage see *Clara Rhodos*, VI-VII, p. 158, fig. 144. The handle of the Agora example is intermediate between the form current in the second quarter of the fifth century and that of the years around 400 B.C.

6. *Patterned Lekanis and Lid*. Pl. 73.

Inv. P 19313. Overall H. including lid, 0.092 m. Max. diam. 0.121 m.

Part of one handle and pieces of lid and bowl restored. The rim of the bowl is flanged to take the lid. Horizontal band handles with a spur on the loop. Rounded ring foot. The lid is decorated with an oblique palmette scroll between two zones of ovules. On the flat top of the knob is an eight-spoked wheel; on the reserved face of the knob are irregular glazed lines, the result of careless work by the painter when making the ovules round the handle-root. On the bowl there is a reserved strip at handle-level on either side, with vertical zig-zags. The underside of the lid is reserved; so also the resting surface of the foot. On the underside, incised before firing  $\Lambda$ . Glaze somewhat peeled and damaged by fire; there are several places where a discolored fragment joins one which is unaffected.

For the form and decoration of the bowl, compare another Agora example from a well-deposit of the last quarter of the fifth century (*Hesperia*, XVIII, 1949, pl. 91, 47); for the vertical zig-zags see also Würzburg 433 (Lan-glotz, *Griechische Vasen in Würzburg*, pl. 121; similar in form to a lekanis which was found in a cremation pit with vases of the mid fifth

century; *Hesperia*, VI, 1937, p. 361); spurred handles also occur on Agora examples from contexts of the third quarter of the fifth century (e. g. P 15037). With the decoration of the lid compare three pyxis lids: Würzburg 542, Langlotz, *op. cit.*, pl. 202; Munich 2722, *C.V.A.*, 2, pls. 97 and 99; *Burlington Fine Arts*

*Club, Exhibition of Ancient Greek Art*, pls. 97 and 100, I 56. The Würzburg and Munich pyxides are to be dated around 410 B. C., but the other belongs to the thirties of the fifth century. On the basis of the evidence here assembled our vase cannot be dated more precisely than to the period between 440 and 400 B.C.

The stemless cup, skyphos, plate and lekanis-pyxis belong to the third quarter of the fifth century and probably were made in the later years of that period. The lekythos and lekanis cannot in themselves be dated with much precision, but the absence of all evidence to the contrary entitles one to regard them as contemporary with the other vases from the same burial.

### *Second Period*

The alterations made when the Great Drain was built were less far-reaching in House D than in House C. We have already noted that the line of the drain had to be swung farther toward the northeast in order to bypass the projecting corner of Room 5 of House D. At the south the drain wall was built outside of Room 5; but during construction it seems to have been realized that the drain line would again have to be changed, and quickly, in order to get by the southwest corner of the Poros Building already in existence at the east side. This seems to have involved a change of plan; instead of carrying the drain entirely outside of Room 5, its builders turned its line northward again, starting from the south corner of the room. The east wall of the room was taken out; a few bedding stones still remain at the bottom of its trench. The drain wall was used as the foundation for the new east wall of the room. The line taken by the drain was directly to the northeast corner of the room. The lowest foundation block of that corner (Pl. 70d) was left in place as foundation for the new drain wall. Northward of this corner the drain wall was not continued, but allowed to jog back to the line of Room 4 to the north of the eastward projection of Room 5 beyond Room 4. The line of the west drain wall resumed with the east wall of Room 4. Since the direction of flow was from south to north this jog was of no importance in the functioning of the drain. The adjustments made in the east wall of Room 5 in the end resulted in the addition along the east side of the room of a long wedge-shaped piece, its point toward the north. The northeast corner of the room remained where it has been before; the southeast corner was extended eastward by about 0.90 m. This gave an entirely new orientation to the east side of the room. The building of the drain had made the old roadway useless; in front of Room 5 of House D the space between the inner faces of the drain walls at the corners was only 0.70 m. at the north and 0.60 m. at the south—too narrow for passage. The corridor which had connected the old roadway with the court of House D now became

useless as a passage also, since it led nowhere but to the drain. Taking these factors into account, and in order to make his east room more shapely, the owner of House D now blocked up the corridor by building a new south wall for Room 5, running it westward at a right angle to the new east wall (Pl. 68c; Fig. 7) until it met the wall of House C. We found no trace of any new arrangement to take care of the drainage from the court, which had passed out through the corridor. The new south wall of Room 5 must have met the north wall of House C to the east of the doorway left in the new north wall of that house to connect the two houses at this time.

One other change was made in House D in its second period. A column base of poros, 0.30 m. in diameter, intended to carry a wooden column, was set in the court (Pl. 71a). The position of this base is curious; it lies only 0.90 m. from the west wall of the court, though it is about midway between the north and south sides. A shed roof supported by a column and only 0.90 m. deep along the west side of the court would hardly seem to be worth building. We must look to the third period of the house for an explanation. In the southeast corner of the court in the latest period of the house there was a great hearth, 2.90 m. long from north to south and 1.00 m. wide, against the east wall of the court. Thin stones and tiles set on edge bordered its north and west sides; it was floored with square tiles. Those tiles of the floor which had remained in place were badly cracked and flaked by fire, and where the filling over them was undisturbed it was of ashes and charcoal. Obviously this arrangement was a hearth, and from its condition it seemed that it had been used and withstood intense fires built on it over a fairly long period. The court of the house was its workshop, and the work carried on there was connected with fire on a hearth. It was desirable that the hearth and the working space in front of it to the west should somehow be sheltered from the rain, and no doubt the column carried a shed roof extending over the whole southeast part of the court. Perhaps beams were carried from the column to the east and south walls of the court, to support the outer ends of a roof pitched from south to north, or with two pitches, to north and to west. There must have been some sort of a vent in this roof to let out the smoke from the hearth. The remains of the hearth as we found them belonged to the third period of the house, but the column which carried the roof that sheltered it and the working-area in front of it was put in during the second period. In the southeast corner of the room, and under the floor of the third house, we found many shapeless slugs of iron and some of bronze which suggested metal-working and which carried the operation back into the second period of the house. A great many fine marble chips in the floors of the court in the second period imply that marble as well as metal was worked in House D. But the main operation was metalworking; and very apropos was the inscription on a lead *defixio* found in Room 5. The *defixio* lay in the lowest layer of dissolved mud brick which overlay the house; the sherds in this layer were as late as the middle of the third century. But the ruins of the house had been picked over for

building material after its abandonment, and it is entirely probable that the little lead curse had been tucked into the foundations or under the floor of the house somewhere (as such things should be underground) and that it was thrown up from its original position by the ransackers for building material. The letter forms are of good fourth century style: four-barred sigmas, ionic lambdas, etc.: Pl. 74a.<sup>102</sup> The text follows:

Καταδέω Ἀρίσται[χ]μ<ο>ν τὸ(ν) χαλκέα  
 πρὸς τοὺς κάτω καὶ Πυρρίαν τὸν χαλκέα  
 καὶ τὴν ἐργασίαν αὐτοῦ καὶ τὰς ψυχὰς  
 αὐτῶν καὶ Σωσία(ν) τὸν Λάμιον  
 5 καὶ τὴν ἐργασία(ν) καὶ τὴν ψυχὴν αὐτο[ῦ]  
 καὶ ΑΛΗΓΟΣΙ καὶ ἀδρῶς καὶ ἀδρῶς  
 καὶ Ἀγήσι(ον) τὴν βοιωτ[ί]α[ν].

Line 1: ΑΡΙΣΤΑΙ . MN; ΤΟΧΛΑΚΕΑ. Line 2:  
 ΠΡΟΣΣΤΟΣ, ΠΡΥΡΙΑΝ. Line 4: ΣΩΣΙΑ.  
 Line 5: ΕΡΓΑΣΙΑ. Line 7: ΑΓΗΣΙ.

In the first line the *omicron* of the name Aristaichmos was omitted, perhaps accidentally but perhaps on purpose. In the second line the name, Pyrrias, would seem to have been misspelled on purpose; such misspelling was part of the magic. The meaning of ΑΛΗΓΟΣΙ in line 6 is not quite clear. The name of the Boeotian lady in the last line, Agesion, was pierced by the nail thrust through the folded tablet in three places, but all the letters, except the next to the last which in any case must have been an *iota*, are clear. The name was abbreviated.

Aristaichmos and Pyrrias, both smiths, are consigned to the gods of the underworld, and together with them Sosias of Lamia, a slave or a metic, a craftsman whose work is not specified, and also Agesion, a Boeotian woman, who was probably the cause of the ill-feeling. These were without doubt the smiths who worked at the forge or foundry in the court of House D in the fourth century. Aristaichmos and Pyrrias may have been Athenians; it is not specified that they were not, as in the case of the other two; one of them was perhaps the owner of House D in the fourth century.

<sup>102</sup> Inv. IL 997. Present L. with edges as bent, 0.145 m. W. 0.065 m. *Hesperia*, XVIII, 1949, p. 217, pl. 39, 2. The *defixio* was found rolled up; it had been transfixed near the lower edge by a nail. Some of the letters have been lost in the foldings of the lead, which was in a very delicate brittle condition. Help with the reading was given by G. Stamiris and Miss Anna S. Benjamin.

*Third Period*

As in House C, the court of House D was paved with a terrazzo floor at some time in the fourth century when there was a general raising of levels. The hearth of which we have already spoken was laid on top of the floor; and only under the hearth itself was the floor surface preserved. Elsewhere in the court the floor surface had worn through or broken away; all that remained was the coarse bedding of small stones. The size of the court was further limited by an eastward prolongation of the wall between the corridor to the street and Room 6; at the same time the corridor seems to have been blocked off at its west end by a wall, and entrance to the house must have been through Room 6. The purpose of this rearrangement was not clear, nor could we trace how far eastward into the court the wall had been extended, because its new foundation had been robbed of all its stones at the east, and its trench was not clearly defined. The old corridor now became a deep narrow closet-like space: perhaps a suitable place in which to restore a staircase leading to an upper room. The wall to the north of it, dividing the corridor and the court at the south from Rooms 3 and 4 at the north, was straightened by building a new foundation over the old. A new south wall for Room 5 was built along the line of that of the first house, and the passage to the drain was restored (at the same time the doorway into House C was closed). The wall of the second period of the house, running diagonally through the passage, was taken down, and the corridor was again used for drainage: part of the roof-tile drain installed at this time was found still in situ, bedded on top of the foundation of the south wall of the second period, and taking its diagonal line.

The line of reused poros blocks dividing the corridor and Room 6 from the street at the west probably belongs to this period of the house, which suggests a general rebuilding. Although nothing later than the end of the fifth century was found in the footing-trench of this wall, the trench itself was detected in the street levels of the earlier part of the fourth century. Since these had been cut through when the poros blocks were laid, the house probably got a new west wall beside the street at the same time that the other alterations were made, about the middle of the fourth century.

## HOUSES C-D: ABANDONMENT

At some time in the second half of the fourth century the two houses at the bend of the Street of the Marble Workers were abandoned and fell to pieces. We found no evidence to indicate that they had been destroyed by fire or any other violent means. The fill that overlay them in many places was their own mud brick which had dissolved into a homogeneous mass of red clay-like earth almost devoid of sherds. Apparently the houses were abandoned, for what reason we cannot know, and everything of value was taken away at the time.<sup>108</sup> The walls of brick were soon dissolved by the weather,

<sup>108</sup> Such as good worked blocks like thresholds, steps, etc.; roof tiles which could be salvaged



and the foundations were picked over for stones to be reused elsewhere. The latest sherds from the fill in any of these plundered wall trenches were of the first part of the third century, and the occasional coin found in it was almost invariably of the late fourth or early third century.

The approximate time of the abandonment of the houses was given by evidence of two kinds; a number of small pyres was found scattered through the rooms of the houses, and the well and cistern in Room 12 of House C yielded a certain amount of pottery from the earth thrown into them when they were abandoned and filled.

The pyres are marked Py on the plan, Fig. 7. Four were found in House C, where one lay in each of Rooms 4, 6, 8, and 12. Three more were found in House D, in Rooms 2, 4, and 5.<sup>104</sup> These pyres were made in small pits cut in the surface of the ground, in some cases at the floor levels of the latest period of the houses, in others still higher. That the pyres were burned in the pits was shown not only by the heavy deposits of ash and charcoal which overlay their floors, but by the fact that the earth below and at the sides had been baked by the heat of the fires. Some of the pits measured up to 0.80 m. in length and had contained sizeable fires. It has been suggested elsewhere<sup>105</sup> that these pits were the remains of infant cremations, especially because some of them contained dummy alabastra made of poros. However that may be, the fires in these pits could not have been burned while the houses were still standing roofed. With the exception of one, in the court of House D, all of the pyre-pits lay in rooms of the houses. Further, giving final proof that the houses were already abandoned when the pyres were burned, some of the pits, in Rooms 4 and 6 of House C, had been made through levels which overlay the house itself, passing unbroken over the lines of its internal walls (Pl. 71c). The pyres of this sort found in the Agora were discussed in a previous paper.<sup>105</sup> It may be remarked here merely that the pottery from all the pits in Houses C-D, with one exception, was of the second half of the fourth century or the early third. The exception was the pit in Room 12 of House C, which contained a lamp of Broneer's Type IX and a small kantharos of West Slope ware. The pit must be dated well down in the third century. We are thus forced to the conclusion that Room 12, the shop, outlived the rest of House C. This conclusion is confirmed by the pottery, and most of all by the stamped amphora handles, from the filling of the cistern in the same room. One coin was found in the cistern, an Athenian coin dated between 307 and 283 B.C.; in addition there were some unguentaria of the plump early shape, and lamps of Broneer's Types VII and VIII.

unbroken; all the roof timbers and woodwork. The value put upon woodwork is referred to time after time in ancient sources: cf. Lysias, *On the Property of Alcibiades* (XIX), 28-31; Thucydides II, 14; *I.G.*, II<sup>2</sup>, 2499.

<sup>104</sup> Two pyres are marked in Room 2 on the plan; one of these was the earlier pit with burning, made in the fifth century at a considerably lower level, and already discussed above, p. 218.

<sup>105</sup> *Hesperia*, XX, 1951, pp. 110 ff.

The stamped amphora handles <sup>106</sup> from the bottom of the cistern were all Rhodian, the latest to be dated in the third quarter of the third century. In the upper fill, thrown in when the cistern was finally abandoned, was a Knidian handle of the late third or early second century. We may say that the cistern was probably filled up around 200 B.C. The filling of the well was to be dated at about the same time. Room 12 was probably altered and kept as a shop after the rest of the house was abandoned because it lay at the street corner where traffic went by and business was to be had. The pyre in Room 12 was earlier than the filling of well and cistern; perhaps it lay outside the latest phase of Room 12. The terrazzo floor of the room had been cut through from east to west by a wall bedding; the new wall that lay in this bedding may have been the south wall of the curtailed shop in its last phase.<sup>107</sup>

#### HOUSES C-D: HOUSE TYPE

Of all the fifth century houses in the bottom of the valley only C and D had complete plans preserved. One was apparently a workshop, the other a dwelling. The feature common to both is the central courtyard approached by a corridor from the street door, and surrounded by the various rooms. In House C the courtyard was placed to the south of the middle of the house, in House D at the south side; in both houses the largest and apparently the most important room was placed to the north of the court. Neither house had a peristyle, or even a colonnade at one side of its court; and neither had anything that could be described as a *pastas* in the Olynthian sense. The arrangement at the east side of the court of House C filled the function of a *pastas* by giving access to the corner rooms; but instead of carrying a corridor to the sides of the house at one end of the court, the corner rooms were pulled forward to overlap its corners; this could be done because the rooms between, at the east side of the court, were small ones. In the Olynthian house the *pastas* lay usually at the north side of the court, in front of the *andron*. Here we find the most important room of the house opening on the court at the north, as it should, but opening directly, without *pastas* or anteroom. This room, too, was without the raised platform for couches around three sides which was usual at Olynthus and Delos, and for which an example can be cited at Athens <sup>108</sup> in Dörpfeld's excavation between Pnyx and Areopagus. The fragment of the Athenian house includes the *andron* with its raised platform and an anteroom, facing south, presumably to the court. Dörpfeld seems

<sup>106</sup> Miss Virginia Grace kindly analyzed and reported on the handles from the cistern.

<sup>107</sup> The main well of House C in the courtyard seems to have continued in use, or to have been found and reused, until the time of Sulla's sack of this part of Athens in 86 B.C.

<sup>108</sup> *Ath. Mitt.*, XX, 1895, pl. IV; marked "ESTRICH" near the upper right corner of the plan. The scheme is given in *Olynthus*, VIII, p. 180, fig. 11. Cf. *Hesperia*, XII, 1943, pp. 312, 333 for a similar border in a house of the mid fourth century B.C. on the Pnyx Hill.

to have thought of it as later in the Greek period, perhaps of the fourth century, and has so marked it on his plan. There are remains of several Greek houses in this area, some with masonry resembling that of our B and K-L; but they were patched in later times, only partially excavated, and yield no full plan. It is difficult to find a parallel for our houses; very few dwellings of the fifth century have been excavated which were well enough preserved to show a full plan. The house at Dystos in Euboea<sup>109</sup> was entered, like ours, through a long corridor. The main room was set at the south side of the court, with two smaller rooms behind it. This house is thought to be of the fifth century; its masonry resembles that of our fifth century houses. Another house of the same period, and again built in a similar style of masonry, the so-called "priests' house" at Zoster (Vouliagmeni) in Attica,<sup>110</sup> consisted of a large enclosed court with colonnades across two sides; the main room lay at the south, facing the court toward the north through a colonnade. Neither of these houses resembles our C-D; those in Dörpfeld's old excavation to the south are fragmentary, and apparently somewhat later. Our House C is earlier than any of the houses in Olynthus, and its plan perhaps less developed; nevertheless it much more closely resembles the *pastas* and peristyle types of house of Olynthus and Delos than it does the *prostas* type of Priene.<sup>111</sup> We do not know enough about the plans of Athenian houses of the fifth century to say whether our House C is typical; what is common to both C and D, however, probably is typical, and that is a court at the southern part of the house, the main room to the north of it, and approach to the court through a long corridor. The developed *andron* with anteroom and raised platform around the sides probably came later; the *pastas* of the Olynthus type may also have come later, or may have been an adaptation made for houses in a more northerly climate, though it is common also at Delos. Our House C sufficiently resembles the houses of Olynthus in plan to give greater likelihood to the suggestion<sup>112</sup> that the *pastas* and *pastas*-peristyle types of plan common at Olynthus and Delos were also prevalent at Athens.

House C is somewhat earlier than the houses of Olynthus; the fully developed *pastas* may not yet have emerged at Athens, though it seems to have been in common use at Olynthus when the North Hill settlement began in about 432 B.C.<sup>113</sup> We cannot say that the plan of our house was radically affected by the exigencies of the situation and the lot; the architect had he wished could have made the entrance from the street at the east, and extended a *pastas* across the north side of the court. That he did not do so implies not only that the western was the more important of the two

<sup>109</sup> *Ath. Mitt.*, XXIV, 1899, pp. 458 ff., fig. 5, pl. V.

<sup>110</sup> *Eph. Arch.*, 1938, pp. 1 ff.; plan on p. 4, fig. 4.

<sup>111</sup> Cf. Wiegand, *Priene*, p. 285 ff., figs. 298-307.

<sup>112</sup> Cf. *Olynthus*, VIII, p. 151.

<sup>113</sup> *Olynthus*, VIII, pp. 13 ff.

streets, but also that a *pastas* was not considered desirable here because so much room was taken up already by the corridor from street door to court.

It is very satisfactory to have a complete house plan from Athens of the first half of the fifth century, and the plan is more or less what we should have expected it to be from the analogy of the Olynthus houses. But one or two houses at Athens are not enough to enable us to draw any very sweeping conclusions as to the nature and development of the private house in fifth century Athens. It may be hoped that more houses will be found, so that the cumulative evidence will be enough to give us a more general picture of the Athenian house in the fifth century.

### HOUSE E

Plan, Figs. 1, 7

The line of houses to the west of the drain was interrupted to the north of House D by the little square, 8.20 m. wide, beside the Street of the Marble Workers, which we have noted above. The first house to the north of the square was House E, a simple rectangular structure, badly preserved. Its west wall, like that of Room 3 of House D, was built on the street retaining wall as a foundation. To the north it shared a common wall with House F; it is not impossible that both were part of the same structure. The beddings of its east and part of its south wall were preserved; the house formed a simple rectangle 7.80 m. long from north to south and 5.50 m. wide from east to west. A small bit of the east wall above the rough bedding was well enough preserved to suggest a socle of light limestone construction, perhaps rather carefully fitted, below a mud brick wall. Two small bits of the floor were preserved, one at a higher level than the other, and implying two periods, or two rooms at different levels. Two large pits of Byzantine times had cut through all the rest of the floor, and taken away most of the south wall; no traces were left of any internal partition walls or of any supports such as column bases. The floor which lay at a higher level yielded a handful of sherds of the fifth century, none of which could be closely dated; the lower floor was merely a clay flooring spread over gravel of the Geometric period.

It could be demonstrated, however, that the house existed in the fifth century, that is, before the drain was built. The house seems to have had a gutter wall or curbing beside the line of the pre-drain watercourse at the east. The west wall of the drain was laid on top of it, and packed behind with small stones. This packing had evidently been put into a cut made through the outside ground level of House E at the east, and belonged to the drain. It yielded a few sherds of the late fifth century, to confirm again the date of the building of the drain. But more significant than the packing behind the drain wall was the way in which the blocks had been laid to overhang by as much as 20 cm. the face of the earlier gutter. They were so laid because

the space between the northeast corner of House E and the channel of the drain as planned was too narrow to accommodate the thickness of the drain wall blocks; the earlier gutter wall was considerably thinner. The drain blocks were therefore laid at the corner of House E, and for some distance toward the south, with their inner faces overhanging the old gutter wall, propped underneath their edges with rubble. For the space of a few meters toward the south from the northeast corner of House E, then, the west wall of the drain was set forward about 20 cm. in front of its normal line.

### HOUSES H AND F

Northward of House E the narrowing space between the Great Drain and the Street of the Marble Workers was occupied by a string of houses, or rather workshops, which have been only partially excavated. The northernmost of these, H, was apparently a sculptor's or marble-worker's shop; it is still almost entirely covered by a house of later Roman times. We excavated along its northern edge, however, in order to fix the line of the south side of Piraeus Street just to the west of the bridge, and at the point where the Street of the Marble Workers and the Great Drain diverge (Pl. 57c). The northern limit of House H beside Piraeus Street was fixed for both the Greek and the Roman periods. We uncovered a bit of the Greek floor level at its northern edge; it was a characteristic marble chip fill floor, with enough marble dust to indicate that it had been formed on the spot by the working of marble, and that the house was probably another shop where marble was worked. The level at which the marble chip floor lay corresponded to a fourth century street level outside at the west; probably therefore House H goes back to the fourth century or earlier. It was included among the lettered houses as H despite the fact that it is unexcavated, chiefly for convenience of reference, since it lay at the junction of the Drain, Piraeus Street, and the Street of the Marble Workers. To the south lay two or more workshops.

### HOUSE F

Plans, Figs. 1, 5, 14

House F was a workshop in which a central floored area was surrounded, probably on all sides and certainly at three, by tanks or vats set below floor level. These were lined with fine waterproof cement and had evidently been used in some craft of which the operation involved the working or soaking of material in vats filled with liquid. The house had two periods, like all the others in the bottom of the valley; the establishment existed in the fifth century, before the drain was built, and it was altered at the beginning of the fourth century at the time of the building of the drain, or shortly thereafter. The remains of the later period had best be described first, for though far from well preserved they are more completely exposed than those of the

earlier period which are in large part still covered by them. The building was 8.70 m. long inside on its central axis from north to south, separated from another establishment to the north by a heavy wall of poros blocks supporting limestone construction above. Its east wall was the west wall of the drain, its west wall fronted on the Street of the Marble Workers, and at the south it shared a common wall with House E. It may be noted that the drain wall at the east was built beside House F in the same "checkerboard" style of masonry (Pl. 81a) as beside House A farther to the

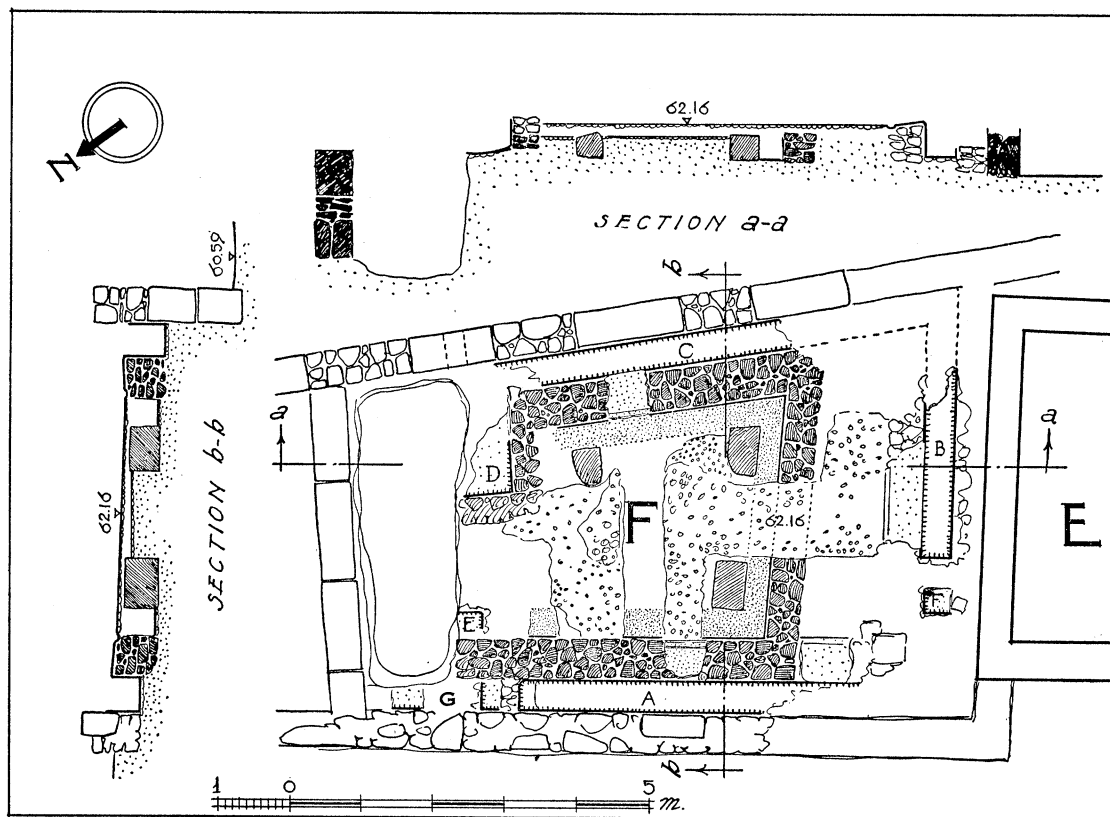


Fig. 14. House F: Plan and Sections.

south, and that on the line of the poros wall, the northern limit of House F, its construction changed to one of heavy limestone blocks cut in polygons and carefully fitted, but left with unfinished faces (Pl. 81c; Fig. 15). Since drain and street here converge toward the north, House F was irregular in shape, narrower (4.50 m.) at the north than at the south (6.40 m.).

Inside the house, walls of rubble ran parallel to its east, south and west limits; at the north a great pit of Hellenistic times had been cut right through the workshop

and left no traces of the arrangement of its north side. The space between the rubble walls and the outside walls at the other three sides was occupied by long vats or tanks lined with fine waterproof cement. These have been numbered from west to east, A-B-C (plan, Fig. 14). Part of another wider vat lay to the north of C, D on the plan. Two very small basins, E-F, lay near the west side of the area; and finally a cross wall to the north of A divided it from another vat or tank, G, which perhaps extended to the north wall of the house. At the east and on the line of the wall between A and G the rubble wall of C turns west, then north to enclose the south and west sides of D. An opening in the drain wall opposite D served to drain it; C and D may have been one. To the south one assumes another hole in the drain wall, which has here been plundered, as an outlet for B. None of the long vats is preserved to its

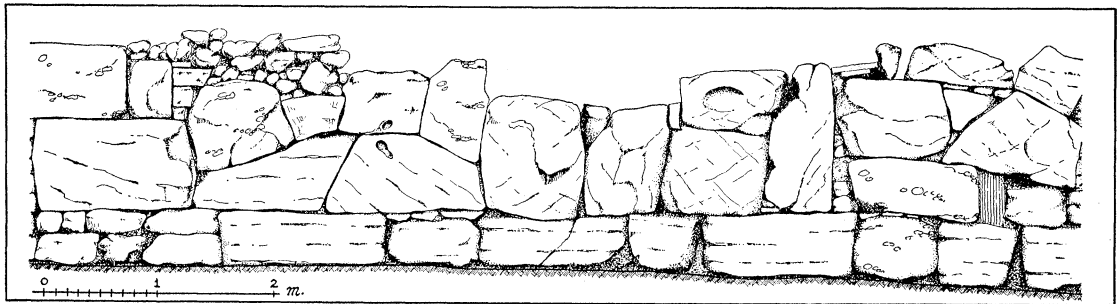


Fig. 15. West Drain Wall between House F and Bridge: Elevation.

full length; C at the east, broken off at both ends, still measures 4.10 m. in length. The west vat, A, was 0.44 m. wide, the others, B-C, only 0.40 m. The two smaller ones, E and F, were about 0.30 m. square. D and G were so broken that their measurements could have no meaning.

All the central space between these vats was occupied by a terrazzo floor of which the fine pebbled surface had mostly been worn away, the rough stone bedding alone remaining. Around the edge the terrazzo work covered the inner rubble walls of the vats, but at a level slightly higher than that of the rest of the floor, and with the resulting raised rim between vats and central flooring sloped inward toward the floor (Pl. 74b). The depths of the several vats varied somewhat: the bottom of A lay 0.38 m. below floor level, that of B 0.46 m., that of C about 0.50 m. The ensemble thus was a central paved area with long vats to east, south and west separated from the floor by a raised border sloped toward the centre of the room. Entrance was evidently from the north through the passage between A-G at the west and D at the east. Vat C used the west wall of the drain as its east side, where the hydraulic cement of the vat was applied directly to the back of the drain wall. This latest phase of the workshop was contemporary with the building of the drain at the beginning of the

fourth century, or perhaps slightly later. The pottery from under the highest floor of the establishment was of the late fifth century, suggesting that this phase dates from about the time of the building of the drain.

Deeper digging where it was possible to sink pits without destroying the remains of the latest period showed that the workshop had engaged in the same operations on the same site throughout the second half of the fifth century. The inner rubble walls of the vats A and C proved to have been the original outside walls of the workshop (Pl. 74c), which in its later phases had been extended to east, west and south. The establishment had always been irregular in shape; a cross-wall at the south, connecting the south ends of the inner walls of vats A and C, closed its south side, giving the room an inner length of 3.90 m. from north to south and a breadth at its south side of 3.25 m. In its earlier phase the plan of the workshop was the same as in the later, a central floor surrounded at three sides by vats sunk below its level. In the first phase, however, the floor seems to have been surrounded by one continuous vat 0.36 m. wide and 0.40 m. deep along its east, south and west sides. The waterproof plaster of these vats was preserved on their bottoms and adhering to the inner faces of the surrounding walls. The central area was reduced by the width of the vats to only 2.55 m. along its south side. Little more could be learned about the first period of the workshop, since the floor of the later overlay it. The date of its construction could be established, however, at some time around the middle of the fifth century, from the filling under its floor level. A heavy deposit of earth and small stones had been dumped in to level off the area before the workshop was constructed; the pottery from this filling was mostly of the first quarter of the fifth century, but it included an occasional piece to be dated in the second. This filling also contained many lumps of colored pigment; white, yellow, red and violet. Since, however, this filling was buried under the floor of the earliest workshop, the pigments can hardly have had any connection with the work done in it later on.

There seems to have been an intermediate period between the first and the last in the expansion of the house. A new west wall fronting on the Street of the Marble Workers was put up, and perhaps a new vat, A, made along its inner side. The southward extension of the house to the line of House E, and the making of the new vat at the south, B, may have been done when House E was built and before the building of the drain, though we found no evidence that the east wall of the older house had been extended southward to meet House E. The floor of the workshop was overlaid by several later earthen floors which had formed while the building was in use and its levels were gradually rising. The latest of these floors below the terrazzo floor of the final period was of rounded pebbles, carefully laid. The workshop seems to have gone out of use early; the trench of a later wall which had been cut through the floor yielded Hellenistic sherds, and none of the sherds from the filling in the vats themselves was later than Hellenistic.



