

EXCAVATIONS AT PORTO CHELI AND VICINITY, PRELIMINARY REPORT VI: HALIEIS, THE STRATIGRAPHY OF THE STREETS IN THE NORTHEAST QUARTER OF THE LOWER TOWN

(PLATE 32)

THIS REPORT focuses upon one particular aspect of the stratigraphy of the Northeast Quarter of the Lower Town of Halieis.¹ A series of five test trenches in different roads

¹ Previous reports on the Halieis excavations:

"Excavations at Porto Cheli and Vicinity. Preliminary Report"

Report I: M. H. Jameson, "I: Halieis 1962–1968," *Hesperia* 38, 1969, pp. 311–342

Report III: W. W. Rudolph, "III: Excavations at Metochi 1970," *Hesperia* 43, 1974, pp. 105–131

Report IV: T. D. Boyd and W. W. Rudolph, "IV: The Lower Town of Halieis, 1970–1977," *Hesperia* 47, 1978, pp. 333–355

Report V: W. W. Rudolph, "V: The Early Byzantine Remains," *Hesperia* 48, 1979, pp. 294–324

Final Report 1970: M. H. Jameson, Δελτ 26, B', 1971 [1974], pp. 114–119

Final Report 1971: M. H. Jameson, Δελτ 27, B', 1972 [1976], pp. 233–236

Final Report 1972: W. W. Rudolph, Δελτ 28, B', 1973 [1977], pp. 159–163

Final Report 1973: M. H. Jameson, Δελτ 29, B', 1973–1974 [1979], pp. 261–264

Final Report 1974: W. W. Rudolph, Δελτ 29, B', 1973–1974 [1979], pp. 265–268

Final Report 1975: W. W. Rudolph, Δελτ, Χρονικά (in press)

Final Report 1976: W. W. Rudolph, Δελτ, Χρονικά (in press)

Abbreviated versions of the *Final Reports* have appeared in *BCH*, "Chronique des Fouilles" and in *JHS-AR*.

Other works frequently cited are abbreviated as follows:

Agora VIII = E. T. H. Brann, *The Athenian Agora*, VIII, *Late Geometric and Protoattic Pottery*, Princeton 1970

Cook = J. M. Cook, "The Agamemnoneion," *BSA* 48, 1953, pp. 30–68

Corinth VII, ii = D. A. Amyx and P. Lawrence, *Corinth*, VII, ii, *Archaic Corinthian Pottery and the Anaploga Well*, Princeton 1975

Corinth VII, iii = G. R. Edwards, *Corinth*, VII, iii, *Corinthian Hellenistic Pottery*, Princeton 1975

OlForsch VIII = W. Gauer, *OlForsch*, VIII, *Die Tongefässe aus den Brunnen unterm Stadion-Nordwall und im Südost-Gebiet*, Berlin 1975

Tocra I = J. Boardman and J. Hayes, *BSA*, Supplementary Papers IV, *Excavations at Tocra 1963–1965. The Archaic Deposits I*, London 1966

Tocra II = J. Boardman and J. Hayes, *BSA*, Supplementary Papers X, *Excavations at Tocra 1963–1965. The Archaic Deposits, II, and Later Deposits*, London 1973

"Vari" = J. E. Jones, A. J. Graham, and L. H. Sackett, "An Attic Country House Below the Cave of Pan at Vari," *BSA* 68, 1973, pp. 355–452

The excavations at Halieis have been carried out under the auspices of the American School of Classical Studies under the successive directorships of Henry S. Robinson, James R. McCredie, and Henry R. Immerwahr. They were conducted by the Program in Classical Archaeology of Indiana University and by the Department of Classics and the University Museum of the University of Pennsylvania. The supervising agency for the Greek Archaeological Service was the 4th Ephoria Argolid-Korinthia. We wish to express our gratitude to Mrs. T. Karageorga, Ch. Kritzas, Mrs. A. Archonididhou as well as to Mrs. E. Protonotariou-Deilaki

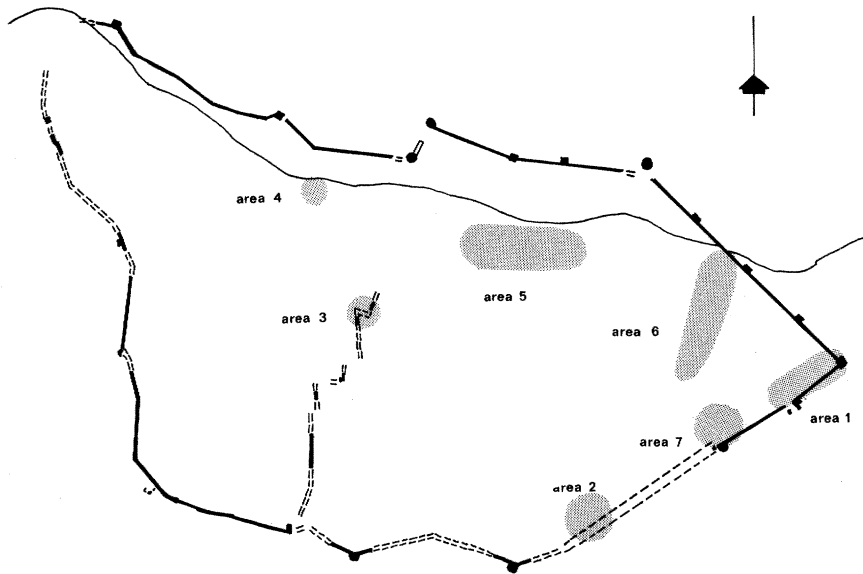


FIG. 1. Ancient Halieis. Location of excavation areas 1–7

and in houses adjacent to them is to be discussed here. The presentation of the evidence from the streets was considered especially important in view of the recent discussion of the date for the layout of the city.² Report VI, furthermore, serves to illustrate in detail the methodology employed for the volume on the stratigraphy of the Lower Town, now under preparation.

THE TESTS

During the summers of 1978 and 1979 five test trenches were excavated in the Northeast Quarter of the Lower Town to provide information concerning the historical relationship between the streets and the houses abutting them. The question of the origin of the street plan was of particular interest. The work continued and supplemented that of several campaigns which had been carried out in the northeastern quarter of Halieis between 1972 and 1976. The five trenches were excavated in areas 6 and 7 (Fig. 2). While the general nature of the orthogonal plan was set forth in *Report IV* (pp. 338–344), questions of chronology

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² T. Boyd and M. Jameson, "Urban and Rural Land Division in Ancient Greece," *Hesperia* 50, pp. 327–342.



FIG. 2. Plan of Northeast Quarter showing location of tests

were not touched upon in any detail at that time. The primary intent of that report was to document the uncovering of another planned city of the Classical period in mainland Greece and secondarily to focus upon aspects of domestic architecture at Halieis.³ With these objectives in mind, four trenches were chosen in the larger area 6, one in area 7. Those in area 6 lay on Avenue B and Streets 3 and 4, the one in area 7 on Avenue C (Fig. 1). With the exception of the latter, all these trenches were laid out so as to straddle the outer foundation wall of a house in order to permit comparison between the stratigraphy inside a house with that of the adjoining street. The letter designations of the trenches refer to those given in Figure 2. The actual trench coordinates of the Halieis Excavation System are given in parentheses (cf. *Report IV*, pp. 335–337). The lettering for the houses refers to the system established by T. Boyd (*Report IV*, p. 348, fig. 3). Numbers have now been assigned to those rooms that have been excavated.⁴

Test A: Area 6, House A (N 7115/E 16360). Fig. 3, Pl. 32:a

This trench was excavated inside the courtyard of House A (Room 6-81) and across the foundation wall into Street 4 (*Report IV*, p. 348, fig. 3). Of the five trenches described here, Test A lies closest to the present shore and the northeast stretch of the city wall. In this part of the town, earlier excavations had revealed that the original surface of culturally sterile soil underneath the successive layers of habitation was rather uneven. This initial, irregular formation of the terrain dictated the widely varying thickness of the road packing. At the point in the trench furthest from the house foundations it reached a thickness of almost 0.60 m. overlying the steeply sloping virgin soil, while in other parts of the trench an accumulation between 0.30 m. and 0.40 m. was closer to the norm.

In Test A, as in all the other test trenches, very irregular lateral limits were characteristic of the road metaling. At times the packing extends to the foundation stones, but generally a gap of *ca.* 0.30 m. exists between the road metaling and the foundations of the house. The unusual thickness of the road packing in Test A was the result of accumulation over a long period of time and allowed for the clear separation of three principal layers (Fig. 3) which can be briefly described as follows:

- (a) Slightly sandy with numerous pebbles of rather small size. Average depth 0.15 m. (**A.1–9**).⁵
- (b) Paler brown, sandier material with larger stones. Thickness slightly greater than the top layer, *a* (**A.10–15**).
- (c) Fine, grayish sand with some rather large stones at the bottom just above the sterile soil. This layer was traced only in those portions of the trench where the terrain sloped steeply (**A.16–41**).

³ See also T. D. Boyd, "Halieis: A Fourth Planned City in Classical Greece," *Town Planning Review* 52, 1981, pp. 143–156.

⁴ The rooms are numbered consecutively within each area as defined in *Report IV*, p. 336, fig. 1. Therefore, the first digit will refer to the area within the excavation and the second to the topographical and numerical position of the room within this particular area. Consecutive numbers were given to all individual architectural units. Thus Room 6-81 is the room-number designation for the courtyard of House A (cf. *Report IV*, p. 348, fig. 3).

⁵ See the Catalogue below, pp. 145–170, for the diagnostic material.

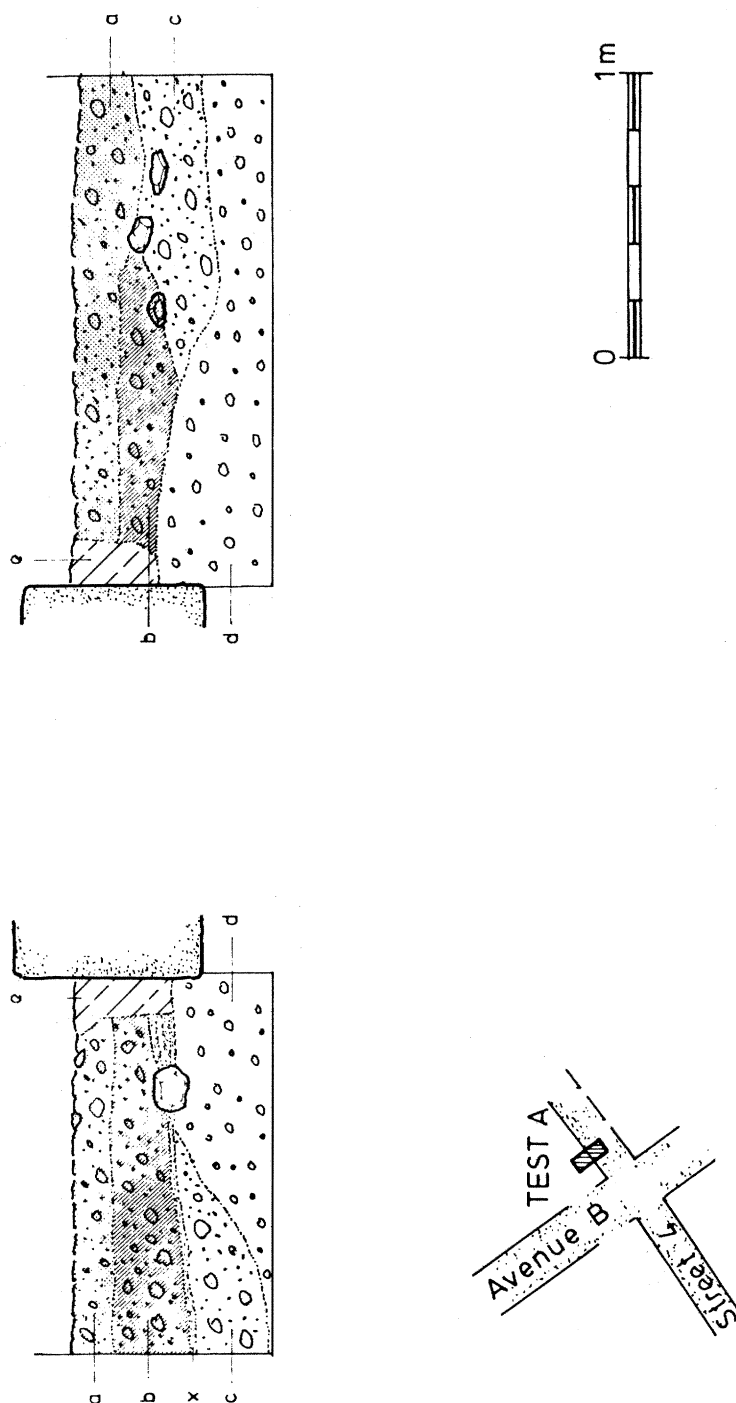


FIG. 3. Test A: Northwest-southeast section looking southwest (at left) and northeast, in Street 4

In some portions of the scarp, a division between *b* and *c* appeared, consisting of a whitish matter with a few roof tile fragments imbedded within it (Fig. 3:x). This irregular layer may have accumulated during the second half of the 5th century B.C. when this part of the Lower Town seems to have been uninhabited.

At one point in the northeast scarp, the road metaling comes rather close to the foundation; it appears to have been cut away sharply at about 0.20–0.30 m. from the lower course. At the southwest scarp this cut is less obvious though still distinctive. The fill in the cut is a soft, brown soil (Fig. 2:e). The fact that both layers *a* and *b* of the road metaling have been cut away indicates that building activity took place during the second half of the 4th century B.C. along the southeast side of House A. To place a foundation block, a trench was dug into the sterile soil (*d*), cutting the edge of the road metaling.

Inside the courtyard (Room 6-81) a brownish deposit formed the top layer, in its color and its pebbly consistency somewhat similar to the top layer of Street 4. The fact that joining fragments of the molded kantharos rim **A.5** (Fig. 10) came from either side of the foundation wall does not necessarily indicate that the same fill was used for both courtyard and street. The distribution of the fragments could simply be the result of a collapse of the house wall, or one fragment might have been thrown into the street while the other one was overlooked. Beneath this upper stratum a deep fill of brown earth with sherds of all sizes came to light. This section, which was not completely excavated, was most likely part of a basement belonging to Level B, such as the ones found in House Area 7 and in House C. In the latter a cistern inserted inside the peristyle courtyard now obscures the existence of the basement (*Report IV*, p. 348, fig. 3).

The road metaling of Test A provides a much more detailed stratigraphy than that of the other trenches discussed here, or indeed any other excavated at Halieis thus far. The build-up of the roadway through successive packings is reflected in the significant increase of the percentages of earlier pottery in descending from the top towards the bottom layer. Most of the material found is broken into small bits, as is to be expected from ceramic material added to road metaling during a period of use. But the information gained from this pottery is substantial enough to confirm that the three different levels of the road metaling in Test A correspond more or less to the main habitation levels of the city. Layers *a* and *b* contain mostly 4th-century materials, reflecting roughly the time span for Levels A and B of the Lower Town (cf. *Report IV*, pp. 334–335). It should be pointed out, however, that a certain amount of pottery dating to the time before 460 B.C. (Level C) came from the lower part of layer *b*. Likewise, some 4th-century pottery was found in the top of stratum *c*. Such overlapping was certainly caused by natural wear upon the road bed by traffic and does not diminish the essentially clear separation of the strata. In the deepest deposition, i.e. towards the bottom of layer *c*, the identifiable sherds all belonged to the early 5th century and earlier time periods.

Test B: Area 6 (N 7115/E 16355). Fig. 4, Pl. 32:b

Like Test A, this trench extended from inside a house (Room 6-78) into a street, Avenue B (**B.1–3**). The house, which was not completely excavated due to the limitations of

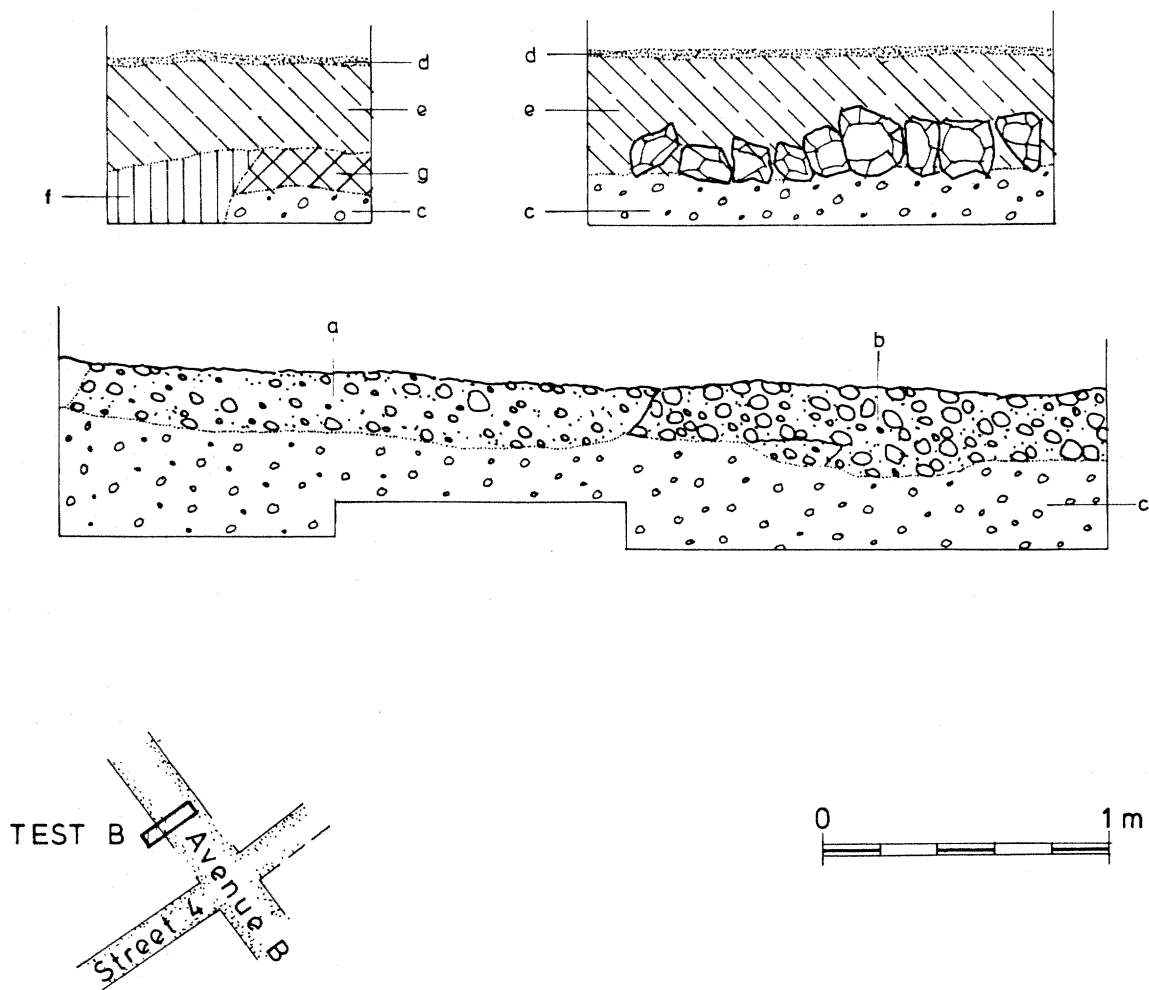


FIG. 4. Test B: Above, northwest-southeast section looking northeast (at left) and southwest-northeast section looking northwest, in Room 6-78; below, southwest-northeast section looking northwest, in Avenue B

the excavation area, lies opposite House A and on the northeast corner of the insula formed by Avenues B and C and Streets 4 and 5 (Fig. 2). The road metaling reached a depth of *ca.* 0.20 m. in this section of Avenue B. Its consistency was basically the same as that described for layer *a* in Test A, a packing ranging in color from limelike white to mottled brown, mixed from sand, earth, and pebbles, which ranged from small nodules to larger stones *ca.* 0.10 m. in diameter or slightly more. Wheel ruts had been impressed into the road surface, but less sharply so than in other parts of the city.

The packing was not uniform throughout the test trench. In front of the house, on the southwest side of Avenue B, a whitish type of road metaling (Fig. 4:a) was laid down, while opposite, on the northeast side of the avenue in front of House A, a brownish fill appeared, slightly more earthen and less sandy in character (Fig. 4:b). A similar differentiation

appears also in Avenue C (cf. below, p. 135, Test E). It is unclear what these differences indicate, possibly two varieties of metaling used simultaneously. The road metaling overlaid the culturally sterile soil (c). The latter consisted, at this particular spot, of an upper clay-like layer below which appeared the typical, rockier soil, leading into the solid bedrock underneath.

Inside the house a floor level (d) with numerous sherds (see below, p. 00) covered a stratum of reddish earth (e; **B.4–19**) which carried down to the top of an abandoned drain (f). The latter was constructed from narrow, upright slabs, but only its northwest side was *in situ*, the other having apparently been disturbed or destroyed during a period of rebuilding. The drain (f) ran at right angles to the outside wall of Room 6-78, exiting beneath the foundations at the side of the avenue. Its original position there is confirmed by soil discoloration, but no traces of its continuation away from the house were found. Inside Room 6-78 the drain ran southwest-northeast, cutting through a layer of darker red and rather hard earth (g) into the sterile soil (c). The contents of the drain itself were but a few Lakonian roof-tiles. Not far from it, in the northwestern scarp of the trench, the lower portion of an amphora, containing some carbonized matter as well as fragments of other pots, came to light. Overall, the finds from Test B constituted a predictable amount of 4th-century material in the road metaling but very little of an earlier date. The shallowness of the road metaling itself seems to indicate that the construction of a solid road surface was not started at this particular spot before the 4th century. Inside the house (Room 6-78) 4th-century pottery appeared in abundance, while ceramics attributable to Level C were concentrated in the earth deposit (g; **C.20–23**) outside the drain (f).

