

# COLOPHON

Southward from Smyrna a gap in the hills that fringe the gulf opens to the great plain watered by the Taçtali çay, the ancient river Astes. Thirty kilometers farther south, where foothills of the ridge of the Sivridağ form the boundary of the plain, lay the Ionian city of Colophon. In the fourth century B.C. its circuit walls linked three hilltops, approximately a kilometer apart, forming roughly an equilateral triangle, with apex at the north (Figs. 1 and 3). By the northwest side runs the mill stream which gives its name to the shady modern village of Değirmendere. A second stream, the Kabakli-dere, rising to the south, flows through the center of the triangle and out at the northeast side. Both streams, reaching the great plain, join the Taçtali çay and turn southwestward through the mountains to the sea near the ancient cities of Lebedos and Teos.

A road from Değirmendere through the ancient city site cutting the Kabakli-dere at right angles, leads to the modern town of Traça, not far beyond the south side of the enclosed area. Though this road seems level, it actually crosses a watershed, and from Traca another stream, the ancient Ales, flows toward the southeast to reach, in thirteen kilometers, the coast at Notion, seaport of Colophon. Beside it ran the ancient highway. Nearly due eastward some thirty-five kilometers of another nearly level road lead from Colophon to Ephesos.

The site of Colophon, well watered and protected by its three hills, had much to recommend it. It controlled not only wide stretches of fertile land, excellent for horse raising, but also the important highway from its colony Smyrna to Notion. On the other hand, its distance from salt water was a little too great and the harbor of Notion too unimportant for it to play a maritime role of any consequence. And as in the Aegean world fame was largely sea-bred, Colophon was noted only for its wealth and luxurious life and for its cavalry.

Indeed the brevity of its annals<sup>1</sup> reflects its fortune. The tradition of the early non-Carian settlement of the region<sup>2</sup> is supported by the remains of a beehive tomb, rifled but still containing Creto-Mycenaean potsherds.<sup>3</sup> We are told that later it bore unwillingly the Lydian yoke, more complacently that of the Persians, and that having finally regained independence, with Alexander's conquest of 334, it devotedly sup-

<sup>1</sup> See the excellent historical note by J. G. Milne, *Kolophon and Its Coinage*, *Numismatic Notes and Monographs*, No. 96 (1941), pp. 2-10.

<sup>2</sup> Pausanias, VII, 3.

<sup>3</sup> Excavated by Dr. Goldman in 1922; to be published with a report on other graves at Colophon.

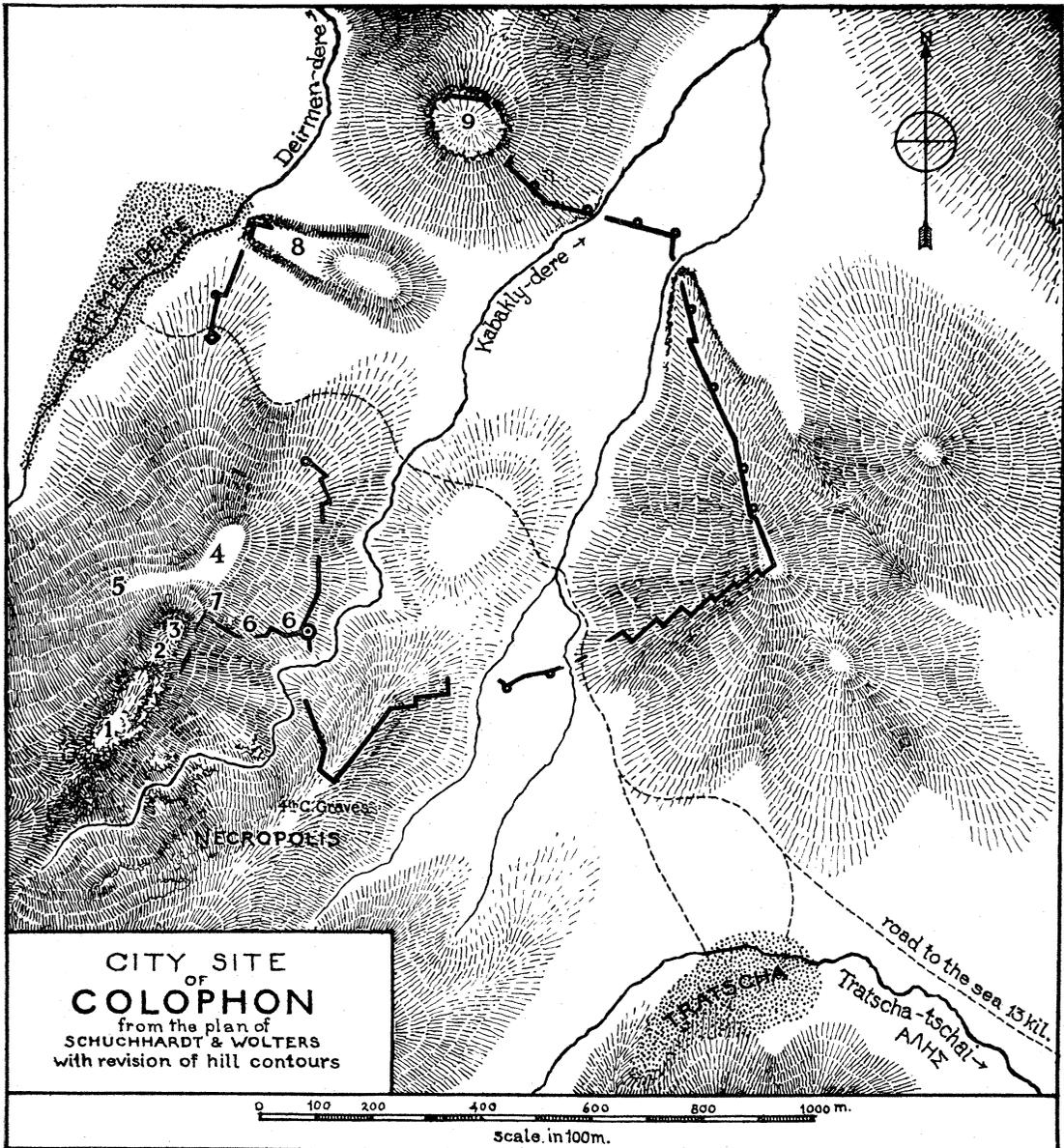


Fig. 1. Site of Colophon

ported his heir Antigonos against Lysimachos, by whose general Prepelaos it was taken in 302.<sup>4</sup> Following this disaster the inhabitants were transferred to populate, with those of ruined Lebedos, the new Ephesian suburb of Arsinoë, built by Lysimachos.<sup>5</sup> This terminal event is perhaps the best known in the history of Colophon, but doubt is thrown on the completeness of the finale by an inscription from Magnesia dating from later in the third century,<sup>6</sup> which mentions Κολοφώνιο[ι οἱ τὴν] ἀρχαίαν πόλ[ιν οἰκ]οῦντες as well as Κολοφώνιοι ἀ[πὸ] θαλάσσης. Probably some Colophonians remained on the ancient site while others migrated to Notion in such numbers that the seaport became known as New Colophon. Those taken to Ephesos seem to have lost the name of Colophonians altogether.

It could hardly be expected that so favorable a location would remain deserted for long. Certainly clusters of dwellings, like the modern villages of Değirmendere and Traça, would appear within two generations, even after total abandonment of the ancient city, but that official commemorations should be set up in such minor settlements seems unlikely. What seems more probable is that certain sanctuaries, important while the city flourished, continued with diminishing reputation to keep alive the name of the dead city of Colophon.<sup>7</sup>

After several false identifications the city site was found by Schuchhardt, Kiepert, and Wolters in 1886 (Fig. 1).<sup>8</sup> Their brief survey traces out the circuit walls, built of hard blue-grey limestone (Fig. 2), cut and laid for the most part like those of Lysimachos at Ephesos. A dozen towers were located, mostly round in plan. Within the walls numerous terraces and foundations, but no standing superstructures, were seen.

On the basis of this report, the Fogg Art Museum of Harvard College in collaboration with the American School of Classical Studies at Athens planned an extended campaign of excavation. In the spring of 1922, from late April to late June, the first expedition, directed by Dr. Hetty Goldman and Dr. Carl Blegen, attacked the site. As this campaign was primarily exploratory, trials were made in many scattered places, where building stones appeared, in the valley and on the acropolis hill, and three cemeteries were investigated. Since Schuchhardt's report was seen to be in general correct, no attempt was made to analyse the city walls or plot their lines, and indeed far more new structures were uncovered than could be surveyed in two months. Careful recording and study were planned for future campaigns.

The specific results of this expedition were: first, determination by the coins found that the site was indeed that of Colophon, a very large majority being from

<sup>4</sup> Diodorus, XX, 107.

<sup>5</sup> Pausanias, I, 9, 7. In 286 B.C. (?), *C.A.H.*, Vol. VII, p. 91.

<sup>6</sup> Kern, *Inscr. von Magnesia*, no. 53, lines 75-79.

<sup>7</sup> According to Meritt, *A.J.P.*, LVI, 1935, p. 381, one of the inscriptions (no. VI) found in the Metroön may have been set up after 281 B.C.

<sup>8</sup> *Ath. Mitt.*, XI, 1886, pp. 398 ff.

Colophonian mints; second, that it was inhabited from prehistoric through classic times, cemeteries of the Mycenaean, Geometric, and Hellenistic periods being identified; third, that on the acropolis, at least, there was no habitation after the fourth century, practically all the coins found there being of that period, though a few coins of Antiochus II (261-246) found in the Metroön, and an inscription which may be of similar date, indicate that the sanctuary continued its functions to the third century.

The unsettled state of the country preceding the expulsion of the Greek forces from Anatolia in the summer of 1922 brought the campaign to a hurried close; and

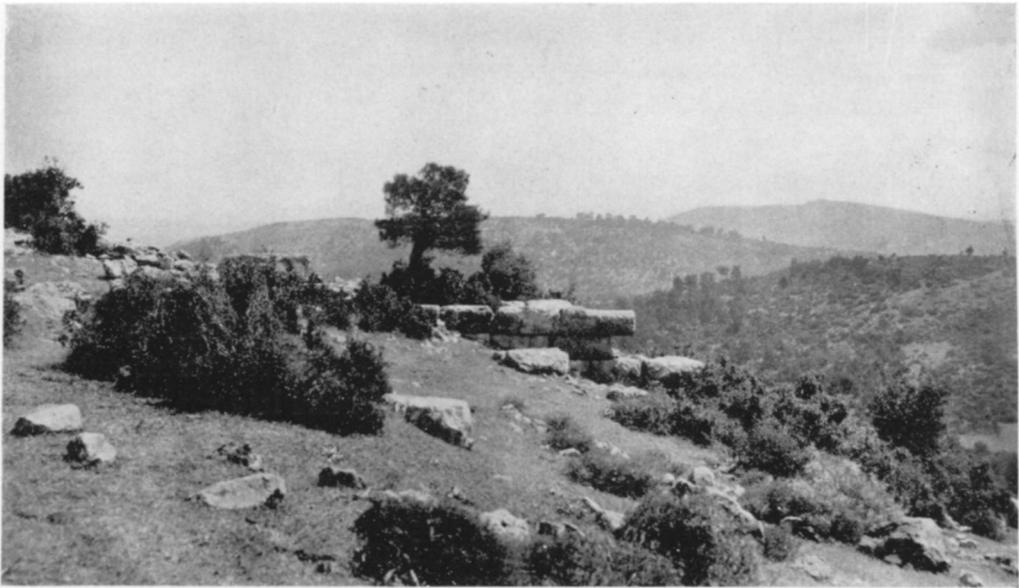


Fig. 2. Exterior of Southernmost Angle of Fortification Wall, on Hilltop East of Kabakli-dere Ravine, Looking Northeast. From the Valley at the Right the Walls Mount to the First Hill Beyond, on Which, Near the Right Edge of the Picture, is the Eastern Angle of the City Enclosure. Thence the Walls Descend Northward toward the Left, along the Visible Crest

subsequent conditions prevented continuation of the full excavations which had been planned for succeeding years.

The coins in transit to the Istanbul Museum, where they now are, were taken to Athens and studied there, but all the pottery and other minor finds left in Değirmendere, unphotographed in the hasty departure, were lost. During September of 1925 the scholarly interest of the Turkish authorities made possible a second short visit to the site under the direction of Dr. Goldman, at which time the Metroön and the bathing establishment, discovered in the first campaign, were more fully excavated and measured,<sup>9</sup> and a few more graves explored. Since then, hope of further investigation

<sup>9</sup> Surveys of these two sections were made by Miss D. H. Cox, from which they have been drawn on Pl. IX.

has gradually faded and now it has seemed wise to compile from the aging records of excavation notebooks and photographs, where actual surveys are lacking, a preliminary and at the same time final report of the incomplete results of the first expedition, leaving unsettled many questions which only further study and re-examination on the ground could resolve. The compiler of this report, occupied throughout the campaign with general surveying rather than with studying the remains, has tried to piece together and to include all significant items that could be gleaned from the notes of other members of the expedition. Obscure statements and absence of desired details have often been unavoidable, for missing information could not be supplied. An account by Dr. Meritt of the inscriptions found has already appeared;<sup>10</sup> the cemeteries must wait for later publication, and so for a time must the Metroön and Baths.

The valley (Figs. 1, 3) within the wide triangle of the city's fortifications revealed on superficial exploration traces of a number of large buildings, the location of none of which was recorded with sufficient accuracy for them to be placed on Fig. 1. Nearest Degirmendere, on a hillock west of the road running thence to Traça, was a structure of Roman date—as indicated by the presence of mortar—apparently made of re-used Greek blocks, and just to the east of the hill a large Roman building which, from the depression within its walls, suggested an Odeum. A little way to the south were remains which may have been Greek.

Eastward, shortly before crossing the Kabakli-dere, not far from the center of the city triangle, the Traça road cuts, near its northeast corner, a structure one side of which runs in a straight line for about 115 meters. Trenches in three locations here revealed parallel walls, about one meter thick and six meters apart, enclosing a great rectangle. The outer and inner walls were faced on the outside with coursed limestone blocks (Fig. 4), roughly bulging between jointing lines, like the coursed masonry of the city walls (Fig. 2), though less carefully jointed. The inner faces were unworked stones (Fig. 5). Both walls went down to stereo, on an average a meter and half below the existing grade. No floor level was found between the walls but only an unstratified fill containing many sherds, including geometric, red-figured, and fine thin black-glazed ware. No remains of the superstructure were found, nor of earlier structures on the site, barring a possible cobblestone pavement about a meter below grade at the eastern end near the Traça road, and a few uncertain scraps of wall at the west. In the absence of coins for dating one can only say on the basis of the pottery, that the structure was not built before the fourth century, and on the basis of the stone work, that it may have been contemporary with the surrounding city walls.

In the adjoining field north of the road, another rectangular structure was investigated. In only a few places did the walls—about 0.80 m. thick—appear finished

<sup>10</sup> *A.J.P.*, LVI, 1935, pp. 358-397. For supplementary commentary see L. Robert, *Rev. de Phil.*, X, 1936, pp. 158 ff.

as if to show above ground. Here also the face was of coursed limestone blocks with rounded faces like the masonry of the peribolos just mentioned (Fig. 6). Stereo was found to be only 0.40 m. below the existing grade. From east to west the north wall measured some 20 meters. The east wall was traced 19 meters to the south, the west wall 10 meters farther. Several short ends of interior walls, a few meters long, were found, but not enough was uncovered to explain the arrangement. No elements of the superstructure came to light, nor any floor, though a length of stone drain and the bottom of a large pithos about 0.10 m. above stereo seemed to mark a floor level either of this building or of some earlier one.



Fig. 3. View from Ledge of Rock between Peak of Acropolis and Main Terrace, Looking North. The Nearest Hill to the Right of Center (9) Forms Northern Apex of City Triangle. In the Heavy Grove of Poplars at the Left Lie the Stream and Village of Degirmendere

A third structure was located still farther to the north, where a line of wall 26 meters long from north to south showed above ground. Five small trenches were opened which revealed this as the west wall of a rectangular building. It was traced for 33 meters from the northern corner, and the north wall for 16 meters; the end of neither one was reached. Internal walls ran parallel to the north wall at distances, on centers, of 16 m. and 28.50 m. from it. All these walls were of rubble 0.75 m. thick, finished in places on the exterior with coursed limestone blocks like those of the previously mentioned structures. A row of slabs 0.25 m. thick, set on edge, paralleled the northern internal wall 2 m. to the north of it. This row was uncovered



Fig. 4. Foundations of Peribolos in Valley, Showing Outer Face of Inner (West) Wall. Trees Just Beyond Mark Course of Kabakli-dere



Fig. 5. Foundations of Peribolos in Valley, Showing Inner Face of Outer (East) Wall

for a length of 2 meters, starting 0.60 m. from the west wall. Stereo was found about 0.75 m. below grade. Again no elements of the superstructure were found, nor any floor, and it may be doubted if any of the existing remains lay above the classic grade level.

These three buildings, of a size more suitable for public than for private structures, would seem to indicate that the heart of the municipality was near by. The shallowness of the soil is responsible for the disappointing scantiness of the remains, and the narrowness of the walls may explain why fragments of columns and en-



Fig. 6. Foundations of Smaller Rectangle in Valley. Outer Face of North Wall

tablatures were not found. Yet a series of large public buildings without any use of orders is not what one would normally expect in an important Greek city. Possibly these structures were the “market place, workshops, and all other necessary [rather than decorative] public buildings” referred to in an inscription authorizing the building of the city walls.<sup>11</sup> There can be no doubt, in any case, that the stonework is Greek, and from its appearance one would place it in the late fourth century, though without the supporting evidence of coins and sherds this cannot be stated with certainty.

Of the three hills which form the apices of the city, that to the southwest was the acropolis (Figs. 1, 7, 8). In shape it is a long ridge stretching a little east of north from the high mass of the Sivridağ, which rises to a peak 896 meters above the sea. The highest point of the acropolis (1 in Fig. 7), some 200 m. above the plain,

<sup>11</sup> See below, p. 170.