Nothing whatever was found to give a hint of the use to which this elaborate establishment had been put. A shallow well in the northeast corner, or another well which lay to the north of the poros wall, may have supplied water for use in the vats. No stains had been left on the stucco of their walls to suggest that they had been used for dyeing or for any other particular purpose involving the use of color. The workshop can hardly have housed a press; no grindstones were found anywhere in the neighborhood. In the fillings over the house, and also under some of its floors, many pieces of animal bones were found, often the knobby ends of the big straight leg bones, which had been carefully sawn off. One assumes that these straight bones, after the ends had been sawn off and discarded, were fashioned into pins, needles, stili, etc.; but much of the discarded bone came from the deposits over the workshop and was presumably later, and in any case it is hard to see what use the vats would have been in the making of bone tools. There was simply not enough evidence (as in House K) from which to determine the exact activities that were carried on in this workshop.

The same was the case in the establishment to the north, separated by the wall of poros from House F, which was partly excavated, though it had been disturbed to great depth in early Roman times. This workshop contained a great tank (Pl. 74d) 3.40 m. long and 1.53 m. wide from north to south, lined with waterproof cement, and going far deeper than the vats in House F. At the north a long vat similar to those in House F ran beside the west wall of the house, connecting at its south end with the big tank, and at a higher level—its floor lay 0.50 m. above that of the tank. The workshop post-dated the drain, as the east wall of the big tank was the west wall of the drain; we could gather no more information as to its date, or its use, because it had been disturbed to bottom, probably at the time of Sulla. In the western part of the area between the big tank and House F lay a well, which had been repaired in post-Sullan times. The soft bedrock had apparently collapsed and a packing of large coarse amphoras was put in around the edges of the resulting pit. We could not dig the well because it was unsafe. The filling in the tank, evidently thrown in in Roman times, had been dug out probably at the south around the well when it was repaired; it contained pottery ranging in date from Geometric to early Roman, as well as sawn-off ends of bones and lumps of pigment. The original filling under the workshop had evidently been the same as that in and under House F.<sup>114</sup>

<sup>114</sup> A curious glassy granular substance adhered to the sides and bottom of the tank throughout, and so uniformly that there could be no doubt that it was a residue from the manufacturing processes, whatever they were, for which the tank was used. Specimens of this substance were examined microscopically by Professor F. R. Matson of the Pennsylvania State College; his report stated: "The material is an aggregate of sand grains, most of them quartz, that are held together by a glassy layer. The glass has an index of refraction of 1.593 and is isotropic with no sign of devitrification. The glassy phase was present in sheet-like layers, and was quite thin. No comment on the meaning of this. The clay which coats this aggregate is water deposited, for it forms a uniform

## HOUSE G

## Plan, Figs. 1, 5

Another workshop lay across the way, on the west side of the Street of the Marble Workers. House G was a marble-worker's shop of which only the eastern half, badly preserved, has been cleared; the western half is covered by a large house of the second or third century after Christ. The entire area was evidently occupied also in very late Roman times. A well in the northern room of the house produced pottery of the fifth century after Christ and had evidently belonged to a house lying beside the Street of the Marble Workers at the west. All other traces of this house had been obliterated in Byzantine times, together with the northeast corner of House G. The east wall of the workshop, which had extended for a distance of 10.10 m. along the street, was preserved only in its lowest bedding course, a wide packing of small stones. This foundation had been protected from the drainage running over the surface of the street by a curbing or gutter wall set in front of it in the filling at the west edge of the street, mentioned above, p. 163. The house seems to have consisted of two rooms fronting the street at the east, and a large paved court with a well at

layer on the grains. It is soft, easily removed, and forms a plastic mass when mixed with water. It would appear to have nothing to do with the original nature of the material. I refined a fragment of the sample in a porcelain crucible over a Meker burner to see if it would fuse at a fairly low temperature. I could find no difference between the fired and unfired specimens when examining them under a binocular microscope. The specific gravity of the material was not determined, but judging from the feel of the porous sample, it would not be very high, so probably it is not from a smelter. The index of refraction of the glass is much too high for a normal soda-lime silica glass. Lead raises the index rapidly, as does iron. I ran a spot test for lead, but obtained no positive results."

Miss Marie Farnsworth examined the sample by x-ray diffraction and spectrographically. She reports: "Spectrographic results, which are discussed more fully below, showed no lead or any other metal present which could possibly connect this material with a smelter. Phosphorus, however, was present as well as iron which would help to account for the index of refraction found. An x-ray diffraction pattern of the material showed quartz and clay lines. Glass does not give an x-ray pattern. Both the original material and the glassy phase, which was separated by Professor Matson under the microscope, were examined spectrographically. The glassy phase, as would be expected, showed less silica than the original material, for it had been separated from quartz grains. The alkali metals, sodium and potassium, were present in both samples as well as the alkaline earth metals, calcium and magnesium. Calcium, in particular, was present in considerable amount in both. While the spectrographic results are only qualitative, they did indicate somewhat more potassium present in the original material than in the glassy fraction. While both samples were impure and showed traces of many elements, the only other element present which was unusual and of significance was phosphorus. Strong lines for this element were detected in both the original material and the glassy phase. The presence of bones in the vicinity makes it extremely probable that they were the source of the calcium and phosphorus found in this material rather than phosphate rock. The persistence of large amounts of calcium and phosphorus in the glassy material also makes it probable that some chemical reaction involving bones has taken place, but whether for a medicinal or some other technological reason I am unable to say"

the west; perhaps a shed stood in the northern part of the court. A partition wall of which again only the lowest bedding is still in place divided the two rooms at the east; of the wall separating them from the court at the west, part of the bedding is preserved, and part of the lower wall course itself at its junction with the partition-wall dividing the two eastern rooms. The wall was of thin limestone slabs set back to back, with good faces to east and west, and packed between with rubble. The slabs were polygonal with finely finished anathyrosis at the edges; small gaps were filled with bits of stone as carefully trimmed and fitted as the large blocks. The masonry suggests a date in the fifth century rather than the fourth; we did not dig any of the filling to the east of this wall. The level of the paved court at the west was high enough to conceal much of the carefully finished west face of this wall, which was evidently meant to be exposed; the paving therefore must represent a later period of the house. All the area around the well and to a distance of 6.20 m. from the south wall of the house seems to have been paved, probably with a terrazzo floor. Only the rounded bedding stones, some of them much worn on their upper faces, remained; at the north the paved area was bordered by a curbing of thin marble and limestone slabs set on edge. Water from the paved court around the well was drained away toward the north in a channel cut in the upper face of a line of limestone blocks set behind the wall of the east room; a couple of these channel blocks were found still in place, and more had been reused as building material in the walls of houses of the Roman period in the vicinity. The well which must have been the source of the water carried off in this channel stood near the middle of the paved southern part of the court, with a well-curb of poros over its mouth. The well could not be dug to bottom because it produced gas; the few sherds which came from it were Hellenistic. A large part of its filling, however, was of pure red clay which had perhaps been used in modelling or in the making of terracotta figurines. Near by to the north a group of fragmentary Hellenistic terracottas, with more than one example from the same mould, was found broken and scattered through a filling disturbed late in Roman times. In the northern part of the court there had evidently been a shed-like building of some sort, backed against the north wall of the house. Part of its west wall foundation was found in place, with a return toward the east at the south; the trench of its east wall, plundered and refilled in early imperial times, was also found, with a return at the south toward the west. For a space between the end of the return of the west wall and the end of the return of the east wall the hard surface of the floor of the court continued through the gap in the line of the wall; here at its south side must have been the door to the shed.

We dug some of the filling of the court to the east of the shed, finding layer after layer of fine marble chips and dust. Some of the layers were of pure marble dust so tightly packed as to resemble a hard lime mortar. These layers had formed on the spot where the marble was worked, and had been trodden hard by the workmen in the

course of their comings and goings. They all dated from the fourth century; probably the lower level in the east room represents the earlier period of the establishment. The workers here may have been sculptors; the presence of clay in their well supports the idea though the few sherds from the well were later and perhaps more closely contemporary with the figurines found outside the house at the north. In any case there can be no doubt that in the fourth century the establishment was concerned with the working of marble. Most of this work was no doubt done in the open air in the court, as it is in modern times; a plentiful supply of water was available for the drilling, sawing, grinding and polishing of the stone, and the shed was conveniently situated for the storage of timbers, tools and perhaps finished work.

Two small pyres were found within the limits of the house. One of them lay in the court close by the southeast corner of the shed, the other in the south room near its west wall. The pottery from these was of the end of the fourth century, suggesting that the workshop had gone out of use by that time, perhaps to be revived later as a workshop for the making of terracottas, reusing the old well of the marble workers.<sup>115</sup>

Having looked at the houses and workshops along the Street of the Marble Workers from the southern limits of our area northward to Piraeus Street, let us return southward along the east side of the Great Drain. The whole space from Piraeus Street southward to the plateia between Houses D and E was occupied at the east by the large building of poros and limestone. To the south of it lay the scanty remains of a simple house or workshop of the fifth century, House J. Beyond this to the south lay another workshop, K, which seems to have been built and occupied as a dwelling, then turned into a marble cutter's shop, and finally became perhaps part of a workshop for making terracotta figurines. Houses J and K faced on the old roadway at the east, opposite House D. The southern part of House K and the northern part of House L beside it had been cut through by the Roman version of the drain; House L was very fragmentary, but apparently also a workshop, perhaps a terracotta factory. The ground rises toward east and south in the area of House L, and in the higher levels late disturbances had gone to bedrock. We find no more traces of early houses toward the south for some distance, until we reach the somewhat fragmentary workshop, M, across the drain from House A and still farther to the south (plan, Fig. 7).

The east side of the drain was bordered for a distance of 37.50 m. southward from Piraeus Street by the Poros Building discussed above by Miss Crosby (pp. 168-187).

#### HOUSE J

Plan, Fig. 7.

To the south of the Poros Building the bedrock of the hillside continues scarped back toward the east to a distance of more than half the width of the court, about ten

<sup>115</sup> See *Hesperia*, XX, 1951, pp. 127-28.

meters from the west line of the building. The area between the scarp at the east and the drain at the west, with the Poros Building to the north and House K at the south, was occupied by a simple house or workshop, J. Its west wall is preserved running for a distance of 5.30 m. beside the old roadway, but set back a meter or so from the line of the Poros Building. This west wall of the house returns at either end toward the east; parallel to it and 3.90 m. away at the east is a fragment of a wall which may have divided the house into two rooms. The south wall of the house runs eastward to a distance of 5.40 m. from the corner before breaking off; it may have continued eastward to the scarp in the hillside. Entrance to the house was through a doorway 1.20 m. wide in its south wall, near the corner. The remains, then, suggest a long rectangular house divided by a cross wall into two rooms at east and west. To the north there was a gap or passage between the corner of the house and the south wall of the Poros Building, which was later blocked. To the south also there was a narrow passage between Houses J and K, doubtless left to give access from the street at the west to House K, whose door lay in its northeast side. The remains of House J are scanty and need be noticed only briefly; the walls are preserved above the rough bedding course in only one short stretch at the north. The house was built early, perhaps in the first half of the fifth century and before the Poros Building existed. The filling of a pit through the floor of House J produced pottery of the same date as that from under the Poros Building, suggesting that House J was abandoned at the time of the building operations to the north. It is probable, indeed, that the area of House J was taken over as a sort of annex to the Poros Building. At the west a wall bedding cut in the bedrock continues the line of the west wall of the Poros Building southward, in front of House J. All the stones which lay in this wall bedding have been stolen except two at its south end (Pl. 75a). There, two blocks are still in place: a large squared block of limestone laid on its side, where its width just fits that of the bedding, and on it a squared block of conglomerate. The wall end is later than the north wall of House K, which was cut away to make room for it; it is covered, as appears in the photograph, by a retaining wall of Roman times which followed the line of the north wall of K. Our information about this heavy foundation wall is not very satisfactory: all we can say is that the heavy bedding stone exactly fits the cutting in bedrock made to receive it, and that the cutting runs north as far as the southwest corner of the Poros Building and on the same line as its west wall. Whether this wall formed the west boundary of an annex to the Poros Building, or exactly when it was put in, we cannot say; in this area the Byzantine trench went deep, and all stones of value were removed.<sup>116</sup>

<sup>116</sup> The east wall of the drain, which stands to its full height immediately to the west, was not plundered because it was covered above by the concrete construction of the Roman bath, which the Byzantines thought it too much trouble to try to break up. The north wall of House K, and the Roman retaining wall over it (which, indeed, covered the only blocks still in situ of the wall in

## HOUSE K

Plan, Figs. 1, 7, 16

House K, a workshop, stood in a great cutting in the bedrock of the hillside to the south of the Poros Building and House J. The cutting had evidently been made for some other purpose and never used. The cutting may have been made for the

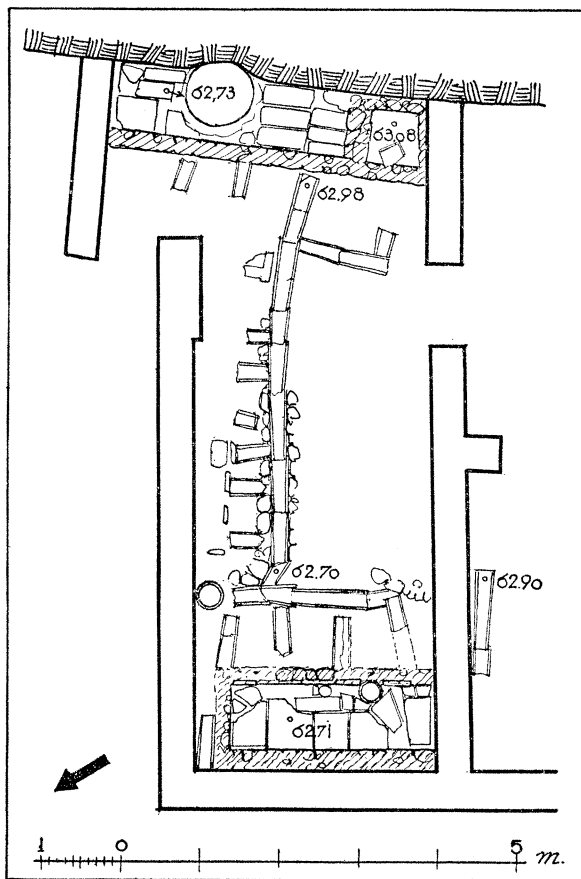


Fig. 16. House K: Plan of North Rooms and Tile Water Systems of Later Fourth Century.

corner of a building; the bedrock was scarped back, leaving a levelled corner with vertical faces of cut rock to east and south, meeting at approximately a ninety degree angle at the corner. Outside this scarp in the hillside to east and south, and obviously

question) lay just beyond the southern margin of the Byzantine trench. The well in House J was probably originally Hellenistic or Roman, since it was tiled; but it had been reused in Byzantine times and produced coarse Byzantine pottery to bottom.

belonging with it, lay another cutting higher on the slope (Pl. 75b). This took the form of a wide shallow trench flat at the bottom, perhaps intended as a wall bedding. The outer cutting lay parallel to the inner at the east 0.60 m. from it, at the south only 0.40 m.; its width at the east was 0.80 m.; at the south somewhat narrower, only 0.70 m. The westward extent of the cutting at the south could not be followed because it was later cut through by the Roman drain. The purpose for which these cuttings were made is not known; it is possible that the Poros Building was planned to stand here, and that after the site had been partly prepared it was decided to shift the position of the new building farther toward the north. House K, which eventually occupied the abandoned site, seems to have been built not earlier than the second half of the fifth century as late or later than the Poros Building itself.

The abandoned cutting, then, was occupied by squatters who built House K perhaps at first as a dwelling, though it later became a marble workers' shop. The west wall of the house bordered the roadway in the bottom of the valley opposite Houses C-D to a distance of 8.60 m.; it was built with a slight outward bend at its south end, perhaps in order to make the southwest corner a right angle. The corner itself is preserved, and a part of the south wall, to the south of the Roman drain. Most of the south wall is missing, destroyed by the Roman drain; if it continued on the same line as the piece preserved at the west, it must have fallen just outside the outer south cutting in bedrock. The north wall of the building, and an east-west interior wall parallel to it and 3.00 m. to the south, were carried eastward from the street wall to the face of the bedrock scarp at the east, a distance of about 8.40 m. The area thus enclosed was further divided by a north-south crosswall, leaving four rooms. These were connected by doors, one between the two rooms at the east, one between the two at the south, and one between the two rooms at the north; there was no direct communication between the northwest and the southwest rooms. We found no evidence as to how the house was closed at the east; the scarp in the hillside stood to a height of almost two meters, but was interrupted by a sort of shelf in which lay the wide outer wall bedding to the east of the main cutting. Presumably the east wall of the house stood on the bedrock between the inner cutting and the outer wall bedding, where there was a ledge 0.60 m. wide; if so, however, no trace remained of it.

The walls were built of limestone, carefully trimmed and fitted (Pl. 75c, d) to a height of 0.60 m.; their smoothly finished tops served as socles for an upper construction of mud brick. Their thickness was 0.45 m., as was that of the walls of the houses to the west of the street. Evidently the walls had all been built at the same time, but in sections, and by two masons. Neither the north wall nor the interior east-west wall was bonded into the west wall of the house at its west end; both abutted against the back face of the west wall, which had evidently been built first. The north-south interior wall was also built before the two east-west walls; its north end was visible in the face of the north wall of the house, which evidently had been built in

two sections, one to the east, the other to the west of the crosswall. The eastern section was somewhat thicker than the western; at its east end lay the door of the house, about 1.50 m. wide from the end of the north wall to the bedrock scarp at the east. The wall was finished off at the west of the door by a good jamb block, turned to cover the thickness of the wall and with a good finished face beside the door. No trace of a jamb was found at the other side, though its position was cut through by a Roman well; instead, another wall lying farther to the north and with a slightly different orientation seems to have served as a screen across the doorway at the north. The approach to House K from the street at the west was through a narrow passage left between it and House J, along its north side and so into the house by the door in its northeast corner.

The internal wall which ran from east to west was also built in sections, which did not carry through on an absolutely straight line. The western section ran from the west side of the house to the wall which divided it from north to south; the second section ran east from this dividing wall to the doorway; the third lay to the east of the doorway, as far as the scarp. The north-south interior wall was already built when the east-west one was made; the ends of both the sections of the latter abutted against its east and west faces. Thus it would appear that in building the house the north-south walls were made first, and then the east-west ones filled in between them. Doubtless two masons were employed, and each built separate sections. The difference in style between the north wall and the east-west internal wall (Pl. 75c, d; Fig. 17) is striking: the former was made with large stones very little trimmed but laid with their edges tangent, and a minimum of small stone filling. The latter was made with large stones somewhat more carefully trimmed, but set apart, the gaps between them filled with stacked work and masonry of small stones carefully fitted. The interior wall resembles the peribolos of the Tritopatreion at the Kerameikos, dated by Wrede in the second half of the fifth century.<sup>117</sup> The walls of House K, though differing between themselves in method, were all equally carefully made, with tight joints well fitted and no filling of earth between the stones. It is surprising that the laying out of the house was done so carelessly, while such pains were expended in the building of the various sections of its walls.

We could not see the outer face of the west wall, which fronted on the street, because the drain wall passed immediately in front of it. Provision had been made for the drainage of the house, however, in the southwest room by leaving a double opening for the water to pass through into the street. The double hole was made by putting a small pillar-like stone in the middle of the opening; the stone served to support the middle of the large limestone block which spanned the opening above (Pl. 76a). In the same room we found evidence for the date of the construction of

<sup>117</sup> Wrede, *Attische Mauern*, no. 112.



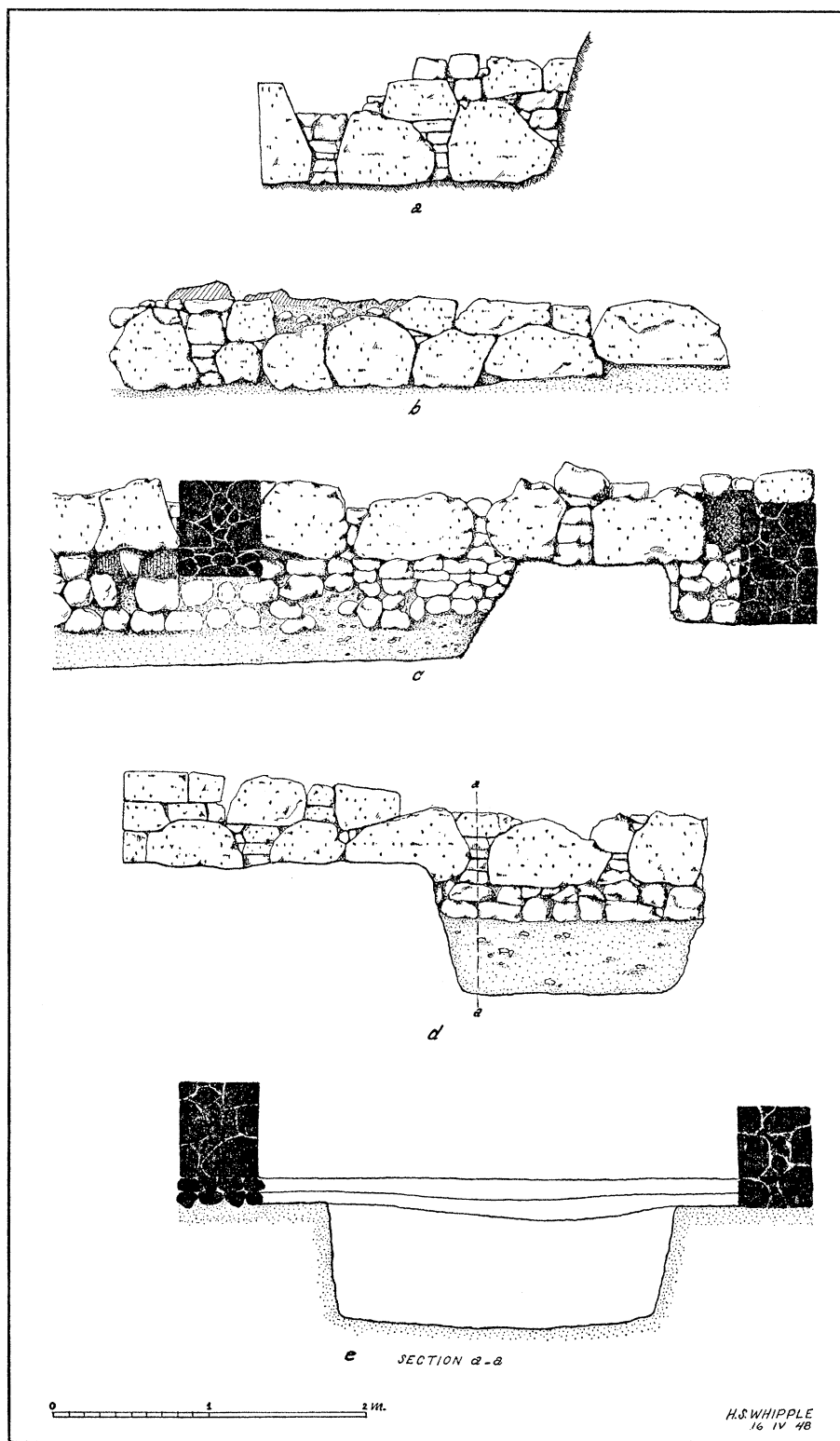


Fig. 17. House K: Elevations of Walls and Section through Northwest Room.

a—Door Jamb and East End of Long Interior Wall.

b—Outer Face of North Wall of House, West End.

c—Inner Face of West Wall of House, Showing Drainage Outlets.

d—Western Section of Long Interior Wall: North Face.

e—North-South Section through the Northwest Room, Showing Pit and Successive Floors.

the house: the fill below its first floor contained many small chips of limestone, doubtless made when the wall blocks of the house were trimmed on the spot. The pottery from this filling was of the middle to the third quarter of the fifth century; the house was evidently built at some time in the third quarter, after the Poros Building had been put up at the north.

It was evidently intended as a dwelling with four rooms of which one, which lay at the northeast and which contained the well, may have been an open court. The building was soon turned into a workshop in which marble cutting was done. With the change, which took place early in the fourth century, various adjustments were made: the two rooms at the south were made into one by taking down all of the wall between them to the south of the door, leaving the north jamb as a sort of buttress against the wall at the north, and the well was filled. The house now had a court at the northeast, in which marble was cut, and a long court at the south, in which the marble chips and dust were apparently stored. The time at which this transformation took place was given approximately by the filling of the well. At the bottom lay a couple of coarse water jars of the late fifth century, which had evidently been lost down the well at the end of its period of use. Also at the bottom lay a mass of broken tiles fallen from the curbing of the well itself. We were able to piece together one of these complete (Pl. 77a); it is of interest because it is from the earliest tiled well so far found in the Agora, and has instead of the usual lunate lifting-hole common in the fourth century and thereafter, a large square lifting-hole.<sup>118</sup> The well had been filled all at once with a miscellaneous dump which contained some marble chips, a great many animal bones and some sawn-off ends of animal bones such as were found in House F and to the north of it, and a quantity of very fragmentary pottery of the late fifth century. The fill in the mouth of the well, evidently thrown in after the deep dump had settled, was slightly later; in addition to the oinochoe and the epinetron published below, it produced twenty-eight loomweights, a combination which suggests that some of the dowry of the lady of the house was thrown into the well.

1. *Red-Figured Oinochoe*. Pl. 77c, d.

Inv. P 18556. H. 0.12 m. Diam. 0.094 m.

The handle and a few small fragments, including part of the hare and of the upper part of the woman's figure, filled in with plaster. Ovule border above and below the scene. The underside reserved. At the lower left corner of the scene, a jug on the ground. Eros, running right, bending forward, is about to throw a ball to a woman who faces him. Between the two a hare leaps toward the woman. Added

clay for Eros' fillet and ball, and for three ornaments to the woman's hairdress. Compare a fourth century lid, *Compte Rendu*, 1880, pl. 5, 1 (= Weicker, *Seelenvögel*, p. 167, fig. 87 = Buschor, *Musen des Jenseits*, p. 55, fig. 42). For the date of this last, compare the white Eros on the lid in Stuttgart, Schefold, *Untersuchungen*, pl. 15, 44, which is somewhat later. Compare further a lid in Brussels, *C.V.A.*, pl. III I d, 4, 3, contemporary with such works by the Meleager painter as the calyx krater

<sup>118</sup> Inv. A 1370. H. 0.573 m. W. (chord) 0.89 m.

Würzburg 523 (*A.R.V.*, p. 871, 6), see also a bell-krater in Naples assigned to the painter of the Oxford Grypomachy (*A.R.V.*, p. 877, no. 5; Schefold, *op. cit.*, fig. 79). The fleshiness and proportions of the male body appear on some of the Jena painter's work, especially on the cup in Ensérune, *A.R.V.*, p. 881, 33. The woman's pose, however, is not one which long outlasts the "sub-Meidian," and her face and

dress can be paralleled on many small vases from around the turn of the century and shortly after. About 390 B.C.

2. *Unglazed Epinetron*. Pl. 77b.

Inv. P 18605. L. 0.237 m. W. 0.12 m. H. 0.088 m. Two small pieces missing.

Handmade of micaceous cooking-ware fabric, unglazed and undecorated.

The filling of the well gives us approximately the time of the changeover in the use of House K from dwelling to workshop. The northwest room seems to have remained roofed and to have been used as a storeroom, perhaps in the same way as was the shed in House G. At some time, probably just before the changeover was made, a great pit was dug through the floor of this room. The sherds from the earth thrown in to refill it were late fifth and very early fourth century; after the pit had been refilled a good flooring of clean clay was laid over the new surface. The refill in the pit settled, however, and more fill had to be thrown into the resultant hollow, and a new clay floor laid. This seems again to have been done before the fill in the pit had finished settling, and a third and final filling and flooring brought the floor of the room to the desired level surface (section, Fig. 17, e).

The actual marble working seems to have been done in the northeast room of the house, its old court. Here were found many layers of fine marble chips and dust, tramped hard. The new long court at the south seems to have been used for the storage of marble chips. In it rough retaining walls were made from time to time, to form bins of a sort, into which the chips were thrown, either to get them out of the way or to store them until some use could be made of them. It has already been noted that large pithoi set through the floors of the Poros Building after it had been given over to the stone cutters were used for the storage of marble chips; apparently they were saved to be put to some use, perhaps to be ground to dust for the making of marble stucco, or perhaps to be burned for lime; some, as we have noticed above, were used for patching the street surfaces. Whatever may have been the purpose for which they were saved, production in House K far outstripped consumption. The first retaining wall was laid across the southeast corner of the building, in a curving line from its east to its south side; later, as the "bin" behind it filled up, more retaining walls were made running outward from the first (Pls. 76a, b) and apparently closed at the north by a retaining wall parallel to the first, which we did not find preserved. This series of compartments seems to have been made from time to time as needed when the earlier ones had filled; finally the corner outside the north door to the east was filled with marble chips held back by rough retaining walls to west and south. The chips themselves were all of white marble, presumably Pentelic; none

were noted of the coarser-grained island marbles. No unfinished or damaged discards were found among them to show whether this workshop had made herms, sculpture or furniture. The sherds found occasionally among the marble chips in the bins in which they were stored were of the late fifth century and well into the first half of the fourth; House K was apparently used as a shop for the working of marble for about a generation, from some time in the first quarter until about the middle of the fourth century. The change-over from dwelling to workshop was made shortly after the Great Drain was built; some time near the middle of the fourth century the building was altered and put to yet another use which we have not been able to define.

This change came at about the same time as the later altering of the houses on the west side of the drain, A and C-D. As at the west the change involved chiefly a raising of the level, perhaps in consequence of floods in the drain. The floor level of House K was raised by more than half a meter, and its internal walls were taken down altogether: the north-south wall was completely buried under the new floor, and all the superstructure of mud brick was taken from the stone socle of the east-west one. The top of the socle lay at the level of the new floor; its upper face shows in places considerable wear from traffic which passed over it, acquired while it lay exposed in the new floor. Presumably the north and west walls continued to enclose the area, which must now have been unroofed and open to the sky. The north wall of the oldest house was later used as the foundation for a retaining wall of Roman times bedded directly on it, wherefore we have no evidence as to its state in the latest period of House K; but we assume that the area remained closed at the north. In order to raise the level a dump of earth and marble chips was thrown in to the full height of the central east-west wall socle; the date of the raising of the floor could be established at about the middle of the fourth century from the pottery found in this filling. Included among the sherds were fragments of plastic lekythoi, figurines of the early fourth century, and some pieces of moulds which suggested that a coroplast's workshop was already in operation near by. In addition to the two characteristic pieces published below a number of fragments of Type VII lamps of the earlier glazed variety characteristic of the first half of the fourth century<sup>119</sup> served to fix the date of the new arrangements made in House K.

1. *Black-Glazed One-Handled Kantharos*. Pl. 77e.

Inv. P 18566. P. H. 0.072 m. Diam. at rim 0.062 m.

The foot missing, and chips from the rim and wall. Broad shallow rounded body and narrow upper wall, slightly concave in section; swollen rim. One handle, shoulder to below rim. Lustrous glaze, fired grey to red, and much worn.

A comparable kantharos: *Olynthus*, XIII, no. 511, pl. 188.

2. *Black-Glazed Skyphos*. Pl. 77f.

Inv. P 19560. H. 0.104 m. Diam. at rim 0.118 m.

One handle missing and the adjoining rim. Lower body drawn in above ring foot. Glazed

<sup>119</sup> Broneer, *Corinth* IV, ii, *Terracotta Lamps*, pp. 45 ff., pls. 111, 120.

over all except bottom, decorated with ring and dot.

first or early second quarter of the fourth century.