Test C: Area 6, House C (N 7095/E 16340–345). Figs. 5, 6

This sounding encompassed part of Room 6-61 in House C (Fig. 5:a) and of Street 4 in front of it (**C.1–10**). Earlier excavations had exposed a floor (Fig. 6:b) dating to the 4th century. After renewed cleaning, the floor was cut through, revealing a brown fill (c) which seemed to consist mostly of decayed mud brick shot through with a strong concentration of pottery (**C.11–15**). The vessel types such as amphora, chytra, and kalathiskos, all plain ware, indicate that the area was used as a kitchen or perhaps a storeroom. This stratum extended *ca.* 0.20 m. below the 4th-century floor (b). Below it a different earth layer (d) was encountered, its soil noticeably softer but of the same brown color; this layer also contained remains of mud brick and some pottery (**C.16–41**). This softer fill covered a floor (e), clearly recognizable by its whitish color, similar to others found at Halieis. The two floors *b* and *e* define the vertical extent of Level C at this point in the topography of the Lower Town. Floor *e* was for the most part spread immediately over the reddish, gravelly sterile soil (g) underlying the city. A pocket of cultural fill from the earliest period of the city, Level D, was also recovered (f; **C.45, 46**); but its minimal extent did not help to throw much light upon this still most difficult and obscure period at Halieis.

A particularly noteworthy discovery was made in this part of Test C, a rubble wall foundation (h) running perpendicular to Street 4 (Figs. 5, 6). The wall was built directly upon the sterile soil, but it was also found to have been sealed within the levels associated

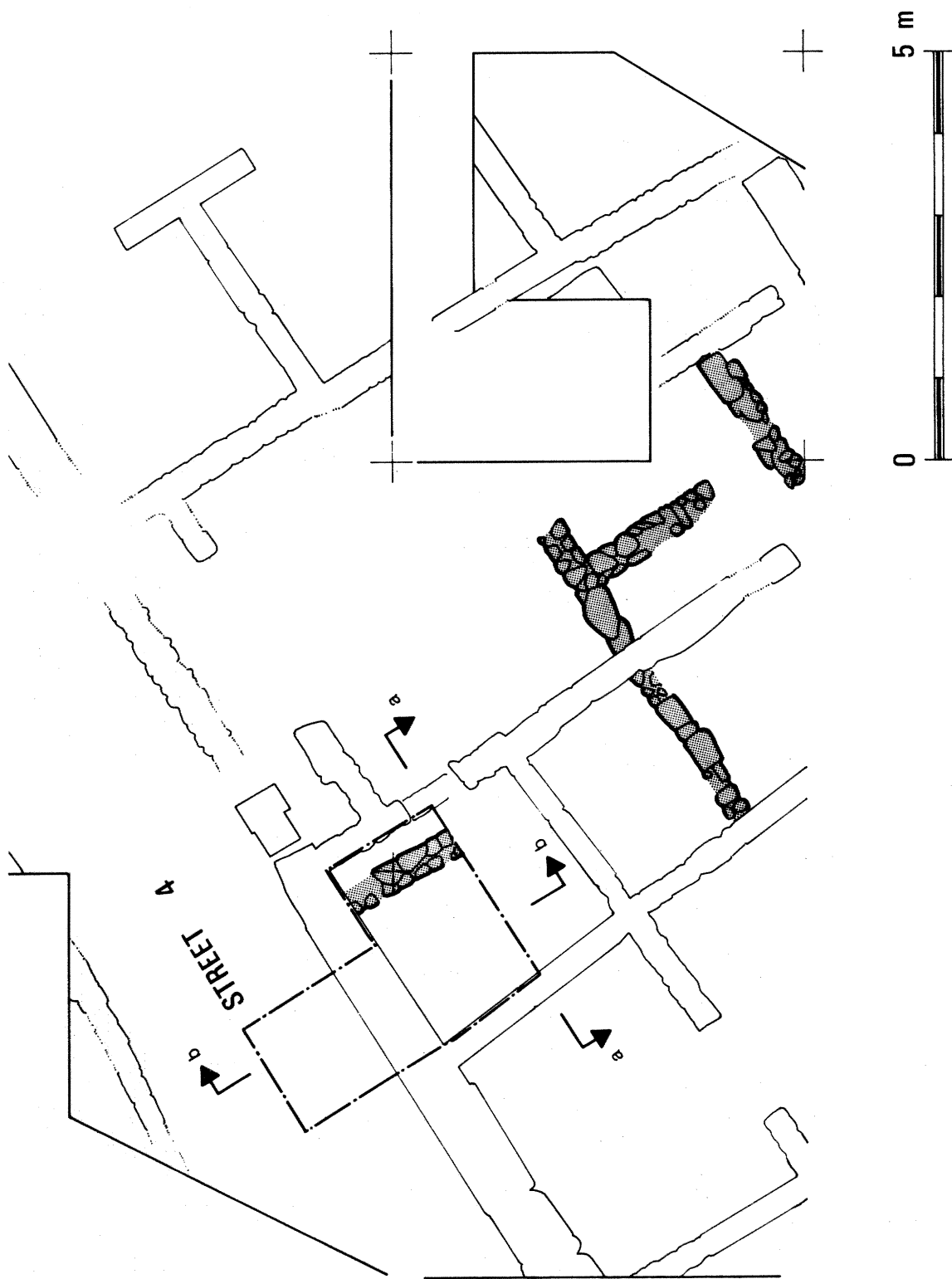


FIG. 5. House C(north at top): Architectural remains of Period C (Test C)

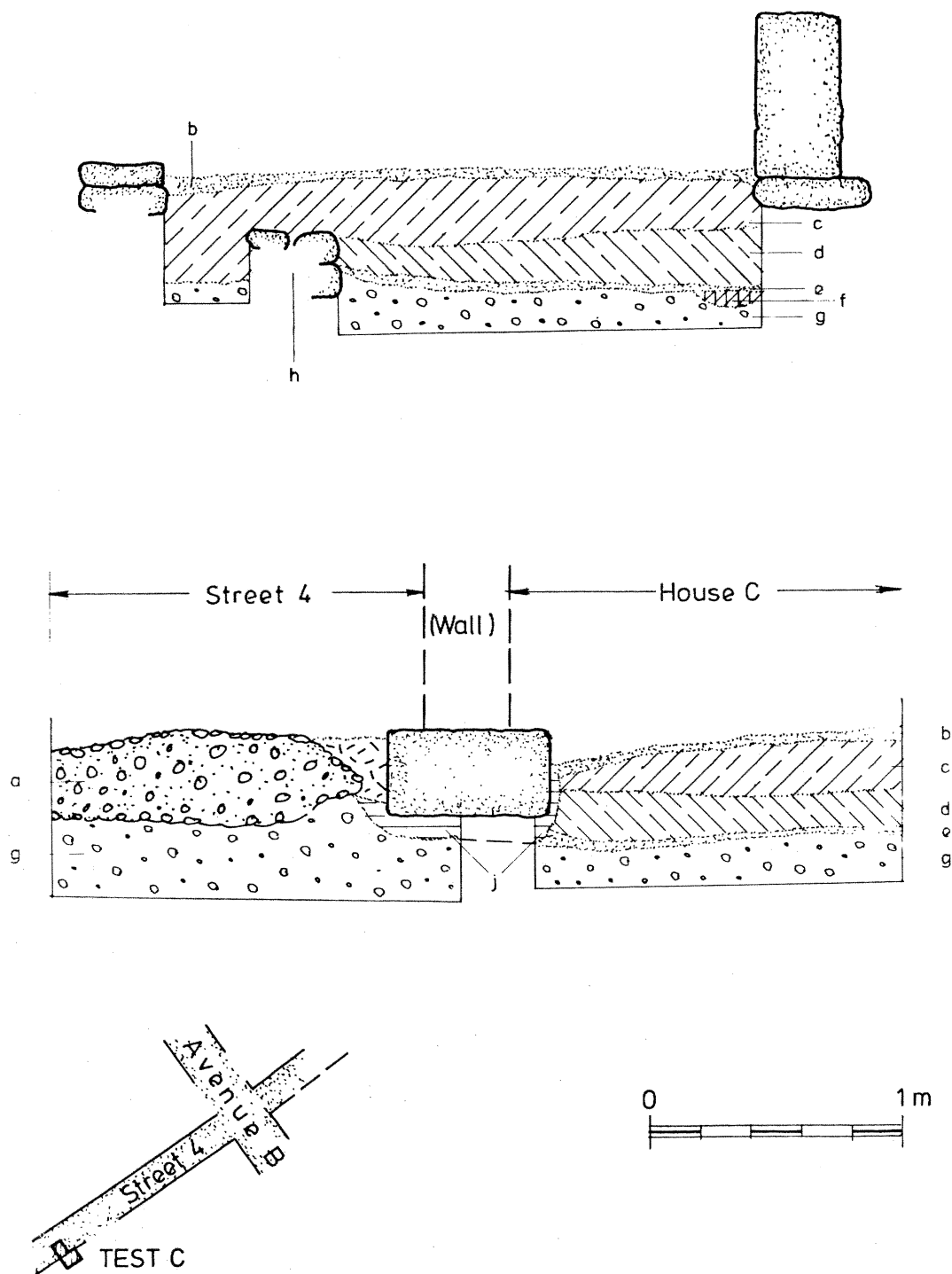


FIG. 6. Test C: Sections a-a and b-b (cf. Figure 5)

with Level C by the 4th-century floor (b) above it. Floor *e* at the bottom of this level is to be associated with the rubble wall (cf. Fig. 6, section a-a), and together their construction should be dated to about the early 6th century.

The trench for Test C also extended halfway across the width of Street 4. As in all the other tests, the road metaling (a) did not cover the entire width of the street, but instead, a brown fill made up the street surface along its edges. In the upper portion of the road metaling, considerable quantities of pottery, mostly of the 4th century, were uncovered, while the lower portion contained a substantially higher percentage of ceramics of the 6th and early 5th centuries. This distinction apparently indicates an earlier, thin layer of street fill which was built up with accumulated packing in the 4th century. Underneath the road metaling (a) the sterile red soil (g) came to light.

A foundation trench (j; **C.42-44**) was distinguished for the soft limestone block which supported the exterior wall of House C. Some black-glazed sherds were recovered from beneath the block, but none were of a diagnostic shape. The over-all character of their fabric and glaze, especially of **C.42**, lead one to believe, however, that the laying of these blocks took place *ca.* 400 B.C. with the beginning of Level B.

Considering Test C as a whole, it is important to note the relative difference in elevation between the interface of sterile red virgin soil and cultural levels inside the house (cf. Fig. 6, section b-b) and the corresponding interface in the adjacent street. In the roadway this interface occurs as much as 0.10 to 0.20 m. higher than that in the house, suggesting that the zone of the street was already reserved as such in an early period and that within the houses the existing ground was leveled for the laying of the floor. This leveling process seems to have erased all but a few traces of the settlement features of previous occupation in Level D.

Test D: Area 6, House E (N 7050/E 16320). Fig. 7, Pl. 32:b

This sounding was cut through the road metaling of Street 3 as well as through the cement floor in the east corner of Room 6-13. This floor abuts a very substantial foundation wall, consisting of a bedding course and an orthostate. The wall provides some slight terracing, separating the levels of Room 6-13 and the lower-lying courtyard, Room 6-19, to the northeast.

The road metaling (a) in Street 3 compares well with that found in the top layers of the other soundings. Within the metaling were numerous sherds (**D.1-23**), some shells, and larger quantities of both Lakonian and Corinthian rooftiles, a common combination at Halieis. As in other soundings, the road metaling did not abut the foundation wall of the house. The resulting gutterlike gap between the roadbed and the rubble southeast foundation wall of House E was filled with a brown, soft soil and some larger stones. Some of these stones were actually laid out in a line roughly parallel with the foundation wall, thus creating a makeshift drain between the house and the road. Under the road metaling in Test D an irregular, thin layer (b) of brown soil was encountered. It was very distinct in the northeast scarp but almost disappeared in the northwest. It blends with the top stratum of the underlying sterile soil and contained but a few undiagnostic pottery fragments. Between layers *a* and *b* lay a fine, whitish stratum of varying depth; it is similar to that found in Test A between layers *b* and *c* (Fig. 3:x; cf. p. 128 above).

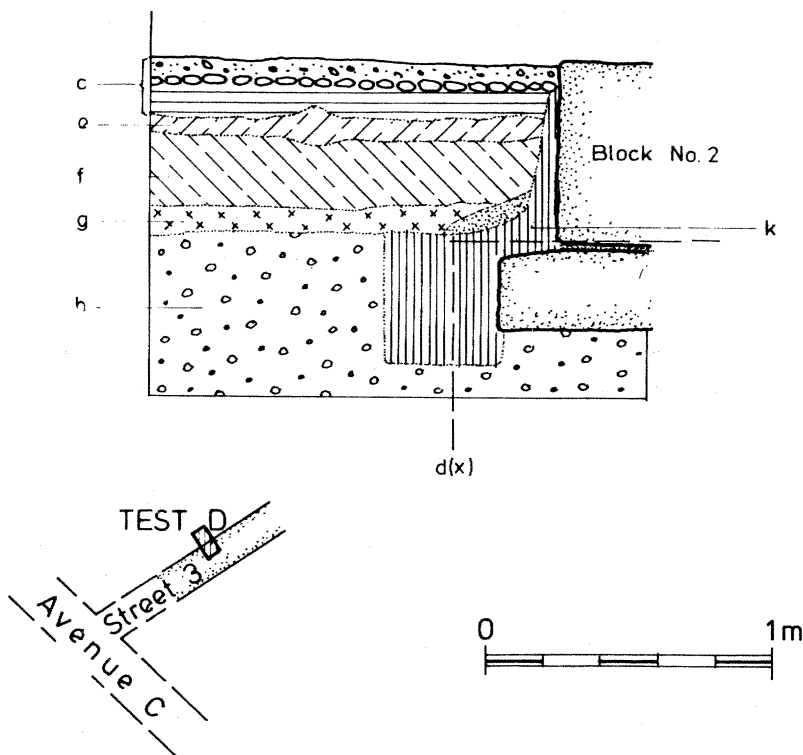


FIG. 7. Test D: Southwest-northeast section, looking northwest, in Room 6-13

The dividing wall between Room 6-13 and Room 6-19 is of a solid but somewhat irregular construction. The blocks used were of the softer local limestone; only the very end block towards Street 3 (block 1) was cut from a harder conglomerate. It appears to have been set at another time than that of the original building of the wall, since it lies directly on earth rather than on the bedding course. Furthermore, it cuts across the rubble southeast foundation wall of House E and abuts right against Street 3. This variant construction compared to the main run of the wall results in a difference of height between block 1 and the next block to the northwest, block 2, of *ca.* 0.40 m.

Test D uncovered the greater part of the southeasterly bedding block and orthostate (block 2). The bedding block is set in a foundation trench (d; **D.28-31**) which cuts into the hard, sterile soil. The foundation trench runs for a length of *ca.* 0.95 m., beginning at the southeast end of the bedding block, at a width between 0.35 and 0.40 m. After this point it narrows to a width of *ca.* 0.15 m. (indicated by the dotted line x in Figure 7). The excavation of the wider portion of this foundation and, possibly, an ensuing change in plan, might be placed in the 7th century B.C. as the layers above (d) contain pottery of dates beginning *ca.* 600 B.C. The positioning of block 2 appears to have taken place at a later, as yet unspecified date. It is separated from the bedding block by a fine layer of earth which may have accumulated before block 2 was set and been allowed to remain at that time. The

away of the northeast ends of the layers *e*, *f*, and *g* might have been required to create space for the setting of block 2. The void in the cut at the block's southwest side was filled with earth (i.e. the upper, thinner portion of *d* in Figure 7) which is slightly different in color and consistency from that in the lower portion. Once the block was in position, the concrete floor (c; **D.24–26**) was built against the wall.

The sequence of layers as found begins with *c*, a cement floor of solid construction. For its top surface, a thin layer of fine stucco with tiny, flat pebbles was spread over a much more substantial bedding of lime and sand mixed with small, rounded pebbles. This bedding, in turn, was placed over an underpinning of fist-sized stones, packed tightly and regularly in the layer of earth beneath. Underlying this construction, placed presumably to raise the floor's surface to a desired level, was a layer of sterile earth. The latter covered a stratum (e; **D.27**) containing some patches of mud brick but fewer than stratum *f* below, which also exhibited traces of burning. The lowest layer (*g*) above the sterile soil (*h*) contained mud brick as well and is rather shallow, on an average between 0.05 m. and 0.10 m. thick, its color a darker reddish brown. Layers *f* and *g* (**D.32–37**), though distinguished by their color, should be viewed as one cultural horizon. The date of the pottery, together with the traces of burning, suggests that the cause of the collapse of the mud-brick structure from which layers *f* and *g* stem was a destruction in the early decades of the 6th century.⁶ Traces of burning also characterize the small pocket of discolored earth *k*.

Test E: Area 7, (E 7005/N 16345). Fig. 8

This sounding dealt with the road metaling of Avenue C, outside Room 7-9, the *andron* of the house in Area 7. Avenue C is 4.50 m. wide at this point; the test covered about half this width, extending 2.00 m. out from the southwest exterior wall into the roadway. Clearing the foundations of House Area 7 showed them to be constructed from rubble, rather than from the more common large limestone blocks.⁷ Since the lower wall course is missing here, it can not be determined whether the wall of the *andron* 7-9 contained an orthostate at this point or whether a rubble dry wall was built to fill a gap between two regular orthostate blocks. The fill (*a*) abutting against the southwest wall of the *andron* 7-9 was composed of slightly sandy soil with many smooth, rounded pebbles, interspersed with a number of pottery fragments (**E.1–9**), mostly broken into small bits. This fill (*a*) extended *ca.* 0.60 m. on the average into Avenue C; at one point it widened to as much as 1.00 m., its depth reaching as much as 0.20 m.

This particular type of fill (*a*) contrasts with the harder core of typical road metaling (*c*) and appears to have been the filling for a gutterlike hollow alongside the house. Below *a* lies layer *b* which slopes away from the foundations, extending below the road metaling *c* at some points. Although used as a street packing, its color and texture suggest that originally it was mud brick which had been discarded, possibly from an earlier collapsed structure, perhaps below the latest house here. Finds from stratum *b* (**E.10–12**) were just a few ceramic fragments, their frequency considerably lower than in *a*.

⁶ For such a destruction on the acropolis, see *Report I*, p. 319.

⁷ General remarks on construction: *Report IV*, p. 352.

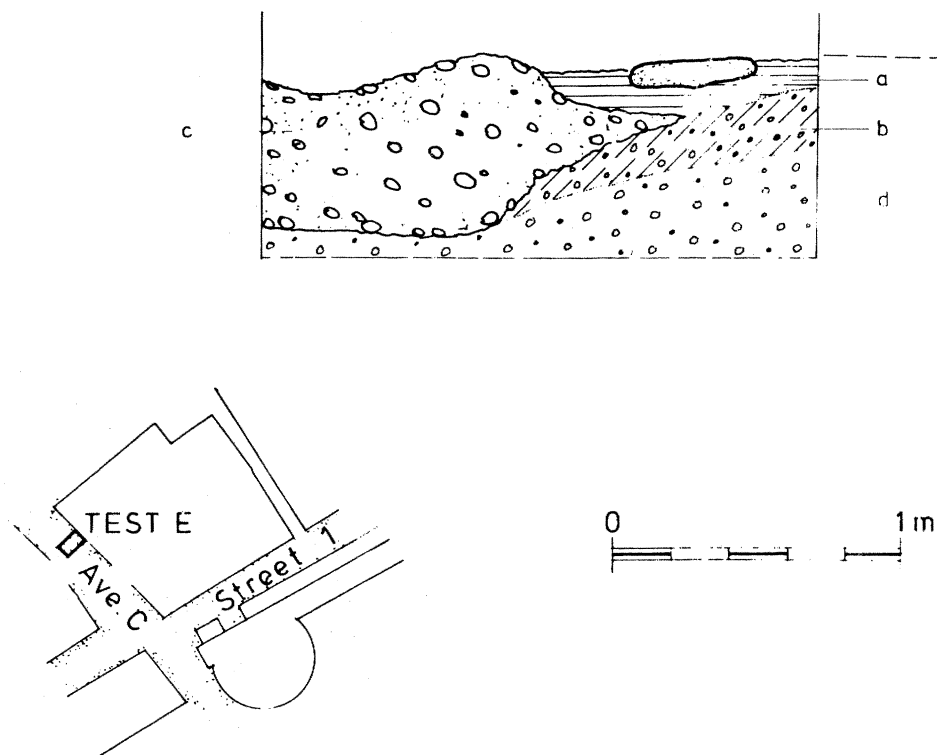


FIG. 8. Test E: Southwest-northeast section, looking northwest, in Avenue C

The solid, densely compacted road metaling (*c*) reached as much as 0.50 m. in depth. Its surface was marked by broad wheel ruts, created by the traffic using the near-by Southeast Gate (Fig. 2). In comparison to the tests in other roads of the Lower Town, Test E yielded only a minimal amount of finds which consisted mostly of undiagnostic, badly worn pottery and some rooftile fragments. Within the road metaling (*c*) itself, no stratigraphy existed; it was laid in on solid, heavy packing right upon the underlying sterile soil (*d*).