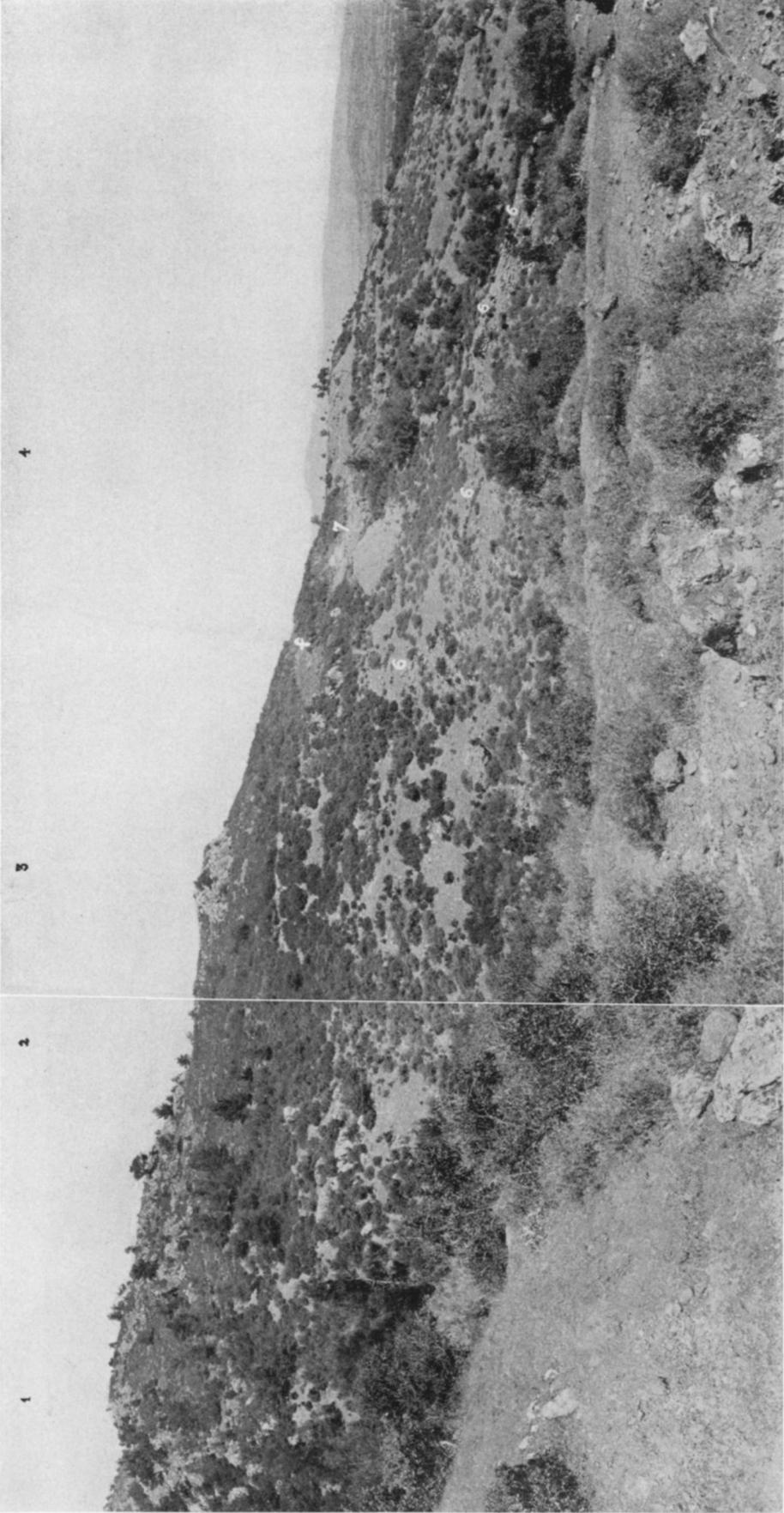


Fig. 7. Panoramic View of Eastern Side of Acropolis from Hill East of Kabakli-dere; to Left, (1) Summit of Acropolis and Second Terrace; to Right, Second Terrace (3) and Third Terrace (4)

is separated from the hill behind by a sharp declivity perhaps twenty meters deep. From the peak a bare strip, little more than seven meters wide, at the narrowest, of rock fissured by progressive fragmentation, slopes gently northward for some fifty meters to a saddle (2), rounding evenly to the eastern and western flanks of the acropolis. This continues nearly level for some twenty-five meters more to a second outcropping crag (3), from which the hill spreads cone-wise down to east and west and more gently toward the north. Fifty meters lower still the northern slope becomes a level terrace (4), fifty meters wide by slightly over one hundred meters from south to north. A side extension of this terrace, twenty meters wide, runs like a shelf nearly



Fig. 8. West Side of Acropolis from Camp Site. Poplar Trees (5) to Left of Center Mark Western End of West Terrace. Compare Fig. 26

due west along the flank of the hill for a hundred and twenty meters or so until it merges with the even westerly gradient from the peak of the acropolis (5). Ten meters below the level of the main northern terrace another narrower shelf runs along the steeper eastern slope (Fig. 7, 7) and below these three flat areas more gradual declivities stretch north and northeast to the lower city, and east and west to the courses of the Kabakli-dere running through the city's heart and the Degirmendere which skirted its western wall.

The wall which made the acropolis a stronghold independent of the main city ran from the summit along the east side of the highest ridge as far as the saddle, whence it descended in a broken line nearly to the Kabakli-dere (6). From this point Schuchhardt and others traced it on a level course halfway round the hill, but could not locate it on the northern and western sides. While making no effort to plot the fortifications, the American expeditions did find a wall upholding the western terrace which may have formed part of the acropolis ring.

Within this ring we may suppose the area to have been filled as solidly with buildings and streets and public places as the topography would permit, whereas the extent of the lower city is so great that much of the area must always have remained unoccupied. For this reason, except for the cemeteries and trial trenches at the three above-mentioned sites in the lower town, digging was confined to the acropolis. Unfortunately the geologic formation of the hill was such that preservation of remains was extraordinarily bad. On the main peak (1) and the lower outcrop (3) of rock



Fig. 9. Acropolis from Necropolis Hill, Looking Northwest

nothing remained, if indeed anything had ever been built there. On the saddle (2) between the two a trench four meters wide by thirty long showed scarce a half meter of earth above the rock.<sup>12</sup> In it were found the bottoms of many walls, which to judge from their width and the spaces enclosed—three or four meters on the average—must have been house walls; in the trench were also found fragments of cobblestone paving, a section of tile drain above which a wall had been built indicating a change in plan, many pieces of roof tile, broken pithoi and fragments of smaller pottery, terracotta figurines, etc., bits of lead, part of a hand millstone, and three bronze coins of the fourth century B.C.<sup>13</sup> Lacking earth to cover it, all superstructure had slid off the saddle to one side or the other. And as the fragmentary foundations that are left

<sup>12</sup> Not located with sufficient accuracy to be shown on the plan, but roughly 50 m. below lower left-hand limit of Pl. IX.

<sup>13</sup> J. G. Milne, *Kolophon and Its Coinage, Numismatic Notes and Monographs*, No. 96 (1941), Pl. VII, 126, 128, Period V, ca. 330-ca. 285 B.C.

show diverse rebuildings, it is questionable if more extensive digging and more intensive study could reveal intelligible plans. All that can be said is that this high area was closely settled for a considerable period during the fourth century, while evidence of inhabitation either later or earlier was not found.

From the saddle and the second ledge of rock the ground falls away rapidly; most steeply to the east, least steeply on the ridge which spreads finally into the northern terrace. But everywhere the grade is such that building could only be made possible by heavy retaining walls, providing a series of stepped terraces from fifteen to twenty-five meters wide. The inevitable result of rain and earthquakes through many centuries has been to smooth these steps into continuous slopes. The top of each terrace wall and what stood upon it has been eventually tipped outward and scattered in confusion down the hill. On the other hand the shelter of the terrace walls has preserved what stood close below them for a height of a meter or two, buried often by the collapsed wall itself and debris from above. And at all periods, as well when the city was flourishing as in its long disintegration, the upper ledges of the acropolis have loosed from time to time great boulders to plow a path of wreckage through walls and terraces. The multiple rebuildings, indicated by the varying techniques of sections of the retaining walls, may have been due more often to enforced repairs than to intended changes.

But the wide level terrace (4) which prolongs the ridge well to the north on the lower part of the hill is, for most of its extent, beyond the reach of landslides; here digging was commenced with the promise of well-preserved remains. It was quickly seen, however, that in the center of the area the surface of the modern plowed field was only a few centimeters above bed rock, and that while the earth was deeper along the shoulders of the terrace where foundation walls had allowed it somewhat to collect, there was rarely more than a meter of it, and even at the southwest angle where deposits from the upper slopes collected most heavily, stereo lay but a meter and a half below the undug surface. It appeared that the center of the terrace had not been built upon at all, but had remained an open *plateia* (Pl. IX) flanked on the north and west by an impressive stoa filled with shops or public offices, and perhaps by similar structures at the foot of the upgrade at the south. Little investigation was conducted on the southern boundary or on the eastern side where no remains save terrace walls were to be seen. The stoa was excavated in two sections. That at the south half of the west flank was wholly uncovered, and surveyed in connection with the houses at the east end of the west terraces. That at the north of the *plateia* was not surveyed, but was carefully recorded—together with the houses on the northern front of the terraces—in the daily entries in Dr. Blegen's notebook. Preliminary measuring stakes, which show clearly in several photographs, give certainty as to the relation of these two sections to each other.

## THE STOA (VII)

NORTH WING (VII *e-l*)

While the stoa was unified in conception and probably was all built within a short stretch of years, it was not all built at one time. The northern wing (Pl. IX and Fig. 10) shows two distinct sections. The western section consists of a portico about 5.70 m. deep behind which were five rooms 6.15 meters deep and in width from east to west approximately 4.65 m., 4.75 m., 5.70 m. (Fig. 10, VII *i*, VII *h*, VII *g*) with a final space of 11.40 m. which probably comprised two rooms of 5.20 m. and 4.65 m. (VII *f*, VII *e*) corresponding to the divisions of the western wing of the stoa. The eastern section comprised a large room (VII *l*) about 10.35 m. deep by 12.80 m. wide with a foundation about 1.40 m. by 1.50 m. for a central support, echoed by a pilaster against the west wall and presumably by a similar one on the undug east wall. This large room was flanked by two smaller rooms (VII *k*, VII *j*) respectively about 3.85 m. and 5.70 m. deep by about 5.25 m. and 7.20 m. wide, with a portico across the whole front continuing that in front of the western section. The wall between the eastern and western sections is double, with a combined width of 1.30 m., that to the west being somewhat the thicker (Figs. 10, 11). This, together with the fact that the masonry courses as shown in the north walls are considerably larger in the eastern section than in the western (see Fig. 27), clearly indicates that they are not strictly contemporary. The relative thickness of the party walls points to the western section having been built first. The cause of the sequence of construction is probably a paved street (G) which originally connected the area north of the stoa with the plateia. The cobble paving of this street was found to continue under the stoa, its western edge lying about 0.85 m. west of the dividing line in the party wall, its eastern about 1.40 m. to the east of it. Thus the western section of the stoa could have been built without completely stopping use of the street and the eastern one added when some other line of communication was established. Possibly passage was effected through the second room from the west end of the west section (VII *f*); this area was not excavated, but it would probably have been impossible to determine the matter even if it had been, for the ground level there was considerably below the original level of street and plateia, and these in turn must have been about a meter below the floor of the stoa rooms. Both the east and west ends of the northern wing lie so far beyond the present level part of the terrace that it was not found practicable to excavate them. Small pits served to locate the northeast and northwest corners and the meeting place of the central wall with the eastern wall. The termination of the stoa at those points was clear. But the southeast corner was not investigated and one cannot say whether steps or a terrace wall or some other structure effected the transition at this point between the level of the plateia and the lower slopes to the east.



Within the main walls of the eastern section of the north wing are minor walls (Fig. 10). Two of these,—a transverse wall *ca.* 0.50 m. wide in the northern half of the southwest room (VII *j*), and a short spur 0.65 m. wide projecting into the large east room (VII *l*) from its south wall, 1.35 m. from the west side,—are preserved to the height of the main walls and may belong with them, though since nothing is preserved above the floor level this cannot be certain. Another wall *ca.* 0.50 m. wide,



Fig. 11. Double Party Wall Between East and West Sections of North Wing of Stoa, Looking North, Showing Remains of Paved Street along Base of Wall, with Doorsill at Still Lower Level, at Lower Right Corner of Picture; beyond Doorsill is Interior Wall Preserved to the Height of Main Walls

paralleling the south wall of the large east room (VII *l*), though slightly lower, may also belong to this system, as it seems to join the end of the spur wall in a clean rectangular corner. Another spur, *ca.* 0.80 m. wide, projecting northward into the large room from the south wall, at a distance of 8.70 m. from the west wall, may also belong, as may perhaps other short low north and south sections along the southern wall. But there are still other bits of wall, notably a short section slightly over a meter wide paralleling the northern wall of the large room about two meters to the south of it, and a section *ca.* 0.70 m. wide lying along the west side of the west wall of the large room, which certainly were part of an earlier structure on the site. The width of these fragments indicates that they belonged to a building of considerable size, and the complete agreement with the orientation of the stoa suggests that this east section was merely a replacement of a structure of nearly the same size and

probably the same function, which continued in use for a while after the west section of the stoa was built, and which because of its importance may have set the orientation for the whole revision of the area.

The function of the large room and its dependencies, or of the separate building which preceded it, can only be guessed. It seems rather too important for a commercial structure and too closely linked to the rest of the stoa to be a religious one unless the whole stoa was an adjunct to the neighboring sanctuary. A civic function of some sort seems most probable. But its area is small for a bouleuterion, having hardly more than a third of that of the Ekklesiasterion at Priene or a sixth of the bouleuterion at Miletos. Possibly a clue is given by the finding of three square pieces of lead some seventy-five centimeters below grade in the southwest region of the large room. One of these was 0.07 m. on a side and 0.01 m. thick and bore in relief on one side a lyre with the letter **M** beneath; a second of similar form, though less regular, was stamped with the lyre and two indecipherable symbols in the upper corners; the third, of the same shape, but considerably thicker and heavier, had neither lyre nor letters. A number of similar weights were found elsewhere on the acropolis but always singly. These weights were below the floor level of the later building and probably above that of the earlier one. If they indicate that the official weights and measures of the city were kept in the earlier building, then it and its successor, the east section of the stoa, may have been a prytaneum, and the foundations against the south wall may have been for enclosures in which the official standards were stored.

Beneath the portico of the east section parts of two more walls *ca.* 0.45 m. wide were uncovered, lying parallel to the east-west walls of the stoa and each having a stone doorsill, nearly but not quite in front of one another. It is difficult to see how they could have served simultaneously in a building, and one may therefore suspect that they belong to successive structures or to revisions of a single structure.

Beneath the two eastern rooms of the western section of the north wing of the stoa, foundations of other earlier structures were also found (Fig. 10, VII *h*, VII *i*). These are of rubble 0.40 m.-0.45 m. thick and belong to two adjacent rectangular rooms. Their orientation agrees with that of the walls of a house lying just north of the stoa (XI), though not exactly with that of the structures which lay east of the street across which the stoa was built. Evidently the street broadened somewhat as it approached the plateia. In the southern piece of wall in VII *h* was a large poros threshold block with hinge socket holes 1.11 m. apart on centers. The door opening however had been walled up, indicating a change in plan even before the house was demolished for the building of the stoa.

The front wall of the stoa, on which the columns stood, is 1.00 m. wide, not wide enough to allow for steps below the stylobate. The west and north walls of the large room in the east section are likewise 1.00 m. wide; the end walls of the stoa were probably of the same width, though the tumbled state of the foundations uncovered

forbids certainty. The north wall of the stoa, however, and the central one running from east to west are but 0.75 m. wide, while the north-south divisions between rooms are from 0.65 m. to 0.75 m. wide. The rear wall and doubtless the end walls were faced with limestone blocks in courses of approximately uniform height (Fig. 27), though the length of the blocks varied greatly; the horizontal and vertical joints were cut with care and closely assembled, while between joints the face was dressed in a rough convex bulge. In the eastern section the inner face of the outside wall and all



Fig. 12. Walls of Eastern Room in Western Section of North Wing of Stoa, Looking East Across Room

the interior walls were built of uncoursed rubble; in the western section the lower part of the walls is of similar construction while the upper part, at or slightly below floor level, is made of blocks which have been roughly dressed to rectangular form with approximately flat faces (Fig. 12). These however are laid with such complete disregard for their jointing and in such irregular courses that it can hardly be doubted that they are re-used materials, perhaps originally from the walls of some building which the stoa replaced. If so, they show the style of dressing given to careful masonry at a period prior to that of the stoa. However, since six of the datable coins<sup>14</sup> found within the stoa area are from the first half of the fourth century, the earlier and later constructions cannot be far separated in time.

<sup>14</sup> Milne, *Period III, ca. 389-ca. 350 B.C.: Num. Notes and Mon.*, No. 96, pp. 49 ff.

WEST WING (VII *a-d*)

The wing of the great stoa which bounds the plateia on the west (Pl. IX) was likewise built in sections. This is clearly indicated by the fact that the convexly cut stone work of the rear wall, used only as a visible finish, was returned across the south face of the division wall between the third and fourth chambers, counting from the south (Pl. X, VII *c* and VII *d*), and was carried around to form a finished exterior to the southeast corner of the fourth chamber (VII *d*). Obviously this chamber terminated the stoa when this wall was built. But as there is no similar sign of interrupted construction in the foundations of the wall which bore the colonnade, nor any cross wall linking colonnade to chambers at this point, it would seem that the row of chambers to the north was completed first, the colonnade being added when the three chambers to the south were built. Only one of the chambers of this earlier section,—VII *d*,—was fully excavated. Its internal measurements were 4.50 m. by 5.50 m., the division walls both at front and sides were 0.65 m. thick. Presumably four more chambers lay between this one and the northern wing of the stoa; if so the space would allow an average width of 6.06 m. from north to south, with division walls of 0.65 m. The dimensions would be approximately those of the rooms in the north wing of the stoa, though turned with the long side toward the colonnade (Pl. IX).

The row of five rooms in this western wing, antedating the colonnade, may have been built at the same time as the west section of the north wing. The foundation wall for the colonnade of the north wing is carried at its full width of 1.00 m. at least as far as the central wall of the west wing, but whether it continued thus to the rear wall is not recorded by notebooks or photographs. At the south the north section of the west wing of the stoa was stopped by an older street (F) which entered the plateia diagonally from the northwest (Pl. X), the principal if not indeed the only approach from the valley on the west side of the acropolis. The eventual addition of three rooms to the south involved much rebuilding of the adjacent residential sections on the west terrace; there may have been considerable delay before this final section of the stoa could be undertaken, permitting the colonnade to be built simultaneously all along the west wing to finish with a solid wall across the southern end.

At the south end the grade rises somewhat, and here a stretch of euthynteria laid on stereo has been preserved. This course is made of two faces of re-used poros blocks with a fill of rubble between. On the outer face the blocks are set to an even line and dressed to a level top. In one block are a square dowel hole, a pry hole and a cutting for a hook clamp; another has a similar dowel hole. These cuttings antedate the use of the blocks in the stoa. The stylobate has disappeared. However, there is a fragment of red plaster upon the south wall, close to the east corner (Pl. X, *a*), the bottom of which is 0.28 m. above the euthynteria, while just to the west of the latter stereo reaches nearly the same height. The stylobate therefore can be figured as 0.25-0.30 m.

high. Another scrap of wall plaster (Pl. X,  $\beta$ ) still in place in the angle between the south wall and the face of the central wall of the stoa, fixes the floor there as level with the stylobate or a few centimeters higher. The central wall is preserved at its extreme south end for 0.30 m. higher still, but shows no indication of the floor level of the room to the west (VII *a*), nor of any doorsill. However, the door may have been in the center or toward the northern side of the room, where the wall is not preserved above the level of the outer floor; a sill 0.30 m. high would bring the floor level of the room approximately to the highest bit of masonry preserved. Plaster fallen from the south wall in the portico shows three distinct layers. First is a pinkish ground coat about 0.025-0.03 m. thick made of coarse sand, lime and broken pottery; this coat was scored lightly with shallow depressions on the surface, and a second coat of sand and lime about half a centimeter thick was applied. The body of the second coat is white, but there are traces of red on the surface. On top of this is a third coat of white plaster made of coarse sand and lime about 0.02 m. thick. Probably this coat belongs to a second plastering. Fallen plaster found within the south room of the stoa was very coarse, about 0.025 m. thick, and showed no traces of color.

The columns and entablature were presumably of poros but no fragments have been found; the spacing of the columns is purely hypothetical. Superstructure as well as stylobate blocks may have been carried from the deserted acropolis for use in constructions in the valley in Roman or later times. The division walls and the end wall are about 0.65 m. thick, the top of the rear wall, which in its northern portion rose some six meters high to floor level, 1.00 m. thick. Exterior faces are built of coursed limestone blocks with rounded faces (Fig. 13), the rest of the walls are all of rubble. The horizontal joints are more rigidly continuous, the vertical ones more strictly vertical than in the masonry of the fortifications (Fig. 2). At the same time, the work seems more careful, the joints closer than in that of the peribolos in the valley (Fig. 4). No re-used material was to be seen in this section of the stoa, except in the euthynteria, as noted above. The roof was covered with large flat terracotta imbrices and angular cover tiles. It is possible that at the northwest corner, instead of earth fill, a lower story or a stairway leading to the plateia level occupied the space below the floor.

The second room from the south (VII *b*) shows a curious group of interior foundations (Pl. X, Fig. 13). Along the north and south walls these are *ca.* 0.30 m. wide. Against the east wall is one 1.00-1.10 m. wide, and in the center of the room are four, *ca.* 0.50 m. wide and 2.50 m. long with interspaces of 0.40-0.55 m. These foundations are not bonded with the room walls, and though preserved to nearly the original floor level, measure now only 0.75 m. from top to bottom, at which point the stoa walls increase in width. Evidently they served to carry heavy objects standing in rows upon the floor or in racks of some sort. The narrowness of the space between the rows implies inactive storage rather than frequent use and consultation such as might be made of official documents. Five pithoi of 0.50 m. diameter could be carried

by each of the central rows, with smaller jars against the north and south walls, and three of 1.00 m. diameter against the east wall. These might serve to hold oil or wine as a city reserve in case of need. Or, following the shrewd exposition of Hess<sup>15</sup> con-



Fig. 13. South End of West Wing of Stoa, Looking Northeast

cerning the method of storing civic wealth in antiquity, the foundations may have held racks for jars or bags of coins, with space against the eastern wall for chests. The main entrance from the portico would seem to be to the south of the wide foundation against the front wall, with a minor door leading into the adjacent room at the east end of the north wall. The capacity seems hardly sufficient for a city treasury, but it might have served as the treasury of the sanctuary of the Great Mother, on which in fact the whole stoa and plateia may have been dependent.<sup>16</sup>

<sup>15</sup> "Opisthodom als Tresor," *Klio*, 1935, pp. 81-84.