Comparable to *Olynthus*, V, 973, pl. 185; late

Over this new floor level in the north part of the house (i. e., over the two north rooms) was laid a system of tile basins and channels. At east and west were large shallow rectangular basins floored and edged with tiles (Pl. 78a-c; Fig. 16). The basin at the west was 2.60 m. long from north to south, and 0.95 m. wide, set against the west wall of the house. Four inverted roof tiles ran eastward from its edge, perhaps as overflow outlets, to a line of tiles which ran parallel to its east side, and which carried the overflow northward. At the east side of the room there were two basins set against the east scarp of the hillside, a larger one at the north, 2.90 m. in length, and a smaller one at the south, which overlay the old well of the house. The small basin at the south had one overflow channel toward the west, the larger one, three; these were connected by a line running parallel to the basin at the west. A central line of drain tiles connected the two overflow channels to west and east of the two basins, running westward, with a jog to pass the north end of the western basin, to empty into the drain at the west through a hole in the corner of the house wall. The system resembled in plan an H with elongated horizontal bar; the vertical sides collected the overflow from the basins at either end, the central cross piece carried it off into the drain at the west. But along the north side of this central link lay six more short roof-tile drains, evidently intended to bring liquid into the central line. The depth of the western basin was 0.25 m.; it was made from all sorts of reused material, as were also the lines of drains connecting and draining the basins. Square floor tiles of two sizes, measuring 0.47 m. and 0.57 m. on the side respectively, were used; some of these had their vertical faces grooved horizontally, perhaps so that they might be bound together with a filling of clay in the grooves, and others were decorated on their upper faces with crosses of glaze stripes drawn from corner to corner. Fragments of pan tiles and well tiles, some of the latter perhaps from the old house well, were used as covers over the channels, which were made of curved roof cover-tiles, laid upside down. Two of these were complete, with a full length each of 0.95 m. All of this reused material was rather loosely thrown together without mortar or binding of any sort. Only the main lines of drainage—the two verticals and the horizontals of the “H”—seem to have been covered; the short overflow channels from the basins, and the six tributaries running from the north into the main line, seem never to have been covered. The whole gave a very makeshift impression, as if thrown together for daily use in some technical process and carelessly patched and repaired as it became necessary. It is possible that this complex was connected with a terracotta factory which lay to the south. The basins at east and west may have been used for the cleaning and mixing of clay. In modern potteries shallow rectangular basins are

used, usually a series of them at different levels. The clay is mixed with water and the liquid strained off into another basin at a lower level, where it is again mixed and stirred and strained off. Finally it comes to rest in a wide shallow basin where it is allowed to dry until pieces can be cut off as needed for the making of the pottery. The basins at the east and west of our complex may have been used for the cleaning and drying of clay. This would perhaps call for another still larger basin at the north, of which the overflow was taken off by six outlets into the main line of drainage. No trace of any such basin was found; but without it the six side channels seem inexplicable. It must be remembered that the retaining wall of Roman times came to below this level, and that the entire area to the north of it (over House J) had been cut away in Byzantine times.

To the south of the complex of drainage tiles and basins, in the two southern rooms of House K, a line of tile drain was laid shortly after the middle of the fourth century, which apparently brought waste water from the houses above the scarp at the east and emptied it into the Great Drain (Pl. 78d). As a collecting pit an old well was used; it was filled to the level desired, then a tunnel was dug under the bedrock toward the west, which emerged just to the north of the southeast corner of House K. The drainage was carried in—or rather, under—a line of half elliptical tiles which covered it; there was no lower series, nor any terracotta channel inside. This series of tiles was put into a trench made in the marble chip fill of House K. The line it takes is of interest in that it must have entered the Great Drain at about the point where the later Roman drain was brought into it, suggesting that here an inlet of some sort had been left in the east side of the drain when it was built. This line of drainage seems to have continued in use until some time in the third century when the collecting pit in the hillside above was filled up.

The area occupied by House K was covered in Hellenistic times by a house or shop of some sort, of which only foundations remained. The packing of small stones on which its walls were bedded followed the line of the interior wall which had divided House K into halves, to north and to south; north-south cross foundations were found at east and west (Pl. 78d). None of the superstructure remained; the whole was buried under a filling thrown in to raise the level when a terrace wall was built on the line of the north wall of House K in Roman times, probably in the second century A.D.

### HOUSE L

Plan, Figs. 1, 7

House L lay immediately to the south of K, facing on the roadway opposite House C. In the area of House L the bedrock rises rapidly toward the east and south, so that only its northwest corner, with parts of its north and west walls, were at sufficient depth to be preserved. The north wall, like the south wall of House K, was

cut through by the Roman drain; its line is continued to the east of the drain, however, and part-way up the hillside, by a short stretch of early wall which may well have belonged to House L. This wall is set against a scarp in the bedrock, which turns south at its east end; the wall itself may have also turned south, following the scarp, to serve as an east wall for House L, which would in that case have had a depth of 12 m. from the street at the west. The west wall of the house is preserved to a length of 7.60 m. southward from the corner; then it breaks off, and we have no way of knowing how far southward House L extended. In front of this wall, however, we found a series of four pits cut into the bedrock, which slopes rapidly down to the drain. In the bottom of each of these pits lay a flat stone which had probably been laid as a bedding for an upright wooden post or beam, perhaps the supports for a balcony in front of the house. The walls of House L were of the usual neat polygonal limestone masonry, through a good part of their extent built against a scarping-back of the hillside made for them. The house was built before the south branch of the Great Drain was made; all of its lower face was covered by the fill thrown behind the east drain wall after it had been built. The four pits in which wooden posts had been bedded were filled with the same dump of greenish sand, suggesting that the balcony or whatever it was that they supported was abandoned at this time. The pottery from this filling not only serves to help in the dating of the drain, but it also proves that House L was already in existence when it was built. The greenish sandy filling was the same as that used in the filling behind the west drain wall, under the corner of Room 4 of House C, and the pottery was closely similar. Although we found no joins between the sherds from the two fillings it remains most likely that they came from the same place: from the filling of the older drain channel which was dug out when the new drain was made. The most characteristic and significant pieces from this filling have been selected and described below by Peter Corbett.

1. *Fragmentary Red-Figured Epinetron*. Pl. 79.

Inv. P 18283. Max. dim. 0.137 m.

Three joining pieces preserve part of one side, with the finished edge, and part of the curved knee-piece. At the right of the figured scene is a vertical border composed of an oblique palmette scroll. On the side is a woman seated to left in a chair. She wears an Ionic chiton and a himation wrapped around her waist and legs; around her head is a fillet. In her left hand she holds a flower, in her right an alabastron. Before her stands a woman in a Doric chiton, whose right elbow rests on the

cushions of a couch. Partial relief contour; white for the flower.

Comparison with the work of the Cassel painter (*A.R.V.*, pp. 674-5) suggests that this vase is to be dated in the early thirties. Compare the vertical border with the palmette scroll on an onos by the Clio painter (*A.R.V.*, p. 673, 20).

2. *Fragment of a Red-Figured Mug* (oinochoe type 8). Pl. 79.

Inv. P 18273. Max. dim. 0.086 m.

A single fragment, broken, all round, giving part of the wall and the start of the neck. A

youth to left, wearing chlamys and boots, with a spear in his left hand; he extends his right hand toward a figure seated to right, who uses his cloak as a cushion. Reserved ground line. No relief contour; glaze fired grey in the background to the figured scene. Contemporary with a stemless cup in Berlin (2728; *A.R.V.*, p. 742, IV: "These (cups) stand between the Codrus painter and Aison: the Berlin stemless nearer to Aison, the others to the Codrus painter.")

3. *Red-Figured Cup Fragment*. Pl. 79.

*Paralipomena* to *A.R.V.*, p. 623; "Koropi painter, add as No. 15."

Inv. P 18281. Est. diam. of rim 0.165 m.

Three joining pieces give part of the rim and wall, with one handle root. Nothing remains of the interior decoration. On the exterior, beside the handle ornament, is a youth to right. He is nude save for a cloak thrown over his left shoulder; in his left hand he holds a javelin. Comparison with the painter's cups in Brussels and Berkeley (*A.R.V.*, p. 623, 1 and 9) shows that the object in his extended right hand was a strigil; below it is the outstretched hand of another figure. Partial relief contour; good glaze.

4. *Red-Figured Bell-Krater Fragment*. Pl. 79.

*Paralipomena* to *A.R.V.*, p. 779: "painter of Munich 2335: add, as no. 33 bis (very late)."

Inv. P 18291. Max. dim. 0.098 m.

A single fragment from the upper wall. A wreathed maenad with a thyrsos looks left toward a bearded satyr, part of whose face survives at the right of the fragment. His right hand is extended to grasp her shoulder. Relief contour for the faces; white for the leaves of the maenad's wreath.

5. *Red-Figured Bell-Krater*. Pl. 79.

Inv. P 18274. H. 0.123 m. Diam. 0.133 m.

One fragment of rim and one handle-bar missing. On A) a woman wearing a Doric chiton runs to right and looks back to the Eros who flies in pursuit. Between the two figures is a volute plant. On B) a draped youth to left, holding a strigil. On the rim, and below the figured scene, an ovule border. The inside of the handles, and the space between the roots, reserved; so also the vertical face of the foot. A scraped ring at the junction of foot and body. No relief contour. When the background was filled in, Eros' feet and the tip of his wing were covered over. Glaze fired red in places.

Compare two small bell-kraters in Würzburg (Langlotz, *Griechische Vasen in Würzburg*, pl. 213, 524 and 525; there dated "um 420" and "um 410" respectively), and the reverse of a krater in the Louvre (G 502; *C.V.A.* 5, III Id, pl. 35, 8); with the woman on A) compare a fragment from the Grave of the Lacedaemonians (*Arch. Anz.*, 1937, p. 193-4, fig. 13, above, left). The shape also argues a date before the end of the fifth century.

Two red-figured fragments from this deposit have already been published (*Hesperia*, XVII, 1948, pl. 67, 4; pl. 68, 6; see also pp. 188, 190). The first, from a calyx-krater in the manner of Polygnotos (*Paralipomena* to *A.R.V.*, p. 682; "No. 6 bis") is of the same period as the epinetron, No. 1; the second seems contemporary with No. 2 in this catalogue. The figured vases would suggest that the deposit originally accumulated in the thirties and twenties of the fifth century, but the presence of the bell-krater, No. 5, shows that the closing date is toward the end of the century. The black-glazed pottery was fragmentary; the most significant pieces were from bosals, and, while they confirm the fifth century dating, they do not contribute to greater precision (see *Hesperia*, XVIII, 1949, pp. 331-332, No. 77).

The corner of House L was occupied by a floor of terrazzo work laid with a definite slope toward the west, and apparently turned up at the edges to hold liquid.



To the east of this floor lay three cuttings in the bedrock, one of which was lined with waterproof cement and a second occupied by a large terracotta basin or lekane. The third was a simple cutting, but cement lining may have disappeared from its sides. The filling in these pits was late Hellenistic, that over the floor itself was late Roman. Floor and pits, however, must have been connected and used in the same operation, and since the pits were out of use by late Hellenistic times we must conclude that they were made earlier, and the floor with them. It is most probable, though not susceptible of proof, that the terrazzo floor was made about the middle of the fourth century when similar floors were being laid down in Houses C, D and F to the west of the drain. If this is so, then the floor must belong to a mid-fourth century period of House L, and some manufacturing operation was carried on in the house which made use of the floor and of the pits and basin in the bedrock to the east of it. We know that somewhere in the neighborhood a terracotta factory was in operation from the fourth century down to Roman times; quantities of fragments of figurines and moulds were found, and even bits of small bowls which had contained the colors with which the figurines were painted: red, blue and lavender. Although these characteristic bits of debris from a workshop making terracotta figurines were scattered well over the whole southeastern part of the area, the greatest mass of them was found just to the east of House L in a filling which had been used to fill up a gap between the west wall of House N, which lay beside the Roman drain, and a deep cutting-back of the hill-side which extended a couple of meters farther to the east (plan, Figs. 1, 7). This dump must have been brought from near by, and it is tempting to associate it with the apparatus in House L, and perhaps the basin and drainage system in House K, which seem well suited to the working and preparation of clay. A source of water for the factory lay just to the southeast of the floor in a well of unusually great diameter. We could not dig this well to bottom, as the bedrock was here soft and dangerous; its filling as far as we dug (to—9 m.) was entirely of dug hardpan, probably thrown in to fill the well when the channel of the Roman drain was cut. House L, with its own source of water, had also what seems to be suitable equipment for a terracotta factory, very similar to that of the recently published terracotta factory in the Potters' Quarter at Corinth:<sup>120</sup> sloped floor, pits in bedrock lined with hydraulic cement, terracotta basins, etc. The figurines found here and in the immediate neighborhood were made over a long period, from the fourth through the first centuries before Christ, but all traces of the establishment, excepting only the floor and the pits, were wiped away.

<sup>120</sup> A. N. Stillwell, *Corinth*, XV, i, *The Potters' Quarter*, pp. 16-17, 39 ff. Sloped floors with up-turned edges, and pits in the bedrock in which clay was found, seem to have been used in the working of clay, and resemble our terrazzo floor and bedrock pits. The figurines, moulds, etc. from our area will be the subject of a study by Dorothy Burr Thompson; hence none of them are published here.

## HOUSE M

Plan, Figs. 1, 7; Section, Fig. 18.

Opposite House A, to the east not only of the Great Drain but also of the deep earlier drainage channel which, as we have seen, must have predated the building of House A, lay the remains of another house or workshop, M, in part earlier than the drain and in part contemporary with it. Directly opposite House A and parallel to it was uncovered the west wall of a small house or room 7.70 m. in length, with a return toward the east at either end. These returns, the north and south walls of the house, break off where they meet the sloping hillside which rises toward the east, and no other remains of this phase of the house could be traced. The few sherds found in undisturbed filling behind the west wall were of the late sixth and early fifth century; the wall was probably already standing when the channel of the earlier drain was cut.

To the south of this room lay a great shaft and well cut deep into the bedrock, along the east side of the early drain channel. The rectangular shaft was carried down to a depth of 5.75 m. and its sides, lined with carefully built walls and cut bedrock below them, measured 3.60 m. in length from north to south, and 1.40 m. in width at the bottom. The longer sides, however, were made with a downward slope or batter so that the width at the top was only 1.09 m., spanned by flat cover slabs laid across from side to side. The masonry was carried only about half-way to bottom. At the east side (section, Fig. 18) there were four courses of squared blocks, with one block of a fifth course below at the north and two at the south. The north wall was of four courses, the west of only two at its north end, deepening to four at its south. At the south two courses at the top were supported on rubble masonry below, and a narrow ledge or shelf projected in front of the bottom of the wall. At the other sides the bedrock was trimmed to flat vertical faces flush with those of the masonry walls above. Near the south end of the shaft a well was cut through its floor, 1.20 m. in diameter and lined with drums of tiles. An opening was left in the cover slabs of the shaft above the mouth of the well, its south side curved, its north squared. A great natural cave or hollow opened in the bedrock to the southwest, connecting with the shaft at its bottom.

The well was dug to -24.85 m. without finding bottom; the flow of water was so great that it seemed hopeless to try to bail it out to greater depth. All the filling to this depth, as well as in the shaft above and in the cave at the southwest, was late Roman of the fourth and fifth centuries. Of eleven coins found in the well two were identifiable as fourth century Roman; one was of Theodosius I (A.D. 379-395) and four were of Honorius (A.D. 395-423).<sup>121</sup> Well and shaft had apparently continued in use, or had

<sup>121</sup> The shaft was left open at the close of the 1940 campaign. When it was cleaned out again in 1946 a sample of a modern accumulation was recovered: several dozen tin cans; fragments of several lekane; four or five yaourt bowls, broken; one bicycle wheel and two worn-out tires; a

been found and reused, late into the Roman period. This no doubt was because of the excellent supply of water it afforded. It must have been built in order to store water, using the natural cave at the southwest as a supplementary storage chamber. The shaft was built at the same time as was the Great Drain, the beginning of the fourth century B.C.; this was indicated not only by the style of the masonry but by a

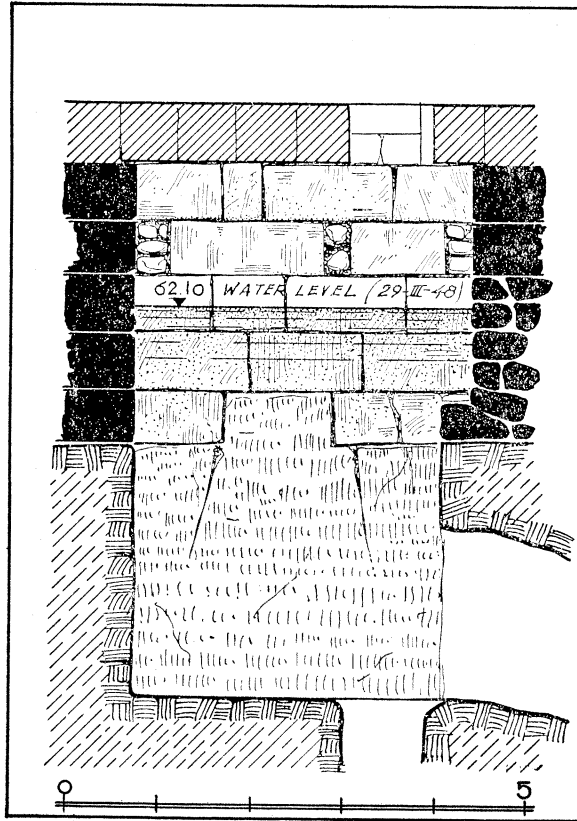


Fig. 18. Shaft under House M: Section and Elevation of East Wall, Showing Cave at South and Mouth of Well.

little undisturbed filling at the bottom of the chamber itself at one corner; and also from crannies in the cave, where the sherds were all of the late fifth century. The west wall of the shaft, moreover, was continued toward the north by an extension carefully built and fitted of small rubble (Pl. 82c). A short distance to the north of

corner of iron pipe; an iron hoop, perhaps from a wagon-wheel; a bicycle sprocket and fork; a tin pill-box, made in Hamburg; two empty shoe-polish tins; a decrepit broom; a mortar shell; and two clips with 9 mm. cartridges. Perhaps the relation between a modern and an ancient well accumulation would bear pondering.

the shaft this wall curved westward, then again westward to bond at its west end into the back of the drain wall. In its course it passed right across the line of the earlier drain channel, blocking it. The ends of the shaft which underlay the upper part of the wall, which was carried over the west ends of the cover slabs, were marked by a large orthostate in the construction, one over each corner. All the filling behind this wall to the south was of the late fifth century; it was evidently thrown in at once to the west and south of this wall and behind (east of) the drain wall in order to level off the whole area at the time of the construction of the drain. A basin or lekane of terracotta set against the face of this wall at its bend suggested some sort of manufacturing operation; a tile conduit brought water to it. The basin seems at one time to have been broken; it was raised, the break carefully mended with lead clamps, and then it was put back. The copious supply of water from shaft and well seems to have been used throughout antiquity in some sort of a workshop above. The lekane already mentioned belonged to the earliest period; to a later, probably Hellenistic, period belonged a floor of pebbles in cement laid beside the shaft at the east. The edges of this floor, which recalls that in House L, could be traced, with a door in the south side; but the Roman drain, and the still later water channel, had been carried across it (Pl. 82d) and little was left but the floor itself. The latest phase of the workshop was represented by a great square tank of Roman times, built of rubble and cement, with floor turned up at the edges and corners bevelled to hold liquid, no doubt water from the shaft and well immediately beneath. This tank was in use from early in the second century after Christ until the Herulian destruction. It had in all six floors laid successively one on top of the other, probably repairs made when the earlier floors had sprung leaks.<sup>122</sup> We found no evidence as to the uses to which the water from the shaft and well was put through the long period from the fourth century before Christ to the middle of the third century after; but it would seem certain that it was the plentiful water supply that attracted artisans of some sort to the spot, and kept them there for six and a half centuries.

## OTHER REMAINS OF THE FIFTH AND FOURTH CENTURIES

Scattered traces of houses and workshops, as well as other deposits of the fifth and fourth centuries were found throughout the area. On the hillside to the west of Areopagus Street the west wall of Houses N and O had evidently belonged to houses of an earlier period and had been reused by the Roman houses. Where the wall is preserved beside House O it is partly of original early construction, partly a Roman repair in which was incorporated much of the earlier material. Some fragments of walls on the bedrock under Houses N-O probably belonged with this wall to a house

<sup>122</sup> On the general plan, Fig. 1. This establishment is the one remarked on because of its longevity in *Hesperia*, XVI, 1947, p. 206.

or houses of the fifth and fourth centuries; in the area were several wells, which had been filled at the end of the fifth century, and a cistern of which the filling was evidently a dump containing fifth century sherds, but which had been thrown into the cistern in the third century. Not enough was left of these houses to give even an intimation of their plans, and we may pass over them with a mere mention.

The west side of the Street of the Marble Workers at its bend, later occupied by the western Roman bath (plan, Fig. 1), had been enclosed in the fourth century or early in the third by a peribolos of poros blocks. The line of blocks at the west was in place over a stretch of several meters; to the north of the bath deep Byzantine disturbance had gone to bedrock and broken off the continuation of the poros wall, which may once have extended as far to the north as House G. The curved retaining wall, or peribolos wall, beside the Street of the Marble Workers had evidently been added later, in the third century; it served to enclose the south end, and part of the east side, of the same structure as the poros wall at the west. The builders of the Roman bath, and the Byzantine plunderers, had destroyed all evidence as to the use to which this enclosure had been put.

Somewhat to the southwest on the other side of the Street of the Marble Workers, between House C at the east and the alley running southward at the west, and north of Grave 50,<sup>123</sup> a great pit in the bedrock had been filled up in the second quarter of the fifth century, apparently as part of a levelling operation. The dump in this pit was of interest because it produced ostraka in great numbers, 540 in all. Since, however, the filling was brought from elsewhere (perhaps it came from the digging of the earlier drain channel at the east) and contained pottery of the second quarter of the century, it could not be regarded as a closed deposit representing discards from any single *ostrakophoria*.<sup>124</sup>

## THE SOUTH BRANCH OF THE GREAT DRAIN

### FIFTH AND FOURTH CENTURIES

Much has already been said about the Great Drain because in many places its history is intimately if not inextricably tangled with that of the houses and streets beside it and over it. The drain has not yet been treated as a unit in itself, however; and since it is now the most conspicuous feature of the area, and since in antiquity while it was serving the function for which it had been made it was the most important, a brief resume of its history and construction is worth setting down. Its importance in antiquity is best demonstrated by what happened when it and its Roman successor

<sup>123</sup> Cf. *Hesperia*, XX, 1951, pp. 108-9.

<sup>124</sup> *Hesperia*, XVII, 1948, p. 193. This number was eventually raised by another 40 in 1949 by the tearing out of some later walls which covered a residue of the ostrakon-bearing fill: cf. *Hesperia*, XIX, 1950, p. 337.

were abandoned and allowed to fill: the area began to silt in, until an accumulation five meters deep covered its entire south and central part (cf. p. 138 above, and the section, Fig. 2).

Mention has been made of the natural bed of the watercourse of Geometric times; no attempt was made to control the flow of water so early. We found, in fact, no traces of any artificial drain of pre-Persian times.

The first drain was a deep channel cut in the bedrock between Houses A and M on a line nearly north and south. This channel was 1.40 m. wide to the east of the drain, and cut into the bedrock to a depth of 3.50 m., greater than that of the later drain. Toward the south the channel could be traced, though neither so deep nor so carefully cut as in front of the older part of House M, along the west side of the built shaft under House M, and so southward out of our area. In front of House M where its line gradually converges with that of the later drain the sides of the bedrock cutting were beautifully fresh and clean, and showed no traces of water wear. The freshness of the vertical cut in bedrock suggested that it had been screened from the action of water, perhaps by a wall similar to that of the later drain. No remains of such a wall were found at either side of the cut; perhaps the stones had been removed and used elsewhere when the early channel was abandoned in favor of the new drain at the west. The lines of old and new drains converged toward the north; at the point where they met the older cutting curved somewhat toward the northeast. It could be traced for some distance under the later drain because the latter lay slightly farther to the west, though both followed the same line. The result of this discrepancy was that for some distance there was a ledge of bedrock about 0.30 m. wide in front of the west wall of the later drain, while its east wall was bedded actually on the sand filling in the earlier. The floor levels of the two drains gradually converged toward the north until the cutting for the later drain eventually became deep enough to reach and perhaps cut below the bottom of the earlier; from this point onward all traces of the earlier drain were lost. That the later drain followed the course of the earlier still farther toward the north was confirmed by a curious pocket in its bottom just to the north of House E and beside the north wall of the court of the Poros Building, where some of the sand filling of the earlier drain still lay undisturbed. In this pocket were found 172 ostraka, almost all of the *ostrakophoriai* of the years immediately preceding the Persian Wars.<sup>125</sup> This, then, was the line of natural drainage in the first half of the fifth century. The first channel seems to have been cut in bedrock at the south at some time around the middle of the century or earlier, certainly before the building of House A, which we have dated around the mid-century.

We found no drain filling in the channel as early as this. In order that the drain should fulfill its function it could not be allowed to become silted up, and doubtless

<sup>125</sup> *Hesperia*, IX, 1940, pp. 301-302; Supplement VIII, p. 395.

it underwent periodic cleanings. The fill found in it was thus the deposit of its latest years, after it had been abandoned and allowed to fill itself. The east wall of the Great Drain formed an effective dam across the line of the earlier channel, and to the south of this dam was found a great depth of fine sand which had formed immediately the channel went out of use, and had filled it from bottom to top. The pottery from this deposit has been examined and selected by Peter Corbett, who describes and dates the pieces which he selected as the most characteristic and datable.

1. *Red-Figured Askos Fragment*. Pl. 80.

Inv. P 16998. Max. dim. 0.076 m.

A single fragment from the top; at the left is part of the attachment of the spout. A bull, goring to left. Around the shoulder of the vase is a reserved line. No relief contour; dilute glaze for some internal detail; a glaze wash within.

Compare a fragmentary red-figured askos (Pl. 80, 5) which is by the same hand.

Inv. P 6506. Max. dim. a) 0.092 m. b) 0.065 m. Diam. est. 0.092 m.

From a well on the south-east slopes of the Kolonos Agoraios, which contained pottery of the third quarter of the fifth century with a lower limit of *ca.* 425 B.C. Two non-joining fragments, both mended. On a), a bull, goring to left; on b), three feet of an animal to right. A reserved line around the shoulder; no relief contour; dilute glaze for some internal detail.

By the same hand also, an askos in Cambridge (1/1900; *C.V.A.*, pl. 39, 4). Comparison with the Cambridge askos makes it probable that the animal on fragment b) was also a panther, in a similar pose.

2. *Fragment of a Red-Figured Pyxis Lid*, Type A. Pl. 80.

Inv. P 16997. Max. dim. 0.106 m.

A single fragment preserves part of the flange and the flat top. Tongues and dots on the concave surface between the flange and the rim. On top there is a zone of ovules around the rim, then the figured scene, with a boar confronting a panther. Around the root of the handle was a ring of tongues and dots.

Partial relief contour; dilute glaze for some internal detail.

The glazed lines (as opposed to dots) for the manes and ruffs of the panther and the boar may be compared with the similar rendering on the fawn on an askos in the Ashmolean Museum (*C.V.A.*, pl. 45, 8; dated in the text "About 430-420"; note also the side view on pl. 48, 37); contrast the treatment on such late fifth century askoi as those figured in *Hesperia*, Supplement IV, pl. 130, fig. 97 d, and *Hesperia*, XVIII, 1949, pls. 84 and 85, 19.

3. *Red-Figured Bell-Krater Fragment*. Pl. 80.

Inv. P 18848. Max. dim. 0.059 m.

A single fragment from the wall. Part of the head of a youth to right. Before him is a post or column; at the top of the fragment is the lower edge of some straight horizontal object, perhaps the lintel of a door. Relief contour; dilute glaze for the pupil of the eye and the upper lid, and for the shading on the central zone of the column.

By the Talos painter; the attribution confirmed by Beazley (letter of 27 February, 1949).

4. *Red-Figured Bell-Krater Fragment*. Pl. 80.

Inv. P 18849. Max. dim. 0.093 m.

A single fragment from the wall. The fragment becomes intelligible when set beside a Pompeian wall-painting of the death of Neoptolemos (Herrmann-Bruckmann, *Denkmäler der Malerei des Altertums*, pl. 156; a similar scene on an Italiote volute-krater, *ibid.*, p. 215). The action takes place at an altar, whose top

has a double moulding of ovules and dots; on it the central figure knelt with his left knee, and before it can be seen part of his trousered right leg; the fabric of the trouser is decorated with crosses and dotted circles. One end of his cloak hangs beside his leg; to the right is a sceptre, which is apparently falling to the ground. The upper garment, with its border of ovules surmounted by rays, is best explained by comparison with the costume of Paris on a later vase (Schefold, *Kertscher Vasen*, pl. 2b); it is an Oriental under-tunic, open at the right side, and the inside of the far corner can be seen to the left of the trousered leg. Another figure approaches behind the altar, from the right; he wears thigh-length tunic, with a border of framed palmettes and with larger, linked palmettes on the material. At the left of the fragment is part of the bent knee of a third figure.

Partial relief contour; dilute glaze between the large ovules on the altar top, and for the blood-stains on the altar.

There seems no reason to regard the one in Oriental costume as an Amazon. The sceptre might suggest Priam, and the altar an Iliupers-

sis, but on Greek vase-paintings of the subject his regular costume is the chiton and himation. The obvious identification is Paris, and the scene would be not his death, which took place on the battlefield, but the dispute between him and his brothers before his recognition (Roscher, *Lexicon*, pp. 1582-83; 1605-06; compare Etruscan representations of Paris with one knee on the altar where he took refuge; Brunn, *I Rilievi delle Urne Etrusche*, I, pls. I-XVI). The story was known in fifth century Athens, for it formed the theme of Euripides' *Alexandros*, which appeared in the ninety-first Olympiad (Aelian, *Varia Historia*, II, 8). The surviving fragments of the play suggest that one feature of it was the contrast between Paris, the country lad, and his town-bred brothers, and this contrast might explain why the two assailants do not wear Oriental costume. The sceptre remains a problem.

The style, with its wealth of ornament, indicates that our fragment is contemporary with such works as the Talos krater (*A.R.V.*, p. 845, below).

The fragmentary black-glazed pottery from this deposit was extremely similar in character to that from the other two groups discussed above (pp. 211-212, 247-248, pls. 72, 79), and many of the pieces find close parallels in Agora well-fillings of the last quarter of the fifth century. Of the red-figured fragments, Nos. 1 and 2 are probably to be dated in the twenties; Nos. 3 and 4 should belong to the years around 400 B.C. The deposit also contained a fragmentary bell-krater which may provide a more precise lower limit; it is published in *Hesperia*, XVIII, 1949, pp. 104-107, pl. 4, where a date between 400 and 397 B.C. is proposed on historical grounds.

The dating for the construction of the drain, around the turn from the fifth to fourth century or shortly thereafter, is derived mainly from the group of pottery just described and from two others that come from behind the walls of the drain and that have been described above, pp. 211-212, 247-248. The latest sherd from the first group is to be dated between 400 and 397 B.C.; those from the other two around 410 B.C. The part of the older channel which lay outside the line of the new drain at the south may well have filled immediately after the new construction had been completed, thus containing sherds slightly later than those from the fillings behind the walls of the new drain, fillings of sand and gravel presumably dug out from the bottom of the existing



channel when the new drain walls were laid. The dating suggested was confirmed in a number of places all along the line of the drain, by sherds from the levels cut through by the drain wall at the bridge in Piraeus Street (above, pp. 152-153) and by the pottery from the triangular area in front of House B (above, p. 198). The remodeling of Houses C and D was probably done at the same time; House K seems to have been converted from a house to a workshop slightly later, as suggested by the pottery from the filling of its well (above pp. 242-243).

We must assume that the building of the drain walls was a single operation, since a channel of the sort formed by them would have been of little use were it not continuous. The assumption is confirmed, indeed, by the evidence of the sherds found behind the various sections of the channel walls; and despite variations and differences of construction between various stretches of the channel walls the project must have been one, carried out at one time. This again is confirmed by the existence in the west wall of the drain of two sections, in front of House A and in front of House F, of "checkerboard" masonry (Pls. 66e, 81a; Fig. 9) which are probably from the hand of the same mason. The building of the drain involved the remodeling of some of the houses which lay beside it, and historically the date given by the archaeological evidence for its construction fits very well: in a very few years after the end of the Peloponnesian War a measure of security and prosperity had returned to Athens. Her citizens were again in a position to restore their properties, which no doubt had suffered from neglect during the preceding period of proscriptions, poverty, and insecurity. Finally, perhaps a very practical reason for the building of this channel in the bottom of the valley between Pnyx and Areopagus at the time suggested was the rearrangement of the Assembly Place on the Pnyx above, dated to 404-403 B.C.<sup>126</sup> The turning around of the hollow auditorium in which the citizens assembled before the bema may well have concentrated the rain-water into one line after every storm, whereas the earlier auditorium, facing in the opposite direction, may well have dispersed it, or sent it down in other directions. Though no traces of canalization were found during the examination of the roadway leading northward from the Assembly Place, it stands to reason that the hollowing of the hillside would have concentrated water; every theater had its *ὄχερός*.

The point at which the drain began at the south is unknown; Dörpfeld found no traces of such a channel in his excavations to the south.<sup>127</sup> In our area, however, the line taken by the drain was dictated by the necessity to respect the houses and buildings already in existence at each side of the roadway as far to the south as House A. The drain (pl. 81b) takes a far from straight course; after squeezing past the east side of

<sup>126</sup> Cf. *Hesperia*, I, 1932, pp. 128 ff., 133.