At the middle of the trench, however, layer *c* overlies another fill stratum (*b*). The pronounced slope of the latter towards the center of the street suggests that *b* formed a lateral “embankment”, made up of fill deposited here from discard and rubble. Such a sideways fill below and towards the actual road appears particularly appropriate at this spot where the deep hollow of the terrain required an unusually deep packing with road metaling.

DISCUSSION

STREETS

The five tests A–E have supplied sufficient information to advance some preliminary observations concerning both the technical construction of the streets and their historical development in the Northeast Quarter of the Lower Town.⁸ Best documented in their

⁸ In addition to the five tests A–E, this discussion also takes into account information from other road tests made in the Lower Town. Among these are the following:

appearance are the roads of the 4th century B.C., belonging to Levels A and B, but traces of earlier road construction from the Archaic-Classical Level C could also be discerned in some spots.

The thoroughfares of the latest periods seem to have been fairly simple and straightforward in their construction. As a general principle, all road metaling was laid directly upon the sterile red soil. This soil's top layer may vary in appearance and consistency throughout the site, being either a rather smooth, red, claylike soil with few stones or a "gravelly soil" (*Report IV*, p. 344). Thus far, no evidence exists which would allow one to interpret any layer beneath the road metaling proper as a manmade deposit. This observation corresponds with the lack of traces of preparatory work for the road metaling. No excavating of the sterile red soil to form a roadbed has been found, nor have any other signs of systematic planning and construction been identified, such as the setting of stones along the sides of the streets.

In general the road metaling seems to have been applied to the existing unmodified terrain formations as sparingly as possible, concentrating towards the middle portion of the roads. Thus the road metaling very seldom stretches across the full width of the street; it also fluctuates considerably in depth. Along the edges it remains uneven and only infrequently abuts a house foundation or a wall. The space between the packing itself and such foundation may sometimes serve as a makeshift gutter, particularly on steeper inclines. In Test D, where such a situation occurs, the gutter has been shored up with larger stones to protect against erosion. The sand-and-pebble mixture of the packing in general also helped to absorb moisture and would have cut down on mud puddles during the rainy season.

While the appearance of the street surface is due in part to the very irregular fashion of application, it is also due to the nature of the material used. Since the street packing is basically a gravel, it has a tendency to shift. On the other hand, when exposed to pressure, especially such as that exerted by wheeled traffic, it compacts tightly, very quickly establishing wheel ruts that remain on the surface as permanent pathways.⁹

Street 1: Trench R, between East Gate and Tower 10

Trench H4-4, at Tower 8 on the steeper portion of the slope approaching the acropolis hill.

This street was found to be in part supported by bedrock.

Street 3: Trench 040/310, outside Rooms 6-2 and 6-3

Street 4: Trenches 100/345 and 105/345, outside Room 6-62, House C

Street 7: Trench 145/235 (no further designation)

Avenue B: Trench 110/360, at northeast corner of crossing between Avenue B and Street 4

Avenue C: Trench 990/355, inside the Southeast Gate

Trench 995/345, at the prothyron of House Area 7

Trench 000/350, Avenue C

Until recently, little study has been given to streets within a city plan. A short, general survey: W. Kendrick Pritchett, "Studies in Ancient Greek Topography, Part III: Roads," *University of California, Classical Studies* 22, Berkeley/Los Angeles 1980, p. 146, note 6 with bibliography. See also the recent article by H. Lauter, "Zum Strassenbild in Alt-Athen," *Antike Welt* 13, Heft 4, 1982, pp. 44-52. A road with successive layers of metaling in the excavations at Nemea: S. G. Miller, "Excavations at Nemea, 1981," *Hesperia* 51, p. 34, fig. 6, Sections K19-S19, p. 30, Sections Q19 and Q20.

⁹ *Report IV*, p. 344, note 15 described the hardness of the road metaling when first found. With the material exposure to the elements, its nature changes. Excavated street surfaces have become considerably softer and are now relatively easy to dig. It appears that this status of the roads is closer to the one existing during the

The sources for the gravel of the packing must be located outside the city walls. No definite spot has been identified as of yet, but in the hills close to the city gravel pits might easily have been opened up, either in connection with quarrying activities or in deposits of pebbles in creek or river beds.¹⁰ Aside from the gravel and sand itself, a small amount of refuse such as pottery and roof tile fragments has been found in the packing. Such deposition might have occurred both during the actual building of the roadway and during its subsequent use. The pottery fragments are, by and large, small or very small, since they were often ground into the street by traffic, thus breaking anew.

Material other than the road metaling described above may occasionally have been used. The only recorded application of such different material, thus far, occurred in Test E (Fig. 8). There layer *b* of discarded mud brick was laid in such a way that it reached under layer *c*, the road metaling, encroaching upon the foundations of House Area 7. The low, gutterlike depression between this house and Avenue C is filled by a layer (*a*) of sandy soil with pebbles. Layer *b* may have come from refuse material which was found useful as underpinning for the road metaling at a spot where the low level of the original terrain would have required extra fill. The history of layer *a* is somewhat ambiguous: it could have been constructed by the owner of the house to guard against too much potential moisture at the southwest side of his property, or this layer could represent a gradual accumulation over a longer period of time. The ceramic material does not provide evidence for a clear decision one way or the other.

The metaling at times reaches considerable depth. In some tests, such as E, it was clearly deposited at one specific time, while in others, notably Test A (Fig. 3), such depth had built up gradually, reflecting in its layers the historical growth of the city. While Test A presents the most distinct sequence thus far, all the other tests, with the exception of Test E, contained varying amounts of pottery of Level C (cf. also Fig. 9A).

Our available evidence suggests that once the streets had been laid out, the roadwork for them was not incorporated into the first major campaign to construct the actual city.¹¹ The thoroughfares were certainly part of the initial design, but in this early stage street construction was obviously not considered a high-priority task for the city's inhabitants.¹² In this early period building up the road level was undertaken only in spots where the terrain required it, as was most likely the case with layer *c* in Test A (Fig. 3). Thin coats of road

habitation of Halieis. The extreme hardness was apparently due to the prolonged closing off of the elements and to the weight of soil above.

¹⁰ Dr. C. Runnels, Assistant Director of the Argolid Survey, agrees with this suggestion.

¹¹ The precise modus of the layout seems still undefined, especially the relation between house and street. T. Boyd and M. Jameson suggest ("Urban and Rural Land Division in Ancient Greece," *Hesperia* 50, p. 333) that streets and houses were planned in *one* unit. This view stands in contrast to that put forth by E. L. Schwandner, "Technische und ökonomische Probleme des Wohnungsbaus im klassischen Griechenland," *Wohnungsbau im Altertum. Diskussionen zur Archäologischen Bauforschung* III, Berlin 1979, pp. 105–113. Schwandner mentions especially the foundation of Messene in 370 B.C. and interprets Pausanias, iv.27.7 as meaning that the street system was first established separately, while the laying out of public and private buildings and houses within it came only secondarily.

¹² For a good example of an early road and of the minimal effort which its construction apparently received, see J. Boardman, "Excavations in Chios, 1952–1955. Greek Emporio," *BSA, Supplementary Papers* VI, London 1967, p. 35.

metaling, sometimes just layers of sand, might have sufficed the early occupants of Halieis to solve the problems caused by puddles and soil erosion.

Only with the reoccupation of the Lower Town in *ca.* 400 B.C. (*Report IV*, p. 335), certainly in connection with a major construction effort, were the road surfaces raised and filled with metaling on a wider scale. Whether this took place in one centrally planned operation, possibly ordered by the city's administrators and funded through a tax levy, or whether it was work conducted by the individual householders within the limits of their assigned property lines, remains open for discussion. Based on the assumption that Halieis always had relatively low levels of population with a limited number of citizens to attend to all the needs of the polis, it appears conceivable that street building and repair were regulated by city ordinance, leaving the responsibility for the execution of the task with the individual property owners.¹³ This hypothesis pertains to the roads inside the city, specifically in the Lower Town. Roads outside the city wall, of which there have been traces near the cemetery, for example, might be a different matter.

ARCHITECTURE

Tests A–E have revealed, as have other sections of the excavations, architectural remains which are to be associated with Level C. Due to the limited horizontal extent of the soundings, only short wall sections from this period could be revealed. Despite this limitation, however, one noteworthy characteristic has emerged. The orientation of all known wall portions belonging to Level C corresponds to that of the orthogonal plan of the city. In certain cases it is apparent that interior wall foundations first built during the Archaic–Early Classical period were used again in Levels A–B. Presumably both the position and the orientation of these foundations were found to be useful when the Lower Town was rebuilt at the end of the 5th century B.C. In other cases, foundations built in Level C were not reused and were sealed and preserved under the floors of later buildings; the wall revealed in Test C (Figs. 5, 6:h) is a particularly noteworthy example. Replacement walls for those covered over again, however, adhered to the same principle of orientation set forth in the basic roster of the city plan. One is led to wonder whether this strict observance of the directional principle stems merely from practical considerations or whether the city commanded a building code which regulated such matters.

Another important observation is the conspicuous absence of architectural remains below the road beds in all but two instances. Foundations were encountered within the actual zone of Street 1 near Tower 10 (Area 1) at a level to be associated with Level C. These foundations, too, conform to the general orientation of the orthogonal plan of the city. While they would have violated the zone of Street 1 in its 4th-century B.C. form, i.e. Levels A–B, they did not preclude a narrow passageway running along the interior face of the city wall in Period C, analogous to Street 1 in the 4th-century plan. At the intersection of Street 4 and Avenue B, a second feature was encountered beneath the road metaling. If this feature is to be interpreted as a wall foundation, it fails to conform with the orientation of the orthogonal system. It is irregular, however, consisting of a single line of more or less widely spaced

¹³ On this topic, see also Pritchett, *op. cit.* (footnote 8 above), pp. 145–151.

stones, rather than having the more substantial form of rubble wall foundations found at the site. No clearly defined habitation levels were found in association with it, and its identification as the foundation of a wall remains questionable.

With these two exceptions, then, the zone of the streets and avenues has been found to be free of architectural features. Neither exception seriously upsets the idea that this zone was established early in the history of the city. The consistent orientation of the archaeological remains of Level C in accordance with that of the orthogonal plan supports the notion that this plan has an early date. The inevitable conclusion that Halieis was fitted with an orthogonal plan no later than the earlier 6th century B.C. is amply corroborated by the ceramic evidence from the streets (cf. Fig. 9A).

In mainland Greece three other sites have thus far been investigated which are characterized by an orthogonal plan as early as the Classical period. The best known of these is Olynthos, laid out after 430 B.C. and known in some detail owing to the large-scale excavations carried out there in the 1930's.¹⁴

Kassope in Epeiros at its foundation *ca.* 400 B.C. was given an orthogonal layout.¹⁵ Peiraieus, known to have been a project of Hippodamos of Miletos, was laid out with its regular plan about the middle of the 5th century B.C., but the plan is not known in detail owing to the presence of the modern city in the same location.¹⁶

Orthogonal planning on the mainland is known in so few cases that it is considered anomalous. While the discovery of yet another regular town plan was a surprise, of even greater significance is the realization that the plan of Halieis has its origins not in the Classical, post-Hippodamian period, but in the Archaic. The early date of the plan is in itself not surprising, only its place of occurrence, for orthogonal planning was common enough in regions colonized by Greeks. In some cases, such plans are earlier than that of Halieis; that of Megara Hyblaia in Sicily may have had its origin as early as the second half of the 8th century B.C.¹⁷ The importance of Halieis for Greek urban studies, then, lies not only in the fact that the city antedates Olynthos, Kassope, and Peiraieus, but also that its plan forces a reconsideration of accepted positions regarding the role of the Greek homeland in early urban development.

POTTERY

The finds from Tests A–E fit well within the sequence of ceramics from the Lower Town. But in assessing the pottery as an interpretative tool for the historical development of

¹⁴ For a recent bibliography see *Princeton Encyclopedia of Classical Sites*, Princeton 1976, pp. 651–652 (*s.v.* Olynthos, J. W. Graham).

¹⁵ We wish to thank W. Hoepfner and E. L. Schwandner for providing their article, "Wohnen in der klassischen Polis: Grabungs und Reisebericht 1981." For Kassope, see also Sotirios Dakaris, "Von einer kleinen ländlichen Ansiedlung des 8.-4. Jhs. v. Chr. zu einer spätklassischen Stadt in Nordwest-Griechenland," *Palast und Hütte. Beiträge zum Bauen und Wohnen im Altertum von Archäologen, Vor- und Frühgeschichtlern. Tagungsbeiträge eines Symposiums*, Berlin 1979, Mainz 1982, pp. 362–365.

¹⁶ Peiraieus: R. Martin, *L'urbanisme dans la Grèce antique*, 2nd ed., Paris 1974, pp. 54–55. Another regular town plan has been reported for the site of Stymphalos, Arcadia: E. Hector Williams, "Stymphalos, A Planned City of Ancient Arkadia," Archaeological Institute of America, 84th General Meeting, 1982, *AJA* 87, 1983, p. 270 (abstract). No date has been mentioned in this report for the planning.

¹⁷ Megara Hyblaia: R. Martin, *op. cit.*, pp. 92–93, 309–313.

the site, it must be remembered that an imbalance in the strength of the evidence clearly exists between the late periods (Levels A and B) and the early ones (Levels C and D). The 4th-century B.C. pottery can be analyzed within long, well-established series, many of them Attic imports which provide relatively secure positions within the chronological sequence. For this phase of the settlement, the evidence, both typologically as well as numerically, can be considered relatively reliable. By contrast, the ceramic finds from the earlier time period can be organized only within frequently interrupted series. To compound this problem, no large, comparable body of ceramic evidence from other excavations within the Argolid, which must be the origin for much of the unidentified wares, exists at this time. Imported wares, mostly Attic and Corinthian, provide fewer and less reliable chronological benchmarks at this early time. Consequently, the following discussion abstains from elaborating on the series of early pottery from Halieis. Instead, the ceramics are discussed within a wide, chronological, stratigraphical framework, outlining at the same time some of the pertinent problems with regard to the manufacturing typology.

The pottery from the five test trenches spans the period of time from the 7th century to the end of the 4th century B.C. The vessels found are typical for those associated with domestic contexts, although the inventory of finds remains spotty when compared to that known from the total of the Lower Town excavations. Skyphoi, both of Attic and Corinthian type, deep kantharoi-skyphoi, one of the most common drinking cups of East Peloponnesian-Argive or local manufacture, and other types of drinking vessels accumulated in the streets at a distinctly higher percentage rate than other household vessels.¹⁸ Since such vessels are likely to be used more often in a household, these percentages may reflect the pattern of use, breakage, and subsequent discard rather than the true, numerical percentage of these vessels within a household inventory at any one time. A higher occurrence of household vessels, for example, especially of amphoras or hydriai and jugs in a typical functioning establishment, is strongly suggested by the discovery of eight such vessels inside House C, stratum *d*. Table 1, a brief summary of the pottery finds from the street beds, shows the actual percentage of types, both within their individual group of ware and within the total of all finds from the road metalting. The greatest number of fragments, both inside and outside the houses, dates to the 4th century B.C. (cf. Fig. 9A, B) as is to be expected during this period of densest population at Halieis. The frequency of the various shapes reflects, by and large, the ratios observed for the different types throughout the excavations. The exception is the single kantharos A.5 (Fig. 10) whose normal rate of occurrence is considerably higher, often close to that of skyphoi during the Late Classical period.

Within the pottery one finds a fairly constant percentage of imported wares. The leading fabric is Attic, of which the quota remains always higher than that of Corinthian. Beside the imported pottery, which also includes a certain amount of Argive and possibly Lakonian as well, stands a fairly substantial portion of locally produced pottery. This pottery includes among the fine wares imitations of Attic, often of high quality and great similarity which

¹⁸ "Local" is used here to define wares produced in the Southern Argolid, especially at Halieis but possibly at such places as Hermione or Mases as well. "Argive" is used to define pottery which is believed to have been made in the region of the Argolid proper, including the Epidaureia. It is hoped that clay analysis will help to establish a firmer basis for judgment.

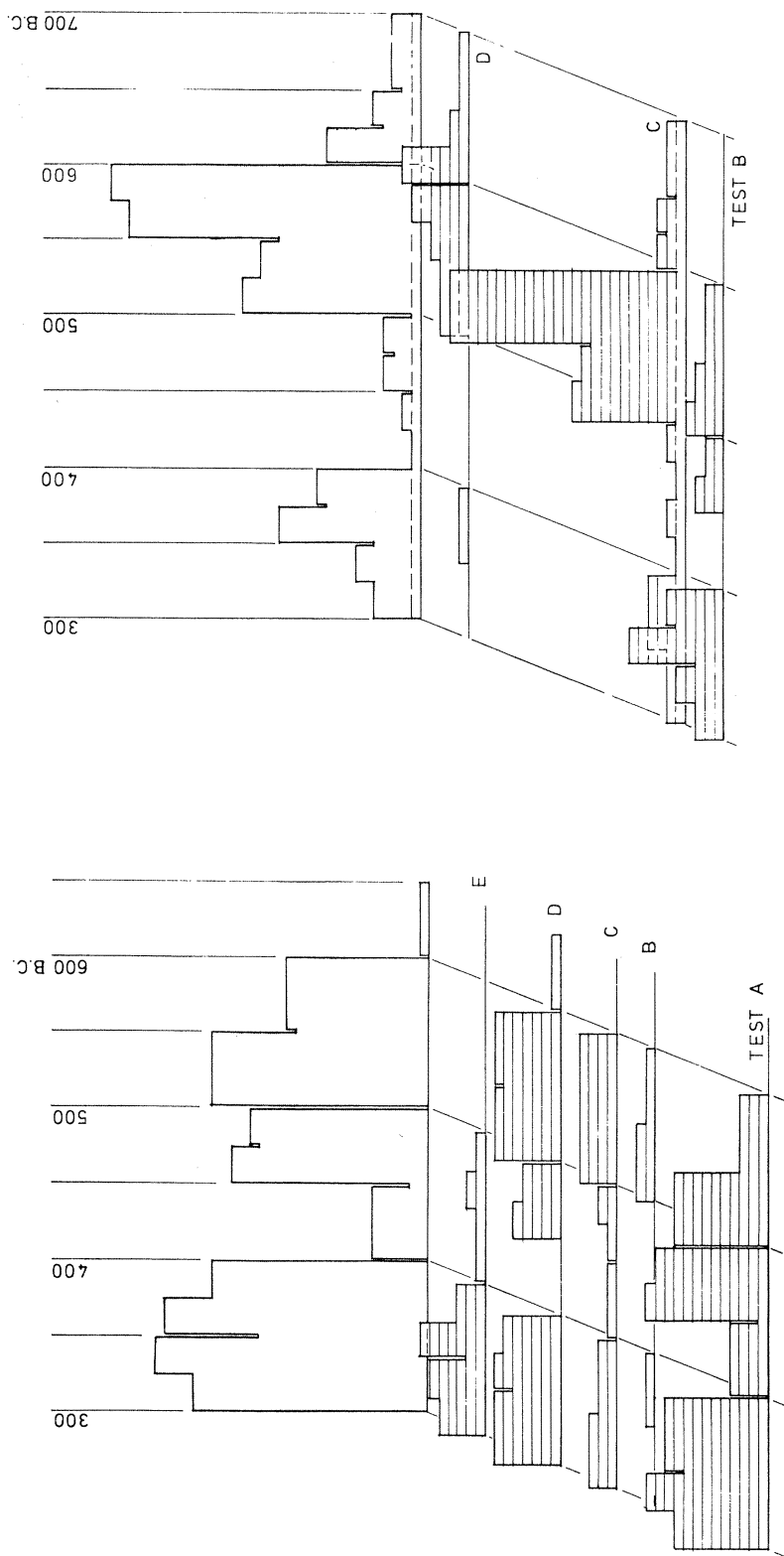


FIG. 9. Chronological distribution of pottery in Tests A-E. Left: within the street metaling. Right: within houses.

TABLE 1: Pottery finds from the street beds

	A	B	C	D	E	Total	Group %	Total %
<i>Food/Drink</i>								
Skyphos	9	.	2	6	2	19	24.2	20.9
Deep kantharos-skyphos	1	1	1	2	.	5	7.7	5.5
Mug	6	.	.	.	1	7	10.8	7.7
Stemless cup	5	.	1	.	1	7	10.8	7.7
Cup-skyphos/Kylix	.	.	.	1	.	1	1.5	1.1
Kantharos/Bolsal	1	.	.	1	1	3	4.6	3.3
Lekane/Krater	8	.	.	5	1	14	21.5	15.4
Bowl	3	1	1	2	2	9	15.8	9.9
TOTAL						65	100	71.4
<i>Storage/Serving</i>								
Amphora/Jug	1	1	3	3	1	9	64.3	9.9
Olpe/Oinochoe	1	.	.	2	1	4	28.6	4.4
Lekythos	1	.	.	.	.	1	7.1	1.1
TOTAL						14	100	15.4
<i>Cooking/Other</i>								
Lopas	2	.	.	.	.	2	16.7	2.2
Tray/Basin	.	1	2	.	1	4	33.3	4.4
Mortar	.	.	2	.	2	4	33.3	4.4
Kothon	.	.	.	.	1	1	8.3	1.1
Lid	.	.	.	1	.	1	8.3	1.1
TOTAL						12	100	13.2
Grand Total						91	—	100

make identification sometimes quite difficult. Consequently, some of the vessels currently identified as Attic fabric may eventually prove to be of a different origin.