<sup>16</sup> It is reported in the excavation notebook that in the northeastern quarter of this room 300 fragments of roof tile (pan and cover), five small fragments of terracotta figurines (male and

Before the west wing of the stoa, on the axis of the fifth room from the south, the foundations of a statue base were found (Pl. X) but nothing of the base itself nor of the statue, nor any indication as to the subject. Nearly in line with the southern end of the stoa and nearly on the axis of the level ground of the plateia terrace is a large outcropping of native limestone that has been worked to receive some sort of artificial superstructure (Pl. IX and Fig. 14). An area *ca.* 2.00 m. from north to



Fig. 14. Rock-cut Base at South End of Plateia, Seen from the West

south and *ca.* 2.50-3.00 m. from east to west has been dressed as a bedding for cut stone, level except at one point where a cube of rock has been left to form part of the masonry core. At the eastern edge the rock is broken away, and, if this is an ancient condition, artificial foundations may have served to extend the platform to the east. At the west the rock is dressed to a lower step, as for a euthynteria 0.30-0.40 m. high. The native rock immediately south of the platform forms a saddle about 1.00 m. wide from north to south, which slopes to east and west. Possibly this is artificially worked, but as it is wholly below the level of the top of the supposed euthynteria, it was presumably below the ancient grade. South of the saddle, the rock rises irregularly to a maximum height of something less than a meter above the euthynteria top. This projection has been dressed to a vertical north face parallel with the east-west axis of the rock platform; elsewhere it is left in its natural condition. On both sides

female), and 75 fragments of large yellow and red clay jars were found *ca.* 0.80 m. below the untouched grade level. The large jars and figurines were presumably in the room when the roof collapsed.

beneath the mass of rock are natural waterworn hollows which may have served some cult purpose in antiquity, but which more probably were quite accidental and completely buried beneath the earth, since virgin soil was found quite close by at the level of the " euthynteria " cutting. Previous searchers had dug beneath the rock, and the roofs of the cave-like recesses had fallen; loose shale mixed with a few large stones and a very few sherds of coarse red pottery were all that was found within. Since the level of the top of the hypothetical euthynteria is over two meters above the grade of the road entering around the southeast corner of the stoa, steps to the north of the rock platform, or a retaining wall to form a terrace at the south end of the plateia, would have been required. As the earth in this region was not excavated there is no telling whether remains of such a wall exist.

The rock-cut platform may have served for a statue base or an altar or as a bema for public assemblies; no fragment of its superstructure nor indication of its purpose was discovered. Not far to the southwest stands a spike of native rock (Pl. IX), which, unless it was incorporated in some cyclopean construction, must have projected like an unworked cone above the terrace level, and directly south of the platform are several large boulders, seemingly in a row, which may possibly have formed part of ancient developments in this region, or may be purely accidental rock fall. Still farther to the south and nearly on the axis of the plateia a trench laid bare (Pl. IX, *g*), just beneath the surface of the earth, a roadway paved in broad low steps, running directly up the spine of the acropolis hill (Fig. 27, *g*, upper center). As the lower part of the road was gone, its connection with the plateia was missing, but doubtless it served as one of the main streets of the acropolis.

Beneath the west wing, as beneath the north wing of the great stoa, lie foundations of older structures demolished at the time of the new development (Pl. X). The farthest to the north of those uncovered lay just south of the statue base (Pl. X, X). Here the bottoms of two parallel walls *ca.* 0.45 m. wide, running from southeast to northwest, were joined almost at right angles by a similar wall which diverged from beneath the front foundation wall of the stoa. The room bounded by these three walls seems to have been open to the southeast, for the parallel side walls are built, like the back wall, of small stones for a length of three meters and then each is broken by a single large flat stone slightly wider than the wall itself, suggesting an anta base. Beyond this point each wall is continued for a meter more by fairly large flat stones which seem intended to serve as foundations for a sill. The bed rock has been cut away to permit the extension of these side walls; the cutting suggests that they reached a point 1.50 m. beyond the anta stones, and that the whole formed a prostyle portico *ca.* 4.50 m. square on the inside, with solid side walls for *ca.* 3.50 m. and columns at the corners. It is possible that another room lay behind this portico; the rock cutting indicates that the present remains are at least the height of a sill below the floor level, so that the absence of a door sill in the rear wall is not significant. The southwestern

rear corner was destroyed by the foundations for the stoa; at the northwest corner are a few scattered stones which may indicate a rearward continuation of the side wall or a continuation of the rear wall toward the northeast, or may be merely fortuitous tumble. Further remains might be found just west of the stoa stylobate foundations, but this area was not investigated. Along the north side of the northeast side wall remains of a terracotta drain were found running toward the northwest. Three sections of pipe, one of which had a clean-out hole in the top, were joined by a broken section of smaller diameter to a section of half pipe, laid as a collecting trough at the plateia end. Such drains usually occur beneath streets, but a street here seems unlikely, and no traces of paving were found.

Farther south a large drain 0.35-0.45 m. wide was built through the south extension of the stoa beneath the floor level (Pl. X, between VII *c* and VII *d*). It was floored and covered with stone slabs, while the walls were of large uncut stones; the intake beneath the euthynteria of the stoa was masked by a vertical slab and at the rear an outlet provided with a projecting lip emptied onto a street (F). This drain to carry off rain water from the plateia doubtless replaced several older drains, including a well-built one of terracotta pipe beneath the surface of the street into which the new drain emptied. This older street drain was found again beneath the southern extension of the stoa in a pit in the third room from the south (VII *c*) and beneath the stoa portico. At its beginning it was formed of pipe of smaller diameter, the first section of which had been displaced when the stylobate was laid. At its northwest end it probably joined a similar drain, a short section of which was uncovered at the top of the northernmost corner of the great retaining wall, beneath a street (E) which ran along the northern edge of the western terraces. The combined drain from streets E and F probably then poured forth by a spout in the retaining wall, onto a cobbled talus at its foot, or descended beneath a road which mounted to the terrace level more or less parallel with the rear wall of the stoa. Time did not permit verification of this hypothetical approach, but it seems the most reasonable way up to the acropolis from the western part of the valley, and was in fact the path usually taken by the excavators.

Behind the stoa, on the southwest side of street F, which had connected the ramp head with the plateia, were walls of houses, and on the opposite side a fragment of wall was found just at the corner where the northern section of the stoa stopped. Whatever structures originally stood on this side were probably entirely abandoned after the stoa was built, as the space then remaining was insufficient for a building. There would result a small open area, perhaps within a gateway at the entrance to the terrace.

Fragments of what may have been the flanking wall farther east on the northern side of the street entering the plateia were found beside the terracotta drain, cutting the stoa column foundations on a line which, if continued beneath the stone drain,

might emerge as the wall at the southwest corner of the first section of the west stoa. But fragmentary remains of successive rebuildings prevent the plan of the structure that stood here (Pl. X, IX, and Fig. 13) from being fully intelligible. The wall itself (*ca.* 0.50 m. wide and only one course high) seems to end with a definite cornerstone *ca.* 1.75 m. east of the stoa foundations. A group of adjacent stones may indicate a wall returning toward the north at a sharp angle, but this is far from certain. Just west of the column foundations, however, there is a definite wall (*ca.* 0.40 m. wide) at right angles to the first, which seems clearly to belong with it; its northern part lies beneath the stoa foundations. About  $2\frac{1}{4}$  m. still farther to the northwest a wall, also at right angles to the first, may be the foundation for a threshold since in it are four stones side by side laid across the 0.30 m. wall, while just beyond, to the northwest, is an area of stones which suggests a paved strip before a building rather than a wall or chance tumble. The end of the street wall, which may have extended as an anta beside this paved strip, has gone. The resultant arrangement appears to be an H-shaped building with a room four meters or so deep on one side opening on the plateia and on the other a room of little more than half that depth opening on the uphill road from the northwest. The function as well as the width of the first room is quite unknown, but in the second room against the central cross wall, on a raised step or bench of earth edged with stones, were found remains of a pithos *ca.* 0.40 m. in diameter and the mark of the base of another somewhat larger one beside it. The width of the room as preserved would permit four such pithoi upon the bench; possibly there was space originally for twice that number. It is tempting to see in this room a precursor of the second room from the south end of the great stoa (VII *b*) which has been suggested as a municipal storehouse or a treasury. The older room would constitute by itself a very limited treasury, but combined with the opposite half, facing the plateia, it might have offered nearly if not quite as much space as the later room in the great stoa. Or it may have seen less dignified services as a tavern, placed Janus-wise at a main entrance to the plateia, with welcoming refreshment on one side for those who had just climbed the hill, and on the other a place to rest and seal in good fellowship the day's transactions, before setting out for home.

The line of the side wall of this structure runs more or less parallel to the walls of the portico by the statue base to the north, and between the two there are bits of three other walls running in the same general direction. The heaviest of these (*ca.* 0.85 m. wide) we may call wall  $\gamma$ . It lies beneath the portico of the stoa and seems intended to meet the corner of the southernmost room of the first section of the stoa, though broken off before reaching that point, as at the other end it stops just short of the stylobate foundation. It is doubtful if it ever formed any part of the great stoa construction and doubtless antedates it. It might be the end wall of a series of rooms of which that near the statue base formed the second. Five rooms of the same size, corresponding to the later five rooms of the north section of the stoa wing that

replaced them, would reach nearly to the hypothetical corner of the building (see above, p. 106) which, before the great stoa was commenced, lay to the west of the street (G) entering the north end of the plateia (Fig. 10; VII *h, i*). If wall  $\gamma$  post-dates the terracotta drain under street F, it may be that at sometime the line of the drain was shifted to the north approximating the line of the stone drain through the stoa, with consequent destruction of the structure between its first and second course; or the street may have forked, leaving a small, more or less triangular island between the old and the new roadway. Wall  $\delta$  is *ca.* 0.45 m. wide and is built directly upon wall  $\gamma$ . It may be merely a scrap of retaining wall to hold a mass of rubble that was filled in about the stone drain, and as such is to be considered part of the foundation construction of the great stoa. Wall  $\epsilon$  (*ca.* 0.40 m. wide) is only a fragment lying in front of the stylobate foundation. It is possible that some of the stones west of the stylobate, among the confused remains of the pithos room, may belong to a continuation of this wall, and other stones in the same region suggest a bit of wall running at right angles to it,  $\zeta$ . If the latter be a real wall, it can hardly be contemporary with the wall of the pithos room, though whether earlier or later is uncertain, as all walls are below floor level here. Together with wall  $\epsilon$ ,  $\zeta$  should belong to a building south of the road as re-routed along wall  $\gamma$ . Possibly some of the previously mentioned group of stones east of the southern corner of room IX may be part of another wall belonging to this system. The building of which these walls would form part would have to extend across the terracotta drain, closing this end of the southern course of the street in favor of the more northern route. There is also a suggestion of another line of wall crossing wall  $\delta$ , in the pithos room, at a slight angle to it, and not quite parallel or at right angles to the walls of the pithos room. Perhaps there is evidence here of three successive constructions, all prior to the great stoa but all fairly close in date and all belonging to rather small isolated structures of public nature, rather than to houses.

Remains of other structures probably belonging to the same pre-stoa complex were found beneath the floor level of the first stoa room to the north of the drain (VII *d*), but, without excavation to the same depth beneath the adjacent portico and perhaps in other stoa rooms to the north, the nature of these earlier structures is far from clear. In the northeast part of the room a section of well-finished composition floor was laid bare.<sup>17</sup> At the north this ends in a straight line approximately parallel to the side walls of the near-by pre-stoa room by the statue base. Along this line there had evidently been a threshold, removed when the stoa foundations were laid. The eastern edge of the floor is cut by the central wall of the stoa and the southern edge

<sup>17</sup> No analysis of the substance of the composition floors at Colophon was made, but in appearance they were similar to the ground coat of the wall plaster found in the south end of the stoa (see above, p. 109), i. e., coarse sand, broken pottery or tiles and lime, spread as on the walls to a thickness of a few centimeters and troweled smooth.

is gone. A wall (*ca.* 0.45 m. wide) at right angles to this line flanked the floor on the west. It is preserved above the level of the floor only at the north and west corners of the remaining plastered section but continues on a lower level to the southwest for *ca.* 2.25 m. where it is crossed at right angles by a well-cut poros gutter (Fig. 15). The gutter stone is cut as if to fit around a dressed anta terminating the wall it crosses, suggesting that the composition pavement belonged to an open portico. A still earlier floor is perhaps indicated by traces of a packed layer of whitish earth *ca.* 0.20 m.



Fig 15. West Wing of Stoa, Looking South Along Rear Wall. Room with Poros Gutter at Left, Terracotta Drain at Right Center

beneath the composition level. Nearly on the line of the gutter, though completely below it, runs a fragment of narrow wall that is approximately parallel to the terracotta drain in street F and the scrap of street wall outside the southwest corner of the stoa room VII *d*. This lower wall certainly antedates the composition floor, though it may be contemporary with the pithos room and the first layout of the street of the drain. On the other hand a group of four stones, set like the base of a square pillar, but separated from the floor by two centimeters of earth (Pl. X), is probably without significance, as may also be a group of stones north of the stone gutter and at about the same level, which suggest a wall parallel to it, as well as a random aggregation, like a pavement at the same level, south of the gutter. All these are probably tumbles from walls demolished when the stoa was built. However, we undoubtedly have here, as under the portico of the stoa (IX), remains of two successive constructions, possibly filling continuous functions, prior to the building of the stoa. The workmanship of all these earlier structures is not inferior to that of the stoa, and the rooms contained

may be scarcely less in size, but the walls are thinner and above all the grouping seems an unsystematized following of the natural line of the west edge of the terrace. The great stoa substituted for this the grandiose uniformity of a formal plan, dictated doubtless by an access of civic pride and wealth, rather than by necessity or any cultural change. The potsherds and few coins<sup>18</sup> found within the stoa all date before 285 B.C.

Another pre-stoa structure lies beneath the southern end of the west wing. Here, laid in stereo about 1.10 m. below the floor level of the portico, is a considerable expanse of well-made composition floor (Fig. 13, Pl. X; VIII *b*). The west side of the rectangular room to which it belonged is cut by the central wall of the stoa, but the bottoms of walls on the other three sides are preserved. The lines agree more nearly with that of the near-by terracotta street drain than with those of the structures further north. The wall along the southeast side is continued beyond the southwest wall to form an anta flanking a floored *prosta* before the floored room. Continuation of the floors of *prosta* (VIII *a*) and room are found beneath the south room of the great stoa, though the wall between them has disappeared. In the westernmost part of the line where the *prosta* floor would have met this division wall, the edge of the plaster, for a distance of about a meter, is particularly sharp and smooth, indicating contact with a cut-stone threshold. Large thresholds found elsewhere on the site measure about 1.50 m. in length. If the center of the threshold were *ca.* 0.25 m. from the end of the preserved floor plaster and if this point were on the axis of room and *prosta*, the width of these two would be *ca.* 7.70 m. (actually the flooring preserved assures a minimum width of *ca.* 5.00 m.) with a depth of 3.30 m. for the *prosta* and 4.70 m. for the room. The depth of the room is almost exactly that of the rooms of the later stoa, but the suggested width would exceed that of the stoa rooms by a couple of meters. The threshold may, of course, have been placed toward an end rather than in the center of the front wall, but, on the other hand, a short stretch of wall, thoroughly buried beneath the rear wall of the stoa and the subsequent structures built against it (Pl. X; VI *h*), lies nearly parallel to the south anta of the pre-stoa *prosta* at a distance of approximately 7.70 m. from it. The *prosta* floor is bordered at its front, southwest, edge by a sill or curb of long stones, dressed on top and front. If there ever were columns on this line, no foundations for them have been preserved. In front of the sill, and almost at the same level, is a pavement of irregular flat stones, belonging doubtless to a street or open area. Possibly a continuation of this pavement is to be seen in a patch of irregular stones in the corner of a later room (VI *g*), just to the west of the stoa. Directly south of the *prosta* the ground rises so rapidly that a level passage past the southern corner could hardly have exceeded three meters in width, while a line of wall cut by a drain and buried beneath a new roadway, both probably contemporary with the stoa, faces the *prosta* on a line nearly parallel with it at a distance of *ca.* 3.50 m.-*ca.* 4.15 m. A partition in the adjacent house (between

<sup>18</sup> Milne, Periods III, IV, V: *Num. Notes and Mon.*, No. 96, pp. 49-72.

VI *f* and VI *g*) continues the line of this wall to the northwest for a total length of *ca.* 8.50 m., and after an interruption by three later rooms it seems to appear again beneath the floor of a fourth room (V *d*) with a turn in a right angle to the westward, at a distance of some 21.00 m. from its southeastern end. Excavation beneath the floors of the intervening rooms would be needed to verify the continuity of the wall. By the northern angle there is a fragment of cobble pavement which would indicate that the street flanked by the wall turned at the same point and by a short southwest course and then a northward turn reached the street running along the north edge of the west terrace. An area of cobblestones north of the poros paving of the later street D seems to mark the southwest stretch (Pl. X, Fig. 16), and a northward-running stone drain built beneath the cobbles just inside the entrance to a later house<sup>19</sup> may mark the final reach.

The erection of the great stoa naturally entailed a general reorganization of the area lying about its southern end. At this time the new street D (Pl. X, Fig. 16) mentioned above (1.65 m.-1.75 m. wide) was laid out slightly to the west of the hypothetical one just suggested, not only connecting directly with the main plateia across a little plateia at the south end of the stoa, but continuing in a straight line by a steep incline to the level of the terrace at the south end of the great plateia and perhaps beyond (Pl. IX). The section of this street from its junction with the earlier cobble pavement at the north to the entrance to the little plateia is paved with poros blocks (Pl. X, Figs. 16, 17) which are as a rule 0.40 to 0.45 m. wide by 0.65 to 0.75 m. long by about 0.16 m. thick, but range from a minimum area of 0.20 × 0.30 m. to a maximum of 0.50 × 1.05 m. At the lower end of the pavement the blocks are fairly regular in shape and laid with care, but they become progressively less rectangular and more random in their arrangement as the street rises to the south, until at the upper end the pavement is made of small uneven blocks with wide irregular joints and interstitial plugs not more than ten or fifteen centimeters on a side. A slight step all across the street, by the north jamb of the doorway into the house to the east of the street (VI *e*, Pl. X, and Fig. 16), suggests that the street paving was not a continuous operation. In any case, the whole pavement is evidently made of re-used materials, laid from north to south with the best blocks used first and with barely enough broken material to finish out the stretch. Since no clamp or dowel cuttings are apparent, the blocks could hardly be wall plinths laid on their beds, nor, in view of the use of composition floors in the structures beneath the stoa, does it seem probable that they had been paving blocks; probably they originally served as wall facings for some of the important buildings demolished when the stoa was built. At both sides of the street the blocks are laid against the bottom of the adjacent house walls. The pavement therefore seems to have marked the completion of the building operation which, with the extension of the western wing of the great stoa, necessitated the rerouting of the street and much alteration if not complete revision of the houses on either hand.

<sup>19</sup> House IV,  $\mu$ ; see below, p. 122.

At the south, where the street passes the little plateia, the bed rock rises so steeply that instead of regular paving an irregular ramp was built, broken by steps made of rubble masonry and occasional large uncut blocks (Fig. 16). After continuing in this form between walls for a little over ten meters the street reaches a light terrace wall which runs straight across it, and continues beyond to east and west on either side (Pl. IX). Above this wall lay a relatively level stretch over which the straight course of the street still held, as is indicated by a short section of built-up drain and a patch



Fig. 16. Paved Street D from North End, Looking South

of cobblestones near by. The southwest boundary on this terrace is a retaining wall of good-size blocks approximately parallel with, but a couple of meters to the west of, the line of the side wall lower down. This retaining wall turns to the west almost at right angles, about two and a half meters south of the light terrace wall just mentioned; between the two a cross street running westward along the side of the hill is to be assumed. Since the eastern boundary of the terrace was not investigated it is uncertain whether the first street broadened out here or simply shifted its course slightly. If it continued for some twenty meters of slight up-grade in a straight line, it would eventually reach the steeper stepped street (*g*) which ran directly up the spine of the hill, approximately on the axis of the great plateia.