<sup>127</sup> The only important drain found, of terracotta tiles (*Ath. Mitt.*, XVII, 1892, p. 91; Judeich, *Topographie*<sup>2</sup>, p. 179), would seem to have been much later in date than the Great Drain. It may have emptied into the Great Drain, or continued northward under Melite Street.

House A (and slicing off a sliver from it) the channel ran straight as far as the corner of House C, where it bent toward the northeast to take a course parallel to the east front of the house. Farther to the north it was compelled to bend again in the same direction in order to bypass the projecting room of House D. Thereafter it was obliged to make a quick recovery in the other direction in order to get safely by the southwest corner of the Poros Building. From there it was clear sailing for about forty meters beside a single building, but at the northwest corner of the building the drain again bent toward the north, probably to cross Piraeus Street with a bridge at right angles to it, and also to attain the line of the Street of the Marble Workers, which the drain followed northeastward from the bridge to the southwest corner of the Agora proper.<sup>127a</sup>

The bridge has already been dealt with at some length in the account of Piraeus Street (above, pp. 151-153). The corbelled construction of poros at the crossing of a main street must have been undertaken as a public work; it extended for the full length of the bridge across the width of Piraeus Street. To the south, however, the walls of the drain show no uniformity whatsoever; their construction and the character of their masonry change every few meters. One would assume that if the drain were a public work it would have been a continuous piece of masonry, uniform throughout. Instead, the construction changes at irregular intervals, the changes often coming at exactly the points where the corners of two properties beside the drain meet. At the west we have a stretch of 7.50 m. of "checkerboard" construction in front of House A; at the corner of the house the masonry immediately changes to small rubble work (Pl. 65c; Fig. 9). How far northward the latter extended we do not know, as the wall was plundered to great depth in later times. Where the west drain wall is preserved again and northward as far as the northernmost room of House C, the construction is of limestone, well fitted, but with rough face; the only noteworthy feature that appears in this stretch is the wall corner which apparently represents a division of the frontage of House B between two houses in its later period. At the line of the interior wall dividing Rooms 4-5 of House C the drain wall bends, and the construction changes (Fig. 12) to squared blocks of conglomerate on a poros bedding. In front of House E the drain wall, badly plundered, appears to have been of large irregular conglomerate blocks, interspersed with patches of stacked work, as opposite House A (Fig. 19). Beside House F, "checkerboard" work again; and at the line of the poros wall separating House F from the complex to the north of it the west wall of the drain changes from "checkerboard" work to carefully fitted polygonal blocks of limestone, their faces rough and semi-rusticated (Pl. 81c; Fig. 15).

At the east side the whole northern extent of the drain wall beside the Poros

<sup>127a</sup> For the history of the Great Drain in its more northern parts cf. *Hesperia*, VI, 1937, pp. 3 f.; Suppl. IV, 1940, pp. 111-121.

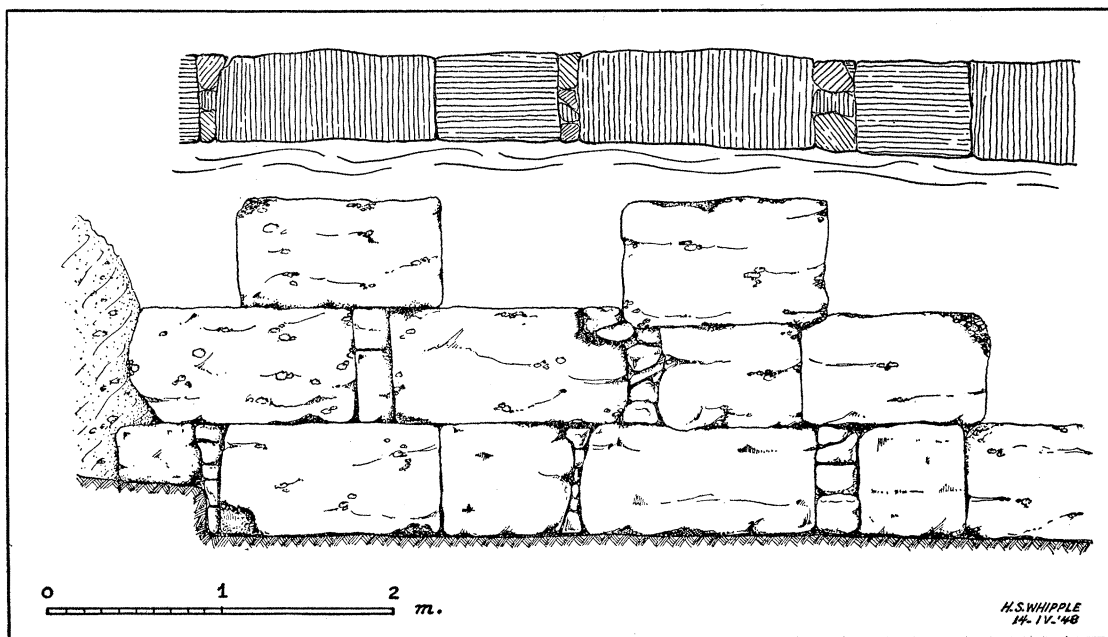


Fig. 19. East Wall of Drain opposite House A: Elevation and Sketch Plan to Show Construction.

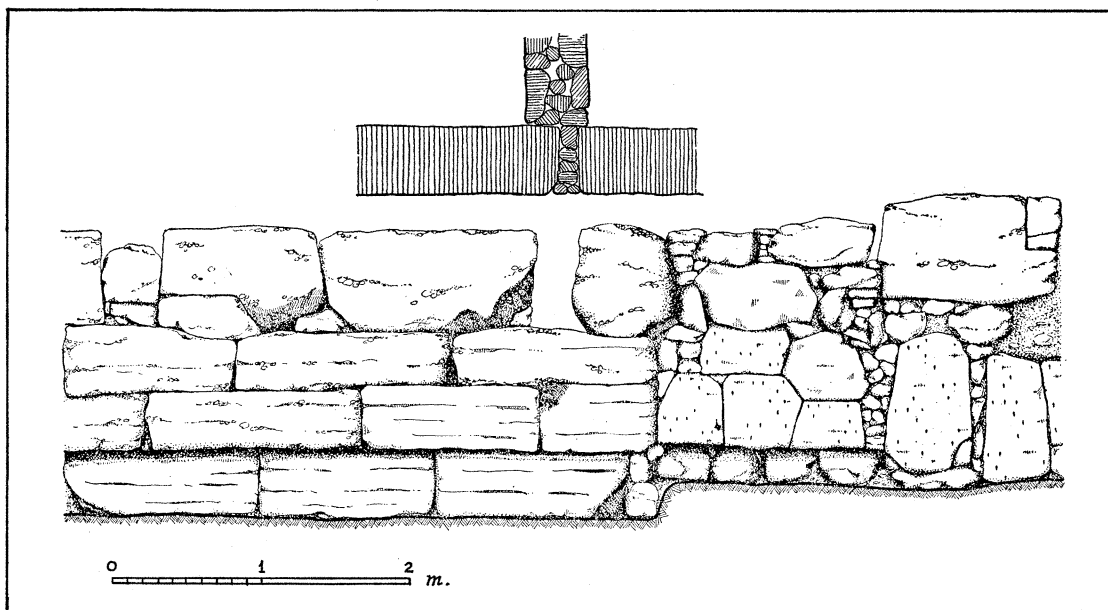


Fig. 20. East Wall of Drain from House J to House K: Elevation Showing Change of Construction, and Plan to Show Return of North Wall of House K.

Building has been rebuilt in late times. The stretch of wall in front of House J to the corner of House K is probably a reconstruction of earlier Roman times; no inlet, for example, was left for the side drain of House K. At the line of the north wall of House K the construction changes, from squared blocks of poros and conglomerate at the north to limestone polygonal masonry at the south (Fig. 20). Farther along, south of the entrance of the Roman drain, a change in construction from polygonal to poros

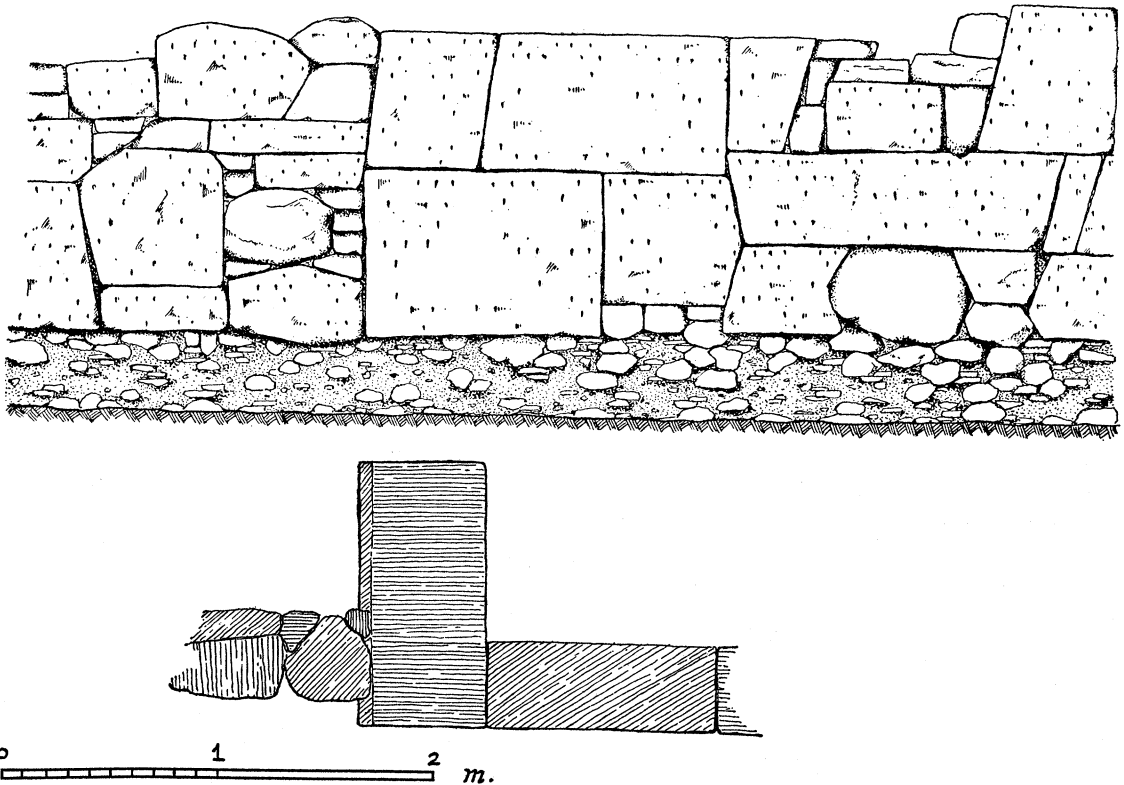


Fig. 21. East Wall of Drain in Front of House L: Elevation and Plan.

blocks filled out with small masonry work (Fig. 21) is the only point at which such a change does not fall in front of a property-line; House L at the east seems to have been continuous. At the line of the side drain entering from the east opposite House B the masonry at the north is of careful limestone work, nicely curved to meet the line of the incoming side drain (Pl. 81d; Fig. 22), while to the south of the opening the construction is a careless jumble of miscellaneous material, perhaps a repair. Finally, opposite House A at the extreme south (Fig. 19), the construction is of large conglomerate blocks interspersed with stacked work.

The major changes in the construction of the drain walls coincide with the property lines of the houses bordering it, especially at the west. We have noticed, too, that the walls of the second periods of Houses C and D in some cases are bonded at their ends with the back of the drain wall. Along the west side, then, the construction

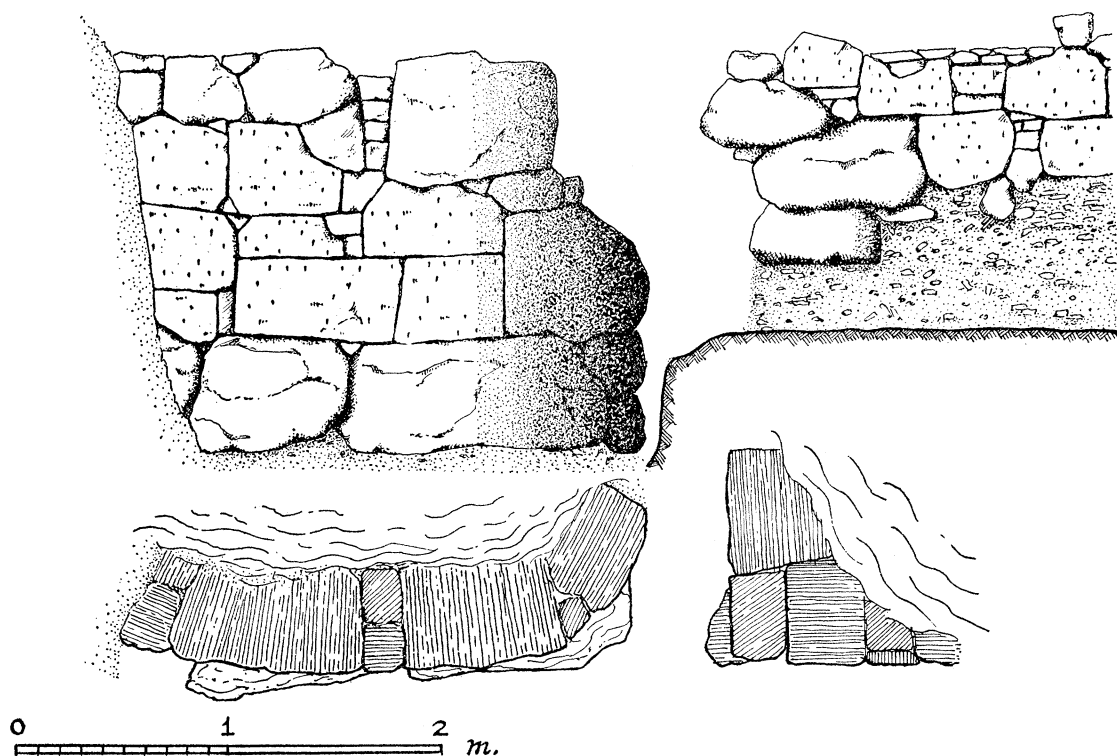


Fig. 22. East Wall of Drain at Entrance of Side Drain: Elevation and Plan.

of drain and remodelled houses is one. There was a certain amount of give and take, too, between drain and houses; House A lost a sliver, House C gained a new eastern margin, House D gained a sliver. The walls of the remodelled A, C and D were built directly on top of the west wall of the drain, as must also have been the walls of F and H at the north. All the indications are that the walls of the drain were built piecemeal, the owner of each property beside its line undertaking the construction of his own section, and adjusting the line to suit himself. Thus the course of the drain, dictated by the positions of the houses already in existence beside it, was in turn the occasion for extensive remodelling of the houses themselves. The property owners at the east were far less affected than those at the west because the ground rises sharply toward the east, and the top of the drain wall lay relatively low; extension of the

houses at the east of the drain would have involved deeper foundations, and considerably more filling in behind them, than at the west.

The new drain was an open channel of somewhat erratic course and varying width. In front of House C its width was as great as 1.40 to 1.50 m.; where it had to squeeze between House D and K, and between House J and the square at the west, it narrowed to 0.60-0.70 m. It was never covered; the wide parts were too wide to be comfortably spanned by slabs laid across from one side to the other, and in any case the house walls at the west were built directly on top of the west drain wall, leaving no place for the ends of cover slabs to rest. No doubt the channel was spanned at some points by wooden bridges: the top of the east wall opposite House A shows cuttings as for beams, perhaps of a bridge. The open channel was of varying depth, in most places about 1.50 m. at the south, somewhat deeper beside the Poros Building. The narrowness of the bottlenecks made passage in the deep channel, walled at both sides and open to the sky, difficult and inconvenient; the old roadway must have gone entirely out of use, its space almost completely filled by the drain. Only two tributaries, aside from the small house drains of the bordering building, entered the drain, both from the east. One we have already noticed; it underlay the alley which came down from Areopagus Street between the archaic cemetery and House N. At some time, probably in the second century B.C., this drain was blocked by the foundation of a Hellenistic house across its line, and its mouth at the Great Drain was walled across (Pl. 81d). Of forty-one coins found in the sandy deposit along its course, ten were of the fourth century, twenty-five were of the third, and one of the second; the rest were illegible. The second tributary was the tile drain which ran across the southern part of House K, already noticed. It entered the Great Drain at about the point where the Roman drain entered later; the reason for these two drains of different epochs converging toward the same point was probably the existence of an inlet left there when the drain was built.

At some time late in the Hellenistic period, perhaps after the siege of Sulla, all the line of the Great Drain to the south of this point was abandoned, and the new so-called Roman drain, running parallel to it some meters away to the east, took over its functions. The main line of the drain was rapidly silted in; the deposit of heavy gravelly brown sand reached from the bottom to the tops of the side walls, in places a depth of 2.50 m. This deposit, except in a few places where a slightly earlier layer overlying bedrock could be distinguished, seemed to be uniform; it was apparently all deposited rapidly over a short space of time. We conjectured that this deposit accumulated after the time of Sulla partly because the drain had suffered damage before it became filled. In places blocks were missing from its top courses, and the gaps where they had been were filled with the same deposit of sand which lay in the drain itself. Mixed sherds of all periods were found in the sand inside the drain; the great bulk of them was of Hellenistic wares of the third century, but there were also many

characteristic pieces of the second, including fragments of lamps of Broneer's Type XVIII.<sup>128</sup> In the deposit over this stretch of drain abandoned in late Hellenistic times 524 coins were found. Of these 92 were of the fourth century B.C. or earlier, 99 of the turn from the fourth to the third century, 150 of the third century, 23 of the second century. The latest coins were one of Chalkis dated between 196 and 146 B.C. and one of Karthaea in Keos of the second or first century before Christ. The rest were illegible or not closely dateable. The evidence of coins and pottery together are agreeable to a Sullan date for the abandonment of this part of the drain. The statistics of the stamped amphora handles are perhaps also of interest: out of 133 found, 18 were Thasian, 53 Rhodian, 43 Knidian, two South Russian, one Parian, and 16 unassigned.

### THE ROMAN DRAIN

We found no apparent reason for the abandonment of the southern stretch of the Great Drain; perhaps excavation farther to the southwest under Apostle Paul Street would reveal one. The abandoned stretch was replaced by another which ran parallel to it about ten meters to the east, skirting the foot of the rise toward the Areopagus below the archaic cemetery and House N. Toward the south at the edge of our area the two drains appeared to be converging, to meet somewhere at the southwest. Toward the north the Roman drain ran as far as the northern limits of the court of House N, then turned northwestward to cut across the borders of houses K-L and rejoin the line of the Great Drain at the point where an inlet probably already existed.

This channel has been called the "Roman drain" or the "post-Sullan drain" because it took over the function of the southern stretch of the Great Drain when it was abandoned, apparently after the siege of Sulla. There were indications, however, that this channel was built and in use before Roman times. For a long stretch from House M to House N its west wall was of large boulders of limestone (Pl. 82d), of which only the lowermost course was preserved. Both material and manner of using it seemed completely alien to ideas of construction of the Roman period, and this stretch seemed earlier, though very late Roman disturbances or silt had gone to bed-rock almost all along its line, and no definite evidence for the date of its construction was found. Only one or two limestone boulders of the original channel were in place at the east side. Below the archaic cemetery, however, the line of the drain passed so close to the mouth of an earlier cistern<sup>129</sup> that the east wall must in part at least have overlain it. The cistern had been filled at some time in the second century before Christ, probably before the drain wall was carried over its mouth.<sup>130</sup> The filling in the

<sup>128</sup> Broneer, *Corinth IV*, ii, *Terracotta Lamps*, p. 61 and pl. VI.

<sup>129</sup> Cf. the plan *Hesperia*, XX, 1951, p. 70, fig. 1.

<sup>130</sup> The cistern connected underground by a passage with another shaft to the south, which continued in use until considerably later.

cistern would suggest a second century date for the building of the drain wall. This dating is confirmed indirectly by the filling of the lower, western section of the cross drain coming down from Areopagus Street at the east. We have already noted that this was blocked off at its entrance to the Great Drain by a dam built in the second century, and its course covered by a house in late Hellenistic times. The eastern stretch, however, continued in use well into Roman times, from Areopagus Street to the line of the Roman drain, and there must have been a channel to receive its water at the foot of the hill as early as the second century.

The channel consisted of parallel walls, the space between them varying in width from 1.00 to 1.40 m. The east wall was set against a cutting in the hillside made for it. The channel seems to have been an open one, like the Great Drain, but much shallower; its walls are nowhere preserved to a height of more than 0.60 m., except at the extreme south where the east wall served also as a retaining wall for a terrace lying to the southeast. This drain, set much higher on the hillside than the Great Drain, was not so well preserved and had suffered greater damage and pilfering. At the point where its line bent northwestward to return to the Great Drain there was a drop of almost a meter in the level of its bottom; thereafter it ran in a wide channel cut in the bedrock as far as the Great Drain. This channel was lined at either side by carelessly built walls of reused material; the southern of these was carried right across the channel of the Great Drain to abut against the face of its west wall, effectively blocking it.

Probably in the late second or early third century after Christ a change was made over the entire line of the Roman drain. From the southern limit of our area as far as the southwest corner of House N a smaller built channel was made over the line of the Roman drain, in places reusing its east wall, in places its west wall, and elsewhere following a line of its own slightly to the east in a channel cut for it in the hillside. This channel was about 0.55 m. wide and 0.82 m. deep inside; it was apparently covered with a double-pitched roof made by leaning slabs across it, tangent at their upper edges. The channel was made of brick and tile cemented together with a soft white mortar; it was floored with flat tiles and bricks. From the southwest corner of House N this built channel was continued toward the north in a line of elliptical drain tiles, no doubt with an opening to let in the drainage from the east under the alley between House N and the cemetery (by this time built over by House U). Before the channel was built a wedge-shaped mass of rubble and cement had been laid along the east side of the Roman drain, no doubt to protect the foundation of the west wall of House N from the flowing water (section, Fig. 23); now the replacement of the open channel by a tiled drain gave added assurance that the foundations of House N would not be undermined. The new channel, however, did not follow the old drain throughout its course; at a point to the west of the middle of the court of House N a breach was made in the west wall of the drain and the tiled channel was turned to



pass through it toward the west, then toward the northwest, to rejoin the Great Drain at the same point where the Roman drain had joined it. The purpose of this cut-off was to avoid the deep drop in level in the floor of the older Roman drain at its bend, and to bring the water into the Great Drain at a higher level. This was done at the time of the first construction of the Roman bath above the ruins of House D as part of a general rearrangement. The new channel bringing drainage from the south became a built channel again, instead of a line of elliptical tiles, for some distance to the south of its entry into the Great Drain, where it passed over the terrazzo floor of

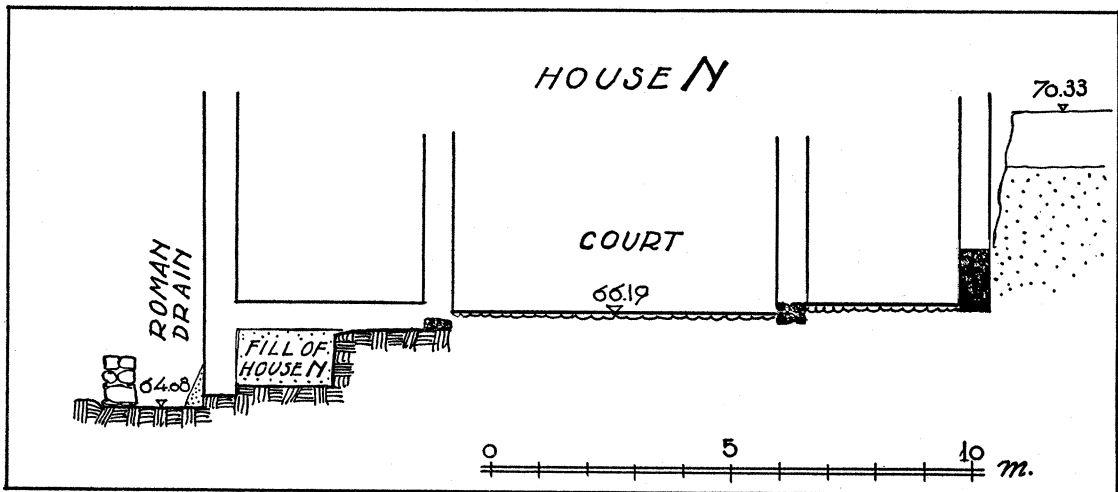


Fig. 23. East-West Section through Roman Drain and West Foundation of House N, Looking North.

House L. A new channel was built to continue it inside the Great Drain and under the east side of the Roman bath. This consisted of a line of half-elliptical lower drain tiles, firmly cemented against the east wall of the Great Drain, and secured also against its west wall but with some rubble filling between, since the width of the tile channel was not as great as that of the drain, especially at the north, where the jog in the face of the House D and drain wall had to be filled in with a solid mass of concrete and rubble, to reduce the width to that of the tile channel. One problem which had to be met was how to carry the new channel, which lay at a high level, over the channel of the Roman drain, which was much deeper, at its entrance into the Great Drain. This was solved by throwing stones into the bottom of the Roman drain, then tipping forward a great poros block from its north wall at the junction with the Great Drain, so that it fell into the channel to rest on the stones thrown in as a bedding for it. The poros block now served as a bedding or a bridge on which to carry the new channel across the gap; since one corner lay a little too high, it was neatly bevelled off to a

flat surface at the level desired (Pl. 82a, b) and the channel carried over it. For a short distance at this bridge and to the north the built channel continued, roofed with slabs tangent at their apices, until the tile channel began. The tile channel itself was roofed by flat slabs laid across below the level of the floor of the Roman bath, but considerably above the tiles themselves.

The date of all these changes may be estimated from evidence from several different places. In the south at one point in its rather wayward course the channel left the line of the Roman drain and passed to the east directly over the mouth of an earlier cistern, which was filled and abandoned at the time (plan, above, p. 70, fig. 1). This cistern connected underground through a tunnel with the one which had been filled at the time of the building of the Roman drain; its filling was Roman, of the first and second centuries after Christ. To the south of this cistern the floor of the channel was laid directly on the sand deposit of the Roman drain, and of 378 coins from this deposit under the floor the latest was one of Rhodes, dated between 166 and 88 B.C. These coins seemed to be very early; perhaps some of the upper and later part of the deposit had been levelled down before the channel was built. At the north, between the take-off of the later channel and its entrance into the Great Drain, the Roman drain lay abandoned. Of 91 coins found in the sand filling of this stretch, which was full to the brim of water-deposited sand, the latest was one of Rome, dated about 49 B.C. Finally, the sand filling of the Great Drain itself below the later tile channel built within it produced 302 coins, of which the latest were of the time of Caligula and Claudius (A.D. 37-54). The coins from all these sealed deposits were remarkably early; the pottery ran later, with plentiful sigillata and other fragments of the first century after Christ, and occasional pieces of the second. We have already noticed that the southern stretch of the Great Drain, which was apparently abandoned at the time of Sulla, produced coins in great numbers, of which the overwhelming majority was of much earlier times. In general it seems that coins found in drain deposits are much earlier than the time of the accumulation of the deposits themselves. A striking example of this was afforded at the bridge, where the latest coin found was one of Arcadius (A.D. 395-408). We know that the latest period of prosperity in Athens lasted until the middle of the fifth century or later; the coin of Arcadius, without the time-lag we have noted in the accumulation of drain deposits, would suggest that the south branch of the Great Drain had filled up at the beginning of the fifth century, fifty years or more before Athens' final collapse, and actually in the middle of her last period of prosperity. Coins and other finds from the deposits under the water channel indicate a date for its construction at some time after the middle of the second century, but before the Herulian destruction of A.D. 267.

To the north of the Roman bath the drain was destroyed to great depth in Byzantine times. Over this stretch the same channel had served in Greek and early Roman times northward as far as the bridge. Beside the Poros Building the entire

east wall had been rebuilt in Roman times; in the channel itself lay a single line of elliptical tile drain, no doubt the continuation of the later water channel under the Roman Bath and to the south of it. The packing beside this tile drain in many places was of complete coarse amphoras, pre-Herulian and to be dated in the late second or early third centuries after Christ. In post-Herulian times the drain had been roofed in places, and houses lying to the east over the Poros Building had been extended westward to the line of the Street of the Marble Workers. In the stretch of the west drain wall beside House F appear the cuttings made as sockets for beam ends at this time, to carry the floors of the houses across (Pl. 81a). The single line of drain tiles ran as far as the south edge of the Piraeus Street bridge; the space under the bridge was not tiled, and when the tiles resumed at its north end the line of tile drains was double, no doubt to take care of the flow from the four additional side channels entering the drain under the bridge.

### REMAINS OF HELLENISTIC TIMES

The area was remarkably free of houses of Hellenistic times. We have noted a house of about the second century B.C. between the Great Drain and the Roman drain to the south of the eastern Roman bath. All that remains of it are the cuttings made in bedrock as beddings for its walls. This was considerably more than remained of several other Hellenistic houses which must have existed to make use of the wells and cisterns which were apparently in use during that period, and which contained pottery of the third and second centuries. Perhaps the ground-level of Hellenistic times was higher than that of Roman. The filling under the East Bath, for example, showed a few scanty foundations of a post-Sullan house (a stone catapult ball built into one of them served to date it with probability as post-Sullan) which immediately overlay a red filling of dissolved mud brick, probably belonging to House D. We have noticed that there was a general abandonment or transformation of the bottom of the valley in the latter part of the fourth century B.C., when Houses B, C, D and probably F were abandoned, G was turned from a marble cutters' workshop perhaps into a coroplast's shop, and the Poros Building was abandoned to the stone cutters. Perhaps the area lay desolate for some time in the Hellenistic period. The presence of wells in House D and beside the east wall of the western Roman bath indicates habitation, but no traces of houses remain. Only at the far south, where there was a great depth of filling above to protect them, were there any traces of the activities of Hellenistic times. Here the slope to the southwest of the archaic cemetery had been terraced. A wall of the second century coming from the south abutted against the face of the old cemetery wall at its curve, then continued to the north. To the west of this lay two more retaining walls of Hellenistic times, at successively lower levels. Behind the uppermost of these walls and to the south of the cemetery there were traces of a

workshop of the second century: two lekane were found in place, where they had been set below floor-level. Around their rims a floor of cement had been made, sloped to conduct liquid into the basins and ridged to keep separate the areas draining into each (Pl. 83a). There had been at least two more lekane of the same sort near by; the cement floor between the two still in place in part covered the remains of a pyre of the late fourth or early third century. These basins were enigmatic, and nothing was found to throw light on the purposes for which they had been used. Not far away toward the north and set through the level in which lay the lekane we found a complete pot lying on its side in the earth at the corner of two walls. Inside it was the complete skeleton of a small dog, together with an unguentarium (Pl. 83c, d, e). The dog had obviously been buried in the pot; perhaps it was the grave of a household pet. The coarsely decorated stamnos which had contained the body of the dog, and the late spindly fusiform unguentarium found with it, date probably from the end of the second or the beginning of the first century before Christ.<sup>131</sup>

1. *Stamnos: Painted Coarse Ware*. Pl. 83d.

Inv. P 16658. H. 0.36 m. Diam. 0.367 m.

Complete, except for chips. Ring foot and broad deep ovoid body; flat rim slightly projecting; grooved horizontal band handles set just above the level of greatest diameter. From below shoulder to rim, three glaze bands, wavy bands between them. Chevrons under handles. Coarse brownish clay with white grits, dull streaky black glaze. Part of the rim was broken off in antiquity and repaired with lead clamps.

Compare a late second century stamnos with

similar decoration. *Hesperia*, III, 1934, p. 418, fig. 104, E 134; also p. 465.

2. *Fusiform Unguentarium*. Pl. 83e.

Inv. P 16659. H. 0.14 m. Diam. 0.027 m.

Intact. Tall thin fusiform unguentarium, somewhat crooked. A groove just above the foot. Grey clay with orange surfaces; three white bands.

A similar fusiform unguentarium was found in the same group as the painted coarse ware stamnos cited above in connection with No. 1: *ibid.*, p. 419, fig. 104, E 138; also p. 473. Late second century.

A factory making terracotta figurines has already been mentioned and an attempt made to locate it in House L. This workshop continued in operation throughout the Hellenistic period, the majority of the fragments of moulds and of the figurines themselves which were found being of the third and second centuries. It seems to have gone out of operation by Augustan times, if not at the time of Sulla; the great mass of figurines and mould fragments was found in a filling thrown behind the west wall of House N (section, Fig. 23) which was probably built at some time in the first century after Christ.