The deep kantharos-skyphos at Halieis is most likely of local manufacture, but the generic shape can be found widely distributed on the Peloponnese. The double name has been used here as it was often impossible to deduce the exact type in the fragmentary condition of many pieces (e.g., Figs. 14, 16: **C.29–C.33**).¹⁹

As J. M. Cook has observed, these deep kantharoi-skyphoi range in diameter from *ca.* 5 cm. to *ca.* 20 cm.²⁰ In practical terms, these vessels span the whole spectrum from miniature pots to regular drinking vessels to smaller kraterlike vessels for serving. Cook's hypothesis that this shape may be more or less Argive has been corrected. Finds from Tocra, Olympia, and Sparta demonstrate that this shape occurs also in the Lakonian repertoires. C. Stibbe has recently reviewed the Lakonian examples and identified parallels for the shape present at Halieis in his group V.²¹ The vessels of this type found at Halieis, with a few possible

¹⁹ The name "deep kantharos/skyphos" combines the two shapes, *Tocra* I, nos. 993–996 and 1024.

²⁰ *BSA* 48, 1953, pp. 43–44.

²¹ C. M. Stibbe, "Lakonische Kantharoi," *Mededelingen van het Nederlands Instituut te Rome* 40, 1978,

exceptions, exhibit a greenish tint and a fugitive, thinly applied glaze; much fewer show a brown to fox-brown glaze, usually also thinly applied. These characteristics point to either Argive or to local manufacture. The typical, deep black and well-saturated glaze of Lakonian ware is rarely found.²² A distinguishing feature of the shape is a precisely formed lip, almost vertical, which is thin walled and normally remains undecorated. The stratigraphy of the vessels as well as their forms suggests a date ranging from the later 7th century through the first half of the 6th century B.C.

The form apparently succeeding the deep kantharos-skyphos in both the Lakonian and the Argive repertoire as a popular drinking vessel is the stemless cup (e.g., Figs. 11, 12: **A.28–31, B.10**). This shape has also been treated by Cook²³ and is found at Tocra.²⁴ Its popularity at Halieis increases during the 6th century and continues throughout the 4th century B.C. It appears to have been a complimentary form to the skyphos, both the Attic and Corinthian types. The place of manufacture again remains somewhat difficult to pinpoint but is hardly Lakonian. In Argos, on the other hand, stemless cups from the sanctuary of Aphrodite, where the shape is also well represented, show a percentage of handles with round sections,²⁵ in marked contrast to the samples from Halieis, which as a rule have flattened, oval sections. Whether these differences are of a chronological nature or are signs of different production centers has yet to be investigated.

SUMMARY

The streets in the Lower Town of Halieis were an integral part of the formalized layout established in the 6th century B.C., possibly as early as the second quarter.²⁶ The growth of the city is reflected in the build-up of street metaling in some areas (e.g. Test A), in which the finds are all typical of a domestic ceramic inventory. Thus far no coins have been recovered, leaving the chronology totally dependent upon the ceramic sequence.

In a wider context, the clearly formalized layout of the Lower Town of Halieis may indicate a major development in the city's political structure the mechanics of which are as yet somewhat obscure and escape precise chronological pinpointing. The most important question arises concerning the application of the plan: does the new formal layout during the 6th century B.C. signal a remodeling and reshaping of an already existing entity without significant restructuring of the political (in the widest sense) organism, or does it represent the inception of Halieis as an urban center and as a polis for the first time?²⁷ Evidence for

pp. 23–42.

²² C. M. Stibbe observed during a visit to Halieis that very few of the vessels from the site qualify for his definition of Lakonian manufacture. We are grateful to Dr. Stibbe for his contributions to this point.

²³ *Op. cit.* (footnote 20 above), p. 44.

²⁴ *Tocra* I, p. 93, fig. 45.

²⁵ We wish to express our thanks to J. Croissant and P. Aupert from the Argos Excavations of the French School, who discussed their materials with us.

²⁶ For a recent discussion of the layout, see Boyd and Jameson, *op. cit.* (footnote 11 above), pp. 327–328.

²⁷ Cf. the discussions of the early polis and settlement: H. Drerup, "Bürgergemeinschaft und Stadtentwicklung in Griechenland," *Wohnungsbau im Altertum. Diskussionen zur Archäologischen Bauforschung* III, Berlin 1979, pp. 87–101; R. Hägg, "Zur Stadtwerdung des Dorischen Argos," *Palast und Hütte. Beiträge zum Bauen und Wohnen im Altertum von Archäologen, Vor- und Frühgeschichtlern*, Mainz 1982, pp. 297–307.

the settling of the site during the 7th century B.C. clearly exists, but the minimal remains categorized as the somewhat elusive "Level D" in the stratigraphy of the Lower Town do not yet allow us to draw a more definite picture of this period. The important role of Halieis, however, in the history of early Greek urbanism has now been established. We hope that, by concentrating further on the remains of the earliest period, the site will also contribute to the better understanding of the early growing pattern and growing pains of one of the quintessential Greek institutions: the polis.

CATALOGUE

In the following catalogue all identifiable fragments of any significance from the streets and the adjacent houses have been presented, in sequence by test trench, as indicated by the letter preceding the catalogue number. The finds from each trench are arranged according to stratigraphy, each stratum labeled according to the section drawings (Figs. 3, 4, 6–8) and subdivided into fine, coarse, and cooking ware under the categories of closed and open shapes. In order to standardize and simplify the clay descriptions, the Halieis Excavations have resorted to a system of standard abbreviations which identify the type of clay by a letter, the hardness by a number.²⁸ As in the Munsell system, overlaps between one type of clay or another or between standards of hardness are indicated by double identification. Where appropriate, verbal description may follow. This system has been used with some success for several seasons, proving sufficiently precise; any more detailed description must be based upon laboratory analysis. Use of the system for work with finds from other sites in the Peloponnesos and elsewhere in Greece has not presented major obstacles.

Most pieces in this catalogue carry only sherd numbers, which are not specified. In a few cases, the objects have been inventoried, the numbers prefixed "HP" for Halieis Pottery and "HL" for Halieis Lamps. All measurements in the catalogue refer to the maximum dimension, in meters. Heavy lines accompanying profiles connote black-glazed areas on pots of banded or plain wares. The scale of the profiles in Figures 10–19 is 1:1 unless otherwise shown.

²⁸ Clay Description:

- A even, fine structure, tight and dense in consistency, without pores or inclusions of noticeable size.
- B even, fine structure, dense in consistency with inclusions and pores at wide intervals.
- C dense structure with inclusions, mica and/or grog, pores regularly spaced, more frequent, sometimes gritty.
- D fine structure, pores throughout ranging from small to large, inclusions and small rocks frequent, sometimes clay slightly layered (schistlike). E.g., large kraters, lekanai, etc.
- E mortar ware, compressed, sometimes with layering, inclusions regular and frequent.
- F tiles and architectural terracottas. As E, but normally harder, and inclusions more regular in size.
- G pithos ware, basically like E, but often coarser and rougher, especially with bins and vats.
- H cooking ware.

Hardness of Clay:

- 1 soft. Clay rubs easily; often brittle with rounded edges.
- 2 medium hard. When broken the clay produces relatively sharp edges, which do not resist much when rubbed.
- 3 hard. Clay has sharp edges which do not rub easily and have a tendency to cut.

The clay description is given after the Munsell color notation, the description letter followed by the hardness number (e.g. A–B/1–2).

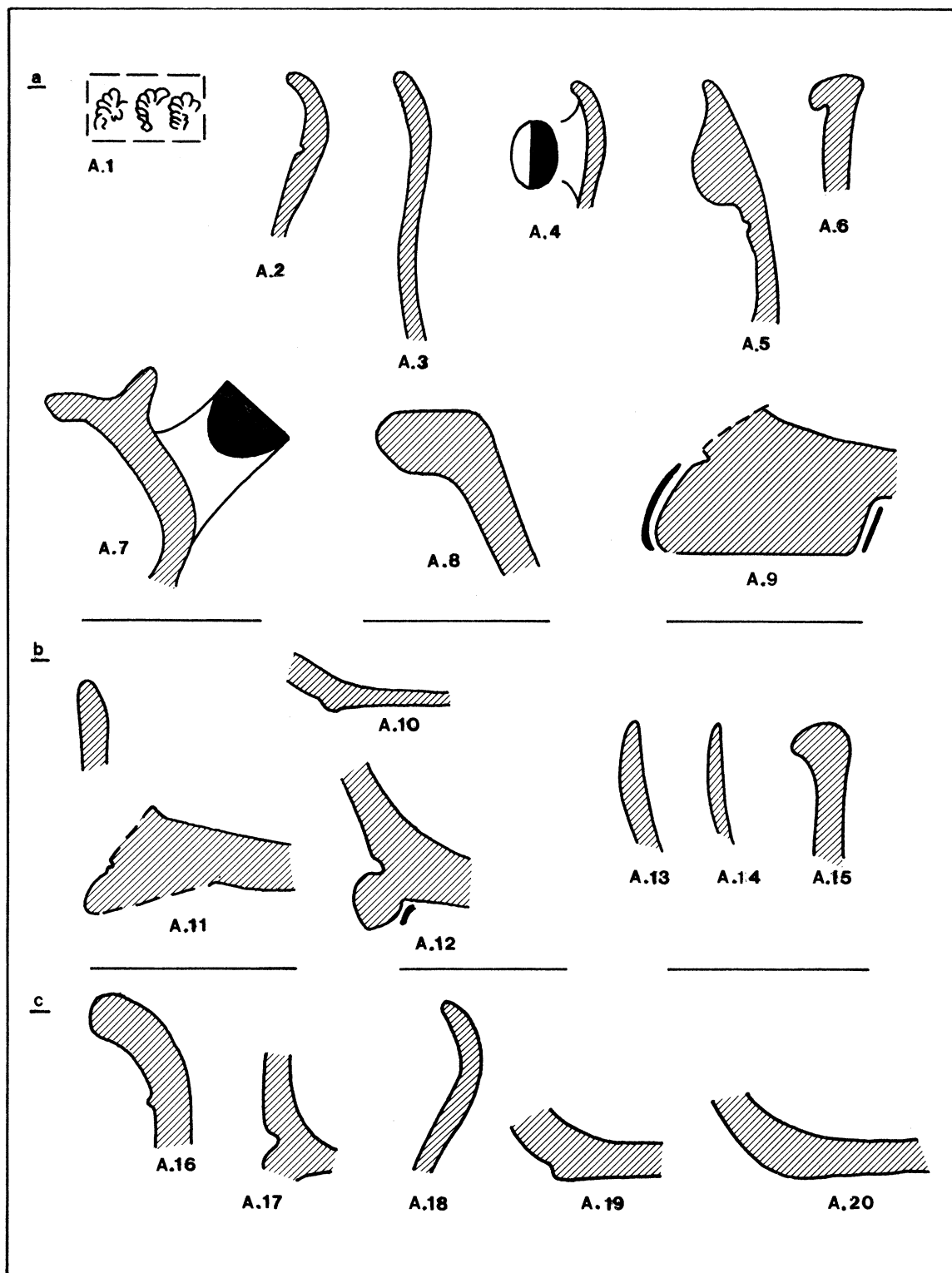


FIG. 10. Test A. Stratum a: A.1–A.9; Stratum b: A.10–A.15; Stratum c: A.16–A.20

TEST A

*Stratum a***A.1 Oinochoe** Fig. 10

L. 0.025; 5YR 6.5/6; A/1–2

Wall fragment (oinochoe shape 8²⁹) with row of stamped palmettes, four preserved. Palmettes seven-petaled, above an impressed groove. Stamps rather clean and even overall. L. 0.0065. Cf. *Agora* XII, no. 803, pl. 58; for placement of such stamps, *Agora* XII, nos. 633, 1190, pl. 47.

Attic, first half 4th century

A.2 Mug Fig. 10

H. 0.032; 2.5YR 5.5/8; B/1–2

Rim fragment of Lakonian mug with short, flaring rim, lip curving outwards.

Mugs of this shape with a broad, drop-shaped body occurred frequently in 4th-century contexts at Halieis. Their place of manufacture is not precisely determined, but the most likely candidate is Sparta, where this shape is common. Variety in the clay and in the glaze suggest also possible local manufacturing of this basically Lakonian shape. Therefore the term East Peloponnesian is used to describe the fabric and possible places of manufacture. For the term cf. *Hesperia* 43, 1974, pp. 128–129.

East Peloponnesian (Lakonian), 4th century

A.3 Skyphos

H. 0.043; diam. rim 0.10; 7.5YR 6.5/6; B/2

Rim fragment of Attic-type skyphos, *Agora* XII, nos. 350–352, pls. 16, 17.

Attic, third quarter 4th century

A.4 Skyphos Fig. 10

H. 0.021; 5YR 5/3; A/2

Rim fragment with handle attachment. Compared to **A.3**, the lip is more pronounced; **A.4** may be slightly later.

A.5 Kantharos Fig. 10

H. 0.038; diam. 0.10; 3.75YR 6/8; A/2

Rim fragment of cup kantharos with heavy, molded lip. Cf. *Agora* XII, no. 661, pl. 28, fig. 7.

Attic, third quarter 4th century

A.6 Bowl with out-turned rim Fig. 10

H. 0.017; 5YR 6.5/8; A/1–2

Rim fragment of medium-sized bowl with out-turned rim. Body apparently rather broad, wall rising swiftly; sharply out-turned, undercut lip. The over-all character and the glaze suggest a 4th-century date.

Attic(?)

A.7 Lopas Fig. 10

H. 0.034; diam. ca. 0.20; 4YR 6/8; H/2

Rim fragment with rather thick, short flange. Cf. “Vari”, no. 111, p. 388, fig. 11.

Second half 4th century

A.8 Lekane Fig. 10

H. 0.022; diam. ca. 0.22; 2.5YR 6.5/4; E/2

Rim fragment with rather thin wall and solid lip, medium size. General shape, “Vari”, no. 83, p. 385, fig. 9.

Corinthian(?), 4th century

A.9 Lekane/krater Fig. 10

H. 0.022; diam. foot 0.11; 3.75YR 6/8; A/2

Foot fragment of very battered, low-footed krater (bell?) or lekane. Wall fully glazed (?). Glaze on exterior and interior of foot. Flat, broad ring foot, molded on exterior.

Attic, 4th century

*Stratum b***A.10 Mug** Fig. 10

H. 0.08; 7.5YR 6.5/6; B/2

Foot fragment; minimally raised base, flat below. Widely curving wall. Cf. comment under **A.2**.

East Peloponnesian (Lakonian?), 4th century(?)

A.11 Skyphos Fig. 10

H. 0.012; 5YR 6.5/6; A/2

Foot and rim fragments of skyphos. Attic type with widely rounded lip and solid foot ring (damaged). Dense, very saturated glaze, black to brown. For the lip, cf. **A.12**.

Attic, first half 5th century

²⁹ For classification of oinochoai, see *ARV*, pp. xlix–l.

A.12 Skyphos Fig. 10

H. 0.024; diam. foot 0.09; 5YR 6/6; A-B/1-2

Foot fragment of Attic-type skyphos, traces of dense miltos on underside; fine, sharp tooling. *Agora* XII, no. 342, pl. 16, fig. 4.

Attic, first to second quarter 5th century

A.13 Skyphos Fig. 10

H. 0.014; diam. 0.12; 5YR 6.5/8; B/2

Rim fragment of a small Corinthian skyphos with a sharp lip above a strongly curved wall. *OlForsch* VIII, p. 175, fig. 22, nos. 6-9.

Corinthian, late 6th to early 5th century

A.14 Skyphos Fig. 10

H. 0.015; 3.5YR 8/2; C/1

Small rim fragment of Corinthian skyphos. Cf. **A.13**

A.15 Bowl with out-turned rim Fig. 10

H. 0.021; diam. 0.18-0.20; 5YR 6/6 B/2

Rim fragment with thickened and lightly out-turned rim, wall curving slightly outwards. The basic shape seems to be similar to *OlForsch* VIII, p. 199, fig. 30, nos. 11, 12.

East Peloponnesian (Lakonian?), 5th century

*Stratum c***A.16 Olpe** Fig. 10

H. 0.026; diam. mouth 0.08; 3.75YR 6.5/7; B/1-2

Rim fragment with outward-flaring mouth and rather heavy, rounded lip. Below rim, a molded ridge.

The fairly heavy lip and the molding indicate an early Classical origin. Cf. *Agora* XII, nos. 260, 276, fig. 3.

Attic(?), first half 5th century

A.17 Mug Fig. 10

H. 0.020; 5YR 7/7; A/1-2

Fragment of foot and lower wall (oinochoe shape 8) with vertical fluting and stamped double circles at bottom. Shape: *Agora* XII, no. 214, pl. 11.

Attic(?), late 5th to early 4th century

A.18 Mug Fig. 10

H. 0.025; 7.5YR 7/6; A/2-3

Rim fragment with sharply flaring, thin lip. Cf. **A.2.**

East Peloponnesian (Lakonian ?), 4th century

A.19 Mug Fig. 10

H. 0.110; 10YR 5.5/6; B/2

Fragment of base of small mug (small bowl?) with raised base, slightly hollowed underneath. Glazed over all. Most likely base for a mug like **A.2** and **A.18.**

A.20 Mug Fig. 10

H. 0.017; 6.25YR 6.57; B/1-2

Bottom fragment of Lakonian mug, flat with integrated base, body curving upwards evenly. Interior and exterior glazed. Cf. **A.2.**

A.21 Amphora Fig. 11

H. 0.057; diam. rim 0.100; 6YR 6.5/6; E/2

Rim fragment with ovoid handle, from a rather small vessel. Lip set off sharply, wall relatively thin. For similar types see *OlForsch* VIII, p. 125, fig. 8, nos. 10-12.

4th century (?)

A.22 Lekane/krater (HP 3056a-h) Fig. 11

H. 0.046; diam. rim ca. 0.26; 7.5YR 6.5/5; C/2

Numerous fragments of one lekane/krater, few joining. Thick, projecting lip, slightly undercut. Vertical rim, outside decorated with at least two grooves, possibly more. Body most likely of bell shape. One fragment of handle, solid, thick, rounded, most likely from a canted handle.

The clay of this vessel is especially dense and tight and of an unusually fine structure. The glaze is dark brown to black, spotty in places, and flaking. The general characteristics bespeak a Peloponnesian manufacture, although a precise place of origin remains to be pinpointed. There seems to be some connection with similar shapes in the Peloponnesos, e.g. *OlForsch* V, p. 229, nos. 1, 2; see *ibid.*, p. 230 for a summary of this form in Olympia during various periods. More recently, *OlForsch* VIII, pp. 134ff., esp. p. 135, fig. 10, nos. 14-16. The context for this

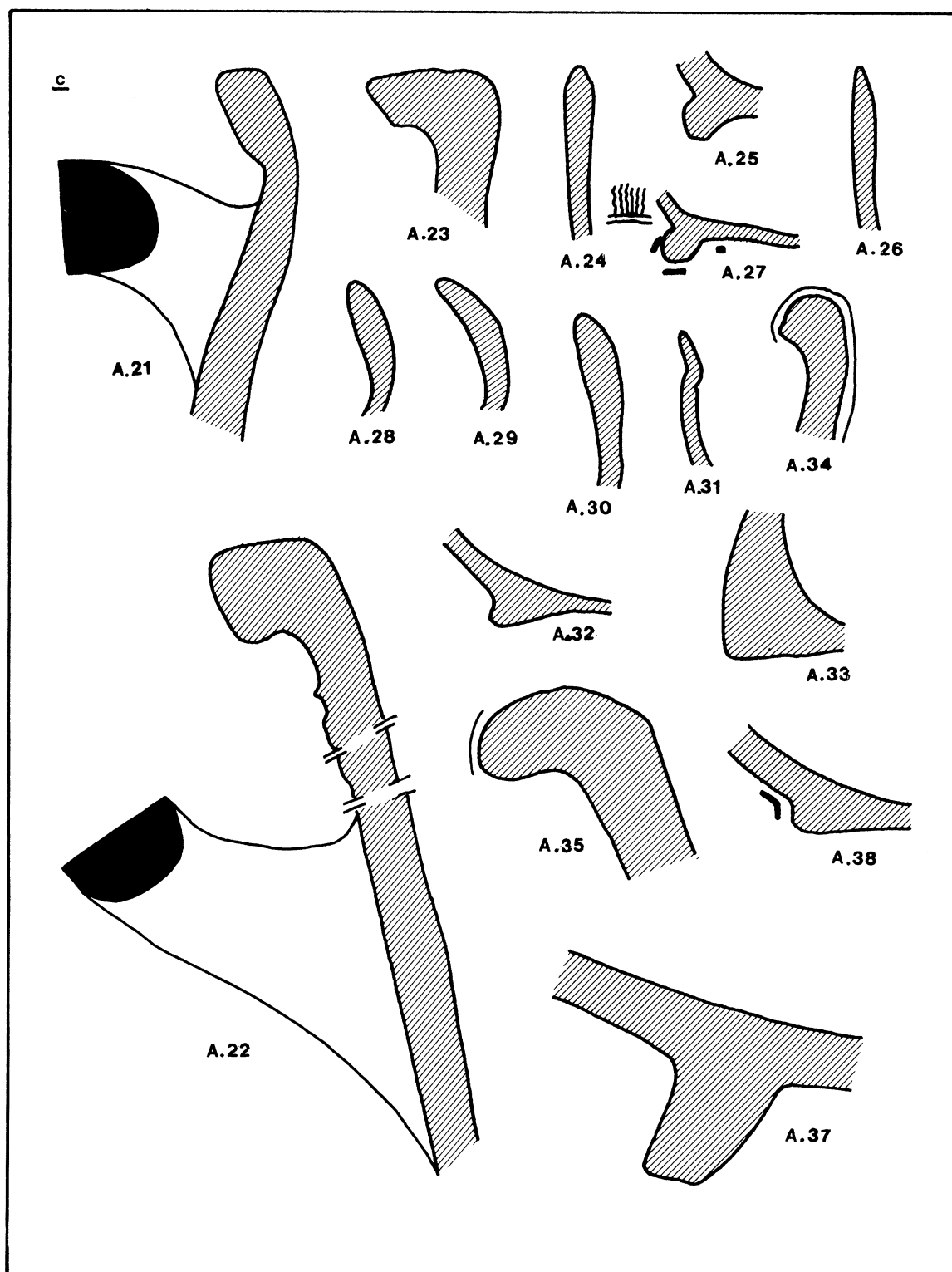


FIG. 11. Test A. Stratum c (cont.): A.21-A.35, A.37, A.38

lekane/krater is Archaic or Early Classical rather than later. The solid lip would also indicate such a date. Cf. lekane, *Agora* XII, nos. 1784, 1787, fig. 15.