Along the south side of the little plateia stood a small building opening to the east, apparently consisting of two rooms, one behind the other, more likely a shop than a residence; the makeshift assemblage of re-used material that served as a doorsill (Pl. X,  $\eta$ ) precludes a civic function. At the bottom on the outside of the wall facing

the little plateia were considerable areas of plaster ( $\theta$ ) about one centimeter thick, applied directly to the stone. The body was white with a red face. This plaster probably antedated the building of the great stoa and was preserved by being covered by the earth fill which buried the remains of the wall running across the little plateia (Pl. X, Fig. 13). In front of the building is a small terrace or platform built with roughly curved outline abutting against a natural outcropping of rock. Between this



Fig. 17. Looking North Down Paved Street D

platform and the stoa (a distance of less than 1.75 m. at the narrowest) three rough steps lead up from the little plateia approximately 0.60 m. to the grade at the southeast corner of the stoa, and from this point two other steps, 0.20 m. and 0.30 m. high, and slightly better built, descend to the great plateia level. Beneath the lowest step by the curved platform runs a well-built terracotta drain. At its emergence it is laid in a trench cut in stereo. It turns, with a right-angle bend, westward across the little plateia and doubtless continues north beneath the paved street to reappear as the drain uncovered beyond the northern limit of the poros paving (Fig. 16) and again just before street D meets that along the north edge of the terrace (Pl. X). The affluent course of this drain from the south was not traced, but it seems probable that it kept to the west of the outcropping rock and drained the upper terrace south of the great plateia rather than the plateia itself. The sections are about 0.15 m. in diameter and 0.45 m. long

between raised rims; each has a four centimeter flange at one end to fit into the next section.

A doorway to what may well be another shop opens onto the street south of the paved section, where it rises steeply at the southwest end of the little plateia (Plate IX). This region lay outside the area surveyed; the walls throughout were fragmentary, and often not preserved as high as the original floor level. But from notebook sketches it appears that here also there were two rooms, one behind the other. Twenty centimeters beneath the floor level of the front room, as indicated by the doorsill (Pl. X,  $\iota$ ),



Fig. 18. Street B on West Terrace (East of Baths), Looking South Toward Steps to Upper Level

was found a second floor. Three stones set like a wall upon the upper floor may indicate a still later construction, or, if not a fortuitous arrangement, may be some part of the equipment of the room. Along the southern side of the room runs a built stone drain 0.15-0.20 m. wide. It is possible that at some time this drain was an open trough and that the whole room served as a latrine. The drain emerges through the front wall just beside and below the threshold block (at  $\kappa$ ). Thence it runs straight across the line of the paved street and, curving to the north,<sup>20</sup> was found paralleling the latter beneath the corner room of the house northeast of it (Pl. X, VI *f*). But oddly enough the drain seems to come to a dead end here against a wall at right angles to it, which lay just to the north of a wall of the house in question. It would appear that the stone drain had been abandoned before the building of the stoa, perhaps at the time the composition-floored structure beneath the stoa's southern end was built, and when the

<sup>20</sup> Three of the cover blocks of the curved section are shown on Pl. X ( $\lambda$ ) just south of the terracotta drain.

terracotta drain across the little plateia cut through it, the stone drain may have been already out of use for a score of years or more. To the west of the paved street, beneath the area of cobblestones that lies north of the poros pavement, another built-up drain, *ca.* 0.60 m. wide, was found (Pl. X,  $\mu$ ), with the top of its cover stones about 0.40 m. below the surface of the cobble paving.<sup>21</sup> It seems to have come from the west and turned at this point sharply to the north; apparently it continued in use, at least from this point, in the period of the stoa and paved street, for west of it in the entrance court of the house (Pl. XI), contemporary with the stoa, is a line of six sections of terracotta drain emptying into the built drain in question. The terracotta drain is doubtless a private construction to carry water from the low part of the court; it is made of odd sections of 0.20 m. pipe, two of which have uncovered cleanout holes, quite unnecessary in this situation. Perhaps in the revision antedating the stoa the stone drain ( $\mu$ ) to the west of the street served to replace the other stone drain which crossed the upper southern part of the street from the west ( $\kappa, \lambda$ ) and ran to the east of it, and was in turn replaced by the terracotta street drain in its function of carrying water from the upper terrace.

Another street (C), some thirty to thirty-five meters west of the paved street (D), ran from north to south across the west terrace (Pl. IX). Only the edge of this street was excavated and as a result its width is not known. Nineteen to twenty-one meters still farther west ran a third street (B). This one was 2.53 m. wide, paved with cobblestones up to the south edge of the terrace, where broad steps *ca.* 1.75 m. wide climbed the steeper slopes (Fig. 18). A fourth street (A) was found a little over twenty-one meters west of the third one. Street A was uncovered for its full width only at the north end, where it proved to be 2.00 m. wide, with an open gutter, 0.27 m. to 0.30 m. wide and *ca.* 0.60 m. deep, along its eastern side. At their northern ends all these streets must have met a street (E) running east and west along the top of the high terrace or fortification wall and thus perhaps have been connected with an ascent behind the great stoa. Unfortunately the top of the wall, the street along it and even the north walls of the houses, to a point below street level, had all slid down the hill. Between the paved street (D) and the next street to the west (C), three houses were uncovered (Pl. XI); the block between the street C and street B was not excavated; that between the street B and street A was found to contain a public bathing establishment. Farther west no digging was done except for a trial trench, 10 m. wide, at the extreme end of the terrace, and a similar one near by but somewhat higher on the hill.<sup>22</sup> In the first of these far western trenches the base of a long wall with others at right angles to it on either side appeared, and in the other a long wall with walls at right angles on the west only and possibly a street to the east. These walls were all of moderate thickness—0.45 m.-0.65 m.—and probably belonged to houses, but time did not permit uncovering sufficient area to reveal the plans.

<sup>21</sup> See above, p. 118.

<sup>22</sup> These two trenches lie beyond the limit of Pl. IX. Their exact location was not recorded.

## HOUSES WEST OF STREET D (II-IV)

## EASTERN HOUSE (IV)

Of the three houses between the streets D and C, two were entered from street D, the eastern-most just beyond the northern limit of the poros paving, that in the center of the block at a point near the higher southern end of this pavement (Pl. XI).

The entrance to the eastern house (IV) is by an opening 1.25 m. wide, with a sill made of three blocks which show no cuttings for doors or door jambs (Fig. 16). This sill is laid upon the lower cobble pavement and is level with the poros one. It seems, however, that the cobble pavement, which had been cut away in the street in order to lay the terracotta drain, was covered there and apparently inside the entrance to the house as well, with a fill of hard-packed soil mixed with bluish stone to the level of the poros pavement. It is therefore quite possible that a secondary stone threshold with appropriate cuttings was laid upon the blocks now in place. The house wall to the south of the entrance, 0.35 m.-0.40 m. wide, is carefully faced with coursed rectangular limestone blocks, dressed with flat outer faces like the re-used blocks in the north wing of the great stoa (Fig. 12),<sup>23</sup> while that to the north is 0.55 m.-0.65 m. thick and built of rubble, obviously to be plastered. Probably the two are not contemporary, but as the latter is merely an enclosure wall, while the former belongs to the most pretentious room in the house, the difference may not be significant. It is possible also that the cut blocks may have been re-used here, though they seem rather too carefully laid for this to be the case. Probably they formed only a socle two or three courses high. There is not sufficient evidence to say with certainty whether the upper part of this or other house walls in Colophon was made of crude brick or rubble, since walls are rarely preserved for a height of more than a meter. But as no heavy deposits of earth were found, such as would be expected from unburned bricks and as the walls where highest show no definite horizontal tops, it seems probable that they were usually built throughout of easily handled uncut stones,—of which there was no lack upon the hill,—pulled down and re-used many times as house plans were altered, with cut blocks for socles only and at corners and jambs. In few cases, however, would the rubble have been left unplastered, as the natural stones give far less uniform surfaces than such as are found in the walls of Delos.

Within the outer gate of house IV, on the right hand, is an alcove, probably unroofed, which resulted from adjusting the line of the street to the earlier system of the house itself, while straight ahead is a downward sloping uncovered passage, 3.50 m. long, widening from *ca.* 1.10 m. to *ca.* 1.50 m. in its course. Across the lower western end there may have been a sill of independent stones, of which the northern

<sup>23</sup> See above, p. 107.

one, flat on its upper side and curved below to cover the end of the previously mentioned terracotta drain (see above, p. 122), is alone preserved. Beyond lies an open yard approximately 5.25 m. from north to south and 4.50 to 5.50 m. from east to west. An irregular stone curb divides this area in two, the northern half roughly paved with occasional flat stones lying about 0.50 m. below the level of the top of the preserved entrance threshold, while the southern is *ca.* 0.15 m. higher. North of the yard lies the house proper, consisting essentially of a rectangular block *ca.* 9.50 m. from east to west by *ca.* 7.50 m. from north to south. This block is divided by internal walls into four parts. The principal piece (IV *a*) in the northwest corner is approximately 5 meters square. A large poros threshold set somewhat off center in the southern wall had seen service in one or two previous situations. This is indicated by rabbets for door abutments along front and rear edges, with two sets of hinge sockets, and in addition two sets of holes as if for grill pivots on the top. On this threshold there once were double doors filling an opening *ca.* 1.15 m. wide between wooden jambs. A fragment of marble, carved as if part of a door jamb or epistyle, was found at the north side of the doorway, but it is doubtful if it belonged to this house.

Across the front of the room ran a portico (IV *b*) or *prosta*s of like width and about 3.00 m. deep. From the east side a short wall or long *anta* projects for slightly over a meter, matched by another 1.85 m. long projecting from the west, leaving a clear space of *ca.* 2.60 m. between. The face of these walls lies about thirty centimeters south of the south wall of the eastern part of the house (IV *d*) and is carried as an overlap onto the latter, with the result that when seen from the court the east *anta* wall appears to be, like the western one, nearly 2.00 m. long. A row of unmatched poros blocks set to an even front line served as sill for the portico. Inside each *anta* is a roughly rectangular mass of rubble; there is no indication as to the purpose of these elevated foundations, though on the analogy of the closely related houses at Priene<sup>24</sup> where cooking hearths were frequently located in or adjacent to the *prosta*s, one at least may have served as such. What appears to have been the main altar of the house stood in the court, approximately on the central line of the opening in the *prosta*s and doorway behind.<sup>25</sup> It served as a western termination for the long curb or step which raised the southern part of the court above the northern. This "altar," *ca.* 0.80 m. square, was made of four roughly dressed poros orthostates—the northern one a re-used block—around a core of rough stones, leaving a depression of five to

<sup>24</sup> Wiegand-Schrader, *Priene*, pp. 291-292, "Als Küche hat in Priene oft die *Prosta*s gedient. . . . Der Herd besteht aus einem meist quadratischen, mit Lehm aufgeführten Bruchsteinklotz."

<sup>25</sup> This and a similar structure in house II *e*, described on p. 146, are referred to in Robinson-Graham, *Olynthus*, VIII, p. 188 as "hearths." The location in the courts approximately on the axis of the *prosta*s, as well as the small size of that in house II, seems to indicate that they served for sacrificial rather than for cooking fires. For this reason they are referred to throughout this report as altars.

ten centimeters at the top. The earth in this basin was very red, as if burned, and there were numerous traces of charcoal.

Two smaller rooms (IV *c*, IV *d*) to the east of the main room and its portico completed the square block of the house. The width of both, from east to west, was 3.30 m. to 3.40 m. with the south room *ca.* 3.70 m., the north one *ca.* 2.50 m. deep. The south room (IV *d*) is entered from the *prostas* by a doorway, the *poros* sill of which is cut for a door near the front edge, so that when open the valves projected inward only slightly beyond the jambs. The north room (IV *c*) must have been entered from the large room, but the dividing wall has been carried away below floor level and no trace of a threshold is left.<sup>26</sup>

At the west end of the *prostas* another door leads to a room (III *d*, *ca.* 2.90 m. by 3.10 to 3.30 m.) in what appears to be the neighboring house. The sill is broken in three pieces and is doubtless re-used, and the south jamb shows none of the large squared stones that are usual at corners and wall ends. The long stretches of wall dividing the eastern house from the middle one of the block give the impression of being so definitely conceived and executed that it hardly seems possible that this incursion beyond the line could have been originally intended, and more probable that the room in question was acquired from the owner of the middle house and connected with the eastern one in a subsequent alteration. On the other hand there is no trace of a doorway from this room connecting with the next house, though the fact that the walls are preserved here for a height of only one or two stones above floor level makes it impossible to say that some earlier opening may not have been walled up. To the north of this debatable room there appears, on plan, to be still another (III *c*), but the wall separating this from the large room in the east house (IV *a*)—preserved for most of its length—shows no opening. And while in the center of its south wall there is a gap, slightly over a meter long at the floor level, where a threshold block might have been expected, it is probable that this gap is fortuitous and that the foundations to the north and west of the area (III *c*), preserved now only to a level considerably below the original grade, are survivals of an earlier arrangement. It is also possible that the area belonged neither to the east nor middle house but was a shop opening on the street along the north edge of the west terrace. At one time also, the room to the south (III *d*) may have belonged with it. A stretch of wall foundation lying beneath the western side of the main room and *prostas* of the east house (IV *a*, *b*), just below the floor level, seems to mark the western limit of the house at an earlier period. The door to IV *a* would thus have been approximately centered without the overlap of the *façade* onto IV *d*. Or it is possible that in an earlier arrangement there were but two instead of three houses between streets C and D, the division being on the line of the west walls of III *c* and III *e*. In that case the main room and *prostas*

<sup>26</sup> It is possible that this room was not actually part of the house, but formed a shop opening on the street to the north; see below.

would have two rooms on each side, III *c* and III *d* balancing IV *c* and IV *d*. The house to the west might have followed a similar arrangement (see below, p. 136).

To the left of the passageway from the street to the courtyard of house IV lies a second major element of the establishment. This consists of a room (IV *i*) almost exactly square, *ca.* 4.30 m. on a side, facing toward the west, above which was a second story, probably similar in plan, reached by an exterior stairway. The door



Fig. 19. View Northeast Across Western Terrace from Southwest Corner of House II

sill—slightly off center in the west wall—opens on the southern half of the court. It consists of three blocks, which may once have been one and which in any case are doubtless re-used, set with upper surfaces about eleven centimeters above the floor. The double doors, giving an opening of *ca.* 1.20 m., were swung on the inner face of the wall. The floor is covered with a fine cement-like red pavement, excellently preserved. It lies from 0.50 m. to 1.00 m. below the level of the sloping street to the east and *ca.* 0.07 m. below the level of the court to the west. The east wall, that against the street, built of cut limestone headers and stretchers on the outside, is faced on the inside at the bottom with two courses of well-cut and carefully set poros slabs 0.30 m. high and 0.55 m. and 0.30 m. long, in imitation of headers and stretchers (Fig. 19).

Above these two courses the wall is of rubble as are the other three walls from the floor up. Traces of fallen red wall plaster were found in the room. The peculiar character of this east wall and the fact that the poros facing extends behind the abutting side wall at the north strengthens the suspicion that it antedates the latter. However, all the walls are carefully built, incorporating a number of large dressed stones, and in the north door jamb the two halves of a broken hand millstone.<sup>27</sup> This north door jamb and the north wall are about 10 cm. thicker than the house walls elsewhere.

The stairway to the second story starts southward from the court about in line with the southern door jamb of the paved room and *ca.* 1.20 m. to the west of it (Pl. XI). The bottom section is a solid rubble pier 0.80 m. to 1.10 m. wide, bearing roughly cut limestone treads having an average rise of *ca.* 0.20 m. and a run of *ca.* 18 m. Six are preserved in place and two more, somewhat fragmentary and disarranged, reach a height of *ca.* 1.60 m. at a distance of *ca.* 0.75 m. from the courtyard wall. Presumably the topmost one formed the edge of a platform at which level the stair turned. It would seem not to have continued above the small room immediately to the west for lack of specific support, but rather to have turned to the east above a cupboard which separated the stair from the paved east room. The masonry of the lower run of steps formed the west side of the cupboard, the long boundary wall of the property formed the rear and a thin rubble wall built against the eastern room flanked it on the east. The opening was narrowed by a roughly cut poros pier, about one meter high, set as an eastern jamb; the floor appeared to have been made of stone slabs laid about 25 cm. above the level of the court; an uncut block across the bottom of the opening may have served as a sill. Among the tumble of earth and stone that filled the cupboard when the roof collapsed was a spherical cooking jar with handles, crushed but practically complete. The lintel of the doorway, as well as the stairs forming the roof above, must have been of wood. Since the floor level of the second story could not have been much less than three meters above the ground, considering the ostentatious character of the room below, the upper run of steps could not have gone east, but must have run north along the face of the building, to reach a balcony and probably a doorway directly over that of the room below. The balcony might have been carried by simple cantilever extensions of the floor beams.

Beyond the stairway the south side of the court is faced by a two-room structure (IV *g*, IV *h*) the front wall of which parallels the building on the north but in a broken line, due probably to a well already existing on the site. The courtyard doorway to this south building has only irregular poros blocks for a threshold, while that between the outer and small inner room has no sill at all. It is quite possible that both lacked doors and that the rooms served only as a stable and storage shed. The un-

<sup>27</sup> See *Olynthus*, VIII, pp. 327 ff.

usually large size of the wall stones and large upright stone jamb to the inner door may have been designed to resist hoof blows. A fragment of flat roof tile found near by, showing the edge of an opening with slightly raised rim, suggests that the inner room was lighted from above.<sup>28</sup> In the outer room a large water pitcher, complete but in fragments, was found 0.10 m. above the floor, with several almost whole smaller vases.

The well is circular, about 0.75 m. in diameter, built of relatively small stones. As no trace of a lip or curb above ground was found, it may be that the top of a large pithos was used to protect the opening as was done in the west house in this block. In fact, fragments of a badly broken pithos were found in the well itself at a depth of 4.00 m. to 4.70 m. below the court; at the latter depth a hard limestone anta capital was also found. It seems quite probable that the capital originally stood on the jamb of the opening immediately west of the well, indicating that whatever its function, the south shed—and probably the whole court—was given a good architectural finish. At higher levels in the well only a small terracotta saucer and numerous fragments of terracotta figurines (a female head, a horseman, etc.) were found. An inflow of water quickly followed excavation.

On the west side of the court a wall, 1.50 m.-1.60 m. in front of the party wall, forms a long narrow room (IV *f*) entered at the north end by an opening, for which the south wall of the main building forms one jamb. This doorway has no threshold and probably had no door. It seems probable that the whole room is an addition to the original plan, for the front wall destroys the symmetrical effect of the façade of the main building, which because of the overlap onto the wall at the east, appears to have been consciously designed. Without this room also the “altar” would be not only approximately on the axis of the prothos of the main building but almost exactly equidistant from the east and west sides of the court, and the court as a whole would form an orderly architectonic composition.

Throughout the area of the court, the earth from 0.07 m. to 0.42 m. above the original level was filled with roof tiles mingled with fragments of large pottery jars and pieces of small pithoi with round pithos covers of terracotta and blue shale.<sup>29</sup> Within the room at the west of the court (IV *f*) a pithos rim *ca.* 0.30 m. in diameter lay inverted on the floor, and outside, near the “altar,” was another of *ca.* 0.50 m. diameter, nearly whole, standing upon the ground. Fragments of still a third large terracotta vessel were found against the house wall in the northeast angle of the court

<sup>28</sup> A number of similar tiles with openings for light or ventilation have been found at Olynthus and Meczyberna (Robinson-Mylonas, *A.J.A.*, 1939, p. 54; 1943, p. 85) and at many other sites. For illustration see Curtius-Adler, *Olympia*, Vol. II, p. 17, fig. 10a, and Wiegand-Schrader, *Priene*, fig. 330. The circular form of the hole in the latter instance may be an incorrect restoration based on a fragment of an elliptical opening as found elsewhere.

<sup>29</sup> The roofs throughout the acropolis were characteristically covered with flat pan tiles (cf. Fig. 21) and polygonal cover tiles.

just by the cover stone at the opening of the courtyard drain. These last fragments may have belonged to a great bowl or basin for family washing or to a large jar used as a receptacle for rain water supplied directly by a spout at the corner of a gutter running across the house façade. There is no other evidence of rain-water collection nor any indication of its removal, except by the drain from the low northeast corner of the court. The roof of the main house-building may have had an east-west ridge and drained partly into the court to the south and partly into the street to the north, or with a single slope have drained wholly to the north; that on the two-story east building (IV *i*) may have had a transverse ridge also, which on the court side may have extended over the balcony; or again there may have been but a single slope draining into the paved street. In both cases the single slope seems the more logical.<sup>30</sup> The south rooms probably were roofed with a single slope toward the court, and the west room likewise with a low sloping roof starting from the west wall at a level below the eaves of the south rooms.