<sup>131</sup> At Motya in Sicily, a Punic town, a whole cemetery of small animals was found; J. S. Whitaker, *Motya*, London, 1921, p. 131, 257 ff. The animals buried there were thought to have been the victims of sacrifice, or animals in some way sacred. In 1950, immediately to the east of the Stoa of Attalos, the skeleton of a dog was found in a clay-lined pit, accompanied by a miniature squat lekythos of the fourth century B.C. (*Hesperia*, XX, 1951, p. 52, pl. 26a). The two dogs buried in the Agora were probably pets.

Under House O (plan, Fig. 1) were found traces of a bronze-working establishment. The drop-shaped casting pit cut in the bedrock still contained at its bottom the base on which had been bedded the mould for casting,<sup>182</sup> and shapeless slugs of bronze and fragments of terracotta moulds were found not only in the pit itself but also scattered well down the hillside toward the west. The filling in the pit contained numerous fragments of late Megarian bowls decorated with long petals, in some cases jewelled, dating from the second century before Christ;<sup>183</sup> the pit would seem to have been abandoned thereafter. It was not possible to tell whether the pit had been used more than once.

## WORKSHOPS

### ROMAN

It has already been noted that the rectangular storage shaft under House M continued as a source for water, probably for some sort of industrial operation, into Roman times. A square (3.80 by 3.90 m.) water basin, heavily built of rubble and cement, overlay its north end, in which water drawn from the shaft could be conveniently stored or used at the surface (Pls. 82d, 83b). We found no hint here as to what was manufactured; but at a similar water tank a few meters away to the north, beside the Roman drain (plan, Fig. 1), we found evidence that marble had been worked. The tank itself was not well preserved, and was considerably smaller than the one over House M, measuring only 3.01 by 2.50 m. Beside it lay a well, obviously the source from which water had been drawn for use in the basin. The construction was similar to that of the tank over House M; walls of rubble and concrete, the floors turned upward at the edges inside, the corners bevelled. The tank had been in large part destroyed in Byzantine times, and the well had been reused to a certain depth. Below the Byzantine fill, which went to a depth of about 11 m., however, the original filling of the well was intact, stratified to a depth of 17.60 m. The upper levels of this filling were of the early third century after Christ, the lower of the early second; the well thus seems to have been in use for about a century. It was intended as a source for a large supply of water, and great pains had been taken in its preparation. The water level (June 22, 1946) was at —4.50 m.; the well was carried to a depth of —17.60 m., lined all the way with drums of specially-made well tiles. At its mouth the inner diameter of the well was 0.78 m.; at bottom, 1.36 m. To take care of this increase in diameter the tile drums had been made to fit, the drums increasing in size as they went downward; but they were not allowed to overlap at the joints, and each drum had been made with a slightly greater diameter at the bottom than at the top, in order to fit the drums above and below. Depth, diameter and care

<sup>182</sup> *Hesperia*, XVII, 1948, pp. 170-171, fig. 7.

<sup>183</sup> Cf. *Hesperia*, III, 1934, E 74, p. 405, figs. 93a-b; also p. 457.

in the making of the tile lining of the well bespeak the desire for a copious and permanent water supply, presumably for industrial purposes rather than for mere household use. In the filling of the well was found a number of fragments of unfinished spouted basins of marble and other kinds of stone; the presence of these in the well suggests that the workshop in which they were made stood near by and used the water from the well in the tank at its mouth. All of the pieces date from early in the Roman period, probably the second century.

1. *Marble Basin, Unfinished: Pentelic.* Pl. 84a.

Inv. ST 354. H. 0.041 m. Diam. 0.17 m.

Complete; two small holes through the body. Low base and shallow body with three lug handles and a spout; ivy leaf in relief outside below the spout.

Unfinished; the inside roughly worked and still showing tool marks, the lug handles not worked down and the spout unchannelled. Traces of guide lines scratched on the rim, handles and spout. Probably abandoned when accidentally pierced by holes in working.

2. *Marble Basin Fragment, Unfinished: White Marble.* Pl. 84a.

Inv. ST 353. H. 0.031 m. Diam. est. 0.12 m.

Granular white marble. The fragment preserves about a quarter of an unfinished shallow bowl, with the spout and profile complete.

Low base; the outside unfinished, with an ivy leaf in relief below the spout. The inside roughly worked, showing tool marks; the spout unchannelled.

3. *Marble Basin Fragment, Unfinished: Pentelic.* Pl. 84a.

Inv. ST 358. H. 0.044 m. Width 0.112 m.

The full profile preserved, with flat bottom and voluted decoration outside below the spout. The inside roughly hollowed, the rim unpolished, the channelling of the spout not carried across the rim.

4. *Marble Basin Fragment, Unfinished: Pentelic.* Pl. 84a.

Inv. ST 356. Max. dim. 0.07 m. Diam., est. 0.13 m.

Part of the wall and one lug handle preserved; the inside only roughly hollowed.

5. *Stone Basin Fragment, Unfinished.* Pl. 84a.

Inv. ST 355. H. 0.087 m. Width 0.239 m.

Micaceous dark grey stone. The full height preserved, with one lug handle. The outside left rough, the inside roughly finished, but the floor worn smooth by rubbing.

The basin of inferior stone, left unfinished outside, may have been used in the workshop itself.

Other fragments of unfinished marble implements of the Roman period were found in the filling over the Poros Building; their presence there implies that the marble workers continued to operate in the vicinity probably up to the time of the Herulian incursion. Two finishing-stones of emery (Pl. 84c) were found together with many chips of Hymettian marble at the early Roman level about one meter above the original floor in the southwest corner of the Poros Building Annex. They are identical in size and shape with emery stones used by modern Athenian stone-cutters for polishing marble. A great tank or basin similar to the one over House M lay to the north of House O, and yet another at the very south end of the area. We found

no wells to go with these, though they must have had some source of water; nor was there any evidence as to their use. Both dated from about the same time as the others, and we may assume that large rectangular water basins or tanks were characteristic of the second century after Christ and were used for industrial purposes.

## GREEK

It is perhaps worth while to pause briefly to recapitulate the evidence for workshops in this industrial section of Athens at various periods.<sup>134</sup> We have seen that our area was almost certainly a part of Melite or of Kollytos, both of which were demes containing workshops of various kinds. Wilamowitz<sup>135</sup> has listed from the building inscriptions the metics living in various parts of Athens, by deme and trade. The demes leading all the others in artisan metics between 420 and 320 B.C. were Melite, Skambonidai and Kollytos. The crafts plied in the first and last of these demes were: goldsmith, worker in encaustic, cabinet maker, mason, sculptor, carver of ornamental stone work, gilder, lead merchant, brick-layer and odd-jobber. We found plentiful evidence for marble working in the fifth and fourth centuries, in Houses G, H, K, and over the Poros Building.

The discards and recognizable fragments from the marble chip fills of the fifth and fourth centuries were very few. Three objects listed below, however, are of interest: a small marble hand, unfinished, from the marble-chip dump over House K; a block of marble, perhaps the arm of a herm, from the filling beside the gutter in the Street of the Marble Workers in front of House G; and another much smaller herm-arm from the marble works over the Poros Building.

1. *Marble Hand, Unfinished: Pentelic.* Pl. 84b.

Inv. S 1350. P. L. 0.053 m.

Small right hand, broken off at the wrist, and with the fingers broken off diagonally. A socket for a pin in the wrist. The inner face roughly worked, and probably unfinished; rasp marks on the outer face.

2. *Marble Arm of Herm (?)*. Pl. 84b.

Inv. S 1426. P. L. 0.069 m. W. 0.054 m. Th. 0.024 m.

White marble, probably Pentelic. Rectangu-

lar block of marble, plain-finished; one end flanged for inseting into a socket, where it was fastened with a pin. A deep round hole in the upper (or lower) face.

3. *Marble Arm of Herm (?)*. Pl. 84b.

Inv. S 1427. P. L. 0.018 m. W. 0.016 m. Th. 0.0095 m.

White marble, probably Pentelic. Small block of marble, nearly square; a flange at one end for inseting into a socket.

<sup>134</sup> A boundary stone found in the old Greek excavations in the Agora may well have come originally from this area, though we know that there were workshops on the Kolonos to the south of the Hephaisteion. It was published by Oikonomos, 'Αρχ. Έφ., 1911, p. 242, and reads:

ὅρος  
ἐργαστηρ[ί  
ο ὑπ<ο>κειμέ  
νο ΠΗΗΓ

<sup>135</sup> *Hermes*, XXII, pp. 117 ff.

The marble-cutters and sculptors (Pl. 84c) probably had their own workshops here, and worked under contract on the Acropolis at such state enterprises as the adornment of the Erechtheion. Contemporary with them were the smiths or bronze-workers who occupied House D in the fourth century; their work is not mentioned in Wilamowitz's list, but his sources, building inscriptions, deal only with work done on public buildings. Bronze and marble were worked in our area into late Hellenistic times (bronze-casting pit) and the Roman period (unfinished marble basins).

Our workers in terracotta again are not included in Wilamowitz's list; their work had no relation to that done on the public buildings, though they seem to have worked here from the fourth century onward. Finally, we found plentiful evidence in House F and to the north of the working of bone, mostly the discarded knobby ends of the straight bones, which had been carefully sawn off. An occasional straight fragment of bone showed knife marks; it had evidently been roughly cut down to size suitable for a pin, needle, stilus or some such implement, and never finished.

The cabinet makers and gilders and the workers in encaustic, gold and lead had left no traces by which they could be identified; nor could their activities be sensibly fitted into any of the workshops (House F, House K in its later period) in our area of which the uses remain enigmatic. We can say, however, that Wilamowitz's characterization of the three demes as industrial sections of Athens has been fully justified; his evidence over a limited period was based only on building inscriptions and work done by metics. Our excavations have revealed traces of other minor industries which were practiced in this part of Athens over a long time; they overlap Wilamowitz's list only in the crafts where it might be expected that unmistakable traces would remain, those of the stone workers and masons, who were also employed in public works on the Acropolis and elsewhere, though they apparently had their ateliers or headquarters in our area.

## HOUSES OF THE ROMAN PERIOD

As has already been noted, it is not intended to discuss here the group of well-preserved houses of Roman times in the northwest part of the area, to the west and north of the Street of the Marble Workers; these houses need further excavation before they can be finally studied, and it is hoped that our area may be extended enough toward the west to fix their western limits. These houses lay between Piraeus Street and the Street of the Marble Workers; some of the Roman houses in the rest of the area were also laid out with reference to the various streets, as N, O and U beside Areopagus Street. Houses P and Q occupied the site of the Poros Building and R, farther to the north over the same building, no doubt bordered on Piraeus Street. Houses S and T were perhaps approached through the alley which ran southward from the Street of the Marble Workers, though House S effectively blocked its south end (plan, Fig. 1).



Most of these houses were very fragmentary, but their presence in our area serves as a link between the rather elaborate Roman houses on the slopes and spurs of the Hill of the Nymphs at the west and those on the slope of the Areopagus at the east. Of House N the plan was nearly complete and we may take it as perhaps typical. The other more fragmentary houses may be described more briefly, and only such features as mosaic floors noted.

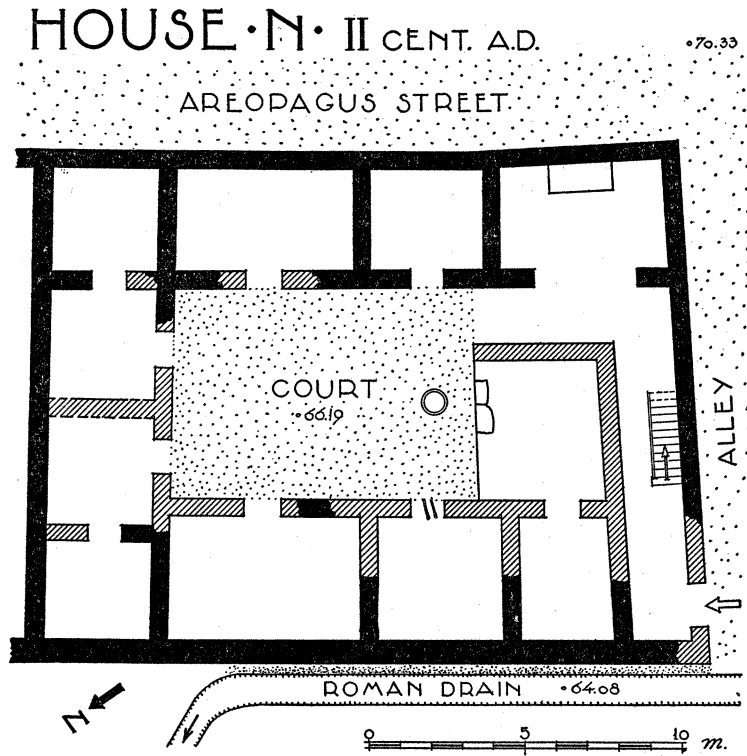


Fig. 24. House N: Restored Plan.

#### HOUSE N

Plan, Figs. 1, 24; section Fig. 23.

House N lay beside Areopagus Street in a great cutting made in the hillside which accommodated both House N and House O. The northern part of this cutting was considerably earlier than Houses N-O; fragments remained of walls as early as the fifth or fourth centuries B.C. which, together with wells of the same period, suggested that earlier houses had stood here beside Areopagus Street. The southern part of the cutting, however, showed no traces of earlier houses, and it was perhaps specially made as an extension of the older cutting for House N. In many places in the area

of House N disturbances of Byzantine times went to bedrock, and often its walls were represented only by their trenches.

The house extended for 20.30 m. from north to south beside Areopagus Street; beside it at the south passed the alley with its drain, dividing House N from House U which overlay the archaic cemetery. At the west lay the Roman drain. The width of House N from east to west, 16.50 m., was greater than that of the cutting, and the west wall of the house served both as foundation and retaining wall. Earlier cuttings made from the west had scarped the hillside; the builders of House N, carrying their west wall outside these scarps, were obliged to fill in behind it with earth to bring the level of the west rooms of the house up to that of the court and the other rooms. The west wall was built of large squared blocks of conglomerate, perhaps reused; many of them were stolen in very late Roman times. The west wall of the house was also reused as the east wall of the Roman drain. To protect its foundation from being undermined by the stream of water in the drain a wedge-shaped shield of rubble and cement was laid against its outer face (section, Fig. 23). Rather surprisingly, over long stretches the plunderers of the foundation stones of the wall had removed the blocks without damaging the rubble shield in front of it. The filling thrown in behind the west wall served very well to date the house in the first century after Christ; besides the debris from the terracotta factory this filling produced occasional fragments of sigillata and other Augustan wares, and lamps of the first century after Christ. The foundations for the walls dividing the west rooms of the house were laid in this fill, usually merely masses of small fist-size stones. They evidently carried only light interior walls; in every case they fell opposite the walls separating the rooms at the east side of the house, so that the plan was symmetrical. At the north House N shared a common wall with House O.

In plan the house consisted of a central courtyard with rooms at all sides. To the north lay a long room, the width of the court, later divided into two, with a smaller room opening from it at either end at the corners of the house. To east and west of the court lay a larger northern room and a smaller southern. At the south most of the width of the court was occupied by a room or large alcove open to the court. A corridor beside this at the east gave access to the room at the southeast corner of the house. The south side was occupied by a long narrow corridor which perhaps contained a door leading to the alley at the south, and a staircase leading to the upper floor. The house was sunk in a cutting in the hillside, with the floor of the court as much as 2.00 m. lower in level than the surface of Areopagus Street at the east. The house then must have been two storied, the upper storey fronting on Areopagus Street; court and ground floor were accessible from Areopagus Street through the second floor and probably by an inside stair for which there is room at the south side of the house, perhaps also through a door at the south opening to the alley. Only one stone of the south wall of the house is still in place, and therefore no traces of the door

remain, but the southern limit of the house is fixed by the bedrock cutting against which its south wall was set.

The house was built largely of reused material; its foundations contain pieces of limestone, poros and conglomerate packed together indiscriminately. Only to east and west, where the walls were retaining walls as well as foundations, were large squared blocks of conglomerate used. The east wall, retaining Areopagus Street, suffered heavily in later times, and long stretches were replaced by rubble and concrete when the house was rebuilt in post-Herulian times. Probably, however, the original house was constructed of sun-dried bricks on socles of stone. The court was paved with a floor of white marble chips, laid in mortar over a bedding of small stones mortared together; its surface, considerably worn, indicates that it had a long period of use. The largest of the rooms at the east was similarly paved with a marble chip floor at a slightly higher level than that of the court. The alcove at the south was paved with tile chips laid on edge, separated from the court by a raised sill of which two blocks are still in place, very worn on their upper faces. The northeast room of the house had a similar tile-chip floor. In all the other rooms the original floors had been cut through or destroyed in late Roman and Byzantine times.

The well of the house lay in the court near its south side. An octagonal opening in the floor over the well suggested that it had been covered by a large well-curb fitted to the floor, or around which the floor had been laid; the block itself was missing. The well went to a depth of —10.60 m., neatly lined to bottom by drums of tile; its filling was stratified. The first three meters were occupied by a very late dump, perhaps of the fourth or fifth century after Christ, which no doubt got in when the well-curb was stolen from over its mouth. Below that and to a depth of about —7.50 m. lay another dump, apparently of debris from the destruction of the house by the Herulians in A.D. 267; it included bits of broken tiles and marble revetment, and chunks of marble-chip flooring from the house itself. The pottery was of the third century after Christ; a marble head found in this filling had doubtless served to decorate one of the rooms, perhaps the court or its alcove, before the Herulian destruction.<sup>136</sup> The head, however, was not completely finished; the upper part of the chest was not smoothed to fit into a socket, and its surface was left roughly worked. The marble throughout had not received its final finishing and polishing, all the flesh surfaces clearly showing the rough marks of the rasp. The head should probably be dated in the latter part of the second century; perhaps it was made in one of the near by workshops and set up unfinished as a sort of protome in House N.

Below the destruction debris of Herulian times began the deposit of the well itself, about three meters of nearly solid pottery. Unfortunately the pottery was almost all coarse, and almost all of the same sort: basket-handled water-jars, one-

<sup>136</sup> *Hesperia*, XVII, 1948, p. 179, pl. LVII.

handled jugs of micaceous ware, coarse oinochoai and pitchers of kitchen ware. The only decorated pot was a mould-made jug bearing in relief on its sides two of the labors of Herakles,<sup>187</sup> found well down in the pottery deposit. The few fragments of lamps served to date the various stages of the accumulation; fragments of Type XXVII lamps of the early third century lay in its upper layers, and fragments of Type XX of the late first and early second lay in its lower layers. The accumulation seems to have continued from the end of the first to the middle of the third century after Christ and to reflect the history of the house, which as we have seen from the packing behind its west wall, was built at some time in the first century after Christ.

### HOUSE O

#### Plan, Fig. 1.

House O, immediately to the north of N, seems to have been very similar in plan and about contemporary in date. The two houses shared a common wall which divided the south end of O from the north end of N. All of the northwestern corner of House O has disappeared, plundered in Byzantine times or washed down the slope by the freshets descending from the Areopagus. The house, however, was smaller than House N, measuring only 16.50 m. from north to south. Its court lay at the north side, rather than in the middle of the house, and there was no suite of rooms to the north of the court. The largest room of the house lay to the south of the court, over an old bronze-casting pit of Hellenistic times (p. 269 above). Along the east side and bordering Areopagus Street lay three rooms, somewhat deeper than those of House N; to the west lay three more, which were not placed symmetrically to those of the east side. The construction of the walls, as far as they are preserved, was similar to that of N; doubtless House O was also of sun-dried brick and stood to a height of two storeys, the upper storey opening to Areopagus Street at the east. The west wall of the house fell to the north of the Roman drain and the cuttings to the east of it; the wall as preserved is partly of good construction of Greek times, probably of the fifth or fourth century, and partly a rebuilding and repair made when House O was built. At the east the three rooms beside the court overlay an earlier wall belonging to a house of Greek times; curiously enough the line of this wall was taken in House N to the south for the wall dividing the east rooms from the court, while in House O the wall itself was buried and the east rooms were extended toward the west. No floors were preserved in any of these rooms, or in the court; such fill as was undisturbed, however, contained much the same sherds as did the filling of House N, suggesting a date for House O in the latter part of the first century after Christ. There was no well within the house; but a well outside to the west was contemporary and probably belonged to the house. At the time of construction a terrace

<sup>187</sup> *Hesperia*, XVII, 1948, p. 183, pl. LXIV.

wall was carried westward as far as the Great Drain, over the line of the north wall of House K, and the level of all the area to the south of the terrace wall and to the west of House O was raised. The well at the northeast corner of this terrace had a small enclosure of its own, and was covered by a large well-curb of poros. The filling of the well-terrace and around its curb dated from the second century after Christ; the well was contemporary with House O or slightly later and had no doubt belonged to it. Unfortunately the well had been found and reused in much later times; the pottery in its filling to bottom was of the fifth century after Christ.

#### HOUSES P-Q-R

These three houses overlay the Poros Building. They have been lettered from the south northward, and little need be said about them here as they have already been noted by Miss Crosby (p. 183 above).

House P lay partly over the Poros Building, partly in an eastward cutting-back of the hillside. The Byzantine disturbance went so deep here that only the east end of the house, cut into the rock, was well preserved. Two rooms lay in the cutting at the east, and the foundations of two more still remained at the west; for the rest the house has disappeared or remains covered by later foundations. The corner room at the southeast retains some of its painted stucco decoration: large rectangular panels separated by floral ornament in red and green, above a dado. The panels, presumably meant to contain figures, were never filled. The house was pre-Herulian, probably of the late second or early third century.

House Q, to the north and west of P, had a large open court paved with a marble chip floor, and a well near the north side. A division across the floor near the south end suggests an alcove open to the court, as in House N. The limits of the various rooms around the court cannot be closely fixed: the court with its pavement appears to date from the years between Sulla and Augustus, while the rooms around represent a remodelling of the house in the first century after Christ. The well could unfortunately not be dug, as it was used during the years of the occupation as a dump for whatever explosives were found in the streets near by and in the excavations themselves, and its digging would in consequence have involved considerable danger.

House R, to the north of Q, had a similar paved court surrounded by rooms, and apparently was also of two periods. The well in the court produced at its bottom a filling of the first century after Christ, probably to be associated with the first period of the building. The house opened to Piraeus Street, which passed by immediately to the north.

## HOUSE S

Plan, Fig. 1.

House S lay to the west of T, the house of Roman times which overlay Houses B-C. It was probably approached from the Street of the Marble Workers through an alley which passed over the side drain just to the east of the unfinished Mycenaean Tomb. The west wall of House S, considerably older and reused by the Roman house, had formerly been a retaining wall along the east side of the alley, which was cut off at the south by the building of House S. At the east a common wall apparently divided House S from House T. All over the area of House S Byzantine disturbance had gone very deep, and little remained by which to date its construction, though it was probably built in the third century before the Herulian sack. Three rooms were preserved, but the house apparently extended southward and westward under the undug area, and little could be made of its plan. One of the rooms was paved with a mosaic floor (Pl. 85a) 4.30 m. long by 2.90 m. wide, in which the design of the central panel was made with its bottom toward the west, suggesting that the entrance to the room, perhaps from the court of the house, lay in that direction. The mosaic consisted of a square central panel bordered by wave pattern, with a rosette in the middle. To the left of the central panel an urn, to the right, two doves; the whole surrounded by an oblong border. The mosaic was made of chips of white marble and dark blue stone, and of fragments of red and yellow tile: blue for the wide outer border, the urn and doves, the wave pattern and the background of the central rosette; red for the border of the inner panel around the wave pattern, and for the center of the rosette; and yellow on the breasts of the doves. The house was evidently destroyed in the Herulian sack.

## HOUSE T

Plans, Figs. 1 and 3

The house which overlay Houses B and C to the east of House S dated from about the same time as S: early third century after Christ. Its walls had been almost completely plundered in late Roman and Byzantine times; the floors of three rooms remained. In the southernmost room only the floor bedding of broken pottery was left; in the other two rooms most of the mosaic floors of white marble chips decorated with simple geometrical designs in dark blue stone (Pl. 85b) remained. A deep Byzantine pit had taken a great bite-shaped arc from the west side of these rooms. In digging outside the house we found fragments of Type XXVII lamps in the footing trenches and the fill thrown in to raise the level at the south, over House B; and these suggested a dating early in the third century. The area at the south contained two great piers of which the purpose was not ascertained; to the west of the two northern rooms lay two or more, separated by a wall of which a small stretch remained, overlying the south wall of House C. All along the west and south sides of the house the

outer walls had been protected from water, perhaps the drip from the eaves, by sloping shields or aprons of cement. We dug out the east wall trench of the house, expecting to find big reused blocks; no traces of the walls remained. They had apparently been plundered in post-Herulian times for building material for reuse; it was astonishing that the sloping outer aprons of cement had not been damaged in the process of taking out the stones (Pl. 67b). A similar device was used in the Roman drain to protect the foundation of House N, and there too the protecting apron of cement remained after the stones backing it had been taken out. The absence of the foundation stones, however, was helpful to us in that we were enabled to dig deeper in their trench and to spot some of the remains of the earlier Houses B and C in their pre-drain periods.

### HOUSE U

The house which overlay the archaic cemetery seems to have been earlier than Houses S and T; the house well, close beside the cemetery wall at the southwest, produced pottery of the first and second centuries after Christ. The house itself was damaged and fragmentary; it seemed possible to discern a row of rooms or shops at the east, fronting along Areopagus Street. Because of its position beside the street the site continued in use into late Roman times, and there was evidently a post-Herulian rebuilding in which much of the material of the earlier house was reused. No plan could be established.

### ROMAN BATHS

The central part of the area was occupied by two bathing establishments of Roman times, which lay one to the east, the other to the west, of the Street of the Marble Workers. Both had been constructed in part of dry stone masonry and reused material, in part of heavy rubble and concrete masonry. Both lay in the path of the heaviest plundering of Byzantine times, and both had been stripped of their walls; only the heavy concrete foundations and floors, too hard to break up easily, remained. The proximity of these two baths, which appear to have been in use at the same time, suggests that one was a men's bath, the other a women's, the more elaborate one at the east presumably the men's. The one has been called simply the East Bath and the other the West Bath. Here we will give only a brief description of each, with some discussion of the chronology; baths of the Roman period in Greece will be the subject of a later general study by John Travlos.

### THE EAST BATH

Plans, Fig. 1, 25, 26

The bath overlay the Great Drain, taking the east wall as the foundation for its east side. All the parts of the building which were used for actual bathing, and there-

fore contained water and heating apparatus, were built of rubble and concrete; the rest was of dry stone and had largely disappeared in Byzantine times. The building was entered from the west, apparently through a court on to which gave a service entrance at the north and a main entrance at the south, leading to the apodyterion or dressing-room (A on the plan).<sup>138</sup> The dressing-room was paved with a floor of bits of marble of various colors laid in cement; only a small portion was still in place at its northwest corner. Court and dressing-room were built with walls of reused conglomerate and breccia blocks on a dry stone bedding; almost all of the blocks had been stolen in Byzantine times.

A door in the north side of the apodyterion gave access to the frigidarium (F on the plan), a room measuring 3.10 by 2.20 m., with a sunken plunge-bath for cold water at either side, rectangular at the east, apsidal at the west. In the eastern basin remained impressions of the paving and revetment of thin marble in the concrete bedding against which they had been laid; fragments of white, green and pink marble from these pavings and revetments were found in the disturbed fillings over the bath. To the north of the frigidarium lay a small anteroom, with a second apsidal plunge bath at its east side; at the west a door gave access to a small service room opening on the court. The well, which was no doubt the source of water for the bath, lay in the northern part of the service room. From the anteroom a door at the north gave access to the tepidarium (T on the plan), with which began the arrangements for heating with hypocausts under the floor and hollow panels behind the walls. The room measured about 2.70 by 2.30 m.; there were probably five rows of columns of full round hypocaust tiles from east to west, and three rows, with a row of half tiles set against the walls at either side, from north to south. The walls were probably faced with mammary tiles (of which we found a number of fragments) behind a marble revetment, so that the hot air could circulate in the hollow panels behind. The room to the north, the caldarium (C on the plan) was mostly broken away in Byzantine times, and its restoration is largely conjectural; part of its east and west foundation, however, was preserved, and the furnaces for the heating of the bath must have lain to the north under the hot room, which perhaps had two plunge baths of its own.

The bath had been made by laying down a hard concrete floor over the whole area, completely covering the heavy foundations which had been previously laid to carry the various walls. This level was constant through the tepidarium and the caldarium (section, Fig. 26); for the frigidarium the level was raised by the laying of two more thick layers of rubble and concrete to bring the floor level of the frigidarium to that of the floor over the hypocausts in the tepidarium to the north. A similar heavy block of concrete brought the northern part of the service room, around

<sup>138</sup> The south wall of court and apodyterion, and the east wall of the latter, were found by Dörpfeld, and appear on the plans, *Ant. Denk.*, II, pl. 37, and Judeich, *Topographie*<sup>2</sup>, plan 1, as a wall corner.



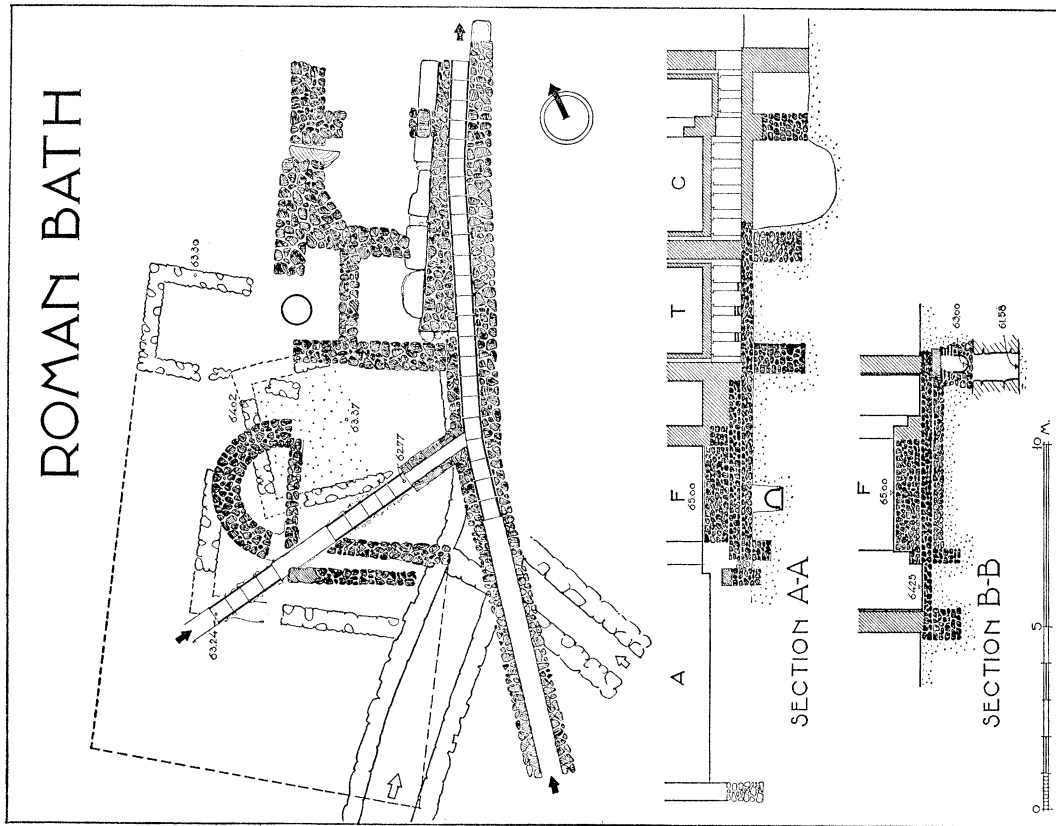


Fig. 26. East Bath: Plan of Foundations, and Sections at A-A and B-B (Fig. 25).