Peloponnesian (Elian?) fabric, first half 5th century

A.23 Lekane/krater Fig. 11

H. 0.021; diam. rim *ca.* 0.34; 2.5YR 7/5; C/1-2

Fragment of krater with broad, projecting lip, glazed; top of lip worn, flat. Shape: *Tocra* I, nos. 233, 234, pls. 16, 17.

Corinthian, 6th century

A.24 Skyphos Fig. 11

H. 0.023; 5YR 6.5/7; B/2-3

Rim fragment of Attic-type skyphos with straight, thickened lip; good glaze. Cf. *Agora* XII, no. 342, fig. 4.

Attic, second quarter 5th century

A.25 Skyphos Fig. 11

H. 0.023; 5YR 5/6; B/2

Foot fragment with torus foot and rounded spiral beneath. Glazed all over, good tight glaze surface, slightly reflective. Good tooling on edges.

The shape of the foot resembles that of Attic skyphoi of the Early Classical period. Cf. **A.24**.

East Peloponnesian, 5th century (early)

A.26 Skyphos Fig. 11

H. 0.023; 2.5YR 7.5/2; B/1-2

Rim fragment with flaking, brown-to-black glaze. Sharp lip, gently rounded, body of vessel rather broad. Cf. *Corinth* XIII, p. 107, fig. 11, nos. 249-2, 255-1, 268-1: Group iii.

Corinthian, late 6th to early 5th century

A.27 Skyphos Fig. 11

H. 0.013; diam. foot 0.09; 2.5YR 6.5/2; A/1-2

Foot fragment with brown glaze and ray pattern at base of wall. Miltos on exterior of foot ring, underside glazed. Circle on bottom close to foot ring. Cf. **A.25**.

Corinthian, early 5th century

A.28 Stemless cup Fig. 11

H. 0.019; 5YR 6.5/6; B/2

Rim fragment with rather high, steep lip, slightly convex on interior, straight on exterior.

The shape is known from Lakonian ceramics (*Tocra* II, no. 2117, pls. 40, 41, fig. 17), but it also seems to have been rather frequent in East Peloponnesian pottery as well. The fabric suggests an Argive origin. Other examples from Olympia: *OlForsch* VIII, p. 188, fig. 26, nos. 3, 4.

East Peloponnesian (Argive?), second half 6th century

A.29 Stemless cup Fig. 11

H. 0.019; 3.75YR 6.5/7; B/1-2

Rim fragment similar to **A.28**; lip more curved and flaring.

(Argive?), second half 6th century

A.30 Stemless cup Fig. 11

H. 0.023; 10YR 7.5/5; C/1

Rim fragment of large stemless cup with somewhat deeper body than the two preceding. Lip curving out slightly, thickening towards top. For similar shape, cf. *Tocra* I, no. 1024, pp. 94-95, fig. 46, with a shallower body; probably of a later date. Cf. also *OlForsch* VIII, p. 186, fig. 26, nos. 9, 10.

East Peloponnesian (Argive?), later 6th to early 5th century

A.31 Stemless cup Fig. 11

H. 0.019; diam. 0.09; 5YR 6/8; A/2

Rim fragment with lip set off sharply at exterior, shallow, squat cup body. Dark brown, even glaze. The precise shape of the lip as well as the character of the glaze suggest a relatively early date. For complete shape, see *BSA* 48, 1953, p. 60, fig. 33:G5. Our example, with a less bulging profile and straighter wall, appears earlier.

East Peloponnesian (Argive?), 5th to 4th century

A.32 Stemless cup Fig. 11

H. 0.017; diam. foot 0.05; 2.5YR 6/8; B/1

Foot fragment of vessel like **A.31**. Base projects sideways, hollowed underneath. Glazed inside and out. Somewhat earlier than **A.31**.

East Peloponnesian (Argive?), 6th century

A.33 Saltcellar Fig. 11

H. 0.025; diam. 0.070; 6.25YR 6.5/8; B/2

Fragment of convex saltcellar with flat base. Lip broken. Good glaze. Cf. *Agora* XII, no. 894, fig. 9.

Attic, first half 5th century

A.34 Krater/Bowl Fig. 11
H. 0.024; diam. *ca.* 0.28; 10YR 5.5/5; B/2

Rim fragment of squat, deep bell shape (?) with lip turned prominently outward. Glazed on interior. East Peloponnesian, late 5th to first half 4th century

A.35 Mortar Fig. 11
H. 0.026; 5YR 6.5/7; E/2-3

Rim fragment with overhanging lip, glazed on top.

Attic, first half 5th century

A.36 Lekane Fig. 12
H. 0.069; diam. rim 0.40; 2.5YR 6/8; E/1

Rim fragment with glazed lip, banded decoration on outside, lip deeply undercut. Shallow groove between lip and first band. Cf. *Agora* XII, no. 1907, pl. 91, fig. 16.

Attic(?), late 6th to first half 5th century

A.37 Lekane Fig. 11
H. 0.030; 5YR 5.5/3; E/3

Foot fragment with large foot ring, rounded below. Wall spreading sideways in shallow curve. Possibly a big dish rather than lekane (?). Recalls foot fragments like *Agora* XII, nos. 1767, 1769-1771, fig. 21

Attic(?), first half 5th century

A.38 Deep kantharos-skyphos Fig. 11
H. 0.017; diam. foot 0.100; 2.5YR 7.5/4; C/1

Foot fragment of deep stemless cup with vertical rim. Cf. **B.22**. Base set off, slightly hollowed underneath. Possibly from a small lekane or bowl (?).

East Peloponnesian, 6th century

A.39 Lopas Fig. 12
H. 0.033; 2.5YR 5/8; H/2

Rim fragment, flange curving upwards; thin outer lip, flaring. The relatively thin walls and the solid, steeply rising outer lip suggest a relatively early date. Cf. *Agora* XII, no. 1960, pl. 95.

Local(?), first half 5th century or later

A.40 Shoulder lekythos

L. 0.022; 5YR 6.5/8; A/1-2

Shoulder fragment of ray-pattern lekythos. Common type; cf., e.g., *AthMitt* 81, 1966, pl. 26:1.

Attic, first half 5th century

A.41 Lamp (HL 454) Fig. 12
H. 0.023; diam. *ca.* 0.077; 2.5YR 7/3; B/1-2

Two joining fragments with wide filling hole and horizontal strap handle. Worn, flaky, black-to-dark-brown glaze. Similar to R. Howland, *Agora* IV, Princeton 1958, type 21c.

Corinthian, early 4th century

TEST B
Stratum a: Street

B.1 Amphora Fig. 12
H. 0.035; diam. rim 0.180; 4YR 6/7; H/2

Rim of cooking-ware pot (amphora?) with strong burnishing marks on outside. Underside of lip rounded, set off gently from neck.

Local(?), late 6th to first half 5th century

B.2 Deep kantharos-skyphos Fig. 12
H. 0.024; 2.5YR 7.5/2; B/2

Rim fragment with steep, offset rim. Worn, brownish green glaze. Cf. **B.22**.

Argive, 6th century

B.3 Bowl Fig. 12
H. 0.015; diam. foot 0.12; 5YR 6.5/8; A/1-2

Foot fragment of large bowl with incurving lip. Spreading ring foot with flat resting surface, reserved underneath. "Vari", no. 43, p. 374, fig. 6.

Attic, first half 4th century

Stratum e: House, layer above drain

B.4 Olpe Fig. 12
H. 0.032; diam. rim 0.120; 5YR 6/8; A/1-2

Rim fragment, glaze black to brown. Lip half rounded, a trifle undercut. Cf. "Vari", nos. 6-9, p. 375, fig. 5, no. 9, with narrower mouth.

Attic, *ca.* 360-330 B.C.

B.5 Lekythos (HP 3055) Fig. 12, Pl. 32:d
H. with handle 0.088; diam. foot 0.028, body 0.057; 10YR 7.5/2.5; B/2

Egg-shaped lekythos on high, conical foot, hollowed below and set off sharply from body. Shoulder rising evenly, blending into neck. Mouth missing. Outside slipped with three bands of purple glaze: lower edge of foot; below widest diameter; broad band below shoulder. Three broad dashes across handle. Cf. E. G. Pemberton, "The Chrysoula

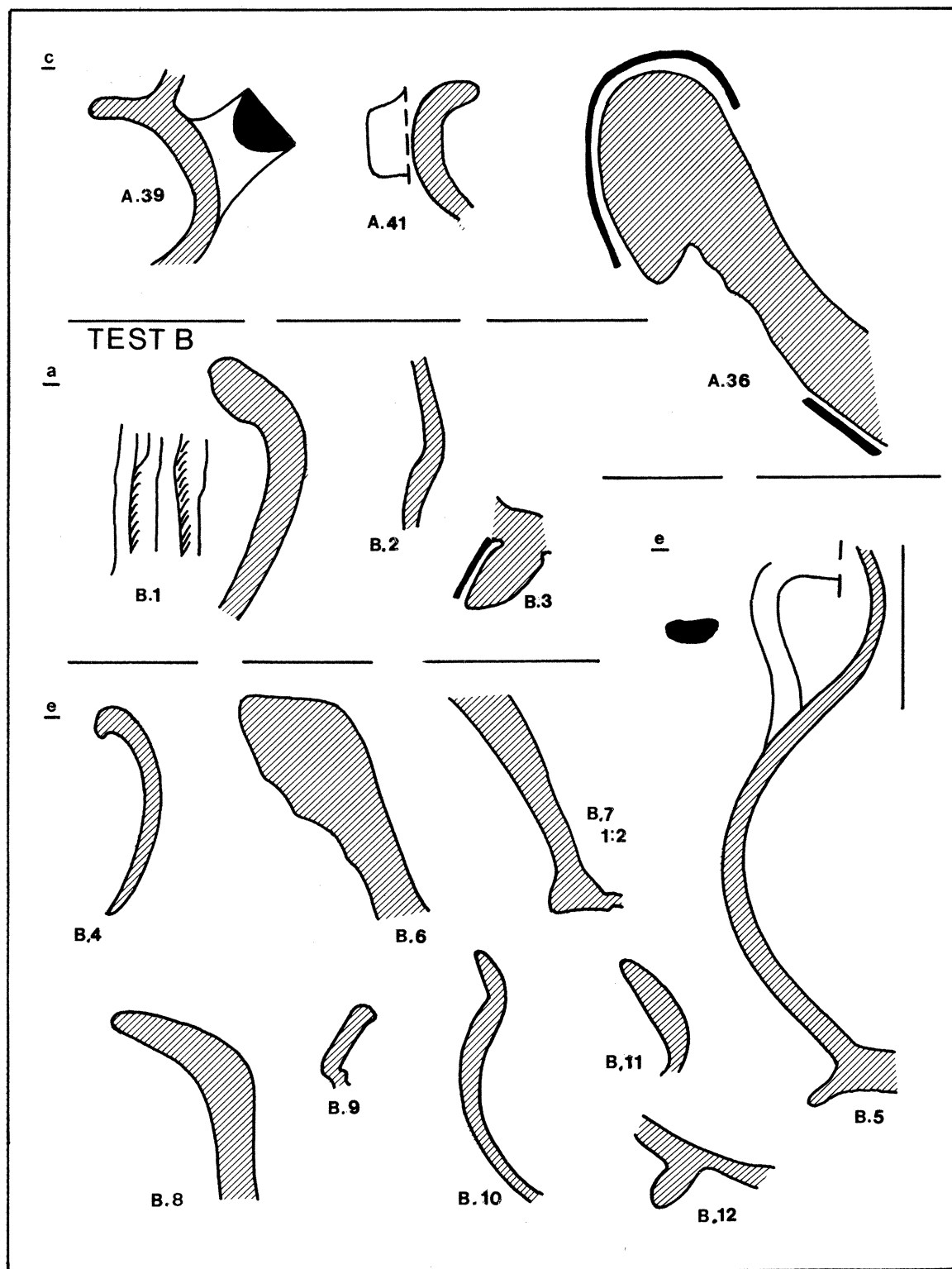


FIG. 12. Test A. Stratum *c* (cont.): A 36, A 39, A 41. Test B. Stratum *a*: B.1-B.3; Stratum *e*: B.4-B.12

Deposit from Ancient Corinth," *Hesperia* 39, 1970, p. 293, no. 93 with text, pl. 72.

Corinthian, mid-5th century

B.6 Amphora Fig. 12

H. 0.032; 5YR 7/6; E/1-2

Rim fragment. Lip flat on top, exterior molded, recessing into neck in two wide grooves. Interior sloping into narrowing neck. Traces of burning(?). Shape: cf. *AthMitt* 85, 1970, p. 136, no. 27, pl. 55:5; *OlForsch* VIII, p. 125, fig. 8, 14.

Corinthian(?), mid- to later 4th century

B.7 Amphora Fig. 12

H. 0.065; diam. foot 0.048; 3.75YR 6/8; E/2

Foot, knob shaped, slightly hollowed in center. Late 6th to early 5th (?) century

B.8 Amphora(?) Fig. 12

H. 0.025; 5YR 7/8 (core gray); C/2

Rim fragment of cooking-ware pot or coarse amphora. Widely flaring and projecting. Neck short.

Local(?), 6th to first half 5th century

B.9 Chytra(?) Fig. 12

H. 0.015; diam. rim ca. 0.16; 7.5YR 4/1; H/2-3

Rim fragment of cooking-ware pot, most likely a chytra. Unusual in its precise, almost moldmade execution.

Local(?), 4th century

B.10 Stemless cup Fig. 12

H. 0.039; diam. rim 0.09; 5YR 5/6; B/2

Rim-and-wall fragment, Argive type with two handle attachments. Cf. **A.31**.

Argive, 4th century

B.11 Stemless cup Fig. 12

H. 0.020; diam. rim 0.120; 6.25YR 6.5/7; A/2

Rim fragment. Lip higher than on **B.10** as well as thicker and more solid. This ought to be the fore-runner of the later, shorter-lipped type such as **B.10**. For the type, cf. *OlForsch* VIII, pp. 182-183, fig. 25.

Argive, late 6th to early 5th century

B.12 Bowl Fig. 12

H. 0.013; diam. foot 0.050; 5YR 6/8; A/1-2

Fragment with ring foot, convex and swiftly rising inside, rounded on outside. Bottom recessed. Most

likely from a bowl with incurving rim. Cf. "Vari", no. 25, p. 378, fig. 6; *OlBer* III, p. 56, figs. 55, 56.

East Peloponnesian (Argive?), second to third quarter 4th century

B.13 Bolsal Fig. 13

H. 0.028; diam. ca. 0.10; 10YR 5/2.5; A/1-2

Rim fragment, good black glaze, slightly worn. Cf. *Agora* XII, no. 541, fig. 6.

Attic, late 5th to early 4th century

B.14 Bowl Fig. 13

H. 0.022; diam. ca. 0.24; 10YR 6/1; A/1-2

Rim fragment of large bowl with lip slightly thickened inwardly. The body was of a more or less hemispherical, somewhat squat shape. Glaze flaking. Cf. *OlForsch* VIII, p. 199, fig. 30, no. 7.

East Peloponnesian, first half 4th century

B.15 Bowl Fig. 13

H. 0.33; diam. foot 0.080; 5YR 7/7; A/1-2

Foot fragment of large bowl with incurving rim. Dip glazed. "Vari", nos. 28-32, p. 318, fig. 6.

Attic, mid- to third quarter 4th century

B.16 Bowl Fig. 13

H. 0.020; 10YR 7.5/2; C/1

Small fragment of bowl with out-turned rim, flattened on top of lip, slightly projecting. Cf. *Agora* XII, no. 759, pl. 56, fig. 8.

Corinthian, mid-4th century

B.17 Krater Fig. 13

H. 0.045; diam. rim ca. 0.32; 5YR 6.5/6; D/1

Rim fragment; plain household type with lip projecting straight outwards, its outer edge vertical, gently undercut below. The body of this vessel was presumably bell-shaped. Cf. *OlBer* IV, nos. 25, 26, p. 28, figs. 14, 15.

Local(?), mid-4th century

B.18 Lekane/krater Fig. 13

H. 0.032; 5YR 7/7; A/1-2

Rim fragment of plain household lekane or krater. Splintered on top of lip and outer edge; two grooves on wall below rim. Similar to **B.17**.

B.19 Basin Fig. 13

H. 0.092; diam. 0.380; 5YR 6.5/7; E/2

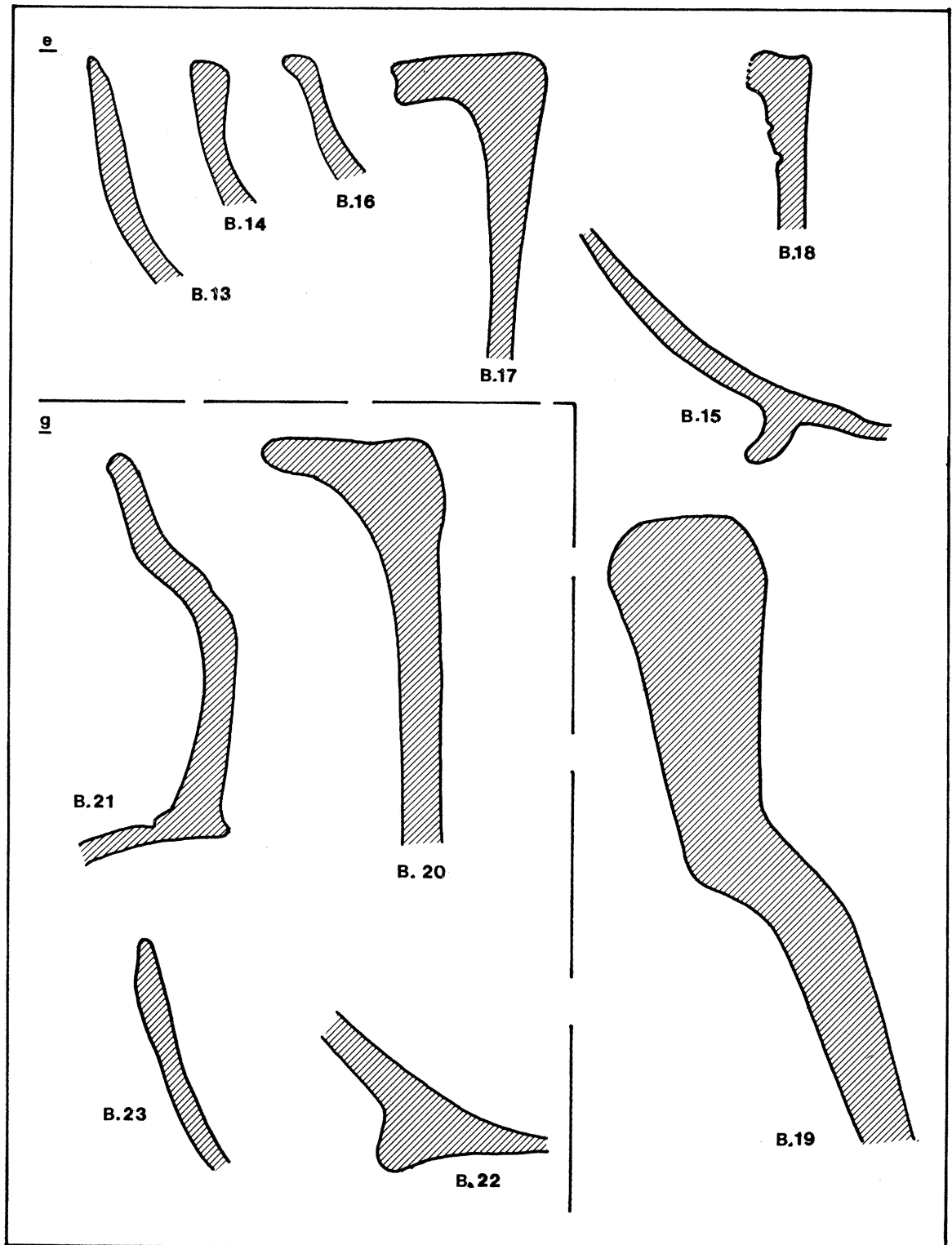


FIG. 13. Test B. Stratum *e* (cont.): B.13-B.19; Stratum *g*: B.20-B.23

Rim fragment set off by carination inside and out, lip rounded off on either side. Lower body curving inwards. The clay is not typical Corinthian; the basin may be either local or Argive in manufacture. Cf. *Agora* XII, no. 1903, fig. 20.