The constituent elements of the residence revealed here are remarkably clear and well differentiated. Colophon was still a roomy, non-commercial city, free from the extreme condensation necessary in a city crowded within its walls as at Priene, while the complexity of paved courts, colonnades and reduplicated chambers elaborated to display the wealth of the owner, as at Delos, had not been reached. Here the elements are such as might almost as well be found on a farm as in a city, set openly about a yard rather than coalesced into a unified structure around a central court.

The first element is the house proper, with the main living room and workroom of the mistress and her maid preceded by a porch or *προστάς* open to the south, where the winter sun might shine through the doorway to warm the inner room, while in turn there would be shade from the more vertical rays of summer.<sup>31</sup> Attached to this were two chambers, the *thalamos* of the master and his wife, probably entered from the main room, and a second, perhaps the *amphithalamus* of Vitruvius,<sup>32</sup> a chamber for other members of the family or for guests, entered from the *prostas*. In this particular instance an extra chamber to the west, also entered from the *prostas*, seems to have been required, perhaps because of a large family or unusual hospitality on the part of the owner. It may have been this group of rooms alone, thought of as separate from all dependencies, that was known to the Greeks as the *οἶκος*, and it is quite possible that in principle the distinction between the *oikos* group of rooms at the north, and all other rooms and courts, as at Delos, persisted in the unified plans of later periods.<sup>33</sup> The second element is the isolated two-storied structure. From its

<sup>30</sup> A slope of about 1:4 for Colophonian roofs seems indicated elsewhere; see below, p. 152.

<sup>31</sup> Cf. Xenophon, *Mem.*, III, viii, 8-10, where the porch is called a *παστάς*. According to Vitruvius, VI, 7, 1, the depth of the porch should be two-thirds the width.

<sup>32</sup> VI, 7, 2.

<sup>33</sup> The four-room type *οἶκος*, with or without other rooms, appears many times at Priene. Cf. Wiegand-Schrader, *Priene*, Chapter X, *passim*.

size and workmanship the lower room was evidently the room where friends of the master were entertained, the *ἀνδρών* or *ἀνδρωνίτις*,<sup>34</sup> and faced toward the west to receive the afternoon sun.<sup>35</sup> The upper story would then seem to have been the *gynaikeionitis* as described by Lysias, *οἰκίδιον ἔστι μοι διπλοῦν, ἴσα ἔχον τὰ ἄνω τοῖς κάτω κατὰ τὴν γυναικωνίτιν καὶ κατὰ τὴν ἀνδρωνίτιν*.<sup>36</sup> The name *πύργος* seems sometimes to have been applied to a structure in the upper story of which the women dwelt, as indicated by Demosthenes: *αἱ μὲν ἄλλαι θεράπαιναι (ἐν τῷ πύργῳ γὰρ ἦσαν, οὐπερ*



Fig. 20. Stairway in Middle House (III)

*διαιτῶνται) ὡς ἤκουσαν κραυγῆς, κλείουσι τὸν πύργον*.<sup>37</sup> This name is particularly appropriate to a free-standing structure of more than one story but might have been used for any small section carried a story above the main roof of a house. Of the minor dependencies little need be said; the sheds about the court probably served for stables and servants' quarters, storerooms and possibly kitchens, though it is also quite possible that cooking was done in the *prostas*. At Colophon the well is a usual feature; the altar of Zeus Herkeios, the familiar courtyard god, was found throughout the Greek world.<sup>38</sup>

<sup>34</sup> Aeschylus, *Cho.*, 712; Xenophon, *Sympos.*, I, 13.

<sup>35</sup> Vitruvius (VI, 7, 3) says that *exedrae* should face to the west, and (VI, 4, 1) that winter dining rooms and bath rooms should face southwest.

<sup>36</sup> *De caede Eratos.*, 9. The possibility is suggested that in an arrangement such as is found at Colophon the main body of the house was known as the "*oikos*" and the separate two-story section with the *andron* below was called the "*oikidion*."

<sup>37</sup> XLVII, 56.

<sup>38</sup> For a general discussion of Greek house plans, see D. M. Robinson, supplement to the

In this plan one can easily see foreshadowed the more developed type where the entrance passage is roofed over and closed with a door at each end, the *θύρα αἴλειος* and the *θύρα μέταυλος*,<sup>39</sup> while the niche beside the outer door becomes the porter's lodge. The court surrounded with continuous buildings develops colonnades on east, west, and south sides to match the deeper *prostas* on the north, and the stairway may serve not only the upper story of an isolated *pyrgos* but a story above any part around the court. Something of all this development is to be seen in the houses of Olynthos, already a more advanced type than those at Colophon, and later at Priene and luxurious Delos. But whereas Priene houses are closely related to the Colophonian, the Olynthos houses seem to follow another prototype in which the primitive *oikos*, instead of consisting of main room with *prostas* in front and two side rooms forming a square block, had three or more rooms set side by side with a portico or *parastas* (*pastas*) all across the southern front.<sup>40</sup> It is far from surprising that the primitive house type of Macedonia should be different from that of Ionia and altogether likely that there were several types to be found on the Greek mainland different from either of these. As for the primitive Athenian house, if it were subjected to any outside influence, we might expect it to reflect the eastern rather than the northern plan. The resemblance of the Delian houses to those of Olynthos may result from a general spread of Macedonian types in Hellenistic times, due to the conquests of Alexander.

### MIDDLE HOUSE (III)

The entrance to the middle house of the three in the block between streets C and D is from the southern end of the paved street D over a threshold made of two ill-matched poros blocks, the cuttings on which indicate a double door between wooden jamb posts set *ca.* 1.20 m. apart. Beyond this gate a cobbled declivity, narrowing from *ca.* 2.30 m. to *ca.* 1.70 m., leads west between the wall of the middle house "*pyrgos*" (III *h*) on the north and the retaining wall of the next terrace to the south. The level of this next terrace seems to have been about a meter higher than the threshold to the middle house (Fig. 21). The grade of the cobbled slope drops about twenty centimeters in a distance of about 4.50 m. to the southwest corner of the "*pyrgos*," where the stairway to an upper story began. The stairway was *ca.* 0.85 m. wide (Figs. 20 and 21); its two lower steps, built of hewn conglomerate blocks *ca.* 0.20 m. high with

article *Haus* in Pauly-Wissowa, probably Supplementary Vol. VII, pp. 252-278 (here cited from an advance reprint), and Rider, *The Greek House*. Cf. Robinson and Graham, *Olynthus*, VIII, particularly parts III-V.

<sup>39</sup> Lysias, *De caede Eratos.*, 17.

<sup>40</sup> The word *παρὰστος* obviously means "that which stands along side of, or against," and as such it might signify a flanking passageway or colonnade as in a stoa, a flanking wall as at the side of a deep portico, or even the jamb of a door. In spite of much argument to the contrary I do not believe that it ever meant a pilaster or specifically the *end* of a wall.

treads *ca.* 0.26 m., project into the entryway. At the far side of the stairs a curb of small rectangular stones forms a step from the cobbled slope to a small cobbled platform about twenty centimeters lower, which in turn opens by a similar downward step of twenty centimeters to west and north. Here the court widens to *ca.* 6.50 m. reaching from the terrace retaining wall on the south to the boundary wall of the neighboring house on the north. A roughly paved way *ca.* 1.50 m. wide continues downward along the foot of the terrace wall, descending about two centimeters to the meter, with the



Fig. 21. Core of Stairway and Southwest Corner of Andron of Middle House (III), from the Northeast

court to the north following a similar gradient some 0.15 m. below. An irregular line of large uncut stones forms the curb of the roadway, behind which at the eastern end are a few flat stones and farther west only the native rock. A portico, with opening *ca.* 2.30 m. wide, stands before the first story room of the “*pyrgos*” (III *h*). A step of irregular poros blocks, level on top and set to an even west edge, raises the portico floor above the court to the level of the roadway. The primary function of the portico was doubtless to carry the wooden upper part of the stairway and a balcony for access to the second story of the “*pyrgos*.” For this reason it is set as far north as possible, with only the continuation of the “*pyrgos*” wall set tight against the neighboring house for north anta. At the south the anta is a face wall which laps the stone core of the stairway for *ca.* 1.40 m. while projecting beyond it to form an alcove within the portico (Fig. 21), reminiscent of that beneath the stairs in the first house considered. The doorway from the portico to the “*andron*” with a large re-used poros threshold in

two pieces, showing two sets of hinge sockets for an opening about 1.00 m. wide, is in turn not centered on the portico opening but set as far south as might be, with its south jamb in approximate alignment with that of the portico. Thus from the portico the opening appears evenly spaced between stair core and north anta, and from within would not seem unduely crowded toward the corner of the room. The fact that the stairway actually starts two steps above the floor of the portico and "*andron*" shortens the run needed to reach the upper story. But if the second floor be assumed to be only 2.50 m. above the ground floor, the stair could still not land there until it had passed a step or two beyond the southern jamb of the portico. The upper door could not then center over the lower one, though it might bear such a relation to the portico opening. The balcony surely continued to the north wall, though whether a roof extended over it is wholly conjectural.

The "*andron*" itself (III *h*), *ca.* 4.00 m. deep by 4.25-4.50 m. wide, though nearly as large as that next door (IV *i*), is by no means so carefully built, nor is its plan so accurately rectangular. The street wall is of small rubble instead of the limestone ashlar to the north; the floor, at a level about 1.00 m. above that of its neighbor, shows no indication of paving, nor was there any interior facing to the walls but plaster. The disparity in preservation of the side walls is curious. That along the street to the east stands to a height of *ca.* 0.30 m. above the floor in the north half and double that height in the south (Fig. 17); the south wall is *ca.* 0.80 m. above the floor at the east and 0.90 m. to 1.00 m. at the west end (Fig. 21), where the core of the stairs and solidly built south face wall of the portico have resisted overthrow. But the north anta of the portico has but a single square poros block, *ca.* 0.15 m. high, at the end, and continues eastward at the same height in small stone rubble laid against the still lower party wall, to disappear entirely before reaching the eastern wall. The west wall, in which lies the door sill, likewise stands only *ca.* 0.15 m. above the floor, and this is particularly surprising in the southern section where the stair core and south wall rising 0.75 m. higher should have protected it (Fig. 21). There may be an indication here that the front wall and north wall, shielded by the portico and by the "*pyrgos*" to the north, were of clay brick, while more exposed walls were of stone. This certainly is not impossible, but no special deposit of clay was noted and inferior workmanship, with the use of small stones, poor bedding and so forth on interior walls, may account as well for the difference in preservation.

For a distance of about 14.30 m. the wall of the east house property runs at right angles to the paved street D, and then bends in an acute angle to run northward in a second straight line. It can hardly be doubted that these dividing lines were laid out when the paved street was surveyed, probably at the time of the southward extension of the great stoa, and that the adjacent houses were designed and built or rebuilt or altered to conform to the new allotments. The southern angle of this party line serves to mark the division of the outer elongated trapezoidal "*pyrgos*" section,

by which the middle property is reached from the paved street, from the main more or less rectangular section of the lot. The northern part of the latter area is occupied by the house proper, the southern part, likewise approximating a square, by the main court and its dependent sheds. The court, particularly along its southern side, shows many traces of earlier arrangements. At the west, about 0.60 m. in front of the terrace wall, is an inner wall of large stones nearly a meter high, rising from bed rock. Other stones seem to carry this construction at right angles into the court for a couple of meters. Doubtless all this is the base of an earlier terrace wall. East of this projecting line a mass of large stones, more or less well dressed, and about  $0.30 \times 0.40 \times 0.60$  m. in size, mixed with the yellow clay of stereo, forms a sort of low rectangular platform. Directly in front and *ca.* 0.60 m. lower is a circular well, built of uncut stones. The bottom of this was reached at a depth of 3.20 m. where a large unhewn stone extended under the side walls on three sides. Fragments of water pitchers and one or two small fragments of fourth-century vases were found in the fill. The top of the well has a curb of flat stones flush with the ground, unworked except for the one at the south which has in its face a rectangular sinkage, 0.14 m. wide and 0.19 m. high, framed by projecting mouldings. This stone was evidently intended to hold some wooden construction, possibly to facilitate use of the well for cold storage of food. Or, since the orientation of the well agrees with that of the remnants of large stone construction to the south, it may be that at one time a water conduit on the terrace above projected a long spout northward, to pour into the well, and that a strut from the well curb supported the spout's end. A large slab on the north, directly opposite, has beneath it a low channel *ca.* 0.35 m. wide, as if for an overflow from or into the well. The north line of this slab is continued to east and west by blocks forming a curb to raise the level of the ground about the well some twenty centimeters above the northern part of the court. The top of the mass of stones south of the well is about 0.60 m. higher still; in the eastern portion close to the terrace wall the broken top of a pithos, originally perhaps 0.70 m. in diameter, was found sunk slightly below the surface, but it cannot be said whether a shed ever stood upon this rough platform, or whether in an earlier arrangement of the terrace wall it formed the base of a bastion of the upper terrace. From the northeast corner of the platform a line of poros blocks extends to the southward angle of the party wall as a curb, separating the sloping "*pyrgos* court" from the more nearly level "*oikos* court." The top of the curb, where it meets the platform, is *ca.* 0.35 m. above the level of the well curb; at its northern end it is *ca.* 0.10 m. lower, while the general level of the court, paved with cobblestones at least in the northeast part, is 0.20 m.-0.40 m. lower still. Curb, platform, and well are all laid out on a rectangular system which seems to antedate those of terrace wall or party line.

From the west wall of the court at about its mid point, a wall runs eastward parallel to the terrace wall, for a little over three meters and then turns at right angles

south for a meter and a half, where it comes to a good square end. Doubtless this wall forms the northern boundary of a shed,—perhaps a store room or stable,—but whether the whole area (III *g*) between it and the terrace was roofed over, and if so whether the east side was carried by posts or by a wall which has since disappeared, cannot be said. The remaining north wall actually rests upon an older one, and its line is prolonged beyond its eastern corner by one or two stone courses which were probably buried beneath an irregular continuation of the grade about the well. Within the shed there are foundations of a wall parallel to the north wall, another line 1.50 m. south of it, and a third nearly on the line of the west party wall. An early floor level *ca.* 0.10 m. above that of the well curb was also indicated by burned material, but all these indications of earlier structures within the shed had been covered by an earthen fill at least 0.20 m. higher, rising perhaps nearly to the level of the rough platform and remains of wall and stereo at the base of the terrace wall. A bronze coin of Colophon found on top of the old wall and below the later floor dates from the first half of the fourth century.<sup>41</sup>

From the north wall of the shed another short wall runs north, forming an alcove *ca.* 1.40 m. square between it and the west party wall. In the eastern half of this area (Pl. XI, *v*) the earth to a height of over half a meter was dull brick red in color as if baked by fire. This earth was bounded on the west by what seemed to be slabs of plaster, 0.06 m. thick, more than 0.35 m. high and *ca.* 0.75 m. from south to north, set on edge; probably this was a heavy plaster facing for a raised clay hearth. The western half of the alcove was paved with cobble, as at one time the whole court perhaps may have been. Doubtless the alcove was roofed, but lacking a door there could have been scant shelter within. Since so constricted an area would have made a cramped kitchen at best, it seems not impossible that here stood an earthen altar beneath an *aedicula*, with narrow space to the west for the officiant. There is no other altar in the court.

The house proper consists of but three parts, all nearly square and nearly equal in size. First is the *prostas* (III *b*), not a shallow portico as in the first house, but a room, 3.80-4.10 m. wide by 4.10 m. deep. A short wall at the western side reduced the opening to 2.65 m. The sill, of fair-sized limestone blocks, could have carried no column or post to divide the span, since its straight southern edge is set almost at the inner, rather than at the outer face of the wall. A poros column drum, 0.40 m. in diameter and 0.40 m. in height, which came to light at the western end of the sill, could not therefore have belonged to this house, but must have slid and rolled from some structure higher on the hill. In the sheltered southwest angle of the *prostas* a foundation or basis of uncut stones forms a rough square about 0.90 m. on a side and 0.50 m. high. On the floor beside it was the inverted rim of a pithos *ca.* 0.50 m.

<sup>41</sup> Milne, Period III, *ca.* 389-*ca.* 350 B.C.: *Num. Notes and Mon.*, No. 96, pp. 49-59.

in diameter. To the east, on the level of the sill, there were found a large pot completely in fragments, a small terracotta lamp decorated on the top, and a small vase. Above the foundation were clay brick, largely decomposed into red earth, but sufficiently preserved for the size, 0.055 m. thick by at least  $0.15 \times 0.20$  m. in area, to be noted. The presence of brick suggests that the basis was used as a hearth, or possibly an oven. In the diagonally opposite corner of the *prostas* there is another basis, much better built, and as now preserved consisting of three large cut poros blocks, 0.17 m. high, encasing a core of rubble against the wall (Fig. 19). There was no trace of superstructure and the wall itself is preserved only 0.25 m.-0.30 m. above the floor. The purpose of this basis is obscure, its workmanship is worthy of an altar, but it may have served as the domestic hearth, if the opposite one had some different function.

Double doors, *ca.* 1.20 m. wide, set upon a large poros threshold, unbroken but reworked for its present position, led into the main room (III *a*) to the north of the *prostas*. This room, *ca.* 4.90 m. square, is nearly the size of the corresponding room in the first house (IV *a*). The door is set upon the axis of the room rather than on that of the narrower *prostas*. The second room (III *e*), to the east of the *prostas*, 3.60 to 3.80 m. by 4.80 to 4.90 m., is considerably larger than any of the subsidiary rooms in the east house. Perhaps its size and that of the *prostas* were intended to compensate for the small number of rooms. The doorway in the center of the west wall is fitted with a well-cut limestone sill, which, though broken, shows no sign of re-use except for a second bolt hole; the opening was *ca.* 0.75 m. wide. The north wall of this room and the walls of the large room and *prostas* are preserved only a few centimeters above the floor level, but it is certain that there were no further doors in them. The wall facing upon the court, however, together with its return to the south jamb of the doorway to the side room is preserved to a height of *ca.* 0.50 m. to 0.55 m. above the floor level. On the outer face it is made of roughly dressed flat-faced squared blocks of poros of various sizes laid in two courses, with single large blocks at the corner and next the threshold (Fig. 19). The inside of the wall is well built of large uncut blocks of limestone; above this base the wall was presumably of rubble. An anomaly is to be noted in the fact that the line of the east wall of the *prostas* is not continuous with the east wall of the large room, nor does the north wall of the *prostas* carry through as the north wall of the side room. Instead a single stone, forming a bit of wall of half the normal width, serves to separate the adjacent corners of the two rooms. Such an arrangement has all the appearance of being a makeshift one. It seems likely that the south wall, the southwest corner, and perhaps the threshold of the side room of the middle house were already standing before the present division into house lots was laid out, and the long walls separating the east house from the middle one in the block built, and that the line of the west wall of the side room originally continued northward to join the foundations north of the large room; excavation beneath the floor of the latter room (III *a*) might well disclose the continuity of the foundations (see above, p. 125).

In front of the prosta three poros blocks of irregular length and width, hollowed on top, were laid to form a shallow gutter in the court. The line of these blocks is not quite parallel with that of the house wall; it does not reach to the east edge of the prosta; and it is continued westward only by irregular stones laid to guide the flow of water to an opening, 0.15 m. wide and 0.40 m. high, purposely built in the party wall. Between the gutter and the prosta was a composition pavement which spread beyond the gutter toward the east, while a row of blocks in line with the face of the house wall formed an irregular step from the level of the pavement about three centimeters below, to the sill of the prosta, seventeen centimeters above. Elsewhere the court was roughly paved with poor mortar and chips of stone, except for an area of cobblestones in the eastern part.