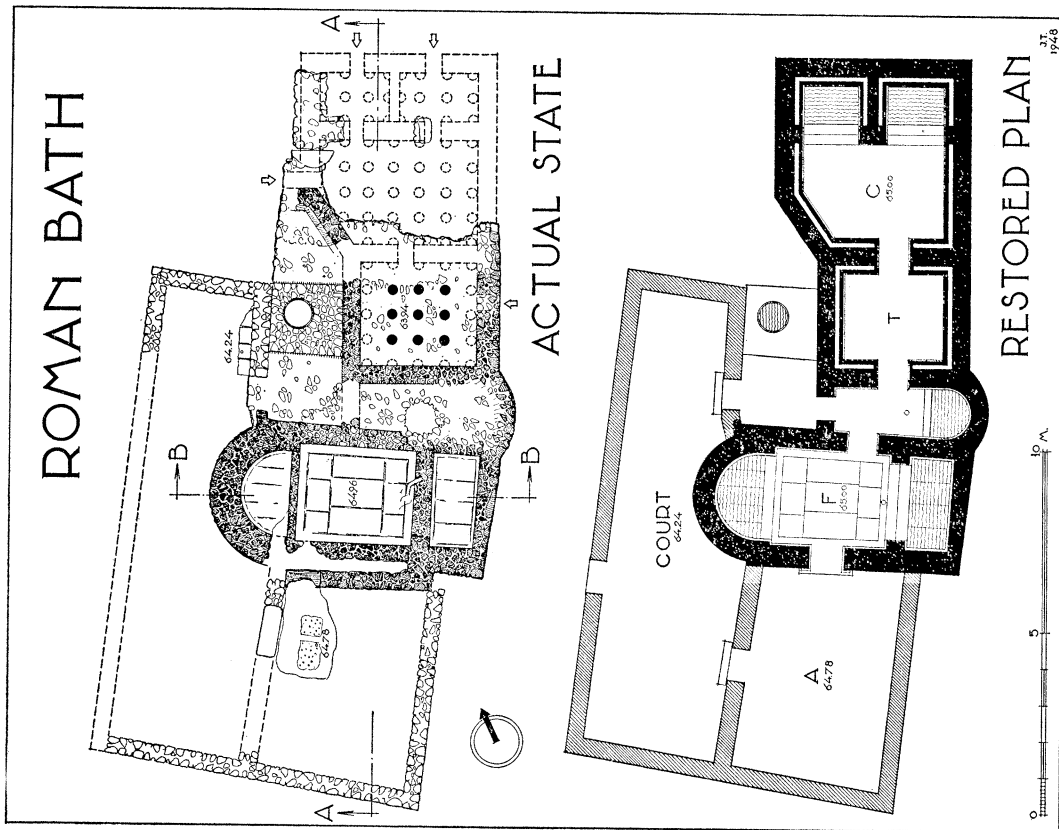


Fig. 25. East Bath: Plans, Actual State and Restored. A—Apodyterion; F—Frigidarium; T—Tepidarium; C—Caldarium.

the well, to the same level. The upper walls of the building had been laid on top of the concrete flooring or levelling block, but they had been completely robbed in Byzantine times and could be traced only by the impression they had left in the surface of the floor. Often enough they had not been laid exactly over, or on exactly the same lines, as the foundation walls underlying the flooring.

Beneath the bath lay the remains of two earlier houses (plan, Fig. 26), one to the west and south of the apse of the frigidarium belonging to Hellenistic times and another, under the frigidarium and its apse, apparently post-Sullan, with a large stone catapult ball built into it. These foundations immediately underlay the bath, and stood on the filling of dissolved mud brick which overlay House D: evidently the whole area was levelled down at the time of the construction of the bath.

Two channels ran beneath the bath, of which one was an earlier drain that came in from the southwest and was cut through and filled by the western wall foundations of the bath. Its east end, however, was reused, and partly rebuilt as a walled channel, to drain the frigidarium into the north-south channel which ran under the whole eastern side of the bath (plan and sections, Fig. 26). This channel as we have seen above was the later replacement of the Roman drain, from the cut-off west of the court of House N to the bath, and under the bath itself. The junction of the three drains—Great Drain, Roman drain and Roman channel—at the southeast corner of the frigidarium can be seen clearly on the plan, Fig. 26, and also the necessity for bridging over the Roman drain to carry the channel across. In the section through the frigidarium, B-B on Fig. 26, appears the channel under the east side of the bath, laid at a high level over the course of the old drain. It will be seen that this channel was an integral part of the construction of the Roman bath, and that it must have been contemporary. The sand filling beneath it, and in the part of the drain that was abandoned when the cut-off was made, produced no coins later than the middle of the first century after Christ, and we proposed a dating in the second or early third century for the construction of the channel (see p. 266 above). The first phase of the bath, then, must date from the same time: pre-Herulian, late second or early third century. To this period belong all the foundations under the flat concrete floors. The floors themselves, and the blocks of rubble and cement under the frigidarium and around the well, belong to a post-Herulian reconstruction; in the mass of rubble and concrete were incorporated fragments of pottery as late as the fourth century. In places under the floor, however, there was a certain amount of debris from the destruction of the earlier bath—bits of marble revetment and paving, of round hypocaust and mammary wall tiles—which had been sealed over when the later structure was built. The establishment, then, seems to have been originally pre-Herulian, destroyed in the sack of A.D. 267 and rebuilt in the form in which we found it in the fourth century after Christ. The well of the bath produced pottery of the fifth century after Christ.

## THE WEST BATH

## Plan, Fig. 1

The smaller and simpler bath which lay to the west of the Street of the Marble Workers at its bend was in the same condition of destruction as the other. The Byzantine pilferers had left only the heavy rubble and concrete substructure and floors, and taken all the walls. The south end of the building lay just outside the edge of a Byzantine trench, and thus part of the tiling over the concrete floor, some of the hypocausts and a bit of the walls were still preserved.

The building was L-shaped, with two rooms at the east side and a third at the northwest. No doubt these were the rooms in which water was used; caldarium at the south, tepidarium at the corner, frigidarium to the east of it. The other rooms, which must have existed, were built of dry stone or reused blocks rather than of rubble and concrete, because they did not need to be waterproof or to have underground heating arrangements; in consequence they were easy prey to the plunderers of Byzantine times, and no trace of them remained. The well lay in the hollow between the wings of the L; it could not be dug beyond a certain depth because of the soft treacherous character of the bedrock. To the depth dug, it produced only destruction debris of the bath itself, with sherds of the fifth century after Christ.

The south end of the southern room contained two rows of hypocaust columns, five in each row, preserved to a height of 0.45 m. (Pl. 85c). Under them the tile flooring laid over the concrete bedding was preserved; in the plundered northern part of the room only the impressions of the tiles remained in the concrete. An opening in the south wall 0.51 m. wide connected with the furnace, which lay outside at the south; part of its east wall was preserved, and its floor, slightly hollowed by the heat of the fires which had been built over it. The presence of the furnace here is helpful in identifying the south room as the caldarium since the hottest room presumably lay nearest to the furnace. All the area outside the room to the south was covered with layers of ash which had been thrown out from the furnace. The caldarium itself measured 3.98 by 2.24 m.

The destruction fill of the bath itself, which overlay the hypocausts and the floor at the south end of the caldarium, very granular from the dissolved concrete and mortar, contained fragments of mammary tiles and bits of marble revetment. The bath was evidently abandoned or destroyed in the fifth century. We found no evidence as to the date of its original construction because it stood up like a concrete island in a sea of Byzantine fill, except at the south where it was not dug. In its present form the bath is no doubt post-Herulian; we have no evidence that the West Bath had an earlier, pre-Herulian phase.

## LATEST HISTORY OF THE AREA

One of the turning-points in the late history of Athens was the destructive raid of the Heruli in A.D. 267. A result of this raid was the abandonment of the ancient Agora and the region to the south of it, which were left outside the new fortification of the city, the so-called Valerian Wall. Our area was not, like the Agora, a good source of material for the building of the wall, and it perhaps lay desolate for some time. In the late fourth and fifth centuries the return of a measure of security and prosperity brought a brief and final period of rebuilding. The areas of rebuilding in our section at that time are of interest in that they show that the old streets continued in use as arteries of traffic and communication. Houses were patched up or rebuilt all along Piraeus Street, to some extent encroaching into the roadway from both sides and narrowing its width; this narrowing perhaps reflects a dwindling of the traffic which passed over it. Similar traces of a late rebuilding were observed all along the west side of Areopagus Street, over Houses N, O, and U. Even the Street of the Marble Workers was still in use, and bordered by houses: a long string of these extended southward between the street and the Great Drain from the intersection with Piraeus Street. Still farther to the south all traces of the houses themselves have vanished, but their wells remain; wells to the north of House F, in House G, in House E, and between Rooms 1 and 12 of House C, produced pottery of the fifth century after Christ, indicating habitation on the spot at that time. The Great Drain itself seems to have been covered over at about the same time; reused slabs span it in some places, in others cuttings for beam-ends in the face of the west wall (Pl. 81a) show that in late times it carried a wooden roof. The houses along the east side of the Street of the Marble Workers in this period no longer confined themselves to the narrow strip between street and drain; they expanded toward the east by covering the drain and building over it. The maze of late house walls over the Poros Building has already been mentioned; it extended eastward as far as the corner of Piraeus and Areopagus Streets, which was occupied by a Roman bath. Like the bath in the central part of the area, this seems to have had two building periods—an early Roman, surely pre-Herulian, and a later reconstruction after the destruction by the barbarians.

This account of the late reflowering of Athens may seem out of place in an explanation of the causes of the destruction of the older buildings and houses; but it must be remembered not only that the foundations of the latest buildings cut down into the remains of the earlier, but also that the new houses were made almost entirely from reused material, often stolen from the ruins of earlier periods. Thus in the areas where new houses were built the older ones were damaged by their foundations, and in the areas which lay open and abandoned even greater damage was done by the search for building material for reuse.

The events of these late times are reflected by the filling of the Great Drain in those places where its natural accumulation has remained undisturbed, especially at the bridge of Piraeus Street and just to the south of it. Here the filling divided clearly into four layers. At the bottom lay a late Hellenistic and early Roman deposit only 20 cm. thick, evidently allowed to remain as a new floor-level at the time of the post-Sullan reconstruction of the bridge. Above this lay an accumulation 0.50 m. thick of pre-Herulian times; it produced thirty-six coins, of which the latest was one of Lucius Verus (A.D. 161-169). The third layer was 0.60 m. thick, probably the accumulation of the time of the Herulian destruction; it seems to have formed quickly, and it contained plentiful small stones and broken tile, perhaps destruction debris thrown into the drain or washed down from above by the water. Of fifty-seven coins from this layer many were third century; the latest dateable coin was one of Alexander Severus (A.D. 222-235). A coin of Aurelian (A.D. 270-275) might have belonged to this layer, or to the one above which was a gradual accumulation of post-Herulian times. The drain at the bridge was eventually entirely choked to its full height by this accumulation; the water ran at a very high level for some time just under the cover slabs of the bridge, which show a very heavy water wear and some lime deposit on their under faces. Of twenty-two coins from this level three were Roman of the fourth century, one was Vandal, one was a Maximianus Heracleus (A.D. 268-305); and one other, of Arcadius (A.D. 395-408), may probably also be assigned to this fill. The drain, then, continued in use down into the fifth century after Christ to carry off the water flowing down from the south.

The closing of the Academy and the forbidding of the teaching of philosophy in Athens, attributed to the Emperor Justinian, seems to have brought an end to this final period of prosperity.<sup>189</sup> Over the greater part of our area the houses were abandoned, after being picked over for anything of use or value, and the drains were no longer kept open and clean. The result was a rapid silting-in of the whole southern part of the area in the sixth and seventh centuries. The accumulation of fine silt brought down from the hills around reached in places a depth of more than five meters (section, Fig. 2); it contained sherds of the fifth and sixth centuries, mixed with many earlier, and coins mostly of the fourth and fifth centuries, including coins of Theodosius II (A.D. 400-450) and Leo I (A.D. 457-474), and even one as late as Constantine II (A.D. 641-668). This filling had evidently accumulated over the various areas as they had been left abandoned and plundered. To the south of the eastern Roman bath it immediately overlay the Hellenistic levels over bedrock; farther to the south it overlay the remains of House T and the early Roman drain with its later water

<sup>189</sup> See, however, P. Charanis, *Amer. Hist. Review*, LII, 1946-7, pp. 74 ff. and especially p. 83. A thorough review of the literary evidence suggests that the Athenians may have sheltered themselves behind the "Valerian Wall" due to the threat of raids by Avars and other roving bands of barbarians, leaving desolate the areas outside. I owe this reference to Homer A. Thompson.

channel. The northeast part of the area alone seems still to have been inhabited, and Piraeus Street open; a new wall, perhaps as late as the sixth century, bordered that street at the south, passing without a break across the north end of the Street of the Marble Workers and over the Great Drain at the bridge. Piraeus Street, indeed, seems to have been the most necessary of all our routes: a street followed its line in Turkish times, and to this day it is represented by Asteroskopeion Street.<sup>140</sup>

Even the tradition of artisans plying their crafts in this area seems to have lasted into late times. Over the eastern edge of the Poros Building was found a kiln in which pottery or tiles had been made as late as the ninth or tenth century. Part of the fire-chamber itself was preserved, with the alcoves and vents which conducted the heat to the oven proper; and associated with it were a number of crude clay props which had served to keep apart the pots or tiles stacked in the kiln for firing. A large number of big round pits scattered throughout the southern part of the area was made at this time or slightly later; it has been suggested that they were made by the potter digging earth to get raw material for his work. More likely, however, these were dug a little later, when the area of the Poros Building proper and a strip to the west of it along Piraeus Street were occupied by a settlement of Byzantine houses dating from the eleventh century onward. The settlement was enclosed at the south by a light wall which passed over the middle of the eastern Roman bath in the central part of the area. For a stretch of about twenty meters northward from this enclosing wall, as far as the houses which it surrounded, almost all the filling had been dug out practically to bedrock. The remains of earlier houses were stripped of every stone that could be of use; the Roman bath was razed to its hard core of concrete. Over this stretch the walls of the Great Drain have been plundered of nearly every stone, whereas to north and south they stand to a height of 1.50 to 2.00 m. The area actually covered by the Byzantine houses was not plundered; apparently the lines of the settlement were laid out, then enormous pits were made in either direction, to north and to south, in search of building material for the houses. This was not a mere sporadic following of the lines of earlier walls to secure stones; it was a systematic stripping of a whole area. The refill thrown back was a heavy mixture of small stones, broken tiles and coarse potsherds. The explanation of these activities would seem to be that the earth dug out was screened for the making of mud bricks, and the coarse rubble which had been screened out, being useless, was thrown back. Thus the builders obtained stones for their foundations and the socles of their walls, and also the earth with which to make mud bricks for the upper construction.

To the south of the enclosure wall no great block had been dug out systematically, but a number of large pits of the same period and containing the characteristic filling

<sup>140</sup> The northern end of our Melite Street, passing the Hephaisteion at the west and running to the Dipylon, was perhaps represented by a street in Turkish times which appears on Fauvel's plan of the Athens of his time. (G. A. Olivier, *Voyage de l'empire Ottoman*, Atlas, Paris, 1807).

of stone and broken tiles was detected. These pits often overlapped at their edges, which suggested that the digging activities had gone on over a fairly long period of time. One of these big pits went nearly to bedrock in the southwest corner of House C, and had led to the plundering of about two-thirds of its west wall; another made a great bite-shaped arc in the floors of Rooms 2-3 of House T. In the course of the digging operations of Byzantine times several ancient wells were found; they seem to have been kept open for use, as they produced a quantity of coarse Byzantine well pottery. One of them lay between Houses J and K; another, beside the Roman drain at the west, was cleared out to a depth of eleven meters and reused in Byzantine times. Yet another, which had been the well in the courtyard of House Q, an early Roman house built over the Poros Building, was also reused in Byzantine times. It lay, however, in the area of the settlement itself and was apparently used by the houses. In order to bring the old well up to the late level, a height of nearly two meters, a new curb and well-head were added above the old.

The activities of the Byzantine settlers were destructive enough. Almost equally destructive was the flow of water eastward from the Hill of the Nymphs. All along the Street of the Marble Workers in its eastward slope into the valley, deep pits, made by water and filled with a waterborne deposit of sand and gravel, went almost to bedrock. The fill was fairly widely spread over the spur of the Hill of the Nymphs; in general it followed the course of the old drain under the street. The coins from the gravel deposit ran as late as the twelfth century; among them was one of Alexius I (A.D. 1081-1118).

No very great destruction was done after Byzantine times. Only at the north, where a large house or khan of Turkish times stood at the line of Piraeus Street, probably near one of the gates in the wall of Turkish Athens, a number of big pithoi had been set down into the deeper filling. Of the Turkish wall itself a short stretch was found, running eastward toward the lower slope of the Areopagus about over the line of the wall between the Poros Building proper and its court at the south. This wall did not go deep enough to disturb the antiquities below, but it was built entirely of re-used materials. It was astonishingly light; built in 1778 by the Turkish authorities, it was apparently not so much a fortification as a barrier for the control of ingress and egress from the town, in order to make sure that all traffic passed through the gates and paid any taxes due on produce transported to and from the city.<sup>141</sup>

The area was not thickly built up in modern times. A heavy accumulation of modern fill overlay it but there were no deep cellars to destroy the ancient remains below. The deepest cuttings of modern times were Dörpfeld's old trenches. We located four of these; the bits of ancient walls which were uncovered in their bottoms (including the south wall of the courtyard, with one corner, of the Roman bath)

<sup>141</sup> Judeich, *Topographie*<sup>2</sup>, plan IV.

appear on the plans of this part of Athens as isolated stretches.<sup>142</sup> The latest excavators are responsible for considerable havoc among the latest antiquities; the problem is always with us as to how much of the later levels may justifiably be cleared away so as to make it possible to expose the earlier ones beneath.

## CONCLUSION

The excavation of this large area was undertaken with the purpose of clearing a site for the permanent Agora Museum. In the end the site proved unsuitable. Not only were objections raised on esthetic grounds to the placing of a large modern building immediately at the foot of the Areopagus, but also on archaeological grounds, because the foundations of such a building would necessarily cut into and destroy most of a large public building as well as private houses of the fifth and fourth centuries which are unique at Athens and rare enough in the rest of the Greek world. The plan to restore the Stoa of Attalos to house the Agora collections is a happy one; nothing will be destroyed and nothing covered that was not covered at the time the stoa was first erected in the second century B.C. The excursion into the area west of the Areopagus, however, has given us invaluable glimpses into the private houses and workshops, the back streets and alleys, the drainage and water supply, of a busy and populous region just outside the Market Place. Excavation here has suggested something of the layout of the main streets of this part of ancient Athens, and of the problems of drainage which confronted the Athenians. It has given us a hint as to the date of the enclosure of the lower city within a defensive wall.<sup>143</sup> It has yielded full plans of houses of the fifth century, and demonstrated how advantage was taken of circumstances to alter and enlarge them at the beginning of the fourth. It has given glimpses, often enigmatic enough, of the industries plied in this industrial section of Athens from the fifth century before through the second century after Christ. Though never a part of the actual Market Place, this area immediately adjacent to it was one of the busiest sections of ancient Athens, frequented not only by the artisans who worked there, but also by the Athenian citizens passing upward from the Agora to the Assembly Place on the Pnyx. Its excavation has yielded a wealth of information which cannot but be a welcome addition to the finds from the official Agora, rounding out our picture of ancient Athens.

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<sup>142</sup> Judeich, *Topographie*<sup>2</sup>, plan I; *Ant. Denk.* II, pl. 37.

<sup>143</sup> *Hesperia*, XX, 1951, pp. 131-34.





a. Area from NW.: To left, Areopagus; in middle, Hill of Muses and Pnyx; to right, Foot of Hill of Nymphs (1947)



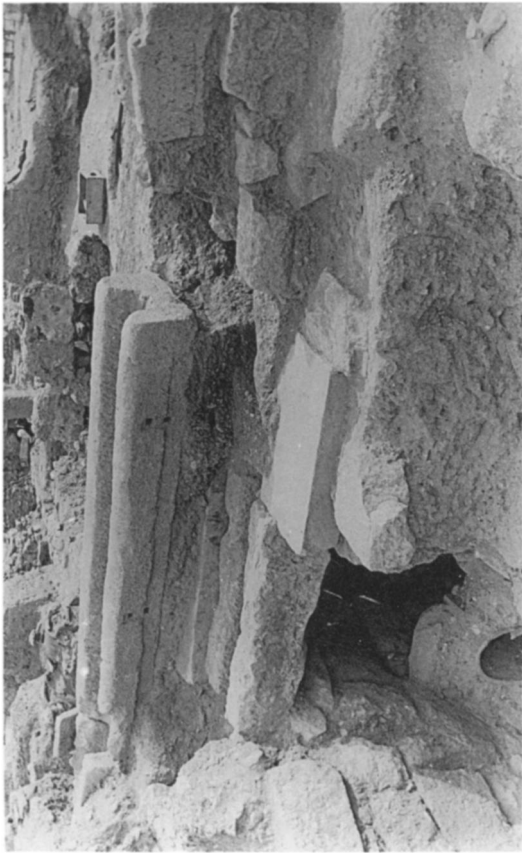
b. General View of Area of Poros Building from SW. (1948). Arrows mark position of corners



a. Great Drain, looking N. at Bridge: Corbelled W. Wall (left)



b. Corbelled Construction beside the Eridanos at the Kerameikos



c. N. End of Bridge over Drain, from NW., showing Channel Blocks and Reused Marble Grave Stele



d. The Same, looking W.



a. Bridge and W. Wall of Drain from E., showing Hellenistic Channel Block and Ends of Terracotta Channels E. of Drain



b. Reused Poros Blocks in Top Course of W. Drain Wall

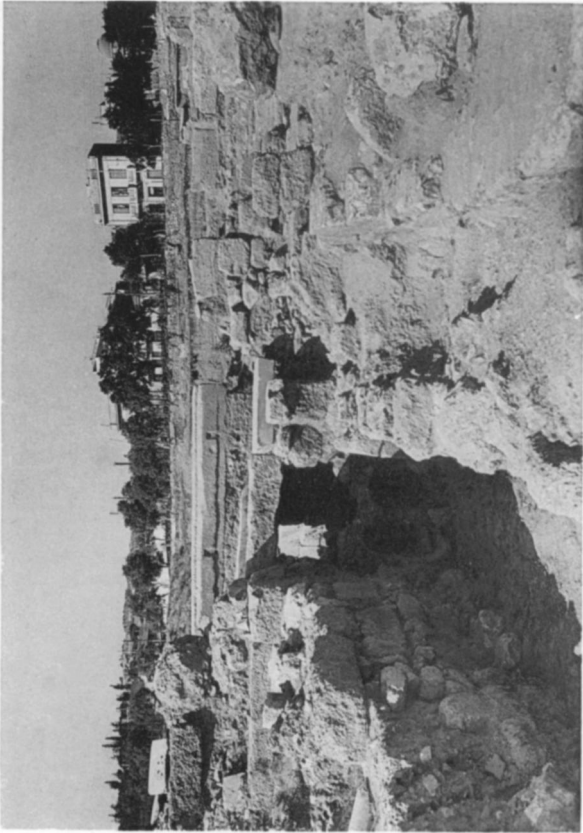


c. Looking S., showing Divergence of the Great Drain (left) and the Street of the Marble Workers (right) ; Hellenistic Channel Block in foreground, N. Foundation of House H above



d. Looking E., showing Hellenistic Channel Block; Street Drain of Street of Marble Workers in foreground

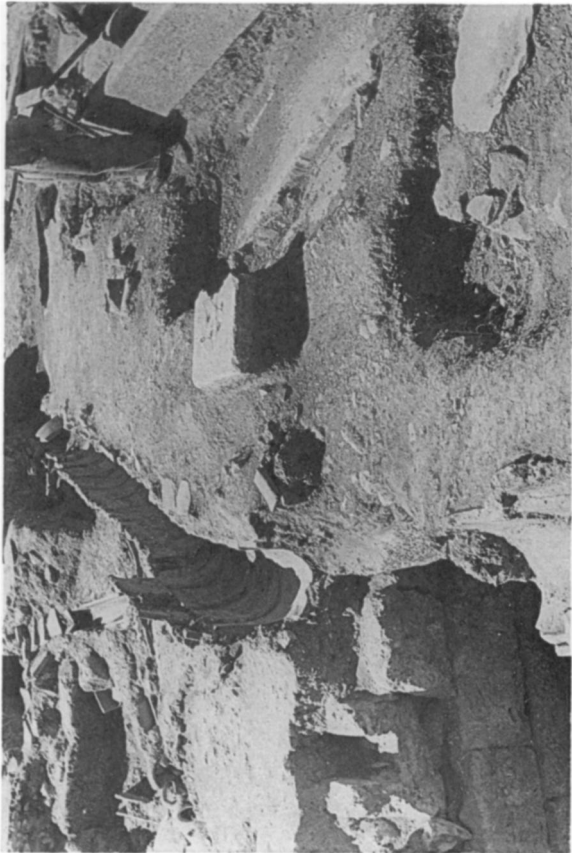




a. N. End of Bridge over Drain, showing Cuttings in Face of Long Channel Block



b. Foundation of V-IV Century House at NW. Corner of Bridge



c. Looking W. showing Roman Tile Water Conduit at Bridge over Drain: Hellenistic Channel Block, left; Late Roman, right



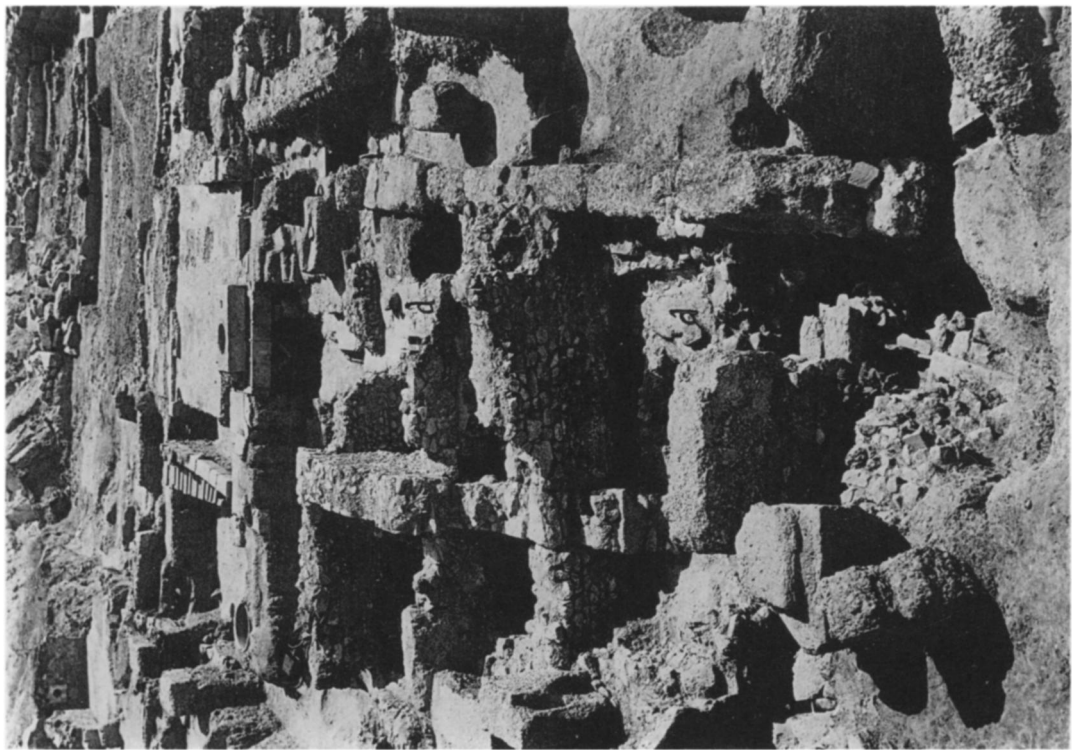
d. Looking E.: Bridge Covers and Post-Sullan Street Level, showing Wheel-ruts on Bridge. Left, Long Channel Block, in foreground Reused Bedding Block for Columnar Grave Stele



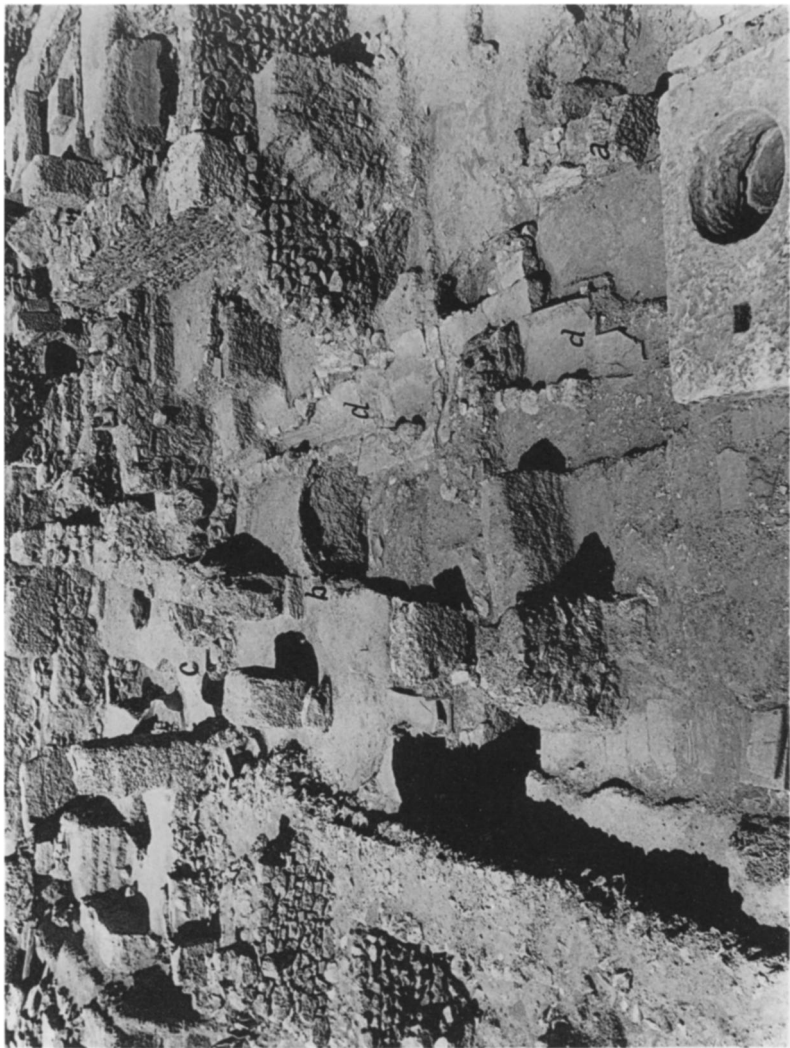
a. Poros Building from S. (1949). Arrow points to NE. Corner of Court



b. S. Rooms of Poros Building from SW.: (a) Corner Blocks of SW. Room, (b) E. Wall of SE. Room, (c) Light Rubble Wall at Entrance from Corridor to Court, (d) Wall between Two S. Rooms in W. Wing



a. Poros Building: Corridor from N., (d) Corridor Drain



b. Poros Building: Central Part of Corridor from S. (a) Doorjamb in III Room from S., E. Wing; (b) Doorjamb on N. Side of Door in IV Room from S., W. Wing; (c) Doorjamb (?) between IV and V Rooms from S., W. Wing; (d) Corridor Drain

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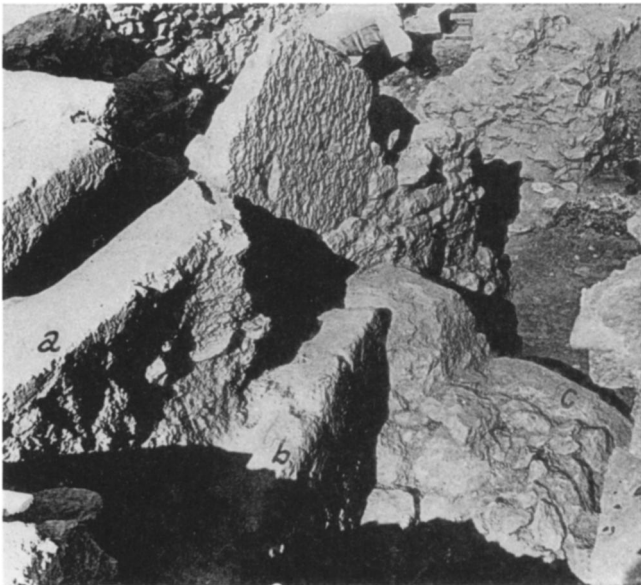
a. Poros Building: N. End from W. Arrows mark NE. and NW. Corners



b. Poros Building: NW. Room from N. (a) N. Wall, (b) W. Wall, (c) E. Wall



a. Poros Building from E. Arrow points to N. Wall of Annex



b. Poros Building: N. Wall of Annex from E. (a) Marble-Chip Floor of House of Augustan Period, (b) Annex N. Wall, (c) Earlier Wall



c. Poros Building: Arrow points to Paving Stones N. of Annex Projecting below Foundations of Roman House Wall; (a) E. End of IV Century N. Wall of Annex. View from S





a. Poros Building: Annex from S.: Arrow marks NE. Corner. (a) Earlier (?) Wall in SW. Room of Annex, (b) Drain, (c) S. Wall of Annex



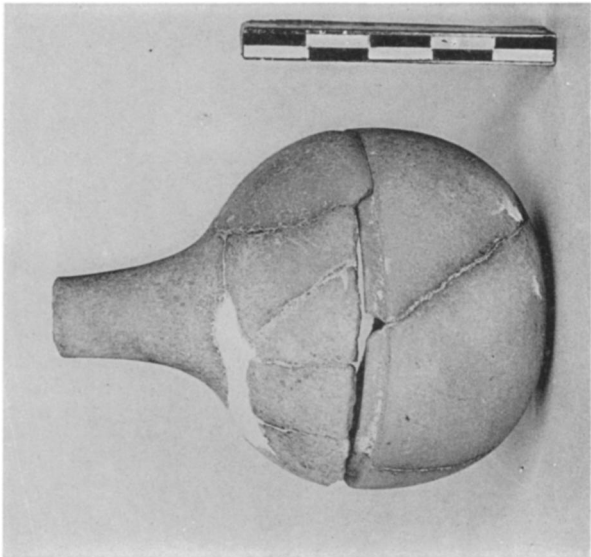
b. Poros Building: E. Wall of Annex from W.