East Peloponnesian, 4th century

Stratum g: House, layer beside top of drain

B.20 Amphora Fig. 13

H. 0.068; diam. rim 0.120; 5YR 6.5/7; D/1–2

Rim and neck of household or cooking-ware amphora with strongly projecting, almost horizontal rim. Vertical, slightly warped neck.

Local(?), 6th century

B.21 Lekythos Fig. 13

H. 0.083; diam. mouth 0.065; 6.25YR 6.5/8; B/2

Neck of a lekythos, household type. Neck set off by step, mouth flaring outwards in compound curve. Dark, red-brown glaze, much worn and flaking. In comparison with the Attic series it should belong in the later stages of the shape development: cf. *Agora* XII, no. 1107, pl. 38.

Corinthian, first half 4th century

B.22 Deep kantharos-skyphos Fig. 13

H. 0.024; diam. foot 0.080; 5YR 7/6; C/2–3

Foot fragment of Argive kantharos with high, offset collar rim, slightly hollowed underneath. Typical streaky, brown glaze. For the type, cf. *BSA* 48, 1953, p. 44, fig. 17. Our example seems less elaborately worked. The shape is also common in the Lakonian repertoire (*Tocra* I, no. 995, p. 92, fig. 44) and appears well represented in Olympia also (*Ol Forsch* VIII, pl. 33). Despite obvious local variation, this shape seems to be one typical for the Peloponnesian repertoire of the Archaic period.

Argive, 6th century

B.23 Skyphos Fig. 13

H. 0.035; diam. 0.120; 8.75YR 7.5/6; B/1

Rim fragment of a Corinthian skyphos. Glaze badly worn.

Corinthian, second half 6th century

TEST C

Stratum a: Road metaling

C.1 Amphora

H. 0.065; 5YR 4.5/6; D/3

Neck fragment, gently cone-shaped, lip very gently protruding.

Local(?), 5th to 4th century

C.2 Amphora Fig. 14

H. 0.039; diam. lip 0.120; 5YR 6.5/8; D/1–2

Rim fragment. Neck slightly conical towards top, lip rounded and rather unpronounced, thickened within and without; slight groove.

Chian(?), 4th century

C.3 Jug

H. 0.039; 10YR 8/6; E/2–3

Handle fragment of course jug with rim attachment. Double handle, rectangular in section, edges rounded.

Local(?), Archaic, 6th century

C.4 Skyphos Fig. 14

H. 0.013; 3.75YR 6/6; A/2–3

Foot fragment of Attic-type skyphos. Reserved below, exterior of foot glazed. Cf. *Agora* XII, p. 260, no. 352, fig. 4.

Attic, third to fourth quarter 4th century

C.5 Skyphos Fig. 14

H. 0.011; diam. 0.120; 5YR 8/2.5; C/2

Rim fragment of Corinthian skyphos. Sharp lip. Corinthian, 6th century

C.6 Stemless cup Fig. 14

H. 0.025; 7.5YR 7.5/6; A/2–3

Rim fragment, rim slightly offset. Fine black glaze inside; exterior reserved except for band below lip. For profile, cf. *Agora* XII, no. 456, fig. 5.

Attic, first quarter 5th century

C.7 Deep kantharos-skyphos Fig. 14

H. 0.016; diam. foot 0.045; 3YR 6/8; B/2

Foot fragment of Argive deep kantharos. Base slightly flaring at sides into rounded protrusion; base hollowed. Brown glaze inside and out, underside of foot reserved. Cf. **B.22**.

Argive, 6th century

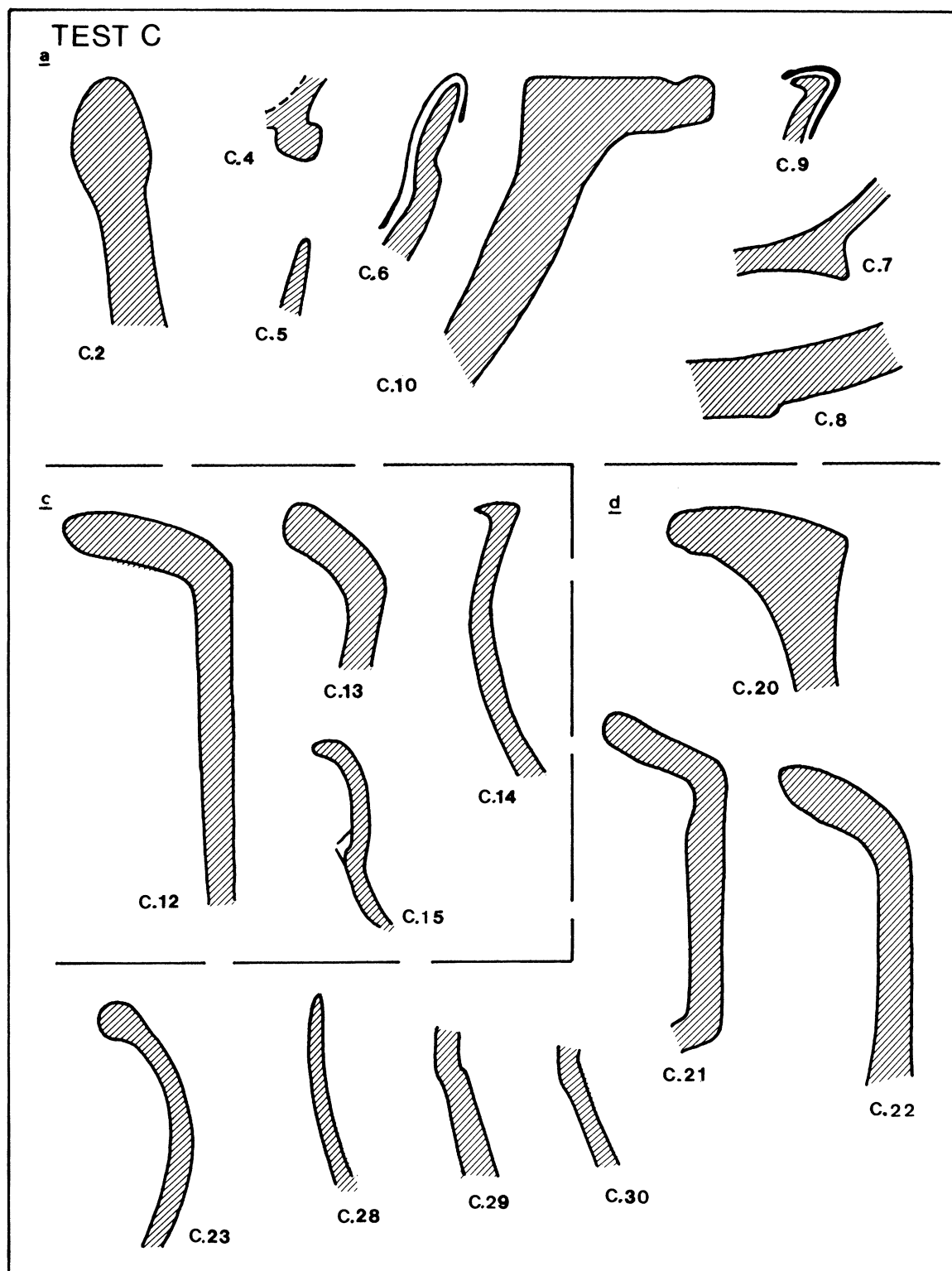


FIG. 14. Test C. Stratum a: C.2, C.4-C.10; Stratum c: C.12-C.15; Stratum d: C.20-C.23, C.28-C.30

C.8 Tray Fig. 14

H. 0.043; 2.5YR 6/8; B/2

Bottom fragment of extremely shallow tray on flat, slightly raised base. Walls spread rapidly. Dilute brownish wash on interior, applied irregularly in streaks.

Local(?), 4th century (late?)

C.9 Bowl with out-turned rim Fig. 14

H. 0.012; 5YR 7/7; C/1-2

Tiny fragment. Lip sharply projecting and undercut. Brown glaze. For a similar shape in a larger version, cf. *OlForsch* VIII, p. 135, fig. 10, nos. 9-11. **C.9** appears to be a smaller version of the shape with a diameter below 0.15.

East Peloponnesian (Argive?), Late Archaic, first half 5th century (?)

C.10 Basin Fig. 14

H. 0.049; diam. ca. 0.35; 5YR 7.5/2.5; E/2

Rim fragment, fairly deep. Flat broad lip, widely projecting. Shallow groove towards outside of lip top. Cf. *OlForsch* VIII, p. 160, fig. 18, nos. 1-3.

Corinthian(?), 4th century

Stratum c: House, earth fill connected with 4th-century floor

C.11 Jug/hydria Fig. 15

H. 0.026; diam. foot 0.107; 10YR 8/6; C-E/3

Bottom of jug or hydria. Low, raised base, underside gently hollowed, wall swinging out widely to either side.

Local(?), Archaic(?)

C.12 Jug/hydria Fig. 14

H. 0.065; diam. lip ca. 0.22; 2.5YR 0/3.5; H/2-3

Neck fragment of large vessel, either a round-mouthed jug or a hydria. Neck almost vertical, slightly bulging; lip thickened, projecting far outwards, close to horizontal, edge rounded. For a variety of such vessels, cf. *Agora* XII, fig. 17; *Corinth* VII, ii, pls. 110, 111.

Local(?), Archaic, early 6th century

C.13 Jug/hydria Fig. 14

H. 0.024; diam. lip ca. 0.22; 10YR 1/5.5; H/2

Rim fragment. Lip rather thick, somewhat squarish; neck more conical, but otherwise similar to **C.12**.

C.14 Cup-skyphos Fig. 14

H. 0.040; diam. 0.070; 6.5YR 7/7.5; A-B/2

Fragment of a deep cup-skyphos; lower portion of wall preserved. Egg-shaped body projecting outwards, sharply pronounced, undercut lip. Streaky, dark brown glaze. No handle attachment preserved; possibly one-handled. Glazed inside and out, lip reserved on top.

Local (Argive?), first half 6th century

C.15 Cup Fig. 14

H. 0.037; diam. rim ca. 0.20; 7.5YR 5.5/4; A/2

Fragment of rim and wall, type C cup with concave lip.³⁰ Rim offset and slightly inset over basin. Fine, shiny black glaze. Cf. *Agora* XII, nos. 398-413, pl. 19, fig. 4; *BSA* 48, pp. 58-59, G.3, fig. 32.

Attic(?), Late Archaic.

Stratum d: House, mud-brick strosis over floor (e)

C.16 Amphora (HP 3059) Fig. 15

H. 0.148, neck 0.136; diam. rim 0.150, handle 0.034, foot 0.084; 2.5YR 5.5/7 on outer edges, 2.5YR 6/1 in interior; D/1

Two large fragments of an amphora, giving a profile of neck and shoulder and the foot. Found together with **C.19**. Rather bulbous, wide body, starting from solid, deep ring foot. Shoulder rising evenly; neck set off by small step. Neck short, minimally flaring. Large, rounded lip, concave within. Widely curved handle, compressed oval in section. The overall height of this vessel was ca. 0.50-0.60 m. An unusual feature is the thin foot of the amphora, which measures only 0.004 m. The closest parallels occur among Ionian trade amphoras to which we assign this piece. Cf. E. Gjerstad *et al.*, "Greek Geometric and Archaic Pottery found in Cyprus," *Skrifter Athen* XXVI, Stockholm 1977, p. 19, no. 116, pl. XI. For the foot, cf. *loc. cit.*, no. 122. Resemblance should also be noted to *Agora* VIII, no. 27, pls. 2, 42. The slightly longer neck, the offset shoulder, and the more integrated lip of our piece speak for a later, non-Attic origin.

Ionian(?), late 7th to early 6th century

C.17 Hydria/amphora (HP 3052) Fig. 15

H. 0.113; diam. rim ca. 0.15; 7.5YR 6/1 (in core); D-G/1-2

³⁰ For the definition of the type, see *Agora* XII, p. 91, note 17.

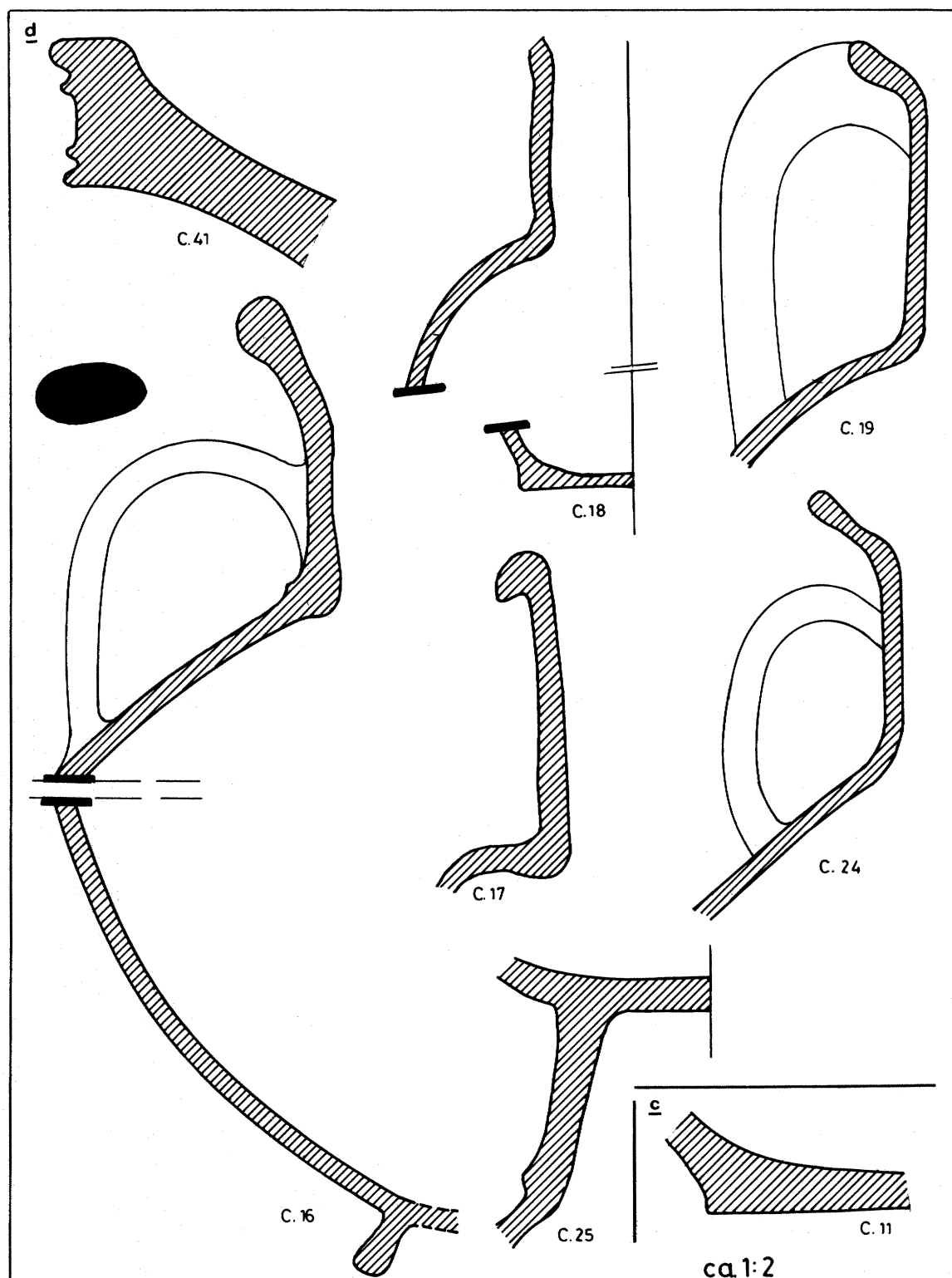


FIG. 15. Test C. Stratum *c* (cont.): C.11; Stratum *d* (cont.): C.16–C.19, C.24, C.25, C.41

Fragment, giving full profile of neck and beginning of shoulder. Latter rather flat, neck vertical, lip a bit undercut, turning out in a full quarter-round molding, also round on top. No sign of second handle attachment; therefore this vessel was most likely a hydria. The handle preserved sits in the middle of the neck, suggesting a low, widely curved handle. For the shape of the neck, cf. Gjerstad, *op. cit.*, p. 19, no. 106, pl. X.

Ionian(?), first half 6th century

C.18 Hydria/amphora (HP 3053) Fig. 15

H. largest fragment 0.097; diam. foot 0.104; 5YR 6/1 (core) and 5YR 7/3.5 (exterior edge); H/2

Numerous fragments of a large kitchen vessel. Offset base, flat. Wide, solid egg-shaped body. Neck slightly tapering, lip sharply angled outward, projecting once under *ca.* 45°. Most likely from a hydria. Cf. C.12 above.

Local(?), first half 6th century

C.19 Hydria (HP 3058) Fig. 15

H. 0.131; diam. rim 0.175; 2.5YR 6/5; variation of H/1-2

Neck of a sturdy vessel, most likely a hydria. Broad neck, slightly tapering. Lip flaring out sharply and wide, edges blunted. Handle rounded in section, blending into lip, standing vertically upon shoulder. At the beginning of the upper handle curve, a lambda incised before firing, the right hasta longer than the left. Paddle marks still visible on inside of neck. The fabric does not fit the standard descriptions from sites like Corinth or Athens. Therefore we consider it local in make. Found together with C.16. For comparanda, see C.12.

Local, first half 6th century

C.20 Amphora Fig. 14

H. 0.030; diam. rim 0.150; 10YR 8/6; E/2-3

Rim fragment. Lip heavy, thickening quickly, almost basin-like above rather thin neck. Slightly curved above, sloping inwards, rounded at edge. To be connected with forms like *Corinth* VII, ii, pl. 110, left side, and similar ones. Also *Tocra* I, no. 1461, p. 145, fig. 70.

Local(?), first half 6th century

C.21 Amphora/jug Fig. 14

H. 0.047; 5YR 1/6.5; H/2

Fragment of neck from cooking-ware pot, either amphora or jug. Vessel very irregularly formed, neck sharply offset. Lip widely flaring, gently concave above, angular at edge. Cf. C.20.

Local(?), first half 6th century

C.22 Amphora/jug Fig. 14

H. 0.049; diam. rim *ca.* 0.18; 3.75YR 4/5.5; H/2

Rim fragments. Neck curving slightly inwards and inclined, lip flaring outwards, curved into sharply pronounced exterior edge. Traces of burning on exterior of rim. Cf. C.20.

Local(?), first half 6th century

C.23 Jug Fig. 14

H. 0.100; diam. rim 0.120; 10YR 4/2.5; H/2-3

Several fragments of cooking-ware pot. Rather elegant curve of neck, rising swiftly from shoulder. Short, thickened lip. Cf. profile, *Corinth* VII, ii, An 291, p. 155, pls. 82, 111. A similar, early profile: *OlForsch* VIII, p. 142, fig. 12, no. 1.

Local(?), first half 6th century

C.24 Chytra Fig. 15

H. 0.097; diam. rim 0.200; 5YR 4.5/3; H/1-2

Several large-size fragments of a chytra or cooking pot with a rather high, distinct neck over a somewhat squat, rounded belly. Shoulder curving up broadly; neck gently set off. Under rim a pronounced ridge, lip bent outwards sharply, thickened and rounded at outer edge, upper side of lip concave. Broad band handle with thickened sides. Cf. *Corinth* VII, ii, An 319-An 283, pl. 110, upper left.

This vessel is better made and more finely executed than others of this type from Halieis.