### WEST HOUSE (II)

In spite of the fact that the lot in which the west house was built is the most regular of the three in the block,—a simple rectangle of approximately ten by twenty meters,—the plan is the least intelligible. For there are not only the problems raised by earlier constructions, but it seems quite possible that the site was partially re-occupied after the desertion of the other houses, with the attendant confusion of makeshift alterations. As usual the court occupies the southern half of the area, the *oikos* the northern. The level of the court is very slightly lower than that of the others in the block, with the result that the sloping street C to the west, at about the same level near its northern end, is nearly a meter above it at the entrance gate, while the terrace wall at the south must have risen two meters or more above the court. The descent from the street to court is effected by three straight steps built of nondescript blocks, flanked by inward returns of the street wall, and with an irregularly curved platform serving as a fourth step at the bottom. A similar platform in the street at the top provides a raised approach to the first step; on this the threshold of the gate—if there was one—must have been placed. Two structures were built in the southern corners of the court against the terrace wall, that to the west (II *f*), a simple storage shed or stable about 2.60 m. by 3.40 m. inside, without any threshold to the door, and that to the east (II *g*), the “*pyrgos*,” with “*andron*” topped by a second story. The “*andron*” is considerably smaller than in the other houses in the block, being only 2.75 m. by 3.75 m. inside. No composition floor was found and the sill of the doorway, which, as elsewhere, faces west, is made of two ill-matched pieces of poros without any rabbet and with hinge holes placed well toward the outer face. But thanks to the shelter of the terrace wall in the southeast corner, about one running meter of plaster was found in place at the base of the east wall, and two meters on the south wall, and more was preserved on the earth floor where it had fallen. The fact that the plaster was not applied directly to the stone but to a ground coat of clay doubtless favored its detachment; without a roof above rain would quickly loosen it. It is there-

fore evident that the room must have been filled with wreckage from the terrace above almost as soon as the roof was broken; perhaps one catastrophe accomplished all. Where preserved the wall decoration consisted of a horizontal band of patterned or marbled panels set about a meter above the floor, crowning a dado of panels, probably white, divided by three incised lines 0.034 m. apart. Plaster on the upper wall was colored red. In some places the horizontal band appeared almost white, but this was probably due to fading. Some of the fallen plaster was yellow, suggesting that the upper wall was not wholly red but may have been broken into large areas of different colors. The second story was reached by a stone stairway built against the terrace wall. Three steps and part of a fourth are preserved; probably the whole flight was built of stone. The run and rise are equal, *ca.* 0.19 m. by 0.19 m. There could then have been twelve treads in the distance from the face of the bottom step to the face of the wall, with a consequent height of about 2.45 m. Another step in the thickness of the wall would give something over 2.60 m. as the height from floor to floor, quite adequate for a room of its size. A few stones that suggest a wall before the door probably belong to an earlier construction; doubtless there was no portico nor balcony here.

The “*oikos*” complex to the north of the court comprises the customary four parts. A wall running north and south divides the area in two. In the west half, to the north, lies what is presumably the main room (II *a*), approximately 5.00 m. square. Nothing above floor level is left of the rear wall, northern end of the west wall, or the northern half of the east wall; and of the south wall, though the part west of the doorway is preserved, the threshold and all above the foundation but a stump of the wall to the east of the doorway have disappeared. Before this room lies what may be considered the *prosta* (II *b*), *ca.* 2.80 m. deep. The opening to the court is all at the eastern side, *ca.* 2.75 m. wide. The curb, so far as preserved, consists of an old poros doorsill set on edge (Fig. 19), pieced out with a small poros block at the west. What is most curious is that the front wall turns inward at the west side of the opening to form a sort of sheltered alcove—perhaps for cooking—within the *prosta* II *b*. As a special convenience a terracotta drain pipe was built in the front wall, 0.25 m. above the pavement level outside and perhaps flush with the floor within.<sup>42</sup>

The two rooms in the eastern half of the house were both nearly square and unusually large for secondary rooms, being 4.15 m. to 4.30 m. wide, with the northern room (II *c*, *c'*) *ca.* 4.40 m. deep, the southern one (II *d*, *d'*) *ca.* 4.80 m. It is possible that these two rooms did not form part of the house but constituted a separate unit—a shop perhaps—entered from the street to the north. If they did belong to the house the northern room must have been entered from the large room to its west (II *a*); from it in turn was the only entrance to the southern room. The sill to the doorway between the two consists of a fine large poros threshold block that has been set on

<sup>42</sup> Cf. *Olynthus*, VIII, pp. 205-206.

edge (Fig. 19). The masonry on which its ends rest suggests that it is in its original location but has been tipped up in the course of a reconstruction to compensate for a rise of 0.20 m. to 0.30 m. in floor level, nearly to that of the prostas of the adjacent middle house. The wear on its upper edge indicates a considerable period of use in its present position. In its original position the hinge sockets would be on the south side of the threshold, that is, the doors would open into the southern room. The west-jamb wall of this doorway is faced on the south with rectangular blocks in three courses, the east-jamb wall is of small rubble up to the level of the top of the threshold as it lay in its first position, and above is roughly built of two courses of large irregular blocks. These upper courses doubtless belong with the floor level accompanying the tipped position of the sill, and may in turn be contemporary with the general layout of the block of houses resulting from completion of the stoa, since the top portion of the party wall separating this room from the middle house is also of larger stones than the part below. On the other hand, the west-jamb wall certainly is as old as the first position of the sill and might be considered earlier if it were not for the fact that the foundations support the threshold block only at its ends with no masonry between, indicating that there was never a continuous wall in this location. Across the room to the north of this division, however, there is a wall parallel to it (between II *c* and II *c'*, Pl. XI), which has every appearance of being later. Not only is its location, dividing the square room, anomalous, but its eastern section, poorly built of small stones and preserved to a height of *ca.* 0.30 m. above the top of the up-tipped sill, rests on earth and abuts the larger stone construction of the party wall without any bonding. But 0.30 m. below the bottom of this late wall there is another wall on the same line, much better built and including in its masonry a certain amount of poros. In the western part of the room the upper wall, poorly built and preserved little, if at all, above the floor level, is laid directly upon the lower wall, with no intervening layer of earth. For purposes of dating, particular importance attaches to two bronze coins found just north of the eastern section of wall, at a depth *ca.* 0.20 m. below the bottom of the upper wall and *ca.* 0.10 m. above the top of the lower one, i. e., at about the floor level belonging to the tipped sill. Both are coins of Colophon to be dated between *ca.* 330 and *ca.* 285 B.C.<sup>43</sup> Likewise in the southwest corner of the large western room (II *a*) three other fourth-century bronze coins were found in a pot, on or near the floor level. It can be assumed that these had remained in place from the abandonment of the house, unlike the many coins found on the site which may have slipped or been washed from place to place. Two are dated *ca.* 330-285 B.C., one *ca.* 389-*ca.* 350 B.C.

In order to determine the chronology of building periods on the acropolis, the northeast corner of the eastern room II *d* of the western house was excavated rapidly

<sup>43</sup> Milne, Period V, Group C: *Num. Notes and Mon.*, No. 96, pp. 67-69, 70-72.

to virgin soil, which was reached at that point approximately three and a half meters below the grade at the commencement of the excavations. No clearly marked floor or sharp stratification was found but field notes permit a schematic correlation of walls and earth levels (Fig. 22). Just above stereo a bit of a gold ornament and a blackened area were found, indicating a floor at this level. Then for a height of perhaps 1.20 m. the earth contained only early sherds—one fine one with a geometric pattern and part of a goose, *ca.* 0.20 m. above stereo, others with groups of dots and angular parallel lines, and pieces of “marbled ware,” characteristic Lydian pottery decorated with thin varnish in wavy combed bands,<sup>44</sup> all belonging to the seventh and early sixth centuries, the period of Lydian occupation. Between 1.40 m. and 1.80 m. above stereo there were many broken tiles and stones and in one section oyster shells and other shells, the earth at the top of this region being very sandy. In the succeeding layer from 1.80 m. to 2.10 m. above stereo, there was little pottery except the head of a fourth-century figurine; the earth continued sandy. From 2.10 m. to 2.50 m. above stereo, there were both early sherds and sherds of fine polished black ware with stamped patterns, in earth that contained much red clay. The black ware obviously dated from the fourth century; nothing to bridge the gap from the sixth century had been found. In this upper stratum six coins appeared, one from Klazomenai, one from Magnesia on the Meander, and four from Colophon of the first half of the fourth century. From 2.50 m. above stereo to the level of the ground before excavation, all finds were of the fourth century.

The sequence of adjacent walls has had to be reconstructed largely from photographs. At the bottom of the pit, resting on stereo, there was a wall running east and west across the middle of the room, with another meeting it at right angles running northward approximately on the line of the party wall above (Pl. XI,  $\xi$ , indicated in open line). These two walls stand for a height of roughly 1.30 m. in earth which contained only early sherds, and these infrequent except near the bottom. It can hardly be doubted that these walls formed part of some structure built in the seventh or sixth century, with a floor some twenty centimeters above stereo. On the north side of the pit the cross wall ( $\circ$ ) between II  $c'$  and II  $d$ , the north and south rooms of this section of the house, is carried down at least as far as the top of the walls just mentioned, and perhaps below it—the level of the bottom is unrecorded—that is, to a depth of about 1.00 m. or more below the bottom of the tipped threshold block, an unusual depth for house foundations. Moreover, as has been said, the absence of masonry directly beneath the threshold indicates that an older doorway in an older wall has been rebuilt at a higher level. The floor level which accompanied the older door must have passed not far above the top of the sixth-century cross wall  $\xi$  and eliminated anything that may have been standing above that level. The east wall of

<sup>44</sup> H. C. Butler, *A.J.A.*, XVIII, 1914, p. 435, fig. 8.

the room rests upon the top of the older wall, though its direction is slightly different. Above this second floor level—about 1.40 m. above stereo—fragments of roof tile begin to appear.

Another cross wall ( $\pi$ ) begins at the level of the top of the sixth-century wall ( $\xi$ ) slightly south of its line and at a somewhat different angle. It might therefore

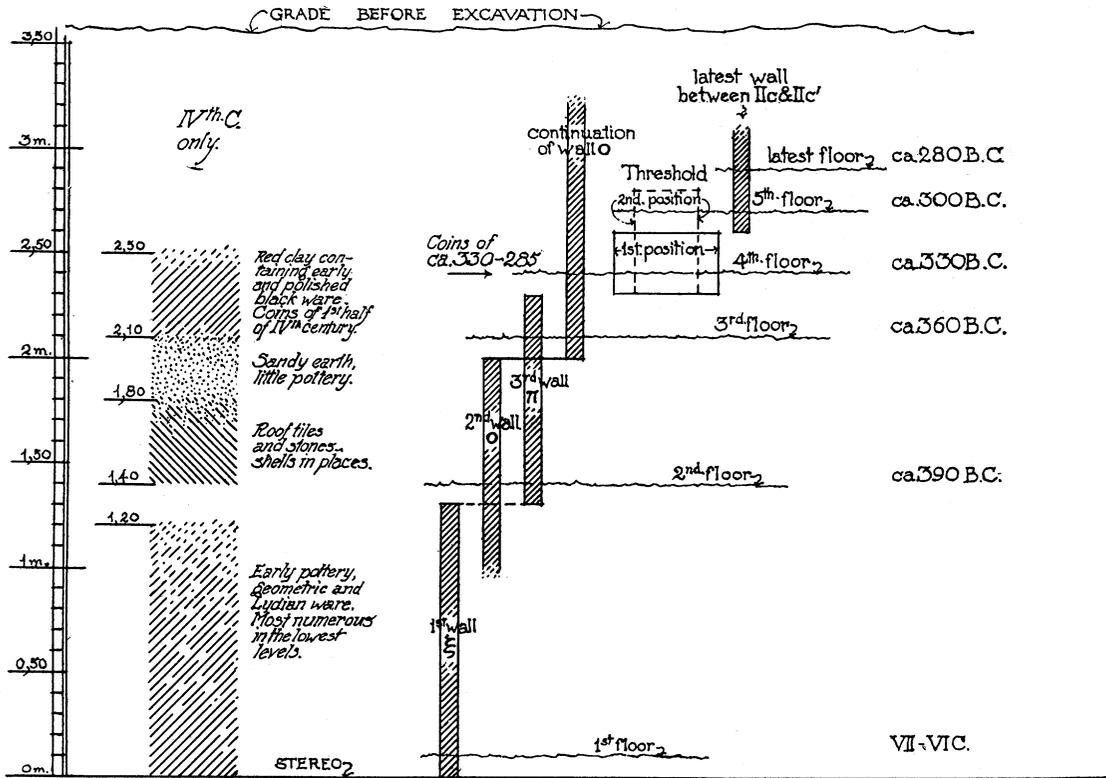


Fig. 22. Diagrammatic Section of Pit Dug to Stereo in West House.  
All Levels and Dates are Approximate Only

be supposed to be contemporary with the second wall ( $\omega$ )—the one with the door—were it not that it lies too close to it to form a reasonable part of the same complex. Since the general tendency shown in the Colophonian houses is toward square rooms, it seems much more probable that the north wall of the room of which this third wall formed the southern boundary was the lower part of the wall cutting across the north room between II  $c$  and II  $c'$ ; but as the north room was excavated to only a little below the latest floor level, this relationship is merely an assumption. If the assumption is correct, there would be a floor level belonging to this third wall ( $\pi$ ) between twenty and eighty centimeters above the top of the first wall ( $\xi$ ), and perhaps ten centimeters less above the second floor level. The second wall ( $\omega$ ) would have had to be cut

off at this height so that the new floor could be carried across it, while the side wall at the east would continue standing.

Beneath the level of this hypothetical third floor the earth contained, as has been said, many broken tiles mixed with large stones—presumably wall tumble—and sandy soil. The inference is that the house of the third floor level was a rebuilding following an earthquake or landslide, with the wreckage of walls and roof of the house of the second floor filled in and levelled off with about thirty centimeters of sandy earth. But as wall number three ( $\pi$ ), which would belong with the third floor, stops 0.20 m. above, there must have been a fourth floor level at about that point. The wall accompanying this fourth floor re-established the line of wall number two ( $\sigma$ ), at the north side of the pit, going down just below the third floor, i. e., 0.40 m. below the new one, to continue the structure of the older wall. Corbels were built inward from the jambs of the older doorway in wall ( $\sigma$ ) to carry the ends of the large poros threshold, originally laid flat. At this time the wall across the room to the north would be eliminated. Finally comes the floor level for which the threshold was tipped up. And possibly at this time, or more probably at a still later period when most of the walls in the vicinity had tumbled, the poor wall across the north room was built, its doorsill, if it had a door, marking a level above that of the tipped-up threshold. An evidence of reoccupation found in the southeast corner of the room (II *c*) of which the presumably latest cross wall formed the southern side, near the bottom of the stone work—therefore at the floor level—and close enough to the wall to be protected from landslides from the south, was a cache consisting of a large bronze ring, a bronze handle, numerous iron implements, including a hatchet blade, and three bronze Colophonian coins of the late fourth and early third century.<sup>45</sup> At approximately the same depth—actually 0.05 m. lower—a large two-handled stannos was found, and a little to the west, a few centimeters higher, two more Colophonian bronze coins of *ca.* 330-*ca.* 285 B.C. The cache is the sort of collection that might be made among the ruins of a deserted city. In front of the late cross wall at its western end, the earth was blackened by quantities of burned material, and here as well as to the north of the wall numerous fragments of rough pottery were found.

On correlating the minor finds with this schedule of rebuilding, it becomes apparent that the first cross wall and side wall were built in the period of Lydian domination, and from the number of early sherds found even in higher strata we must conclude that there was at that time a considerable settlement upon the hill. But the complete lack of any later pottery before that of the fourth century combined with the depth of earth (1.20 m.) accumulated between the first and second floor levels, in which early sherds alone are found, indicates long desertion of the site after perhaps a rather brief period of occupation. Possibly the early occupation marked an attempt to insure the independence of the city by fortifying the acropolis after the overthrow

<sup>45</sup> Milne, Period V, *ca.* 330-*ca.* 285 B.C., Groups A, C: *Num. Notes and Mon.*, No. 96, pp. 63-72.

of the Lydian power in 546 B.C., an attempt abandoned when Colophon was reconquered by Harpagos for the Persian king a decade or two later.

Between the second and third floor levels the presence of early ware and roof tiles was noted. The roof tiles are probably not to be connected with a sixth-century house or they would have been found at a lower level. Between the third and fourth floor levels were the coins, mentioned above, of the first half of the fourth century, and fragments of black stamped ware. The fourth floor should be dated therefore about 350 B.C. or a little later, the second and third somewhat earlier in the century and the fifth, contemporary with the building of the stoa, probably within a decade before or after 300 B.C.

As for the possible period of reoccupation of the house, the only clue is the coinage found on the acropolis. Of 362 recognizable coins only two, a silver Colophonian coin of Persic standard and an electrum piece from Lesbos, can be dated earlier than the fourth century and only sixteen can be assigned with assurance to dates later than 285 B.C. These are, in order of date, eight coins of Antiochus II (261-246), two coins of Pergamum (284-263?), one coin of Colophon (Notion, 2nd century), one coin of Smyrna (2nd-1st centuries), one of Chios (after 84 B.C.?), a Byzantine coin of the fourth century after Christ, and an Austrian Kreuzer piece dated 1816. The coins of Antiochus II are the only ones in sufficient quantity to suggest a reoccupation. In his time remains of the houses, deserted and perhaps ruined thirty or forty years earlier, might still tempt to desultory rebuilding on the old walls. Four of these coins were found scattered in the earth above the "*andron*" (IV *i*) of the eastern house on the west terrace, two in a trench on the hillside above the west terrace, one in the sanctuary on the east side of the hill, and one in the front wall of the *prostas* of the house under consideration, near the point where the drain from the *prostas* to the court passes through it.

A further indication of various building periods is given by the technique of the walls. It has been observed that the south face of the cross wall west of the tipped-up threshold (between II *c'* and II *d*) is made of rectangular blocks dressed to a flat face (Fig. 19), while the wall to the east of the doorway is for the lower half of the sill height of small rubble stone work indistinguishable from that below, with two very irregular courses of large uncut blocks above. These last, as has been said, doubtless belong with the fifth-floor level, while the smaller rubble and the cut blocks probably were placed with the fourth floor. The west face of the wall between II *b* and II *d* is also made of flat-dressed rectangular blocks (Fig. 19). The lowest row of blocks is *ca.* 0.40 m. high and rests on rubble foundations, then comes a row of blocks *ca.* 0.20-0.25 m. high, and above this course are remains of small-scale rubble. Evidently when the wall was built the ground level to the west was at or near the bottom of the large blocks. But in the *anta* prolonging the wall southward, also built of flat-dressed rectangular blocks, the bottom line has been raised about 0.20 m., and beneath the *anta*

there are no foundations. Presumably the main body of the wall belongs to the fourth floor level of pre-stoa date, while the anta is a post-stoa addition—belonging with the fifth floor level—built of re-used blocks. Of the latter date, probably, is the south wall of II *d'*, though a threshold block built into it on edge (Fig. 19) and the foundations are doubtless older. Why this wall should be so much wider than the normal house wall—0.65 m. as opposed to 0.40 m.—is a mystery. It is possible that it merely fitted wide foundations which had been built not for a normal wall but for a wide poros sill perhaps bearing columns. Other examples of squared masonry, which may be survivals from pre-stoa constructions, are found in the north and west walls of the prostas. The west face of this west wall along street C, though it was the street wall of the house, is of rubble to the south of the rear wall of the prostas, but north of that point is built of rectangular blocks, including some of poros, which increase in size in the northern part of the wall. It would appear that the northern section of this wall is post-stoa construction re-using pre-stoa material, while the section along the prostas is of an earlier period. It should be noted that there is no bond between these two sections. Perhaps the line of the street itself dates only from the later reorganization.

Directly in front of the prostas is a section of cobblestone pavement (Fig. 19), which, because of its high level—nearly even with the prostas sill—cannot be a survival from an early period. Presumably it once covered the whole area between the east section of the house, the west wall, and the steps from the street into the court. Along the south side of this area and cutting diagonally across its southeast corner to empty into a large drain in the street outside, is a surface gutter, cut in irregular blocks of poros. This is a continuation of a section of gutter, made of three long poros blocks, lying south of the east part of the house, which in turn receives, through a hole built in the party wall, the surface drainage from the court of the middle house. A variety of techniques is shown in the blocks which form this gutter. The three blocks in the eastern part of the court are well cut and of nearly equal length (1.35 m., 1.45 m., 1.50 m. from east to west). Along the north side of each is a raised band *ca.* 0.13 m. wide, as if a sill or the edge of a wall were to be set upon it; the main area of the gutter, about 3 centimeters lower, is *ca.* 0.38 m. wide, and beyond it is an irregular margin of the block a centimeter or so lower still, evidently intended to be covered by the plastered surface of an adjoining pavement. The trough in section is a slightly flattened semicircle fifteen to eighteen centimeters wide, with rounded edges. The distance between the trough and the raised band is but half that to the other edge. The three gutter blocks in the middle house and the remainder in the west house court are all shorter, irregular in length and width, apparently random blocks recut, without raised band for superstructure or depressed edge for overlap of pavement. Moreover the cutting of the trough in these others is rough throughout, and while in some places it is wider than in the three long blocks, it degenerates to a simple V cutting on the

four blocks at the bend by the entrance steps to the west house, where it would be particularly liable to overflow. On the basis of workmanship alone one would be inclined to associate the three long stones with the pre-stoa limestone ashlar work, and the rest with the later revision. In that case the three long blocks must have been reset, since the later level is about 0.20 m. higher than the earlier. But it is doubtful if they were moved far; their good preservation and neat jointing suggest that they were not subject to much handling. Furthermore, it may be noted that while the combined length of the three is too great to reach from the party wall at the east to the east side of the anta, and too little to reach to the west side of the anta, it just agrees with the interior width of the room to the north (II *d*). This suggests that in a former arrangement the west wall of this room continued south across the court, perhaps to the line of stones before the entrance to the “*andron*.” It is also possible that the gutter originally lay *ca.* 1.40 m. farther north and that the unusual width of the wall there results from foundations that were intended to carry a normal wall or sill with this gutter running along its foot. These suggestions add little information about the pre-stoa arrangement of the area, nor could any reconstruction of the earlier plan be attempted without further excavating below the upper level, but all indications confirm the theory that construction of the stoa was accompanied by an extensive rebuilding of the whole east end of the west terrace, with a general alteration of plans, and perhaps a conversion of the functions of structures. These alterations were accompanied by a distinct technical degeneration, caused perhaps by the amount of work to be done, and aided by the amount of old material to be re-used.