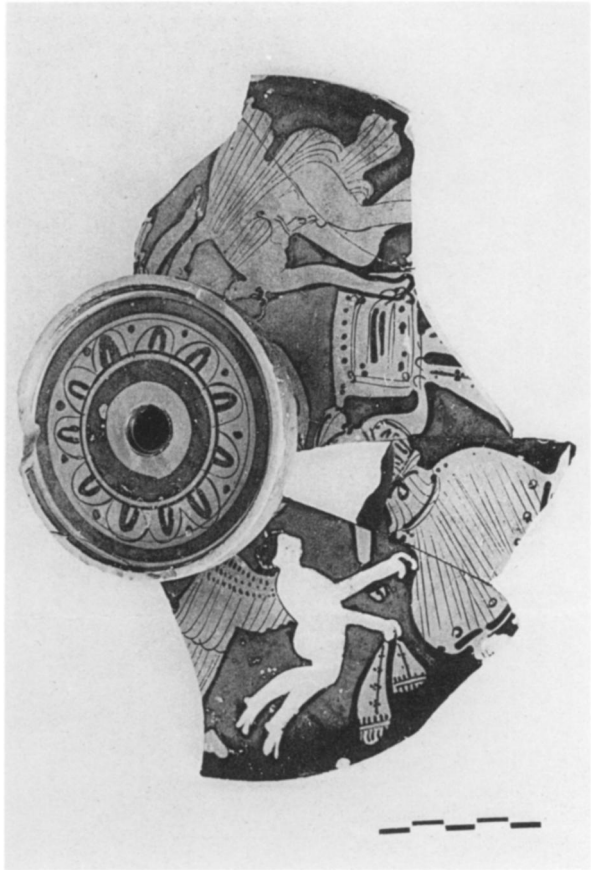
a. Poros Building: Early Wall (a) and Drains (b) in S. Part of Annex, from S.



b. Poros Building: NW. Room from SW. (a) Basin, (b) Pithos used by Marble Workers, (c) Unfinished Well



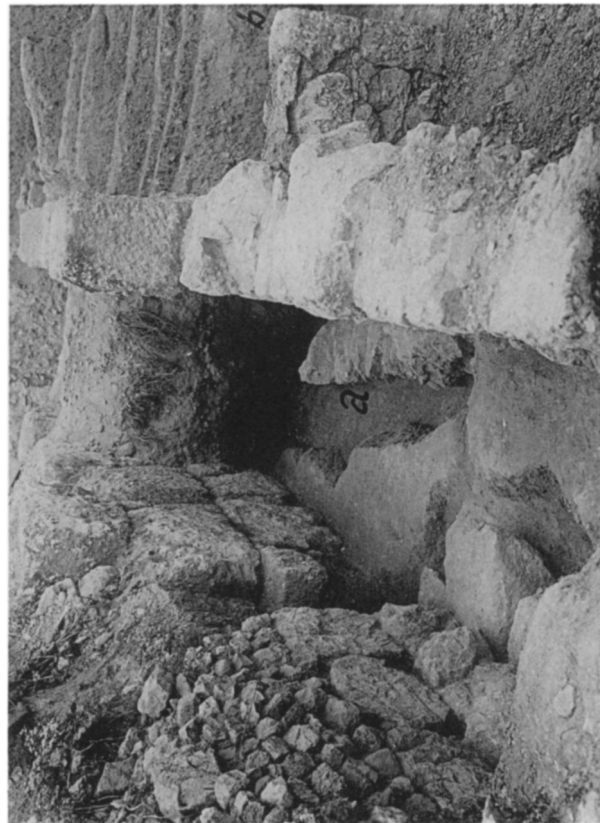
c. Marble Perfume Bottle



d. Red-Figured Lid



a. House A: NW. Corner from N., showing Doorway in N. Wall

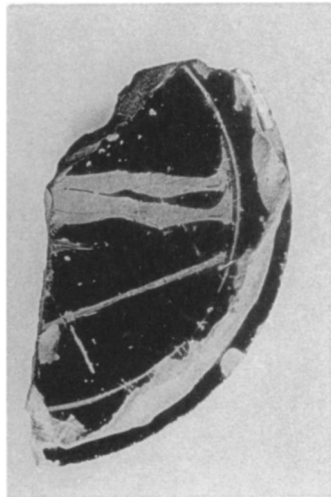
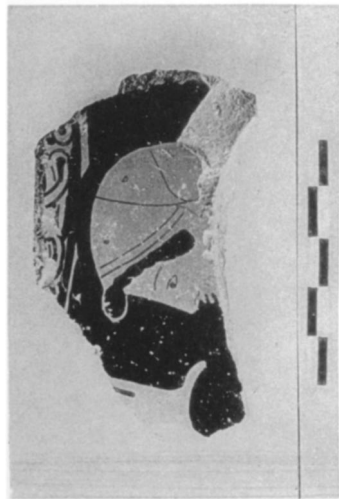


b. Great Drain: looking S. (a) Cutting and Bedding Stones for E. Wall of First Period of House A, (b) E. Jamb of Door in N. Wall

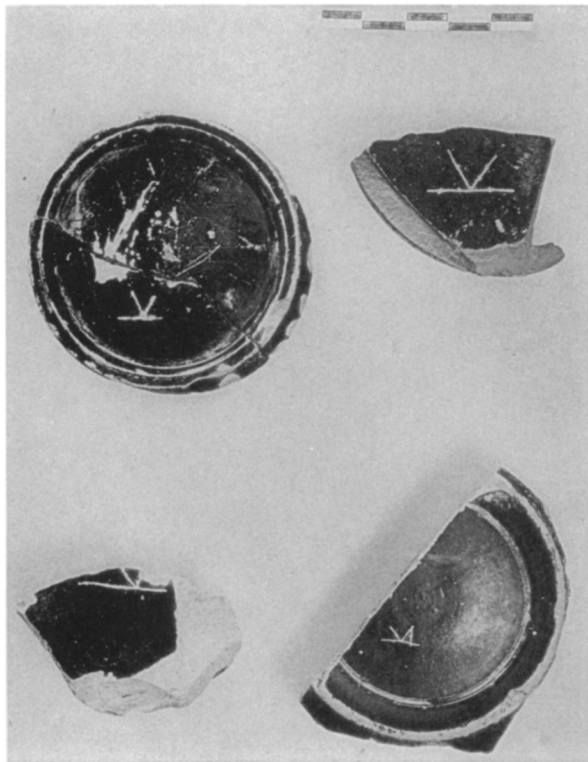


c. NE. Corner of House A, looking down into Drain from E.; Blocks remaining in place of Earlier House, and Bedding for its E. Wall





a. and b. Sherds from under Floor of First Period of House A



c. Sherds with Graffiti from Second Period of House A



d. Looking E. into N. Side of House A. (a) Rectangular Pit of Latest House, (b) N. Doorway, Blocked



e. W. Wall of Drain = E. Wall of House A, Second Period: "Checkerboard" Construction



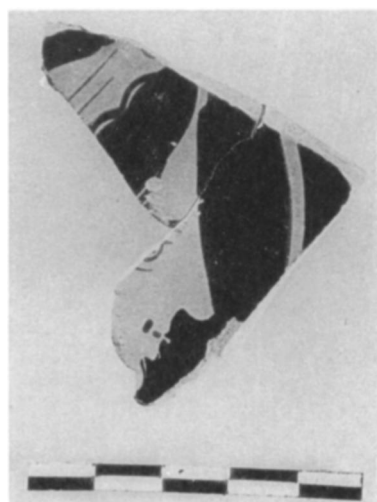
a. Looking SW.: S. Half of E. Wall of House B, showing Limestone Construction and Later Poros Channel Added against its Face



b. Looking S.: W. Drain Wall (a) with Thin Wall (b) added behind it to Correct Angles in Later Phase of House B. Wall across center (c) and Floors at right (d) belong to Roman House T.



c. Fragment of Dikast's Ticket from Rubbish Pit in House B



d. Red-Figured Sherd from the Same Pit



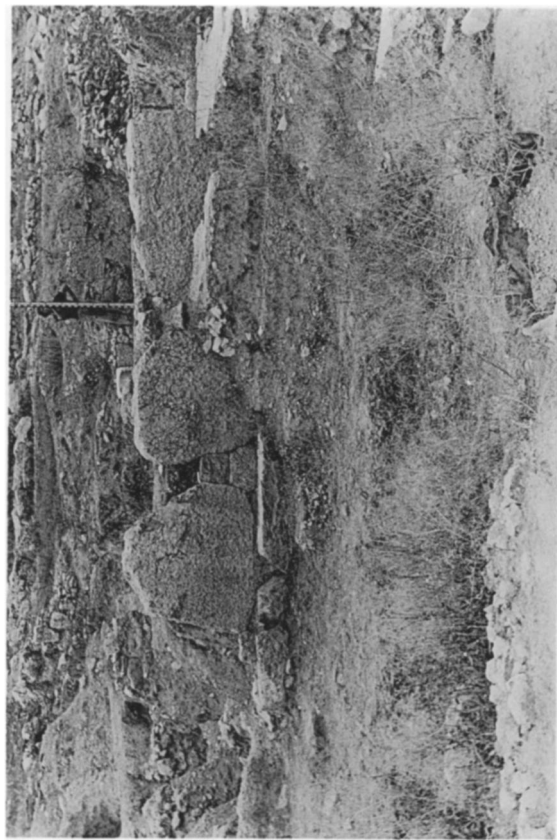
a. House C, Room 6: Great Drain (a) with Outside Wall (b) of Earlier House C, beside it. Tile Drains (c) of Room 6 beside N. Wall, (d) of Room 7 at bottom



b. House C, NE. Corner, from S.: Outside Wall (b) of Earlier House beside Drain (a) and Various Arrangements of Rooms 4-5



c. Houses C-D, from E.: (a) NE. Corner of Early House C, (b) N. Wall of Later C, (c) South Wall of Second Period of House D



d. House C, W. Wall, from E.: at right Later Floor of Room 12

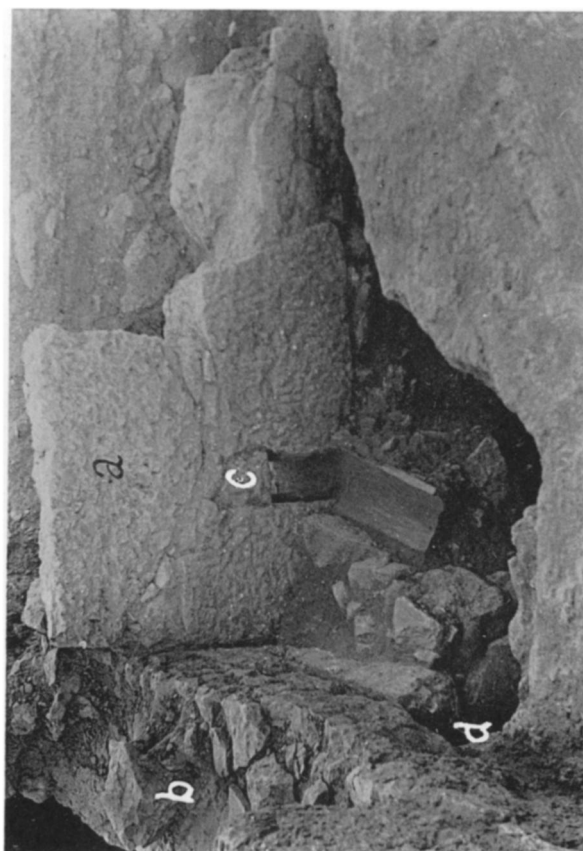




a. House C, Room 6, looking E.: Later Wall (a) between Rooms 6-7 and beside it Foundation (b) of Earlier Wall, with Tile Drain (c) beside it leading into Drain by Inlet (d) through its W. Wall



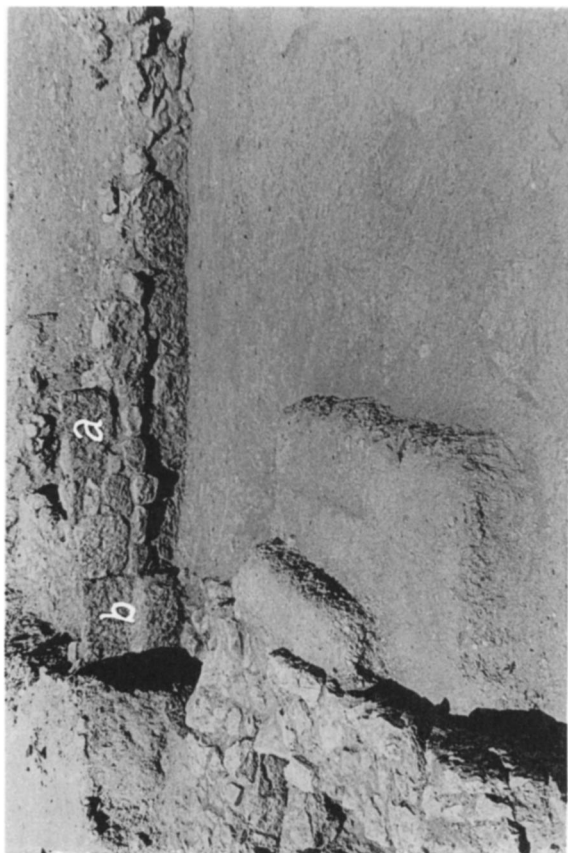
b. House C: (a) Wall between Rooms 5-6, looking E., (b) Drain of Room 6 of Earlier House Passing under E. Wall. Note levels indicated by changes in construction of back of Drain Wall (c)



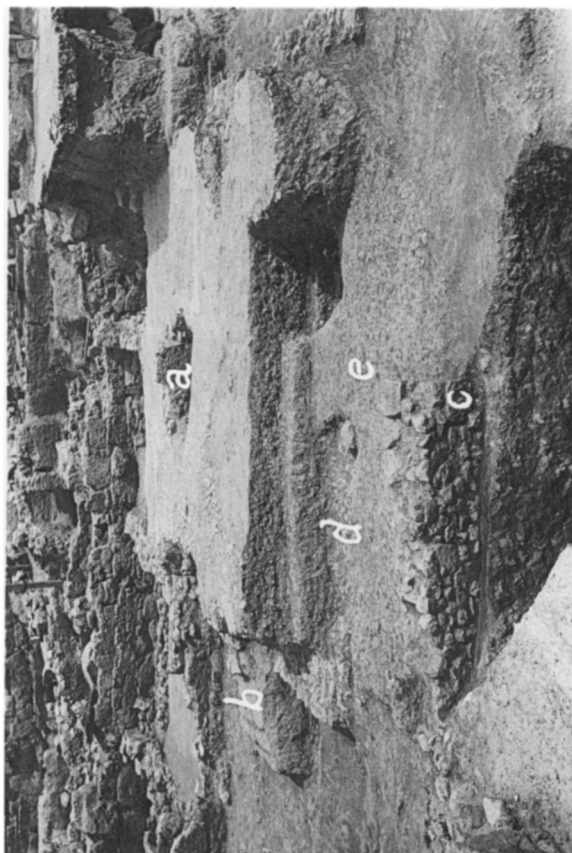
c. House C, from N.: Partition Wall (a) between Rooms 6-7 of Second Period, abutting against Back of Drain Wall (b). Note Hole (c) left in it for House-Drain, and Tile in Place. Left, Inlet (d) into Great Drain



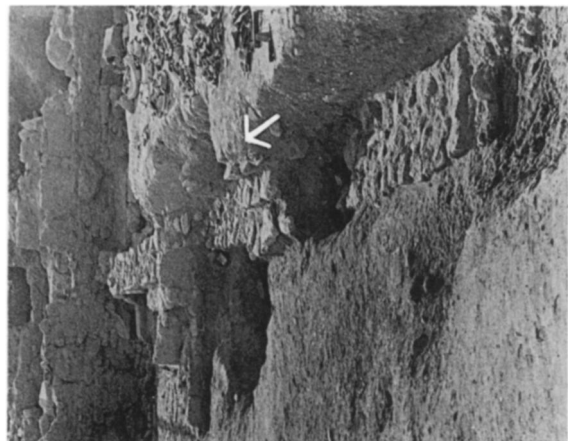
d. House C, Rooms 4-5, from SW.: showing L-Shaped Room 4, with Door (a) to House D or Alley. Note Construction Levels in Back of Drain Wall (extreme right)



a. House C: SW Corner of L-Shaped Room 4, from E., showing Two Periods of Socle for Wall (a) between Rooms 3-4 and W. jamb (b) of Door from Room 4 to Court



c. House C: Court in 3rd Period from W. (a) Well, (b) Step-Beddings to Room 3, (c) Wall between Court and Room 11, (d) W. Wall of Court of 1st Period, (e) Doorway from Court to Corridor



b. House C: N. Wall of Court, looking E. Arrow points to Beddings for Steps between Room 3 and Court



d. Looking S. in Great Drain, Projecting Corner of House D, Room 5, with Original Bedding-Stone (a) *in situ*. (b) W. Wall of Drain = Wall of House D, Room 4





a. House D, Room 2, looking S.: (a) Base for Wooden Column, (b) Doorway to Room 6. At left, Edge of Hearth



b. Bronze Dikast's Ticket from House C.



c. Pyre in House C, Room 4, looking E. Level shown is that of the Floor of the 3rd Period, cut through by the Pyre. Note Top of Drain Wall (a) beneath House Wall (b)



1



7

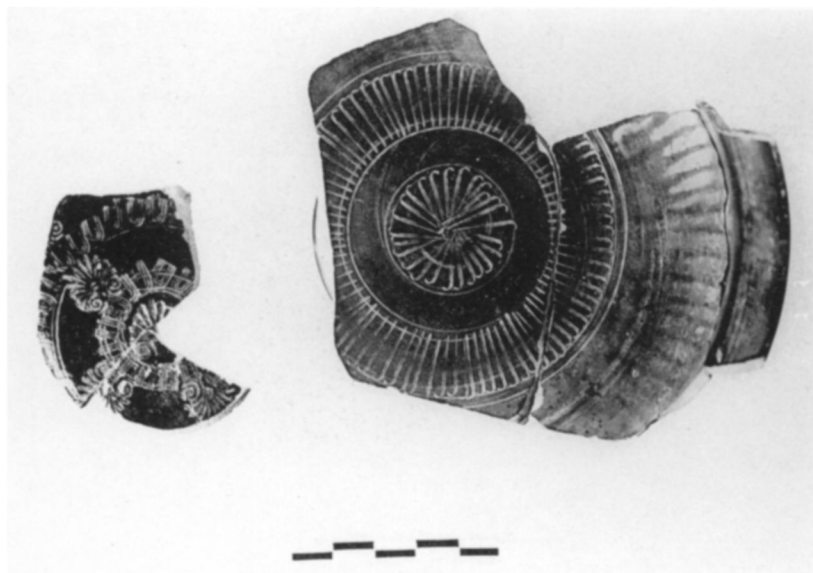
2B



2A



3



4

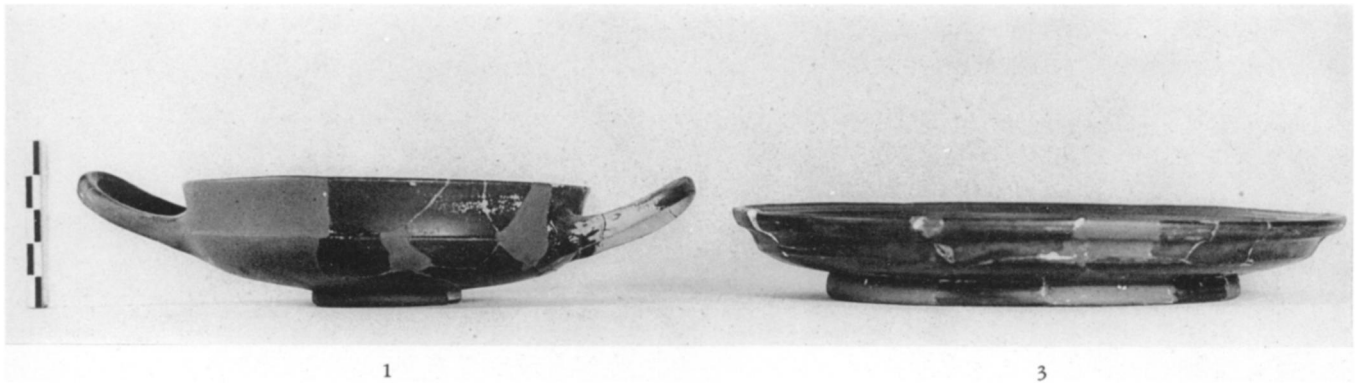
5



6

Sherds from Filling between Drain and Wall of House C, in front of Room 4  
(No. 7 comes from elsewhere in the Agora)

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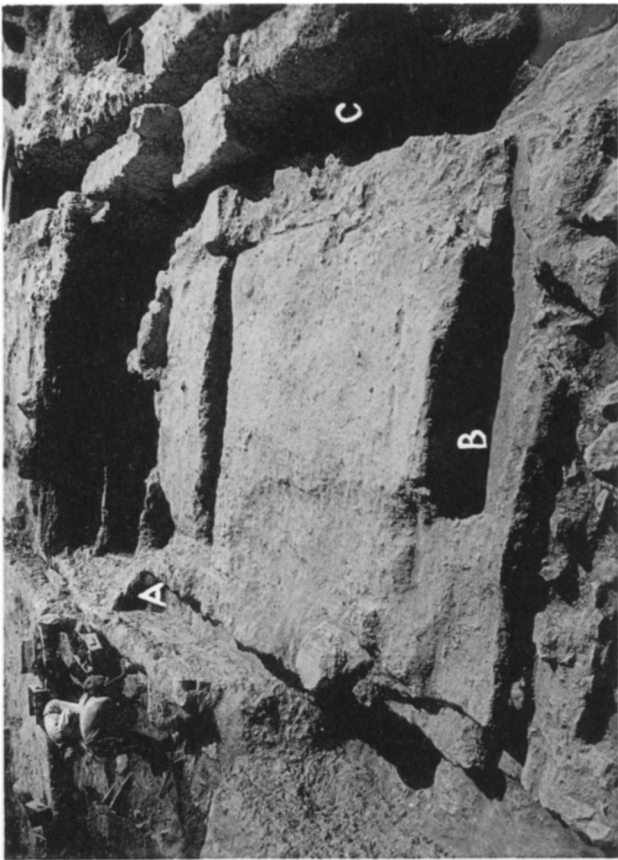


Fragmentary Pottery from Early Pyre in House D

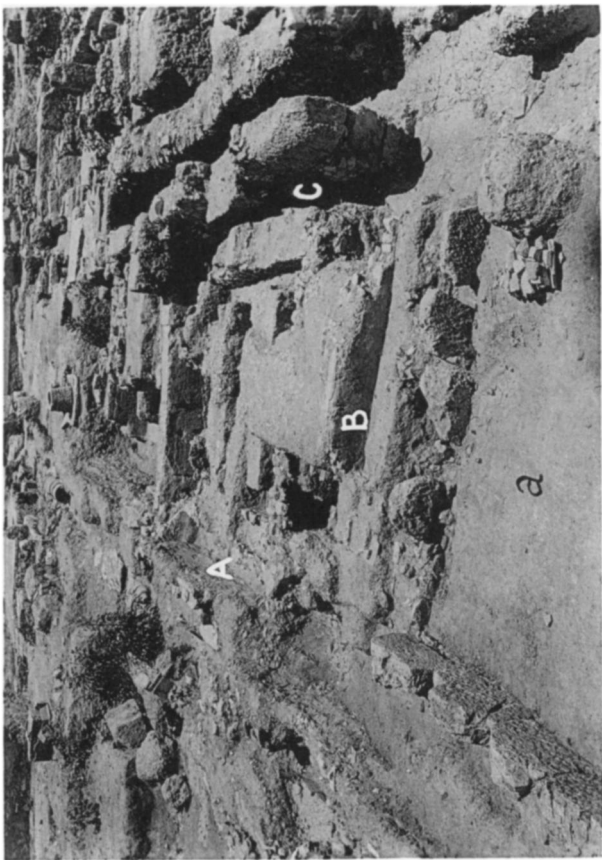
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a. Inscribed Lead *Defixio* from House D



b. House F, Later Period, looking N. Left, Vat A; in foreground B; right, C beside Drain Wall



c. House F from S.: in foreground N. End (a) of House E. A, B, C: Vats of Later Period

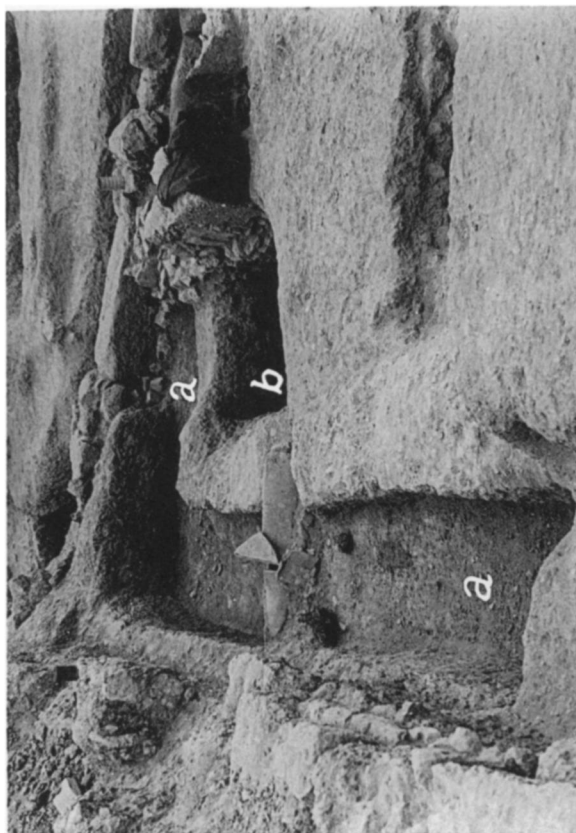


d. Tank to N. of House F, looking E. Lower left, S. End of Connecting Vat

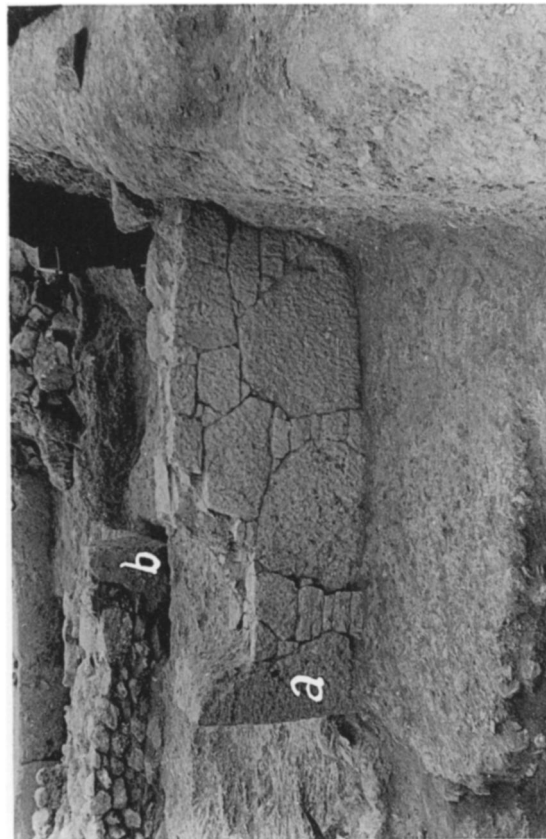




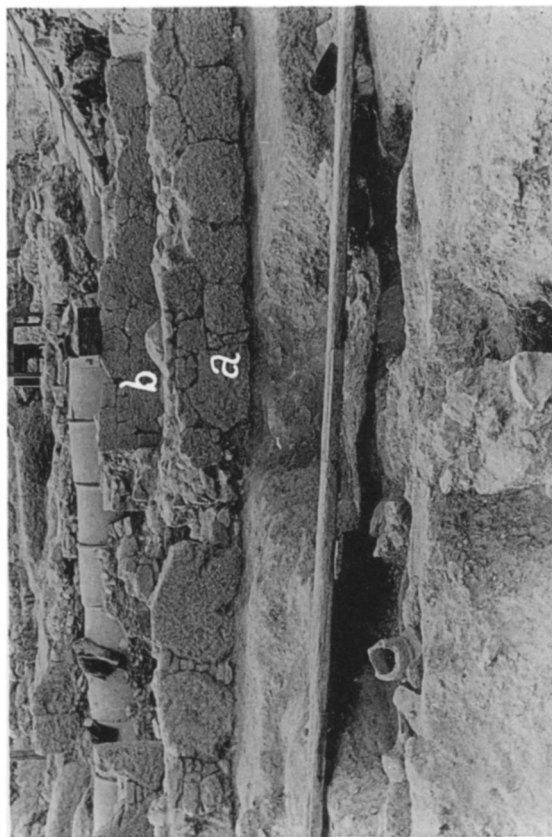
a. Foundation Blocks (a) under NW. Corner of House K, looking S. (b) Back of E. Wall of Great Drain. (c) N. Wall of House K to left of Squared Foundation and beneath Roman Terrace Wall (d)



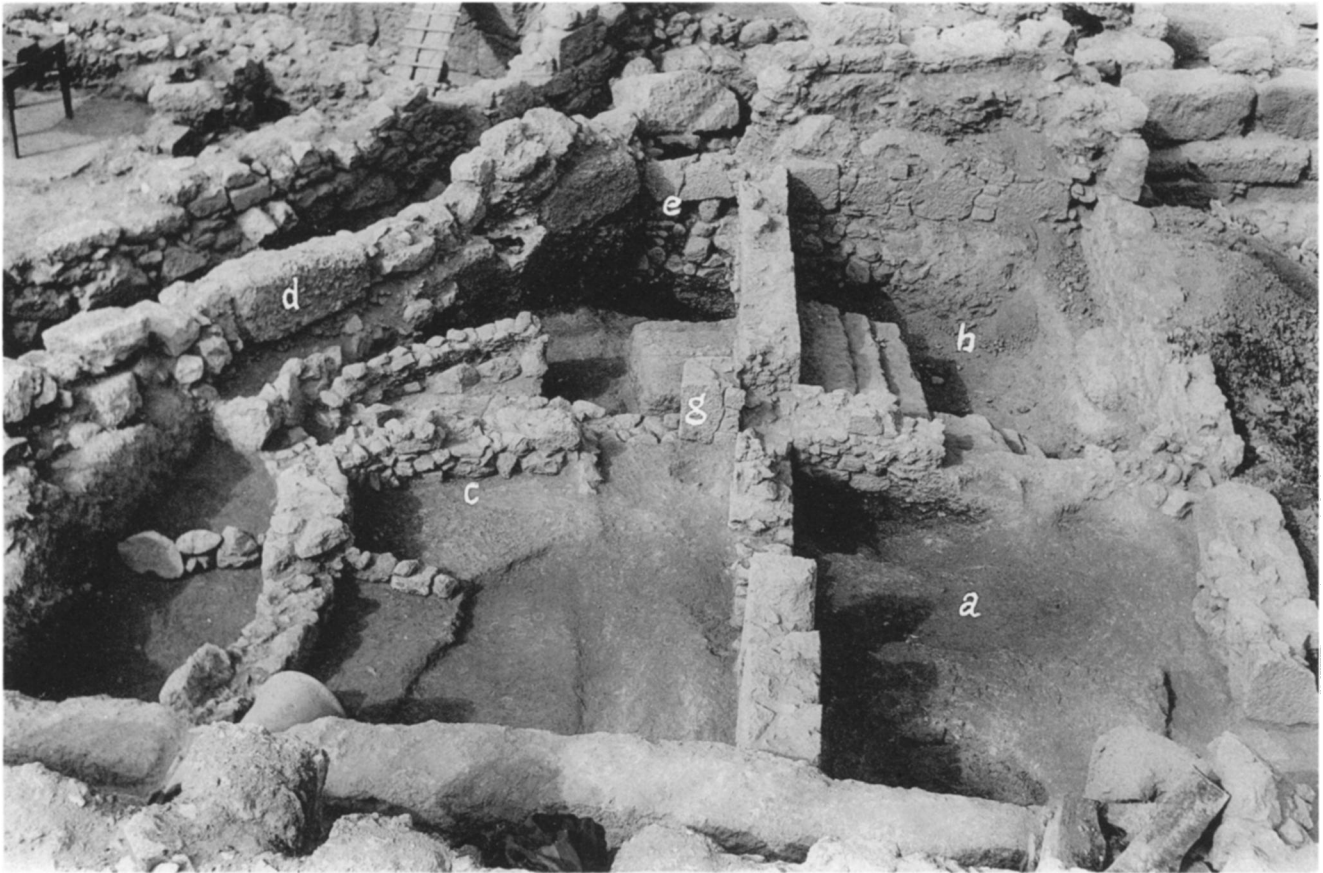
b. E. Side of House K, looking S.: left, Wide Shallow Wall Trench (a) in Hillside, turning W. at its S. End. SE. corner of Deep Cutting (b) inside Corner of Outer Bedding