Local(?), early 6th century

C.25 Pedestaled krater Fig. 15

H. 0.079; p. diam. foot 0.165; 5YR 6.5/3; C/2-3

Foot fragments from a large pedestaled krater. Foot spreading towards bottom in a trumpetlike flare; original edge of foot ring missing. At the beginning of the supporting, gently tapering foot stem, a sharp molding. Bottom flat and fairly thin, the thicker walls of the basin spreading out widely to either side. Interior of stem slipped and smooth. Bands of dark-brown-to-black glaze at ridge and below basin. The fabric has a slight but distinct purple tinge and

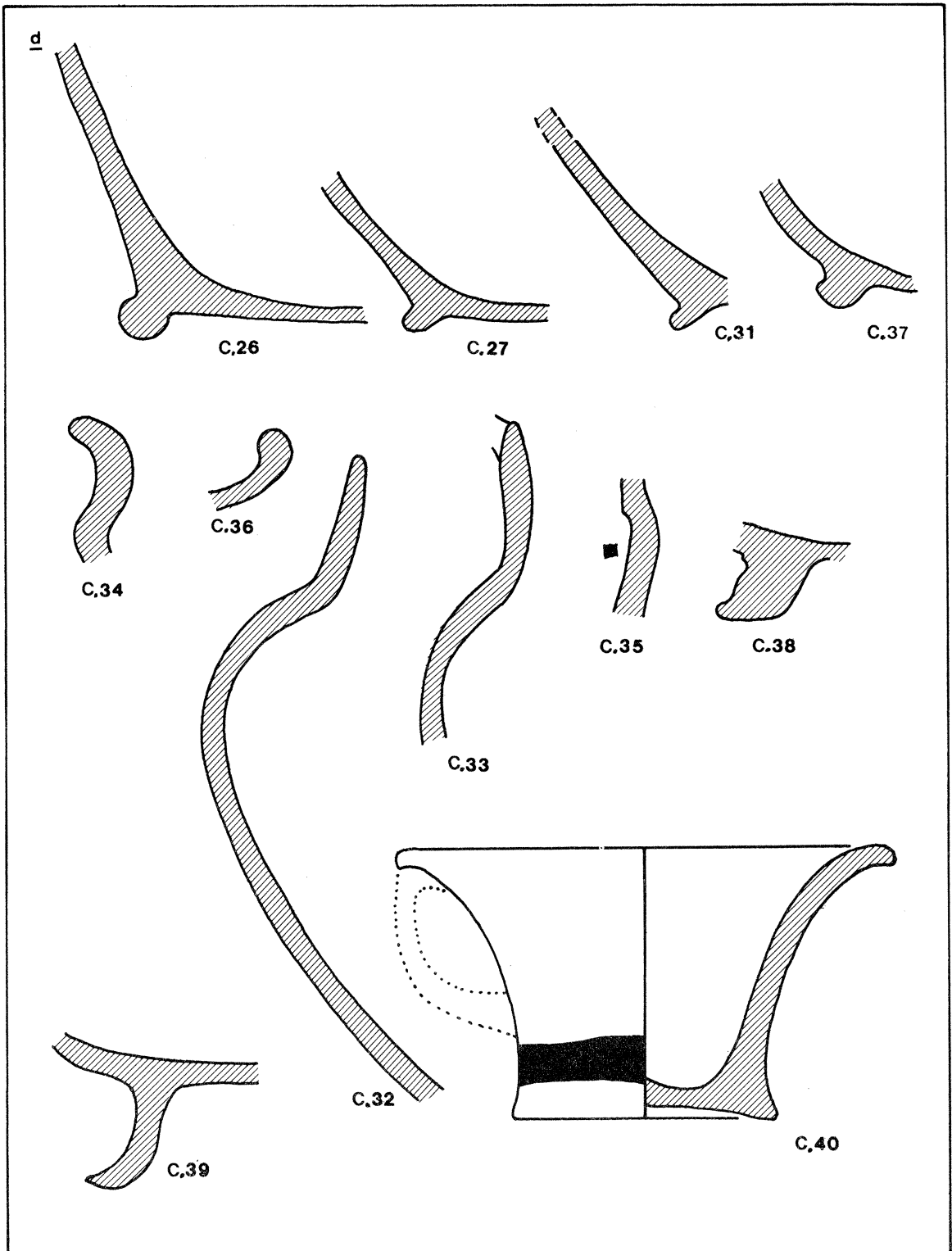


FIG. 16. Test C. Stratum *d* (cont.): C.26, C.27, C.31–C.40

is somewhat gritty, which places it in the East Peloponnesian circle.

The type of the pedestaled krater occurs in the repertoire of Argive Late Geometric: P. Courbin, *La céramique géométrique de l'Argolide*, Paris 1966, pls. 50–52, 86. For a profile of an earlier example of the shape, see *BSA* 48, 1953, p. 35, fig. 8:A2. This form is well known from Late Geometric times onwards, in Attica and elsewhere: Coldstream, *Greek Geometric Pottery*, London 1968, pl. 35. The form is certainly Peloponnesian: *Agora* VIII, no. 243, pl. 13 (the stand in this case is restored; examples occur both with pierced triangles and without). See *ibid.* also for additional literature.

East Peloponnesian (local[?]) but not Argive), second half 7th century

C.26 Skyphos Fig. 16

H. 0.049; diam. foot 0.079; 2.5YR 6/8; A/2–3

Foot and lower portion of wall of Attic-type skyphos. Torus ring foot sharply set off from body. Interior of foot rises steeply, separated from gently sagging bottom by short vertical zone. Wall rises steeply in a very subtle countercurve. Wall medium thick, thinning towards top. Resting surface of ring foot reserved, sides glazed. Bottom covered with miltois; around center a small circle of diluted glaze. The shape of the foot with the narrow vertical face adjacent to the bottom closely resembles *Agora* XII, no. 342, pl. 16, fig. 4; ca. 470–460. The general proportions, with rather wide foot and relatively squat body, also support the general date.

Attic, third quarter 5th century

C.27 Skyphos Fig. 16

H. 0.024; diam. foot 0.055; 10YR 6/2.5; D/2

Foot of Corinthian skyphos, burnt(?). Foot ring spreading sideways, bottom flat, wall rising in wide, outward-pointing curve. Exterior worn. Cf. *Corinth* VII, ii, An 196, An 263, Type Ia, pl. 76, fig. 1.

Corinthian, late 7th century

C.28 Skyphos Fig. 14

H. 0.026; 7.5YR 6.5/7; B–C/2–3

Five joining fragments of Corinthian-type skyphos. Broad body with gently curved wall; lip rounded on top, bent inwards. Streaky, thick brown glaze on interior and exterior. Cf. *Agora* XII, no. 336, pl. 16, fig. 4.

Attic(?), early 5th century

C.29 Deep kantharos–skyphos Fig. 14

H. 0.025; 10YR 6.5/4; C/2

Shoulder fragments. Bluish glaze, thin application. Rim set off by shallow groove. Cf. **B.22**.

Argive, 6th century

C.30 Deep kantharos–skyphos Fig. 14

H. 0.023; 7.5YR 6.5/7; C/2

Shoulder fragments, similar to **C.29**. Streaky brown-to-black glaze on exterior, interior worn. Cf. **B.22** above.

Argive, later 6th century

C.31 Deep kantharos–skyphos Fig. 16

H. 0.033; diam. foot 0.050; 10YR 1.5/6.5; A–B/1–2

Foot and bottom fragment. Low spreading ring foot, reserved within and beneath. Solid wall, tapering as it proceeds upward in a moderately steep curve. Streaky black-to-green glaze inside and out. Cf. **B.22**.

Argive, 6th century

C.32 Deep kantharos (HP 3051A)

H. 0.101; diam. 0.160; 2.5YR 7/2; B/1–2

Rim and most of wall profile with lower handle attachment preserved under strongly curved shoulder. Rim slightly inset and separated by groove; lip sharply rounded on top. Brown glaze, black in spots, thin, applied very superficially. Cf. **B.22**.

Argive, 6th century

C.33 Deep kantharos (HP 3051B) Fig. 16

H. 0.057; diam. 0.140; 2.5YR 7/2; B/1–2

Similar to preceding, shoulder less curved, groove under rim more pronounced. Lip with slight outward slant, broader, rounded on top. Upper attachment of vertical handle preserved. Cf. **B.22**.

Argive, 6th century

C.34 Lekane/krater Fig. 16

H. 0.028; diam. lip 0.260; 10YR 6/6; E/1–2

Rim fragment of medium- to large-sized utilitarian vessel. Body apparently rather conical, shoulder carination rounded. Low concave rim, flaring into solid lip. Reddish wash on interior. For similar profile (with spout), cf. *Agora* XII, no. 1747, pl. 82, fig. 15. The general context and the level for this fragment suggest an Archaic date.

East Peloponnesian or Corinthian (?), 6th century

C.35 Cup/mug(?)

Fig. 16

H. 0.023; 5YR 6.5/6; B/1-2

Rim fragment from below lip, latter set off above shoulder externally. Fine, dense black glaze inside and out. On top of shoulder, fine band of added red.

Lakonian, 6th century

C.36 Bowl with incurving rim

Fig. 16

H. 0.019; diam. 0.060; 7.5YR 7/5; A-B/1-2

Rim fragment of small bowl (saltcellar) with incurving rim. Streaky black glaze inside and out.

Attic(?), 4th century

C.37 Deep bowl with incurving rim

Fig. 16

H. 0.021; 10YR 6/4; C/2

Foot fragment of deep bowl (possibly one-handled?). Solid ring foot, not pronounced. Wall curving out widely. Unglazed (or very worn).

Corinthian, first half 4th century

C.38 Cup on low foot

Fig. 16

H. 0.016; diam. foot 0.055; 2.5YR 3/8; C-E/3

Low, trumpet-shaped foot fragment. Center pierced by a hole of *ca.* 0.025 m. diameter. Thick, high ring foot with lower outer edge curling out and slightly upwards. Small molding at beginning of wall. Latter rather solid, bottom thin. Worn, no glaze preserved.

Related examples of bowls with this kind of foot occur in the Ionian sphere: *Tocra* I, p. 51, no. 713 (Rhodian), fig. 26; p. 56, nos. 733, 734, 738, 760 (Chian), fig. 28; p. 72, no. 878 (unclassified East Greek), fig. 36; Gjerstad *et al.*, *op. cit.* (under **C.16** above), pl. IV:11. The fabric of our piece bespeaks rather a local or possibly a Corinthian origin, although the gritty consistency of the clay is unusual for such a provenience.

Local(?), first half 6th century

C.39 Kylix

Fig. 16

H. 0.023; diam. foot 0.056; 10YR 7.5/1; B, splitting in layers/1

Foot fragment. Trumpet-shaped stem, its interior hollowed all the way up. The interior of the bowl was flat in the center, apparently curved shallowly at the sides. Worn, no trace of decoration.

Feet like this are found sometimes in East Greek wares but occur also in Lakonian black glaze; cf. *Tocra* I, p. 87, no. 951, fig. 43. The curious

consistency of the clay suggests local manufacture, possibly in imitation of Lakonian prototypes.

Local(?), 6th century

C.40 Kalathiskos/cup (HP 3049)

Fig. 16, Pl. 32:e

H. 0.044; diam. foot 0.043, diam. rim 0.081; 10YR 7.5/5; B/1-2

Complete profile, some body fragments missing. Flat base, hollowed underneath, bulging at edges. Body flaring swiftly in sharp trumpet-shaped curve. Lip hanging over slightly, rounded on top. Sole decoration, an irregular band of brown-to-light-brown glaze just above foot. The glaze is carelessly applied, the color diluted towards the top. The shape has only one handle; no attachment is visible on the other side.

The kalathiskos is here used as a drinking cup; shapes similar to this, often with sharply carinated bodies, occur in the post-Geometric period at Mykenai rather frequently. For Argive kalathoi, also used as cups, see *BSA* 48, 1953, p. 46, bottom. For a discussion of kalathoi see J. Dunbabin, *Perachora*, II, *The Sanctuaries of Hera Akraia and Limenia*, Oxford 1962, pp. 87-99, Argive kalathoi, p. 90. Cf. also *Tocra* II, p. 50, fig. 21:2195, 2196.

Argive, first half 6th century

C.41 Louterion

Fig. 15

H. 0.100, H. rim 0.0635; diam. *ca.* 0.60; 2.5YR 5.5/8; E/3

Rim fragment giving full profile of rim and beginning of basin. Gentle countercurve between lower edge of rim and basin. Top of lip almost horizontal. Outer surface of lip deeply recessed, a sharp ridge at top and bottom. Interior decorated with a slip.

The type stands in the tradition of *Corinth* VII, ii, nos. 268, 282, pl. 82. For general similarities, cf. *Agora* XII, no. 1860.

Corinthian, first half 6th century or later

Stratum j: Foundation trench under exterior wall**C.42** Amphora

H. 0.025; diam. rim 0.140; 5YR 6/8; D-E/1

Rim fragment, well rounded, flat on top, slanting inwards.

Unknown provenience, early 4th century (?)

C.43 Deep kantharos-skyphos

Fig. 17

H. 0.014; diam. foot 0.051; 7.5YR 0/7.5; B-C/2

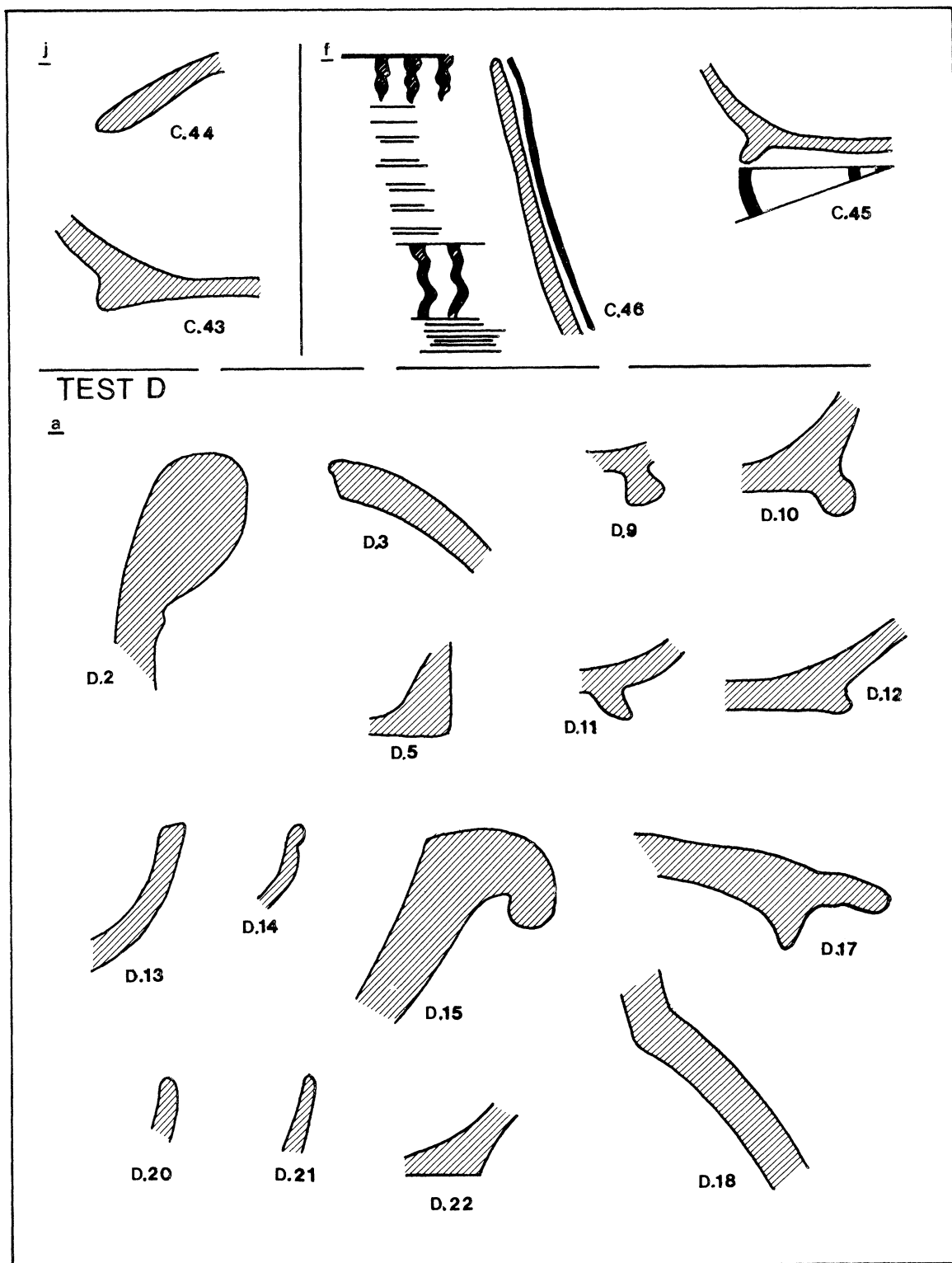


FIG. 17. Test C. Stratum *j*: C.43, C.44; Stratum *f*: C.45, C.46. Test D. Stratum *a*: D.2–D.22

Foot fragment. Sides of base vertical, hollowed underneath; reserved. Streaky brown glaze on rising wall and in interior. Cf. **B.22**.

Argive, 6th century

C.44 Lid/dish Fig. 17

H. 0.010; 5YR 6/8; D/1

Rim fragment of either a very flat dish or a lid. Such a lid would have to be fitted into a flange on a pot. Flat, domed silhouette.

East Peloponnesian (?), date undetermined.

Stratum f: Pocket of Level D

C.45 Kotyle Fig. 17

H. 0.029; diam. foot 0.046; 2.5YR 8/4; B/2

Foot and several body fragments of Corinthian kotyle. Vertical, slightly spreading ring foot, gently rounded on exterior. Bottom sagging somewhat, reserved; in center, dot and circle. Resting surface of foot glazed. Steeply rising, curved wall, covered with thick, dark brown glaze. Some color in interior, but glaze worn and washed.

This kotyle is rather wide and low in its proportions. A representative example for its period: *Corinth VII*, ii, An 263, p. 76, Type Ia, fig. 1.

Corinthian, *ca.* mid-7th century

C.46 Kotyle Fig. 17

H. 0.041; diam. rim 0.100; 10YR 7.5/7; B/2

Several joining fragments of a broad, rounded kotyle. Sharp lip; wall in its upper portion rather straight. In the interior, streaky brown glaze. Exterior decoration on outside rim: short, vertical, wiggly S-lines, topping eight narrow horizontal bands; below, higher, more nervous inverted sigma, above two narrow bands. Rest of decoration missing. A similar ornament: H. Payne, *Protokorinthische Vasenmale-rei*, Berlin 1933, p. 13, pl. 10:2.

Corinthian, first half 7th century

TEST D

Stratum a: Upper level of road metaling

D.1 Amphora

H. 0.052; 5YR 5/7; B-C/2-3

Fragment of amphora neck from a rather small vessel. Neck apparently quite low, tapering towards lip. Remnants of handle attachment, groove on top of

handle. On exterior, black glaze with metallic flecks, brush marks.

Attic(?), 4th century (?)

D.2 Amphora Fig. 17

H. 0.041; diam. rim 0.160; 5YR 6/7 (exterior) to 2.5YR 6/8 (interior); B/1-2

Two joining rim fragments. Vessel with low neck, streaky brown glaze inside and out. Heavy, rounded lip, stripe on outside.

The fragment appears early, closest to the "SOS" amphora, *BSA* 73, 1973, pp. 103-141; compare, e.g., the profile, *loc. cit.*, pl. 18:a. The amphora may also be later but in the tradition of this particular amphora type.

Attic, 6th century

D.3 Pelike Fig. 17

H. 0.024; diam. rim *ca.* 0.160; 7.5YR 8/6; C/2

Rim fragment, possibly plain (no traces of glaze, but possibly worn?). Widely flaring, broad mouth; beveled edge of lip.

Attic, 4th century (middle or later?)

D.4 Oinochoe

H. 0.107; 5YR 7/3.5; A-B/1-2

Handle, heavy flattened oval in section, rising vertically in sharp turn to shoulder. Streaky black glaze. Cf. *Agora XII*, no. 128, fig. 2.

Attic, *ca.* mid-4th century

D.5 Olpe Fig. 17

H. 0.020; diam. base *ca.* 0.045; 10YR 8/2.5; B-C/1-2

Foot fragment of small jug, most likely an olpe with narrow, elongated body. Base flat, minimally hollowed underneath; steep wall. For the type, cf. "Vari", no. 6, p. 374, fig. 5; *Agora XII*, nos. 274, 275, pl. 13.

East Peloponnesian, second half 4th century

D.6 Krater

H. 0.024; diam. foot *ca.* 0.12; 5YR 5/7; B-C/2-3

Fragment of a column-krater(?) foot with one or more steps. Glazed inside and out. For a possible parallel, cf. *Agora XII*, no. 59, pl. 3.

Attic, first half 5th century

D.7 Skyphos

H. 0.022; 10YR 8/2.5; A/1

Rim fragment of skyphos with handle attachment. Lip very sharp, handle somewhat ovoid in section. Glaze black to greenish, quite worn.
Corinthian, 6th century

D.8 Skyphos

H. 0.026; 2.5YR 8/5; B/1

Wall fragment, interior glazed, exterior with remains of band above vertical base rays. Over the band remains of an unintelligible geometric design.
Corinthian, 6th century

D.9 Skyphos

Fig. 17

H. 0.023; diam. foot 0.050; 2.5YR 6/8; A/1-2

Foot fragment; exterior flattened torus, interior vertical. Brown stripe on both interior and exterior. Some dilute brown glaze on interior.

Corinthian, 6th century

D.10 Skyphos

Fig. 17

H. 0.023; diam. foot 0.050; 2.5YR 6/8; A/1-2

Foot fragment; ring foot, exterior torus shaped, interior steep wall inclined outwards, thick floor. Cf. *Agora* XII, no. 342, fig. 4.

Attic, second quarter 5th century

D.11 Cup-skyphos/bowl

Fig. 17

H. 0.020; diam. foot 0.070; 5YR 6/8; A-C/2

Foot fragment. Widely spreading ring foot, body opening in flat curve, very fine groove above foot. Dense black glaze; under foot, remains of milts. Cf. generally *Agora* XII, no. 564, pl. 25, figs. 6, 22.

Attic, later 6th century

D.12 Deep kantharos

Fig. 17

H. 0.020; diam. foot 0.060; 3.75YR 6.5/8; A/2

Foot fragment. Base offset, hollowed underneath, wall flaring outwards. Interior, dark brown glaze; exterior reserved. Cf. **B.22**.

Argive, 6th century

D.13 Bowl

Fig. 17

H. 0.030; diam. 0.120; 5YR 6.5/3; B/1-2

Two joining rim fragments of bowl with flattened rim. Black glaze slightly worn, applied inside and out. Wall rising in even curve to lip which slants slightly inwards.

Attic, 4th century

D.14 Bowl

Fig. 17

H. 0.016; diam. rim 0.060; 8.75YR 7.5/5; B/1-2

Rim fragment of small bowl with steeply rising wall and thickened, somewhat rolled lip, below which on the exterior is a shallow groove. Worn, greenish black glaze, inside and out.