Other variations in building technique are shown in the long stretch of retaining wall which supported the upper terrace at the south of the block. In general plan it appears as a straight line; originally it was doubtless of an approximately even height, averaging something under three meters, but closer examination shows several distinct divisions. At the west, the section stretching from the wall of the west shed in the west house to within a few centimeters of the party wall between the west and middle houses (Pl. XI, 1) is built of large rectangular conglomerate blocks with rough-hewn faces, set in regular courses to a true front line. Then to the eastward comes a stretch twice as long (Pl. XI, 2), built of large and smaller unworked limestone pieces laid in what is now, and probably always was, a slightly undulating line. At its western end this stretch is partly masked, as previously mentioned, by the base of another wall seemingly of similar technique resting on native rock, and adjoining this, by an older structure of uncertain form made partly at least of large rectangular blocks *ca.* 0.30 × 0.40 × 0.60 m. in size, set about a core of native rock. The extreme western end of the terrace wall, not shown on plan, running from the street to the ashlar section first mentioned, is of a technique similar to that of the long middle section. This middle section continues eastward to a point opposite the face of the portico of the “*andron*” of the middle house, where it stops with a joint running clear through the

wall. A meter farther east there is a similar joint, but the stone work between the two (Pl. XI, 3), as well as that to the east (Pl. XI, 4), is all of small rubble laid without much care and with quite an irregular front line. In chronological sequence, the vanished structures enclosing native rock in the western section of the middle-house court might be the oldest, with the stretch of square masonry to the left (1) contemporary or next in order. Then, with the removal of the oldest structures comes the extension of the terrace wall on the line of the squared masonry, west to the street and eastward along the middle court (2); and finally this was completed to the paved street at the east (3, 4).

Before the *prostas*, at the far side of the court of the west house, stood an "altar" like that in the east house, though somewhat smaller (*ca.* 0.65 m. on a side), made of four rough stones set on edge, enclosing a sunken basin filled with earth and stone. South of it was a small area showing evidence of fire. Just to the southwest of the altar a well or cistern was found, the shaft built irregularly of stone, and the curb, above ground, formed of sections of a large broken pithos. A terracotta pipe was inserted below grade on the eastern side, but whether this was to conduct water into or out of the well was not determined. The well filled quickly with water apparently rising through the sandy bottom. Even before excavation the earth above this area was moister than elsewhere and of a dark slatey color. Another well, evidently dating from an earlier period, was found partly built over by the stone stairs of the "*pyrgos*." This one was square in plan, well built of even blocks which were somewhat blackened as if by fire. As it was full of water little excavation was attempted, but simple cleaning revealed the end of a terracotta pipe built into the north side. Still a third structure seems to have formed part of the hydraulic system of the west house. This was a cistern, formed of a terracotta drum *ca.* 0.55 m. in diameter, sunk in the ground close to the northwest corner of the "*pyrgos*." Below the ground level were three round openings. In that to the south was a pipe which apparently formed part of the cylinder; this may have formed a connection with the pipe in the square well to the south. The opening at the west side had also been connected with a pipe, but this had fallen away and was found at a slightly lower level. Possibly this led to or from the well to the west. No pipe was found by the third opening, in the eastern side, and it is possible that this hole was purely accidental. Apparently the cistern was intended to receive water from the two wells, but why wells should overflow or why the excess water should be saved instead of being conducted directly to the street is not clear. Possibly in flood season the water became roiled and the cistern was used as a settling basin. The broken rim of a large pithos served as a curb around it.

At the east end of the yard was the lower part of a very large pithos slightly over a meter in diameter, standing upon the ground (Fig. 19 and Pl. XI); the broken rim was found near by. To the west, in the angle south of the entrance from the street,

was the rim (diameter *ca.* 0.30 m.) of a small pithos. A shallow circular basin 0.75 m. in diameter, hollowed out of poros, was found tipped on edge against the east side of the anta projecting from the south wall of the house. It is possible that this basin once stood upon the anta, but it is not at all certain. It may well be that it reached its present position from quite another building higher up the hill.

Throughout the earth with which the yard was covered there were quantities of broken roof tiles, including at least one hypethral tile toward the west (see above, p. 128, note 28), and an unusual number of well-finished poros building blocks which had evidently fallen from above. One of these, found directly upon the pithos rim of the western well, and doubtless somewhat responsible for its smashing, had a drafted and rusticated surface with flat face but rounded edges, and on one surface a lewis hole, suggesting that it came from a building of considerable size.

### STRUCTURES ON UPPER TERRACE (I)

In the hope of finding the source of some of this poros material, it was decided, toward the end of the season, to explore a section above the southern retaining wall. Naturally nothing was found close above the latter, as the earth as well as the top of the wall itself had been carried away well below the floor level of any structures that had stood there. But on the prolongation of the wall (*ca.* 0.60 m. wide) along street C, about 6.75 m. south of the face of the terrace wall, a sill block *ca.* 1.25 m. long was uncovered, and after an interval of *ca.* 1.15 m. another sill *ca.* 1.50 m. long lay in the same continuous line (Figs. 23, 24). At the north edge of the first sill a heavy wall ran eastward. Between the ends of the two sills and set back half a meter from the street was a poros block 0.75 m. square which served as the mouth of a well (Figs. 23, 24). This block was 0.80 m. high, set half above the ground. Down through it a reasonably smooth circular shaft 0.55 m. in diameter was cut, and beneath it the well, built square of moderate-size uncut stones, continued to a depth of 2.60 m. below the top of the stone. In it a small bronze vessel was found ten centimeters from the bottom, at a depth of 2.00 m. two large stone balls (0.20 m. and 0.22 m. in diameter), and at a depth of 1.50 m. to 2.00 m. the fragments of a large pointed-bottom amphora. The top of the well block was smooth, but the sides were roughly hewn. The lip was chipped but showed no sign of rope marks. Between well and street was a low mass of limestone rubble, like the base of a wall; and running directly east, its south face flush with that of the well block, was another rubble wall only *ca.* 0.40 m. wide. At a point *ca.* 3.00 m. east of the street, a terracotta pipe was found running into the south side of this wall, and just beyond, a meter or so of wall *ca.* 0.50 wide, running south. The north end of this last wall was not uncovered, nor were the light wall from the well and the heavy one north of it traced farther to the east. The two sills were narrow, unrabbeted, about 0.25 m. wide, and showed no cuttings for hinge sockets or bolts, though squared jamb bases stood upon their ends. At the south end of the





Fig. 24. Well, Threshold, and Wall at Southern End of Street C, from Northwest



Fig. 25. "Poros House" and Adjacent Structure to the East, Looking Southeast Toward Wall of Higher Terrace

a palaistra. For these balls must be either missiles for war machines, which in the fourth century is improbable, or implements made for weight throwing or some other sort of athletic sport, like that for which the large stone balls found in the Stabian baths at Pompeii were used.<sup>46</sup>

#### POROS HOUSE (I a-e)

On the west, at the end of the street, is the entrance to another establishment, presumably a private house, which in material and technique was superior to any other found (Fig. 23). Unfortunately the northern half had been carried away, down to or below the original floor level, and when it was discovered, the season was so far advanced that only a part of the area could be uncovered. Even that part was not surveyed or carefully studied. The street wall, like that at the end of the street, seems to have been faced on the outside with squared limestone blocks, though hardly a stone of this remained in place. The threshold was a well-cut poros block, of just the width of the wall, obviously not re-used but cut for its position (Fig. 26). On the top were two square holes for wooden door jambs and at the ends of a rabbet along the western edge (Fig. 25) two rectangular holes for hinge sockets. A few centimeters below was a second step, cut from a single poros block slightly wider than the threshold and continuing some 0.60 m. beyond it to the south. This step in turn was barely 0.10 m. above the level of the court. The court (Fig. 23, I c) was paved with irregular flat stones over which was a layer of very hard composition. On the left as one enters was a platform of cut poros, *ca.* 4.00 m. long from east to west, *ca.* 1.25 m. wide and raised *ca.* 0.25 m. above the court (Figs. 23 and 25, I d). An anta preserved for two courses (*ca.* 0.30 m. wide) projected west for the width of the lower entrance step. It was finished on its western face with an orthostate. To the south of the platform lay a room about 3.25 meters square (I e), apparently corresponding to the "andron" in the other houses excavated, but different in that it faced north instead of west and apparently carried no second story. Within the area of this room much red plaster was found, but none in situ. Near the north wall, at floor level, were the two stone balls previously mentioned (Fig. 26, lower left). The outside face of the wall was built of carefully cut poros ashlar with a picked surface dressing and bevelled edges at the joints. Probably a very thin coat of plaster smoothed and whitened it all. In place of anathyrosis the blocks were roughly broken away at the back of the ends, so that there was contact of one block with another for only a few centimeters along the front edge of the vertical joint. The top surface sloped down slightly toward the back, to assure close contact along the front edge of horizontal joints. The back of the blocks was left quite unshaped to meet the inner rubble face of the wall. There

<sup>46</sup> Mau, *Pompeii in Leben und Kunst*, 1900, p. 174. "Zwei schwere Steinkugeln . . . bestimmt . . . auf der Bahn gerollt zu werden: eine unserem Regelspiel ähnliche Übung." Maiuri, *Pompeii* ("Visioni Italiane"), p. 47, shows another stone ball in the court of the Forum Baths.

were no dowels or clamps on blocks in situ, but a block with a cutting for a hook clamp was found in the earth in front of the platform. It may well have fallen from an upper terrace. At the east end the north face was preserved for two courses above the platform. It is probable that only the lower part of the wall was faced with poros, as few blocks of this material were found lying in the area. Among the loose pieces found on the platform or in the court before it were several sections of poros door trim with three flat faciae on the face (Fig. 25). The setting lines for the jambs,



Fig. 26. "Poros House," Looking Northwest Toward Sill of Prostas with Excavations of Bathing Establishment Beyond on Lower Terrace. In Extreme Lower Right Corner, Blocks of Stone Well; in Extreme Lower Left, Two Stone Balls. Upper Center, Baths; Upper Left, Poplar Trees (5) at End of Terrace. Compare Fig. 8

preserved on the door sill, show the opening to have been 0.90 m. wide. A poros anta cap suitable for the anta on the platform was also found, and a poros Ionic capital of corresponding size (Figs. 25, 26). The anta cap was crowned with the usual mouldings above a broad, very flat facia; the capital was completely shaped, but volutes and abacus were left as plain surfaces, probably originally painted; in the bottom was a dowel hole. The capital was found lying upside down on the pavement of the court at the north end of the entrance step. It might have come from an upper terrace, but seems more likely to have been a corner support for the roof above the poros platform I *d*. The entablature was doubtless of wood. A clear span of nearly three meters is perfectly suitable in wood construction though over wide for classic stone proportions. One column between anta and pier or column at the northwest corner is

conceivable, but the only other piece of a capital that came to light was a Doric fragment, which doubtless came from the terrace above. On the east end of the platform two sections of poros column shaft were found, and just to the north of the platform another two (Fig. 25). These were neither drawn nor studied, but photographs show them to have been quite smooth on the surface, perhaps originally constituting a single monolith or at most two stones. The visible ends may be square breaks or cut ends that have been chipped; no dowel holes are to be seen. The total length of the four sections can be estimated at between 2.00 m. and 2.50 m.; the width seems to vary between something under 0.20 m. to 0.30 m. or a little more, the sections found on the platform having the larger diameter. The smaller diameter appears rather too small for the Ionic capital, but possibly part or all of the shaft may have belonged with it. A single poros block from the eaves of this or some other building, found here, gives some details of roof construction. The block is 0.80 m. long and 0.43 m. wide. At one end and at the rear (0.14 m. high) it is dressed smooth. On the bottom it is roughly chipped to a plane, indicating that it capped a rubble wall rather than one of cut stone. For 0.075 m. along the front edge the bottom was dressed and smoothed for projection beyond the face of the wall. The projecting part sloped downward *ca.* 0.01 m. to the front. The front face was a smooth facia 0.085 m. high, inclined forward about a half centimeter from the vertical. The top has a slope of about 1 in 7. It is roughly chipped except for a smooth band 0.03 m. wide along the front edge, for contact with the tile above. A similar band extends across the front edge of the roughly chipped end of the cornice, as an anathyrosis, but as it does not return at the bottom of the projecting part the joint on the soffit could not have been tight. At the back of the upper surface there is a rough band (0.12-0.13 m. wide) which stands about 0.02 m. higher than the rest of the top slope. In this are two roughly smoothed cuttings (0.02 m. deep and 0.08 m. wide) for the ends of rafters; these are 0.31 m. on centers, probably indicating two rafters to a tile if the spacings were related. The roof above this cornice probably had a pitch of about 1 in 4; it could not have been much greater or less. Many of the tile roofs of Degirmendere have much the same pitch at the present day.

On the north side of the entrance from the street, the wall against which the north jamb abuts runs west at a slightly obtuse angle to the entrance wall and step for a distance of four meters from the inner face of the threshold (Fig. 26). Here it turns north. It is faced on the court side with regular poros ashlar blocks about 0.60 m. long, with picked surface. Two courses are preserved in situ. Possibly there were never more. A single corner block of a third course was found slightly out of place at the north end of the threshold; this, however, may have been simply the return of the second course of the wall along the street which lay at a higher level. The north side of the wall is of limestone rubble. At the west corner a large poros block, two courses in height and of the full thickness of the wall, projects some 0.30 m.

westward like the base of an anta, and beyond it a poros sill of several blocks, *ca.* 0.30 m. wide and rising only a little above the court, continues the line to the west for perhaps four meters more. Here excavation stopped, and probably the sill stopped also at about this point.

The wall running north from the east end of this sill between I *a* and I *b* consists of two courses of poros the full width of the wall but not more than 0.50 m. in length. Then comes a poros threshold block *ca.* 1.75 m. long, like the entrance threshold with square socket holes for the jambs, low rabbet with rectangular hinge holes, and raised surface at the end where it was to be built into the wall. This threshold has clearly not been re-used. North of it the wall has been destroyed. To all appearances we have in the long sill the entrance to a southward facing prosta with the entrance to a bedroom (I *b*) at the east end, exactly as in the eastern and middle houses in the block on the terrace below. There would be room for a shed in the unexcavated southwest corner of the court but no place for an upper-story room unless it were above the shed. But if restored so, this house, though built with considerably more elegance, would be less extensive than its neighbors. On the other hand, the distance from the street to the west end of the prosta sill—about nine meters—is approximately the same as that from the north side of the entrance gate to the line of the retaining wall at the north, which would give the house the apparently usual square proportions. Also, as the distance between streets on this terrace is about 19 m. there would be just room for a second house of the same size adjoining it on the west. It is quite probable that the use of poros in the interior, with limestone ashlar on the street face of the walls, marks an earlier technique than that of all rubble or re-used material which the houses on the lower terrace show, and it may be assumed that the structures on this terrace and those above were little affected by the extensive changes which the building of the stoa entailed on the plateia level. Though less might be preserved, it may be that what could be found on and above this terrace would be of more interest than what was actually uncovered, as being of a slightly earlier period and better workmanship.

Another area on the same terrace to the northwest of the Poros House and reaching to the next street on the west (street B, Pl. IX) was investigated, but the remains there, like those on the same level, just to the west of the paved street D, were found to be so shallow as to present merely a confusion of fragmentary foundations of two or more periods. It is uncertain whether some of the walls formed part of the Poros House, with a small structure of a different nature on the next street, or whether they all belong to a separate house. Possibly if the excavation had been carried over the southern part of the terrace and connected with that of the Poros House, it would have become intelligible.

## HOUSES EAST OF STREET D (V-VI)

The section lying between the paved street D and the west wing of the great stoa (Pl. X) was perhaps more seriously affected by the rebuilding programme than any other. The southern part of it, however, along the paved street, clearly formed a house of the usual type. At the entrance from the paved street is a poros threshold made of two re-used fragments. One circular iron hinge socket was still in place, set simply in earth in a much larger rectangular cutting. The nearly rectangular court (VI *e*; *ca.* 3.00 m. wide at the southwest end, and *ca.* 2.25 m. at the northeast) is approximately 6.00 m. deep. It was unpaved and contained no well, but just inside the entrance were remains of a large pithos, 1.10 m. in diameter, which may have served for water storage. On the southern side are two rooms with a continuous front wall. The west one (VI *f*; *ca.* 2.40 m. by 2.70 m.) had a sill made of three irregular blocks of poros, without cuttings, set to span the older drain beneath the room, and in one corner a section of plastered floor was preserved. The other (VI *g*) may have had a regular threshold, but only the foundations for it remain. Possibly a large dressed poros block, nearly square in section, which had been cut on one side for use as a threshold, and which at the time of excavation was found in the street outside the entrance (Fig. 17), had been removed from this location. A large part of the room is cut off diagonally by the rear wall of the stoa, against which it was built. In it the rim of a pithos was found upon the unpaved floor. The opposite side of the court is occupied by the house proper, an approximate rectangle averaging 6.20 m. by 6.80 m. divided into the usual four parts. The *prostas* (VI *b*) is an approximate square, 2.75 m. to 2.90 m. by 2.80 m. to 2.85 m., with a sill of re-used poros blocks, of which but two, out of a probable original three, remain. The opening was not more than 2.00 m. wide, with a spur wall (the end of which has almost disappeared) like an *anta* at the southwest end. The main room (VI *a*), also nearly square, 3.70 m. on a side, has as a threshold a poros block that once evidently served some other purpose (Fig. 17). It is 1.07 m. long by 0.37 m. wide, and approximately square in section, smooth on the front and on the one visible end, quite rough on the back, and on the top dressed with a shallow rabbet and the customary hinge hole, bolt hole, and one jamb hole. From its dimensions it would seem to have formed part of a lintel or an *anta* or jamb post before it was recut to serve as a threshold. It was set with almost its full height above the level of the *prostas* floor, and unless the floor within the main room was raised to a level near its top, so that it might serve as a step, it must have formed a serious obstacle to communication. Toward the rear part of the room, a large pithos (1.20 m. deep) is sunk in the earth. It was cracked in three places in antiquity and mended with 12 lead hook clamps inside, and 3 dovetail clamps on the rim; occasional holes were plugged with lead. Nothing of significance was found in

the earth within. As the level of the rim is perceptibly below the bottom of the threshold block, either the floor of the room must have sloped markedly to the rear, or, as seems more likely, the pithos must be associated with an earlier floor level, perhaps contemporary with the earlier street, which, it has been suggested, ran beneath the whole length of this house on an undetermined line. Unfortunately the side room (VI *c*), opening off the main room, seems never to have had a doorsill by which the floor level might be established. This side room, equal to the main room in one dimension (3.70 m.) is only 2.15 m. in depth. The front side room (VI *d*), on the other hand, is slightly deeper than wide (2.95 m. to 3.10 m. by 2.65 m. to 2.75 m.). Its doorsill is made of two pieces, probably re-used parts of two separate threshold blocks, as indicated by the difference in the cuttings for hinge sockets and jamb posts at the two ends. It is set level with the front sill of the *prostas*, therefore well below the top of the threshold of the main room.