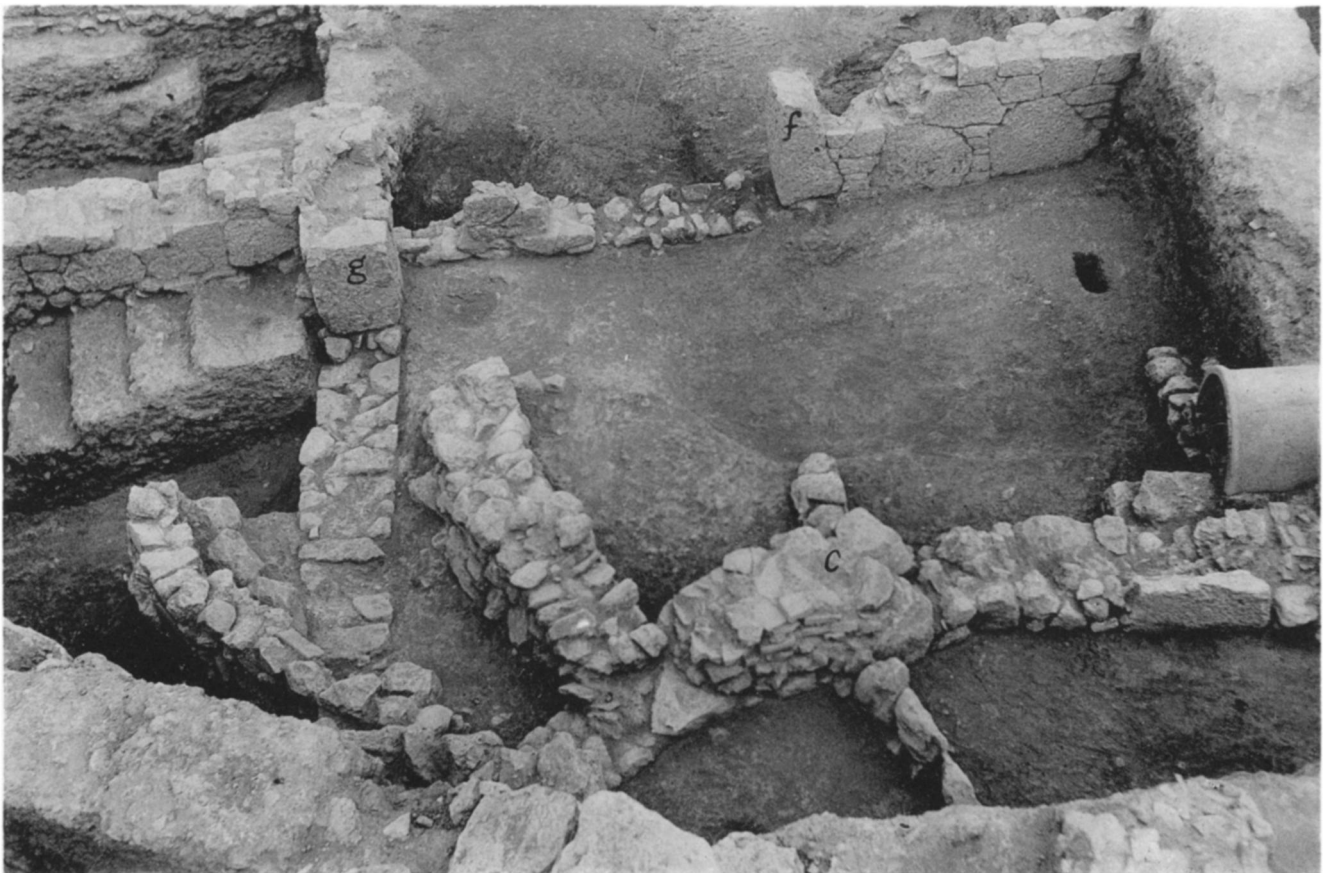
c. House K: Wall and E. Jamb (a) of Door between NE. and SE. Rooms, from S. (b) W. Jamb of Door in N. Wall of House



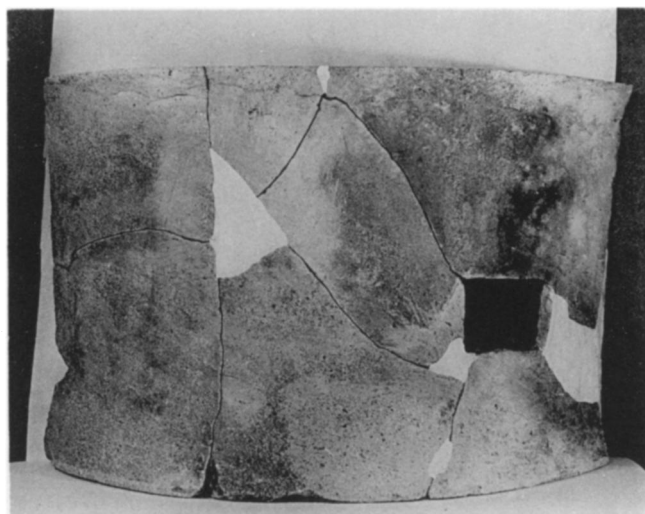
d. House K, looking S.: (a) N. Wall of House, (b) E.-W. Interior Wall



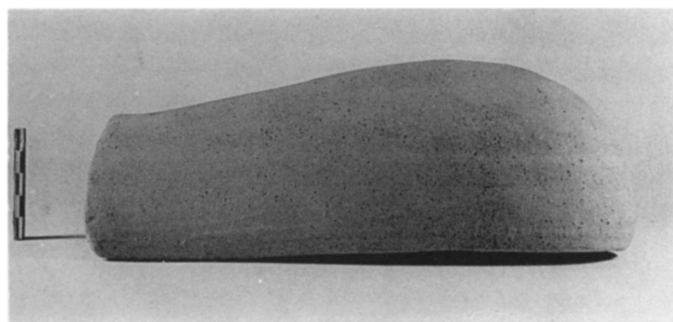
a. House K, looking W.: Two N. Rooms (a and b), right; (c) Walls to retain Marble Chips; (d) Wall of Roman Drain; (e) Drainage Outlet in W. Wall of House K



b. House K, SE. Portion; from S.: Rough Walls (c) built to Retain Marble Chips. Note Jamb (f) of Door between Two E. Rooms and Jamb (g) of Door between Two S. Rooms



a. Tile from Well in NE. Room of House K



b. Coarse Epinetron from the Well



c-d. Red-Figured Oinochoe from the Well

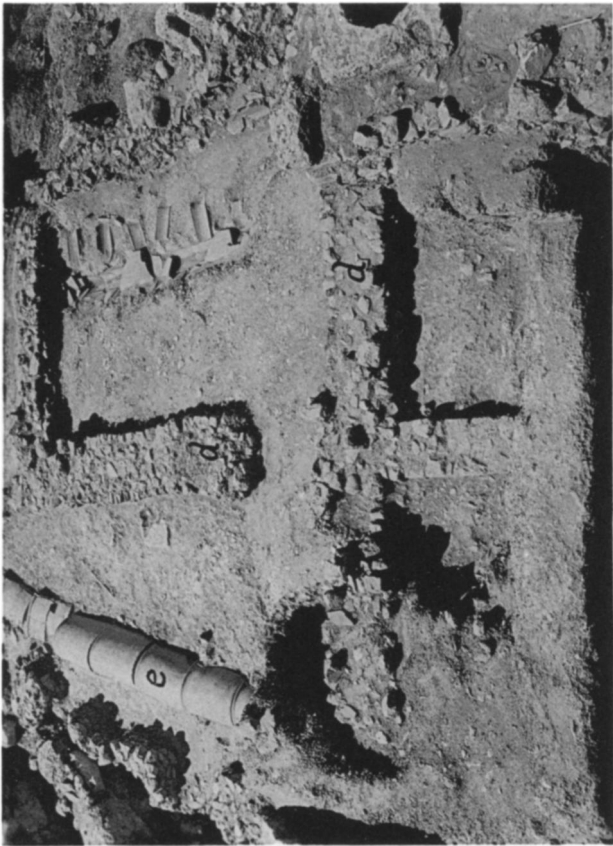


e-f. Black-Glazed Kantharos and Skyphos from Filling thrown over House K in Latest Period to Raise Levels





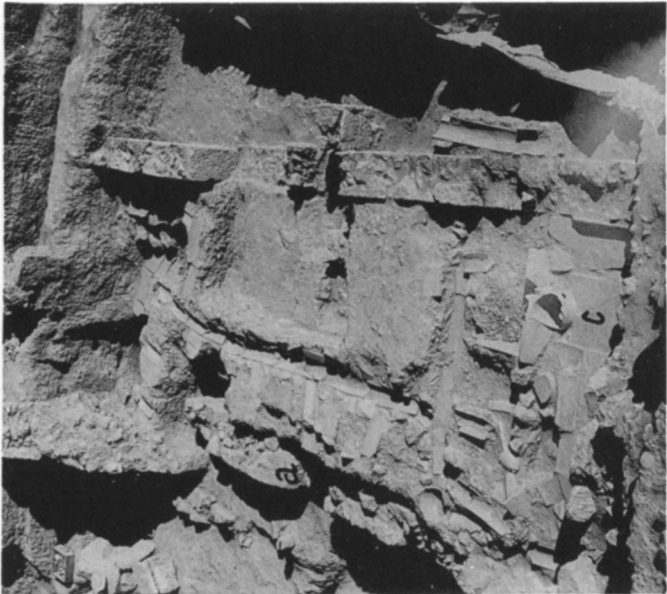
b. House K: Tiled Basin (c) at W. End of Tile System. View from W



d. House K, looking W.: Hellenistic Foundations (d) overlying Classical House, E.-W. Tile Drain (e)



a. House K, N. Side from W.: Tile System beside N. Wall (a); right, Filling of Marble Chips (b)



c. House K, N. Rooms: Tile System and Basin (c) at W. End. View from W





1



2



3



4



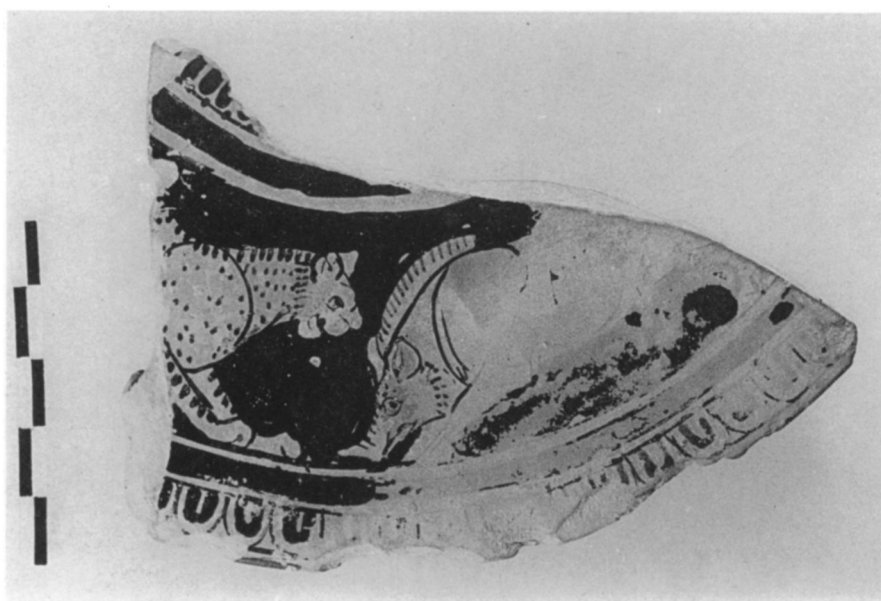
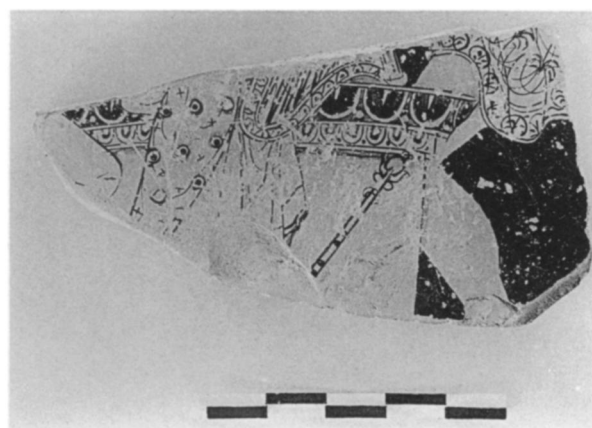
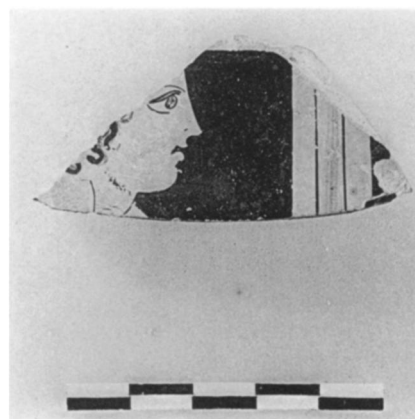
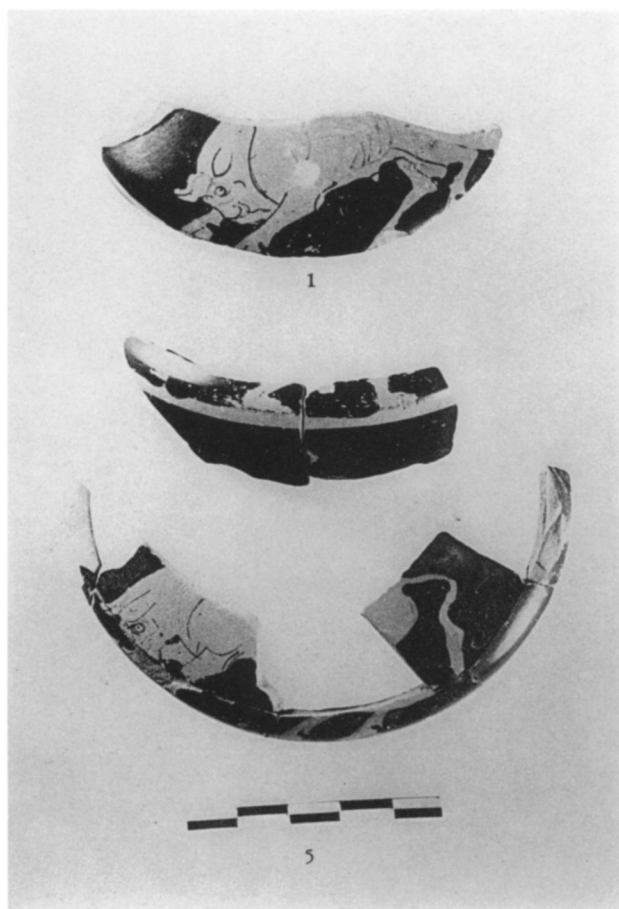
5A



5B

Red-Figured Fragments from Filling between E. Wall of Drain and House L

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Red-Figured Fragments from Filling of Deep Drainage Cutting Abandoned when Great Drain was Built  
(No. 5 is from elsewhere in the Agora)

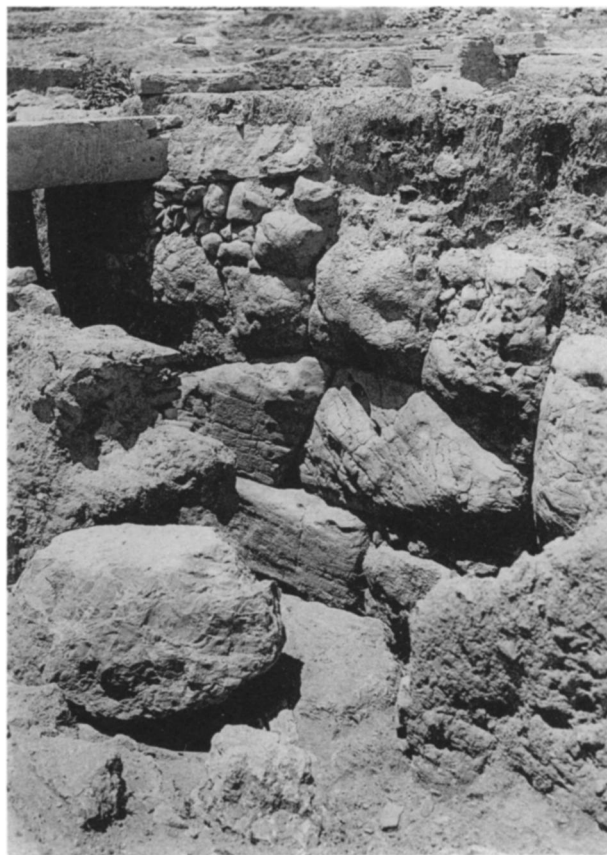
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a. W. Wall of Drain in front of House F: "Checkerboard" Masonry, with Cuttings for Beam-Ends of Late Roman Houses



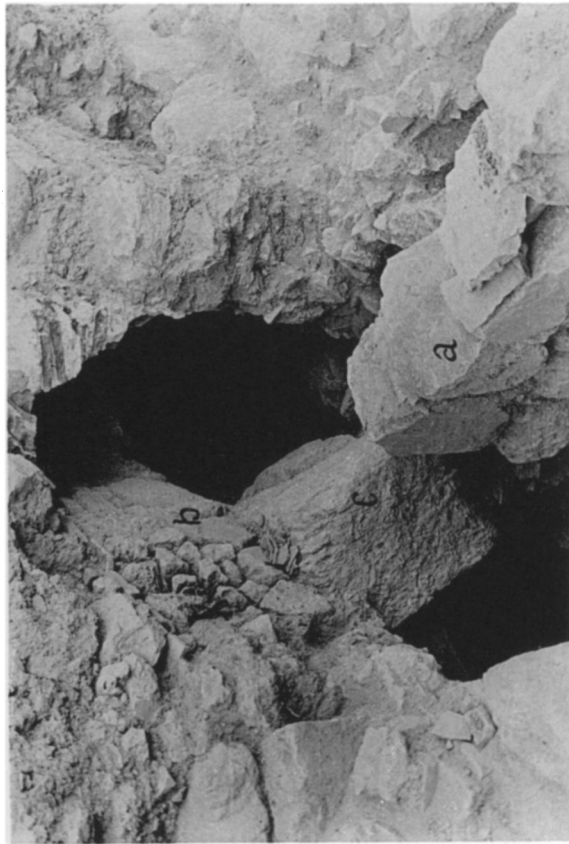
b. The Great Drain, looking N.



c. Limestone Polygonal Construction of W. Drain Wall just S. of Bridge



d. E. Wall of Drain at Entrance of Side-Drain. Crude Dam across Mouth of Side-Drain at right



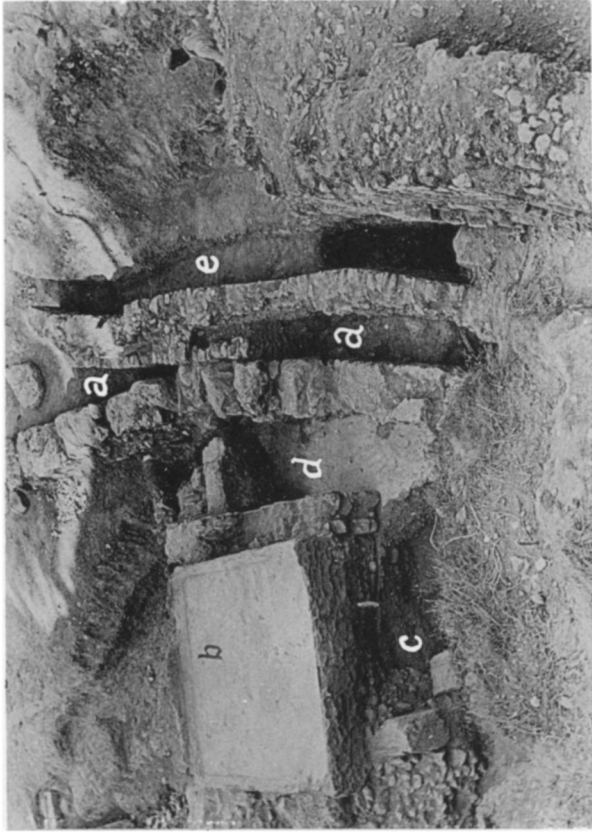
a. Roman Water Channel at Junction with Post-Sullan and Great Drains, looking NW.: (a) N. Wall of Post-Sullan Drain, (b) Wall of Water Channel carried across Gap on Bridge made by Poros Block, (c) displaced from Post-Sullan Drain Wall



b. Looking S. in Great Drain: Poros Block (c) displaced from Post-Sullan Drain Wall as Bridge for Water Channel; in background Dam across Great Drain formed by S. Wall of Post-Sullan Drain



c. House M: Corner of Wall under Roman Tank and Mended Artisan's Basin beside it



d. House M, Roman Drain (a), Tank (b), Mouth of Built Shaft (c), looking N: Later Terrazzo Floor (d) of House M built over by Walls of Roman Drain (a) and Water Channel (e)





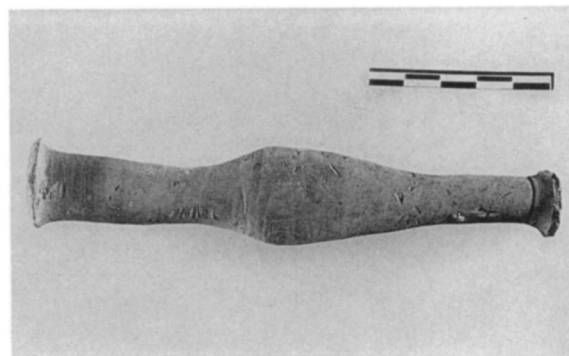
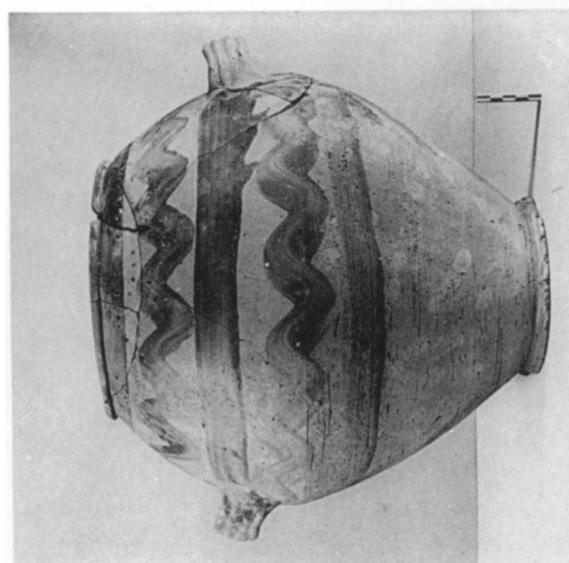
a. Basins and Cement Floor of Workshop of Hellenistic Times S. of Cemetery



b. Roman Water Tank over House M, showing up-turned Edges of Floor, from S.

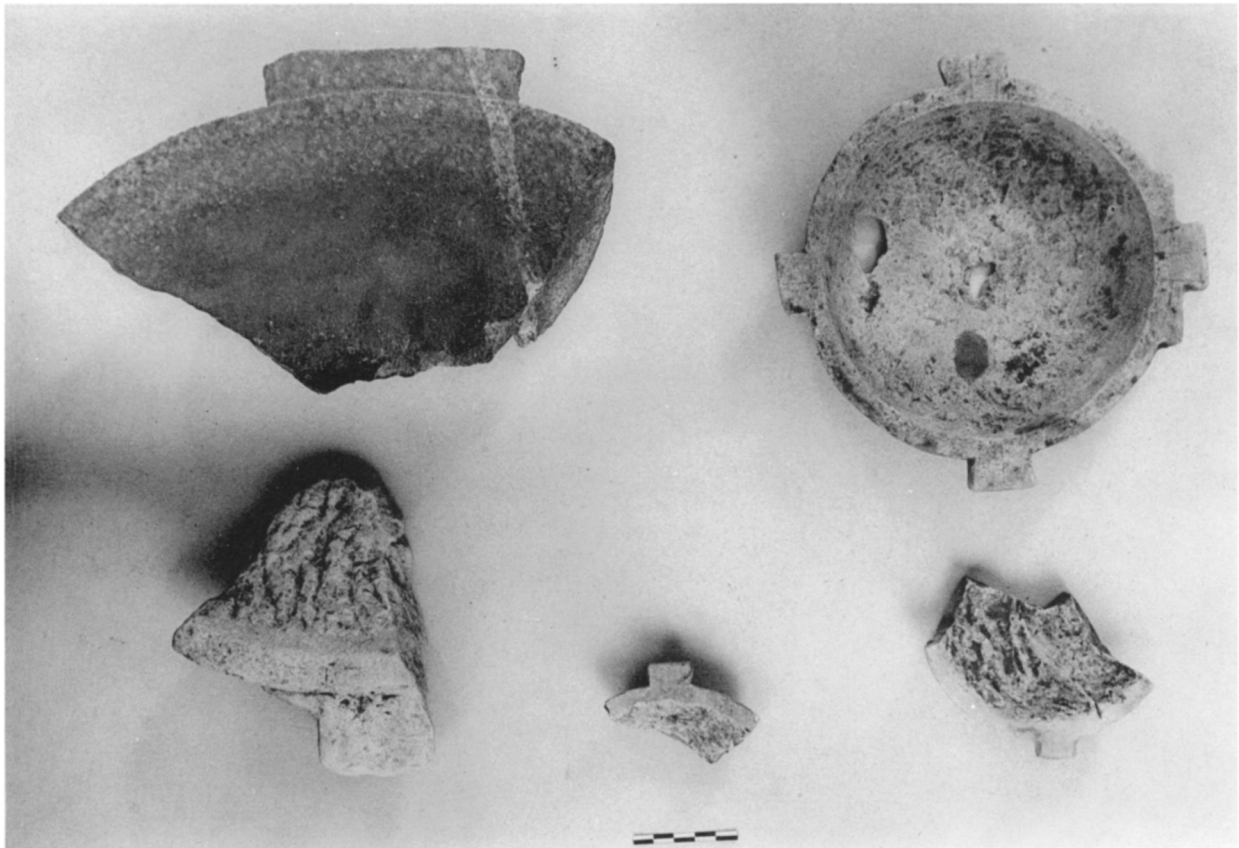


c. Area to S. of Archaic Cemetery: Basin of Workshop and Urn containing Skeleton of Dog

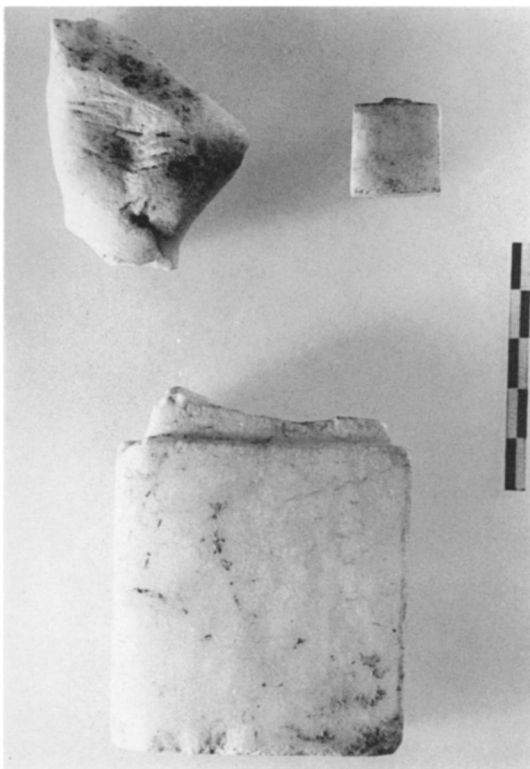


d-e. Stamnos and Unguentarium from Dog's Burial

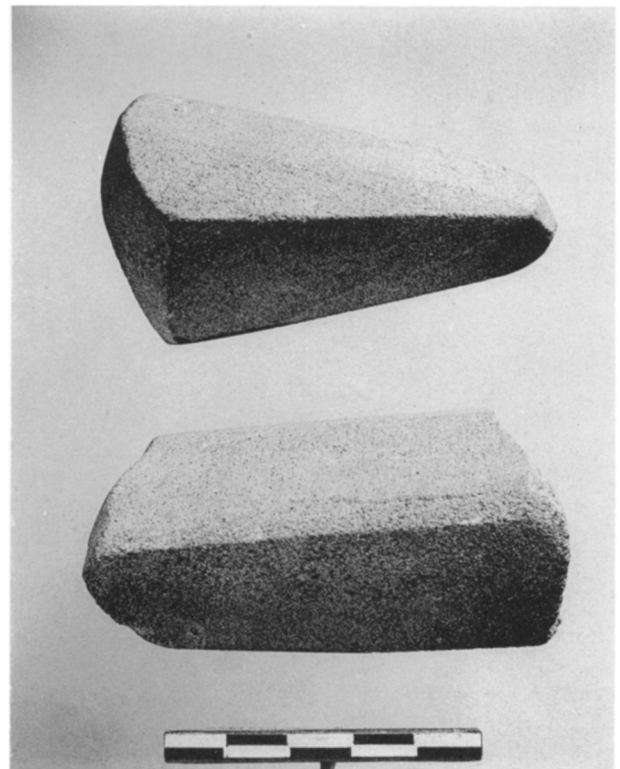
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a. Fragments of Unfinished Stone Basins from Roman Well Beside Post-Sullan Drain



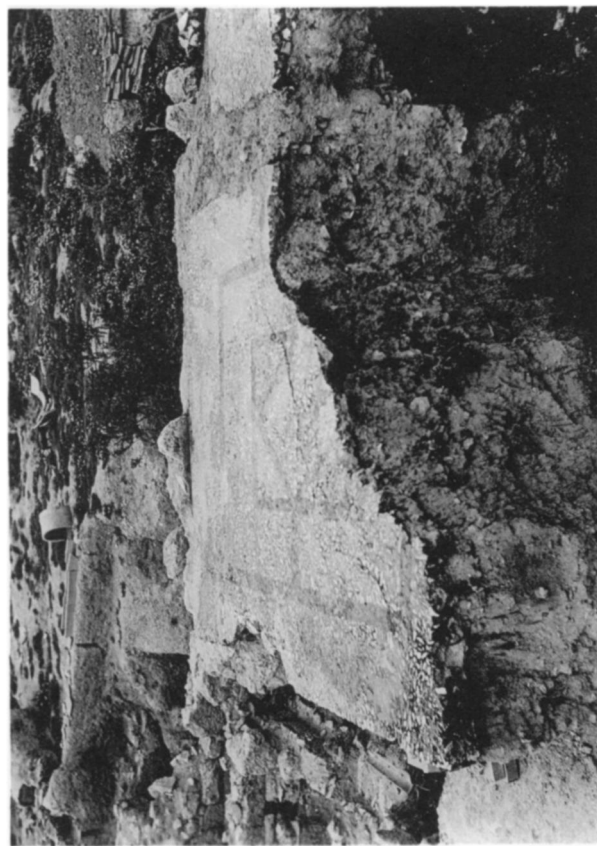
b. Sculptors' Waste from IV Century Workshops:  
Unfinished Hand and Herm Arms



c. Emery Grinders found among Marble Work-Chips in  
Area of Poros Building



a. Mosaic Floor in House S



b. Mosaic Floors in House T



c. West Bath: from S., showing Furnace and Hypocausts still *in situ* in the Caldarium