Corinthian(?), 4th century

D.15 Lekane

Fig. 17

H. 0.040; diam. rim ca. 0.35; 2.5YR 5.5/6; B-C/1-2

Rim fragment with traces of burning. Fairly shallow basin; widely overhanging lip, undercut. Glazed on top. For general type, cf. *Agora* XII, nos. 1818, 1820, fig. 15.

Attic(?), last third 4th century

D.16 Lekane

H. 0.040; diam. ca. 0.36; 5YR 6.5/2.5; A/1

Rim fragments of thick-walled lekane with steep sides and deep basin. Heavy lip, rolled outwards, slightly undercut. Traces of black glaze on lip. Cf. *Agora* XII, no. 1791, fig. 15.

Attic, first half 5th century

D.17 Lid

Fig. 17

H. 0.043; diam. 0.200; 3.75YR 6/8; B-C/2

Two joining fragments of lekane lid. Broad domed top with strongly offset flange. Shallow, wide groove towards outer edge. Traces of brown-to-black streaky glaze.

East Peloponnesian (?), 4th century

D.18 Krater

Fig. 17

H. 0.043; 3.75YR 6/7; C/2

Shoulder fragment from krater or large, deep kantharos. Shoulder curving broadly inwards, rim set off by inward step; rim solid. Reserved strip at beginning of rim, remainder covered with reddish brown glaze. From an Argive type of sub-Geometric krater. For the shape, cf. Bommelaer, *BCH* 96, 1972, pp. 235-240, figs. 9-12.

Argive, 7th to early 6th century

D.19 Krater

L. 0.036; 3.75YR 6/8; B-C/2

Fragment with brown-to-black glaze in interior, greenish black glaze; on exterior, one band of added

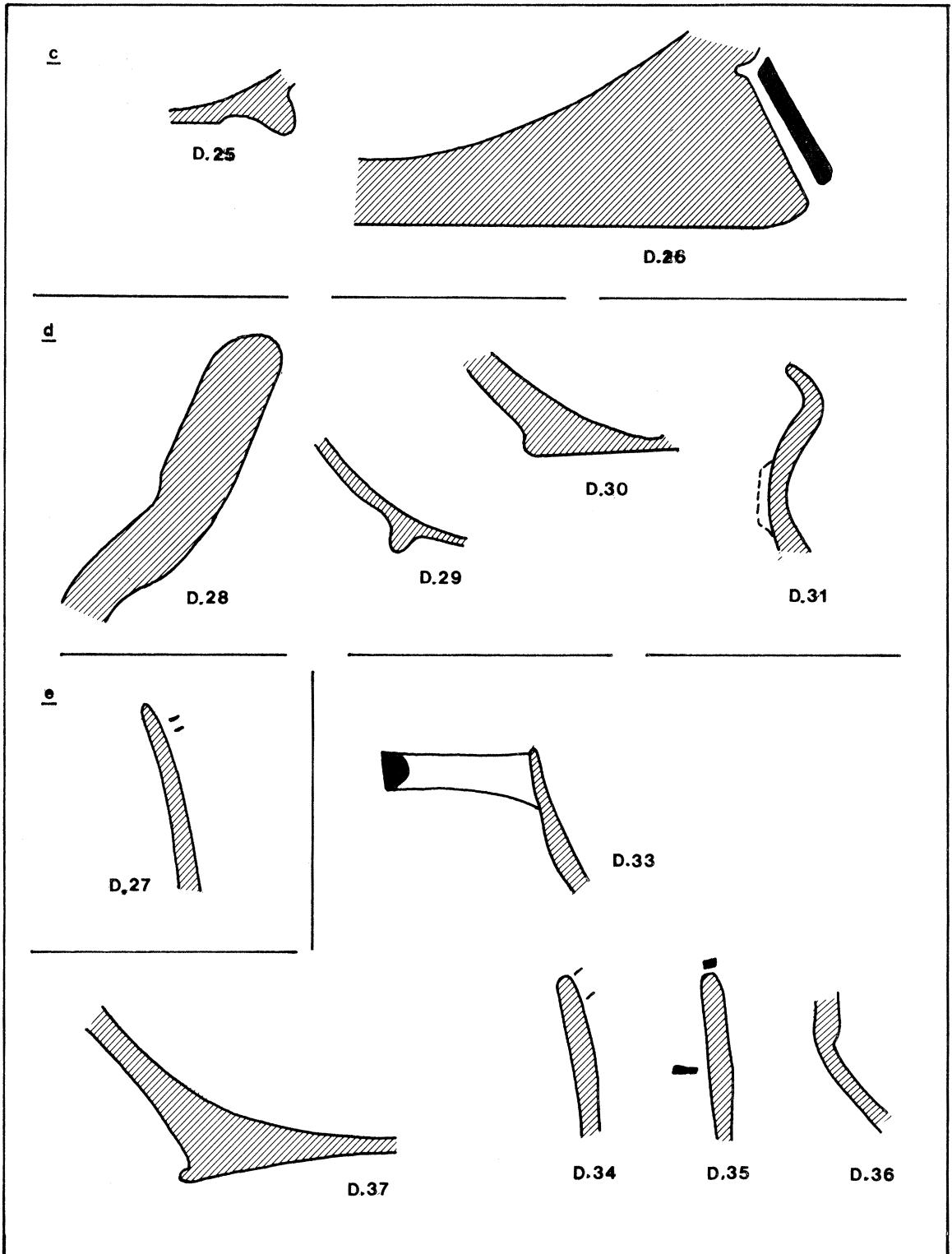


FIG. 18. Test D. Stratum c: D.25, D.26; Stratum d: D.28–D.31; Stratum e: D.27; Strata f and g: D.33–D.37

purple below a double band of white. From a column-krater?

Lakonian(?), 7th to early 6th century

D.20 Skyphos Fig. 17

H. 0.011; 5YR 7/7; A/2

Rim fragment, rather broad with flattened, rounded rim, bearing stripe of milos.

Attic, first half 5th century

D.21 Skyphos Fig. 17

L. 0.016; 5YR 7/6; B-C/1-2

Rim fragment of skyphos (or cup-skyphos?). Rim vertical, covered with dark brown glaze; reserved band on top.

East Peloponnesian (Argive?), early 5th century

D.22 Deep kantharos Fig. 17

H. 0.014; diam. foot *ca.* 0.04; 10YR to 2.5YR 6/8; B-C/2-3

Bottom fragment. Unpronounced base, bottom flat, slightly hollowed. Black-to-greenish glaze, worn; irregular stripe over foot edge. Cf. **B.22**.

Argive, 6th century

D.23 Bolsal

L. 0.028; 2.5YR 6/5; A/2

Bottom fragment with fine, dense black glaze inside and out.

Attic, early 4th century (?)

Stratum c: Cement floor with underlying fill

D.24 Closed vessel

L. 0.035; 5YR 7/7; A-B/1-2

Body fragment with stripes on exterior; remains of one broad stripe over two narrower ones; trace of a further band below. Glaze black to brown, streaky. Post-Geometric, most likely a jug.

Argive(?), 7th century

D.25 Skyphos Fig. 18

L. 0.032; diam. foot 0.050; 8.75YR 8/5; B/1-2

Foot fragment. Offset, broad ring foot, steep on exterior, interior gently rising into shallow groove; center of bottom raised. Reddish brown glaze on interior. Closest parallel: *Corinth* VII, ii, An 86, p. 76, Type III, fig. 1.

Corinthian, early 6th century

D.26 Lekane Fig. 18

L. 0.094; diam. foot 0.200; 10YR to 2.5YR 6/7; E/2

Foot of coarse-ware lekane, set off from body with groove; glazed on exterior with band of red-to-dark-brown glaze. Cf. *Agora* XII, nos. 1800ff., pls. 84ff.

Attic(?), first half 4th century

Stratum e: Mud-brick layer under floor construction

D.27 Cup with offset rim Fig. 18

L. 0.030; 2.5YR 7/3; A-B/2

Rim fragment with rather high, offset rim with sharp lip. Streaky brown glaze inside and out, reserved band on inside of lip. For a possible shape parallel, cf. *Tocra* I, no. 932, p. 126, fig. 59.

Corinthian(?), first half 6th century

Stratum d: Foundation trench

D.28 Cooking pot Fig. 18

H. 0.054; 2.5YR 6.5/0; H (coarse)/2-3

Rim fragment of a cooking pot (chytra) with thick walls. Collar-shaped rim inclining inwards; lip flattened on top, rim blending gradually in low step with shoulder. Handmade.

Corinthian(?), 6th century

D.29 Skyphos Fig. 18

H. 0.021; 10YR 7.5/4; A/1-2

Fragment of simple ring foot. Thin bottom, wall curving out widely. Reddish black-to-brown glaze, rather thick in spots.

Corinthian, 6th century

D.30 Deep kantharos Fig. 18

H. 0.017; diam. foot *ca.* 0.046; 7.5YR 7/5; C/2

Foot fragment. Base offset, gently hollowed underneath. Reddish, pale brown glaze in interior; exterior, dilute blackish glaze. Broad, smeared band around and above foot, glaze worn above. Cf. **B.22**.

Argive, 6th century

D.31 Cup with offset rim Fig. 18

H. 0.024; 10YR 6.5/3; B/2

Rim fragment with handle attachment. Strongly curving wall with slight carination above handle roots. Lip projecting strongly outwards, thinning towards rounded, sharp edge. Handles apparently

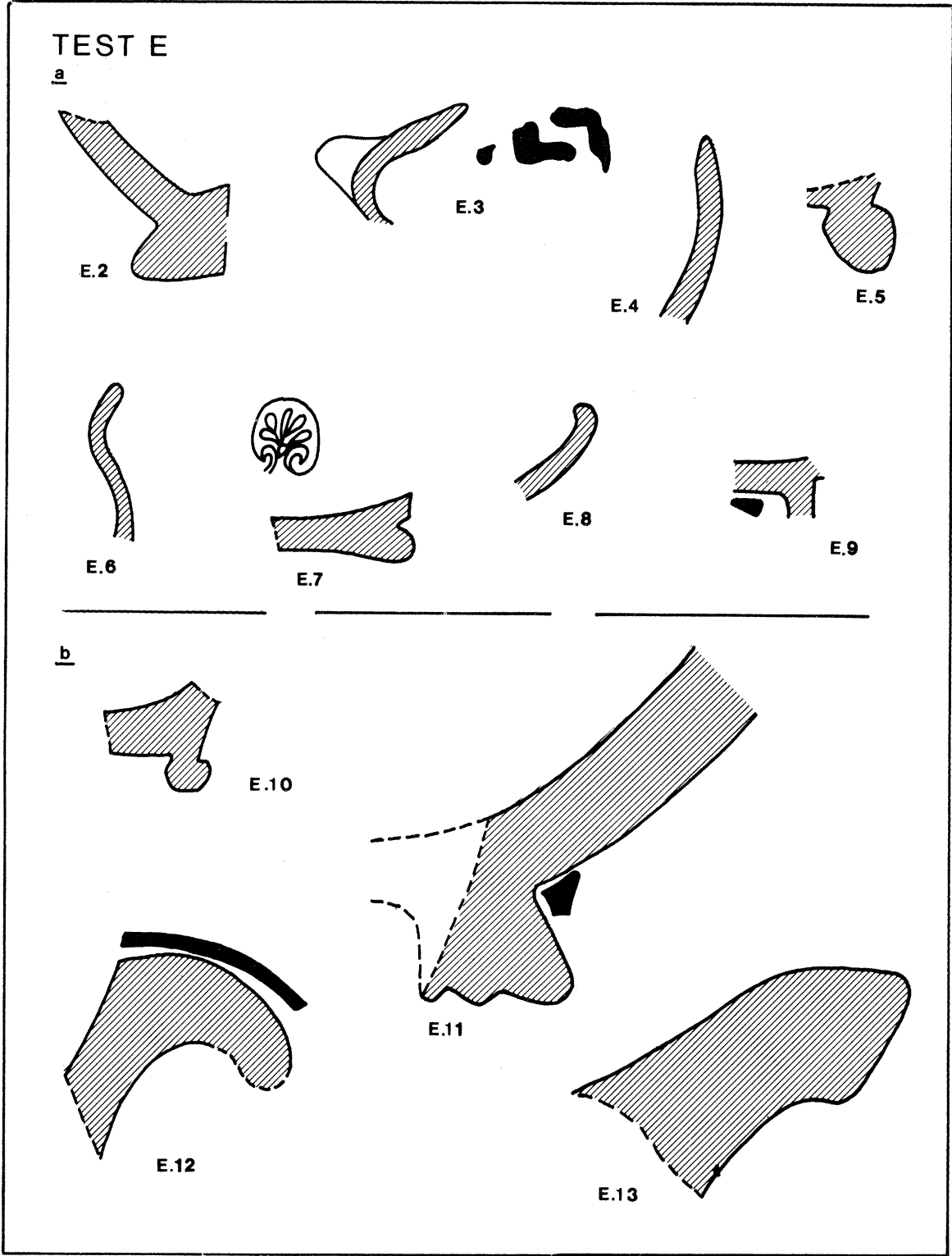


FIG. 19. Test E. Stratum a: E.2-E.9; Stratum b: E.10-E.13

rather large, round in section. Black glaze with brush marks in interior, exterior worn. In profile similar to a Lakonian black-glazed cup from Tocra (*Tocra* I, no. 998, p. 93, fig. 45).

Lakonian(?), early 6th century

Strata f and g: Stratum above sterile soil

D.32 Closed vessel

L. 0.028; 10YR 7/2.5; B/2

Fragment shoulder of closed vessel (hydria? amphora? jug?). Exterior black glazed with design in added cream slip: top of a rounded triangle, above it a white fillet. Neck slightly offset. Definitely East Peloponnesian, possibly Lakonian.

Lakonian(?), late 7th century

D.33 Skyphos Fig. 18

H. 0.020; diam. 0.120; 2.5YR 6/8; A/1-2

Rim fragment with handle, from vessel with widely curved body. Handle open-horseshoe shaped; between the handles a panel reserved in thick black-to-brown glaze; in the interior glaze, ridges.

Corinthian, second half 7th century

D.34 Deep kantharos-skyphos Fig. 18

H. 0.025; diam. rim 0.120; 6.25YR 7/7; B-C/1-2

Rim fragments. Rim even, lip slender, rounded. Streaky brown glaze, reserved band on inside of lip. Cf. **B.22**.

Argive, 7th to 6th century

D.35 Deep kantharos-skyphos Fig. 18

H. 0.026; diam. rim ca. 0.08; 5YR 6/7; B-C/1-2

Rim fragment. Similar to **D.34** but more vertical. Smearly brown glaze, black glaze stripe on top of lip and on exterior. Cf. **B.22**.

Argive, 7th to 6th century

D.36 Deep kantharos-skyphos Fig. 18

L. 0.024; 7.5/YR 7/7; C/1-2

Shoulder-and-rim fragment. Shoulder curved, set off from rim by shallow groove. Dark brown-to-green glaze inside and out. Cf. **B.22**.

Argive, 7th to 6th century

D.37 Deep kantharos-skyphos Fig. 18

H. 0.028; diam. foot 0.070; 3.75YR 6.5/7; C/2-3

Four joining foot fragments. Protruding foot edge,

sharply pronounced; base hollowed, wall rising evenly, thick bottom. Cracked black glaze outside, dark brown-to-red glaze inside. Cf. **B.22**.

Argive, 7th to 6th century

TEST E

Stratum a: Roadfill abutting house

E.1 Amphora/hydria (HP 3057)

L. 0.042; 7.5YR with slightly purple tint

Several fragments of a red-figured closed vessel, either a hydria or an amphora. Dark brown, thick glaze, irregular in spots. Decoration shows parts of large handle palmette, carefully outlined along edges with relief lines. Clay of East Peloponnesian type. This late use of "relief-lines" has been observed on other examples of Lakonian red figure.

East Peloponnesian (Lakonian), mid-4th century

E.2 Jug/oinochoe Fig. 19

H. 0.028; diam. foot 0.064; 5YR 6/6; B/1

Conical foot and lower wall of small, closed vessel, perhaps an oinochoe. Heavy conical foot, slightly hollowed beneath, wall curving outwards, egg-shape.

Local(?), 4th century (?)

E.3 Kothon Fig. 19

L. 0.027; 3.75 YR 6/8; B/2

Rim fragment with reflex handle, tip alone preserved. Rim rounded, red-brown glaze. On lip S-meander pattern. For miniature examples cf. *Perachora* II, nos. 3124-3139, p. 304, pl. 121.

Corinthian, 5th century

E.4 Bolsal(?) Fig. 19

H. 0.032; diam. 0.16; 2.5YR 6/0.5; A/2

Wall fragment. Very light carination in interior near lower edge (accidental?). "Vari", no. 12, p. 376, fig. 5.

Attic(?), ca. 370-330 B.C.

E.5 Skyphos Fig. 19

H. 0.016; 5YR 5.5/5; A/2

Fragment of foot, traces of miltos preserved inside. Fairly large vessel with steeply rising wall. Ring foot a rounded rectangle in section, strongly projecting outwards. *Agora* XII, p. 259, no. 342, pl. 16, fig. 4.

Attic, second quarter 5th century

E.6 Mug

Fig. 19

H. 0.026; 5YR 7/7; B/1-2

Rim fragment of rather small mug, very thin walled with slightly metallic, thinnish black glaze. Lip rounded on top, gently flaring.

East Peloponnesian, third to fourth quarter 4th century

E.7 Stemless cup

Fig. 19

H. 0.012; 7.5YR 7/4; B/2

Foot fragment with hollowed base, protruding on side in rounded molding. Exterior and interior glazed, foot reserved. Dip glazed. In floor, a small stamped palmette. Inscribed in racquet-shaped outline, either five or seven petaled with outward-curving bottom scrolls.

Similar palmettes occur in other examples of stemless cups at Halieis, but in general the percentage of stamped examples of this type of vessel is rather small. For stemless cups, cf. **A.31**.

Argive, 4th century or later

E.8 Bowl

Fig. 19

H. 0.016; 2.5YR 5.5/7; A/1-2

Rim fragment, most likely incurving; not a one-handler. Lip rounded above, sharply undercut on the inner side, but with little inward projection. Cf. *Agora* XII, p. 295, no. 830, pl. 33, fig. 8.

Attic, mid-4th century

E.9 Bowl

Fig. 19

H. 0.011; 5YR 6/7; A/2

Foot fragment of bowl with incurving rim. High, steep ring foot, reserved below and covered with red slip; above, a broad black-glaze band. Interior: impressed concentric circles, outer border crossed by radiating lines, slightly irregular. For the type of foot, see *Agora* XII, pp. 295-296, nos. 832-837, pl. 33, fig. 8.

Attic, second half 4th century

Stratum b: Road metaling below *Stratum a*

E.10 Skyphos

Fig. 19

H. 0.016; 3.75YR 6/7; B/2

Foot fragment of Attic-type skyphos. Steep, almost vertical exterior for ring foot; on top a sharp groove a wall rising steeply above. Interior of foot back; bottom sharply offset, covered with miltsos.

The high floor and the sharply offset ring foot indicate a date after the middle of the 4th century. Cf. *Agora* XII, p. 260, nos. 351, 352, pl. 17, fig. 4.

Attic, third quarter 4th century

E.11 Lekane/krater

Fig. 19

H. 0.032; 2.5YR 5.5/4; F/3

Foot fragment. Heavy ware. Ring foot with sloping exterior, underside decorated with two grooves. Between foot and wall fine double groove, covered over by band of black glaze. Exterior wall spreading outwards in a low, slightly sagging echinus curve. The shape can not be determined with certainty; the large lekane and the krater, a continuation of the Lakonian column-krater, have similar feet.

Local, first half 4th century (?)

E.12 Mortar

Fig. 19

H. 0.047; 2.5YR 5.5/3; E/2

Rim fragment with glazed top. Sharply angled, with outward turning lip, widely overhanging and undercut; tip of lip chipped.

For mortars of this shape compare a nearly complete example, *OlForsch* VIII, p. 230, pl. 75, no. 1; similar but generally lower, *Agora* XII, p. 367, no. 1898, fig. 16. For a discussion of mortars cf. *Corinth* VII, iii, pp. 109-110.

Corinthian(?), mid-4th century or later

E.13 Tray

Fig. 19

H. 0.035; diam. 0.400; 10YR 6.5/3; G/2

Rim fragment of a household tray. Clay very soft and brittle, apparently burnt. Wide, shallow interior, flat lip, projecting outwards in an approximately rectangular section, then returning in an even curve. The shape suggests a very low tray or mortar.

Local(?), mid-4th century (?)

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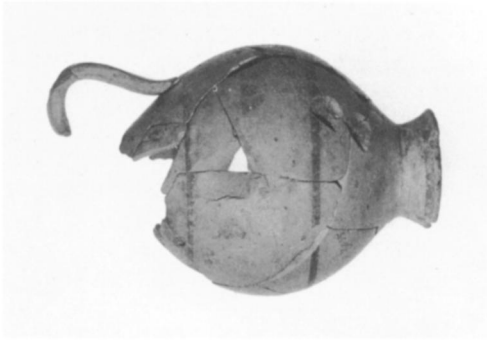
a. Test A: Northeast scarp in Street 4



b. Test B: Remains of drain in Room 6-78, from southwest



c. Test D: Northwest scarp inside Room 6-13 from Street 3



d. Lekythos B.5. Scale 1:2



e. Kalathiskos-cup C.40. Scale 1:2