In spite of the small size and relatively poor construction of this house, a certain effort at ostentation is evident, for the outside walls of the front side room (VI *d*), both that toward the *prostas* and that toward the court (visible on entering from the street) are made of re-used poros blocks. And these are not merely facing blocks to be backed with rubble, but make up the full thickness of the wall, *ca.* 0.40 m. Doubtless they formed the wall blocks of some earlier structure or structures, built entirely of poros, to which perhaps the sill to the main room, and that found in the street outside the entrance, also belonged. The easternmost of the wall blocks originally formed part of a circular or apsidal building, since its outer face is cut on a curve of *ca.* 2.30 m. radius. On the top there are cuttings for a hook clamp at each end, and a square dowel near the middle with an associated pry hole.

The plan of the house as a whole seems to present on a modest scale the most regular picture of what the essential parts of a Colophonian house of the end of the fourth century were and how they would be arranged if not controlled by pre-existing structures, for in this case, except for the side walls and the wall between the rooms to the south of the court, no lines seem predetermined. The house proper, or *oikos*, is evidently laid out as a square facing south, with a cross wall from east to west dividing it into front and rear sections in proportions to one another as 3 to 4. A square room is then laid off on one side of each section, giving a *prostas* of  $3 \times 3$  and a main room of  $4 \times 4$  units with *thalamoi* off each, having proportions of  $3 \times 4$  and  $4 \times 3$  units respectively. The roof would doubtless slope to front and rear from a transverse ridge above the cross wall. Consequently with a constant roof pitch the front or southern face of the house would be somewhat higher than the northern rear. This disposition may explain at once the dictum of Xenophon<sup>47</sup> that "the part of the house facing south should be built higher, the part facing north lower," and that of Aristotle<sup>48</sup> that a house "should be sheltered from the north and not be of equal

<sup>47</sup> *Memorabilia*, III, viii, 8 f.

<sup>48</sup> *Economics*, 1345 a.

breadth" (in its subdivisions); that is, the northern section should be broader—or deeper—than the southern one, with consequent lowering of the height of the north wall.<sup>49</sup>

However, though the house proper seems unusually regular, the "*andron*" and "*pyrgos*" are certainly not disposed as they have been found elsewhere. The room which would seem to correspond best with the "*andron*" in other houses is that to the right of the entrance, in which there was a plastered floor. But aside from the fact that the room is much smaller than the "*andrions*" across the street, and faces northwest instead of west—which may be of no importance—it certainly bore no second story. On the other hand, in the corner of the court three steps lead across a retaining wall, on the line of the far side of the house, to a large irregular second yard behind the stoa (VI *h*). And starting from the retaining wall a flight of stone steps, similar to those seen elsewhere though less well preserved, mounted to a room above VI *d*. It is conceivable that the whole *oikos* was covered by a second story, but such a development in so small a house is much less likely than that there was but one second-story room, above the southeast corner of the building. It follows, then, either that the "*andron*" opened off the *prostas* in this instance, or that the *gynaikonitis* was not always above the "*andron*."

The curious angle at which the stairway is built against the northeast wall of the house is due to the fact that the northern part of this wall, from about the middle of room VI *d*, antedates the house and doubtless the stoa as well. From its square south end an opening, of indeterminate width, continued the line, and when the house was built, instead of filling in the opening to match the older wall, the stairway was run across it with a screen-like facing of slabs on the side toward the room. As the retaining wall at the northeast end of the court was not set exactly on the line of the older wall, the stairway bridging the gap between them was bias in regard to both.

The masonry of the stairway does not go below the level of the floor in the *prostas* and adjacent room. This together with the three steps up from the house court (VI *e*) indicates that the level of the eastern yard (VI *h*, V *i*, *j*) was at least half a meter above the latter, entirely covering all the remains of older pavements and construction that lay close behind the stoa (Fig. 15 and Pl. X). In its final stage the yard undoubtedly extended in an unbroken stretch to the line of wall south of V *h* that runs southwest from the point where the drain emerges from the rear wall of the stoa to reach, with an offset, the east wall of the house at about the middle of the rear side room (VI *c*). Actually neither this wall nor any other walls lying north or east of the house are preserved to the height of the final level of the yard, and the absence of doorways indicates that many of them have not been preserved even to the height of their original floor levels. Such being the case, it is profitless to try to determine the plans of the structures in this region in their various transformations, or even as

<sup>49</sup> See, however, Robinson and Graham, *Olynthus*, VIII, pp. 144-146.

they were in the final phase after the building of the stoa. It can be pointed out, however (Pl. X), that before the stoa was built there was an entrance into the area of the triangular yard from the northeast, by three or four steps down from the street of the terracotta drain (street F) which the stoa covered; also, that at some time a two-story structure had stood on the site of the second room of the stoa (VII *b*), the upper story of which, reached by a stone stairway from the triangular yard, may already have been abandoned before the stoa was built, though the lower room (V *j*), with its cobble pavement at a slightly lower level than the yard (V *i*), was probably still in use, related in some way perhaps to the paved room and portico below the south end of the stoa (VIII *a, b*). Even earlier—before the north boundary wall of the triangular yard and its return along the line of the terracotta drain were built—the east wall of the northernmost room of all (V *c*) probably continued south to a point near the wall that flanked the early stairway, with an entrance way between. At that time a line of stones, of which three are still in situ in the southern corner of V *h*, formed the curb of a portico or *prostas* before the large northern room, so that the whole complex may well have been a large house, with the room buried by the stoa (V *j*) the “*andron*” forming the lower story of a “*pyrgos*.” The small quadrangular room in the west corner of the yard (V *g*) might have been an addition at this period. There is little indication as to the function of the structures in this northern area after the stoa was built. If there was an entry from the lower town by an ascending road behind the stoa, they might conceivably have served as an inn. The three square rooms (V *d, e, f*) north of the house by the paved street would serve well as lodging rooms, but the purpose of what appear to be long, narrow rooms (V *a, b*) north of them is very obscure. It is barely possible that the northeast room (V *c*) had become a large court opening to the northeast directly toward the hypothetical ramping road behind the stoa, with a shallow portico (V *b*) at the west—the columns or posts resting on the wall that is an approximate continuation of the side wall of the house by the paved street—and behind it a similarly elongated main room (V *a*), the three bedrooms to the south opening off these. The remains of earlier paving previously noted in room V *d* lie *ca.* 0.80 m. below the tops of the surrounding walls. A few centimeters above this pavement and at the same level in the room to the east (V *e*) were heavy deposits of roof tiles beneath masses of tumbled wall stones, indicating destruction—perhaps by earthquake—at some period before the last rebuilding. Eventually there must have been an earth fill of over 0.80 m. in these square rooms and the narrow ones to the north, for though the walls stand to a height of 0.40 m. or more, above the level of the neighboring paved street, they still show no trace of doorways. The walls on the east, north, and west of room V *d* go down to the earlier pavement level, but that at the south stops *ca.* 0.30 m. above it, and rests simply on earth. This last wall continues thus all across the north end of room VI *a*, but its eastward section, forming the north wall of room VI *c*, rests on deep founda-

tions. These deep foundations may have formed a rectangular corner with a southward continuation across *V e* of the deep-lying wall under the long room to the north (*V b*), and this corner may have been the southwest corner of the rectangular area of an early *oikos* of which the northernmost foundations in this region formed the northeast corner.

#### HOUSES ON THE POINT (XI-XII)

It has already been noted (above, p. 103) that at the northern extremity of the north terrace an important early cobble-paved street, over two meters wide, ran on the line of the axis of the plateia, and that houses on the west side of this street were demolished and these foundations buried beneath the great stoa when the first part of its northern wing was built, while part of the street itself and a public structure of some sort lying to the east of it were similarly covered by the eastern section of this northern wing (Fig. 10). But north of the stoa the street continued in active use and houses on both sides continued to be rebuilt like the houses elsewhere on the acropolis. The northern end of the street has been washed and plowed off the edge of the hill, and of the northernmost houses only a few stones remain. This is true also for houses on the east and west shoulders of this terrace tip. Only at the southern end of the section, next to the stoa and next to the street, have remains of any completeness been preserved. Here there is one structure on each side of the street.

#### WEST HOUSE ON THE POINT (XI)

The foundations of the structure to the west are relatively intelligible, though preserved only to the height of a single stone in the western part, and scarcely higher along the street (Fig. 27). They date from two periods at least—before and after the building of the stoa—and since they are rarely preserved above the later floor level, it is not always possible to determine which walls belong together. However, they all obviously belong to a house (Fig. 10), normal in arrangement and size of rooms, but with a much smaller court than those on the west terrace. This is partly due to the fact that the rear wall of the stoa touches what was probably the original south wall of the property, and as a consequence the house lot was curtailed by 1.00 m. to 1.50 m. when the stoa was built, in order to allow a passage east and west between it and the stoa. As compensation the house was extended northward along the main street for *ca.* 1.50 m. At the northwest corner of the house a scrap of wall which seems to lie on top of earlier walls may indicate that the lot was somewhat widened also. The entrance to the courtyard (*XI f*) was from the passage at the south rather than from the main street. Beyond the threshold, which had disappeared, lay a little vestibule *ca.* 1.45 m. wide and *ca.* 0.80 m. deep, with a rough sill of three poros blocks at the north side. The court was nearly square, 3.70 m. to 3.90 m. by 4.20 m. to 4.40 m., paved only with earth. To the east lay a room (*XI g*) nearly as large as the court,



proper occupies all the northern part of the lot. The east wall following the line of the street is not parallel to the west nor at right angles to the south wall. A wall parallel to the west wall divides the house from south to north into two parts, the west section being somewhat the wider. The southern part of the western section (XI *b*) constituted the *prostas* (*ca.* 3.70 m. by *ca.* 4.20 m.) with a sill of irregular cut poros blocks. It faced south toward the court with an opening *ca.* 2.60 m. wide. North of it lay the main room (XI *a*), *ca.* 4.20 m. by *ca.* 4.50 m. The sill and much of the wall separating the two western rooms had disappeared. The eastern section appears to be divided into a number of narrow trapezoidal rooms by walls equally well—or badly—preserved. In reality these walls must have belonged to two periods, two earlier walls, at right angles to the central north-south wall, lying 0.80 m. to 1.30 m. south of two later ones, which are at right angles to the street wall. As a result of the revision, the southeast room, opening from the *prostas*, originally XI *d'*, had added to it XI *d*, and had become almost as large as the main room of the house (XI *a*). None of the interior door sills are preserved; even their locations are not marked, but north of the north wall of the house, approximately on line with the central wall, is a poros door sill, set below the level of the later house walls, and from its northern jamb a wall runs west parallel to the north wall of the house, forming a passage *ca.* 1.35 m. wide. As the passageway north of the stoa gave access to the house we have just been considering, and probably to another adjoining it on the west, so the passage north of the house probably once served another house still farther north and its western fellow. The remains of the later walls in this region are too fragmentary to permit analysis.

#### EAST HOUSE ON THE POINT (XII)

The structure to the east of the cobblestone street (Fig. 10) is of about equal size but is far less intelligible than that to the west, as it shows evidence of at least three building periods, in some of which it may have extended east beyond the excavated remains, and probably it was never a house at all. The street wall presumably persisted through all changes, though it is uncertain whether in the latest period it actually abutted the rear of the stoa or left an open passageway to the east, with the present southern end buried beneath a raised street level. Some fifteen meters north of the rear corner of the stoa the street wall is interrupted by the large poros sill of a doorway, over a meter and a half wide between poros jamb posts (Fig. 27, lower left corner). Parallel walls, *ca.* 2.00 m. apart, ran eastward from the jambs for undetermined distances. Probably the wide passageway between them gave access to buildings to the north and east. North of the entrance the line of the street wall inclines slightly to the west. Between the stoa and the entrance five walls meet the street wall at right angles. The northernmost of these, flanking the passageway, forms an integral corner with it; the next one toward the south may also have been con-

structed in connection with it, but the three others, preserved to equal height, simply abut against the street wall with through joints at their ends. They may have been added at various times. The central one of the three—the second to the north of the stoa, between XII *f* and XII *h*—is interrupted by a good poros threshold, *ca.* 1.25 m. long, broken in two pieces, *ca.* 1.60 m. from the inside of the street wall. The level of the top is but slightly above that of the street. The parallel walls to the north and south, however, are preserved somewhat higher than the central one. It is therefore evident that while the latter might have been covered by a higher floor when the others were built, no floor belonging with the central wall could have covered them. The southern pair flanking XII *h* are so close (1.70 m. apart) that their co-existence seems improbable. But not far east of the threshold a short north-south wall connects the two, and as this short wall would be meaningless with either end free, the walls it joins must have been simultaneously in use. Just east of this connecting wall there is a heavy poros threshold, broken in two pieces, in the southern wall at a slightly lower level than that of the one in the neighboring wall to the north, and in the latter wall, still farther east, there is an irregular four-block sill with an angular spur wall to the north, seeming to form a vestibule, like that at the entrance of the western house, though smaller.

About 4.50 m. east of the street wall the base of an older wall parallel to it is preserved below the upper floor level. By pit soundings this wall was found to run from the second wall north of the stoa to beyond the third. Its line is continued by the east wall of the room XII *b*, probably a survival of, or built upon, the older wall. In room XII *h*, south of the second wall, the old wall has disappeared, but its line is marked by a drain originally built against its west side. This drain has a plastered bottom and is faced on the west side by stones *ca.* 0.20 m. high, set on edge. In XII *h* it is *ca.* 0.15 m. wide, but after passing south through a culvert *ca.* 0.21 m. wide by 0.35 m. to 0.39 m. high, carefully built in the first wall, its western boundary swings outward until the plastered bottom has a width of *ca.* 0.80 m. It continues right up to the north wall of the stoa. With the substitution of the short north-south wall across XII *h* for the older wall there, and the removal of the old wall between the first wall and the stoa, the drain must have functioned badly if at all; the bottom was not extended beyond its original east line. The long north-south wall of the older system was met by at least two walls joining it at right angles on the west side beneath XII *f*, and by one coming from the east between XII *e* and XII *g*. A strip of composition floor at the level belonging with the threshold in the second wall covers the western part of this third east-west wall of the older system as well as the north-south wall itself north of the third wall, though curiously enough south of the third wall the floor coating appears to stop in a straight line above the western edge of the old north-south wall. The wall between XII *d* and XII *f* in turn seems to be built upon this floor, and should therefore belong to a third phase of construction. Another

wall parallel to the street lies at the eastern limit of the excavation, where all masonry above the floor level had disappeared. It seems to belong with the older system of walls and bonds with the east-west wall between XII *e* and XII *g*, which lies beneath the floor, and perhaps with another bit of east-west wall at its northern end, though the connection is not wholly clear. Where the first wall north of the stoa meets it, there is no bonding at all, but a clear joint on both sides of the north-south wall, showing that the east-west wall is a later construction, in spite of its careful provisions for passage of the drain.

No interpretation of the walls of any period of this structure is possible, as the number of small rooms into which it was divided does not accord with any well-known type of plan. That it was not a residence seems certain, that it was not a shop or series of shops is probable, but whether it housed some sort of industry or served some civil or religious function related to those of the stoa cannot be said.

### STRUCTURES ABOVE MAIN TERRACES

After the disposition and type of buildings to be found on the relatively flat northern and western terraces had been determined in a general way, it was decided to clear two long strips, five meters wide, through the brush across the shoulder of the hill, somewhat more than half way down from the saddle (3) to the north terrace (4—Figs. 7-8, and Fig. 27 above the excavation in the foreground). The longer strip ran from northwest to southeast to the east flank of the ridge (Plate IX *d, e, f*, and Fig. 27); the other, starting where the first cleared strip crossed the ridge, ran somewhat north of east down toward the west end of the western terrace (Pl. IX *a, b, c*, and Fig. 27). Unfortunately, as no survey of these clearings was made, the position has had to be approximated on the general plan from photographs only. In each strip three areas were excavated which in turn have been approximately located, in the first cleared strip from photographs, and in the second from the note book record that the easternmost trench (*c*) was dug "not very far" from the other strip, the central trench (*b*) about 40 m. from this, and the westernmost (*a*) about 20 m. still farther on. The plans of these trenches are copied from Dr. Blegen's notebook; the disposition and general character of the contents may be considered quite certain, but the orientation—not checked by any survey—may be inexact. However, it is doubtful if there are anywhere errors in location as great as five meters, or in orientation exceeding ten degrees.

In Trench *a* (Pl. IX) the farthest west in the east-west strip clearing, parallel walls running east and west about 1.75 m. apart were found, between which ten complete sections of a large terracotta conduit, and part of one at each end of the trench, were uncovered (Fig. 28). The sections are from 0.64 m. to 0.69 m. long, with a diameter of about 0.25 m. Each section is enlarged at the two ends to permit

tight sleeve joints, and each was reinforced with a raised band about the middle. Each section, moreover, had an elliptical hole in the top, *ca.* 0.10 by 0.14 m., closed by a lid, evidently cut from the pipe before it was baked. Usually these clean-out openings were near the center of the sections, in several cases actually crossing the raised band. Each lid had a small knob or handle. The lids were apparently cemented in place and the sections of pipe cemented together. All the lids were quite loose when uncovered,



Fig. 28. Terracotta Conduit in Trench *a* above Western Part of West Terrace, Looking West

but traces of whitish mortar were clearly visible. The conduit slopes very gradually toward the east. The slightness of pitch, together with the size of pipe and careful construction, points to its having served as an aqueduct following the contours of the hill to bring water from some spring in the heights behind the acropolis. The pipe was bedded in very sandy soil. The wall to the north of it was poorly built of small stones and may mark the north side of a street, though no indication of a pavement or street level above the pipe was found. The wall to the south was a terrace wall standing now to a height of about 1.50 m. above the bottom of the conduit, but perhaps originally reaching twice that height. It is built of rather small stones, except for a slight projection, about 2.00 m. wide, of very large stones toward the east end of the

trench. At this end also there are remains of an earlier terrace wall of large stones lying at a slightly different angle (Fig. 28, foreground left). There was no certain indication as to whether the conduit was contemporary with the earlier or later terrace wall.

In the next trench (Pl. IX *b*), the central one in the east-west strip clearing, a stretch of retaining wall was uncovered running east and west, parallel with the contours of the hill. About 2.50 m. from the eastern end of the trench it was met or continued at right angles by a wall to the south. East of this point the terrace wall was built of large roughly rectangular blocks; westward the stone work was smaller and more irregular. Part of this western section had fallen forward to the north and in scattered earth beneath the tumble were found one silver coin of Colophon of the second half of the fourth century,<sup>50</sup> four of bronze of the same period, and two bronze coins of Antiochus II. Near the western end of the trench, a parallel wall lay *ca.* 1.70 m. to the north of the terrace wall. This was also a retaining wall, having a true face on the north side but none on the south (Fig. 29); it was built of roughly squared limestone blocks and finished in a square east end and level top. About a meter and a half from this end a large limestone threshold, with rabbet and hinge socket holes on its eastern edge, spanned the gap from one terrace wall to the other. A little less than a meter below this threshold and about a meter to the east of it, another threshold of about the same length reached to a third terrace wall. The second threshold was of poros, with sill and hinge holes on the east edge, on both top and bottom, indicating re-use. Heavy traffic had worn away much of the upper surface to below the level of the rabbet. Sixty centimeters west of this block and *ca.* 0.25 m. lower, a cross wall served as a step below the threshold. The two thresholds evidently carried no doors in their present situation and formed no part of any roofed construction. Instead it seems clear that the trench chanced to uncover the end of a relatively level section of street or plateia at the foot of a terrace wall, which, at its western end, connected one section of a zigzag road leading up the side of the hill from below with another stretch continuing westward on a higher level. The thresholds were re-used blocks placed at changes in the slope to hold the surface of the road.

The easternmost of the three trenches in the east-west strip (Pl. IX *c*), quite close to the junction with the north-south strip, seems also to have uncovered roadway rather than houses. In it were three parallel walls running northeast and southwest. The two more easterly ones were built of very large stones with other large stones lying between and tumbled to the north of them. These two walls appear to have formed the opposite faces of a causeway, *ca.* 3.30 m. wide, running directly up the slope of the hill. A suggestion of a cross wall may indicate that the bottom of the ramp was about in the middle of the trench, though the western side wall seems to

<sup>50</sup> Milne, Period IV, *ca.* 350-*ca.* 330, Group A, half-drachma: *Num. Notes and Mon.*, No. 96, pp. 59-63.

continue a little farther north. The grade level at the start of the causeway, if such it was, is established by a fine poros threshold lying in the northeast corner of the trench, within a meter of the east wall of the ramp and at an angle to it. The threshold, only *ca.* 0.15 m. wide, was uncovered for a meter without reaching the southeast end. At the other end it was met at right angles by a row of three poros blocks, *ca.* 0.10 m. wide, forming the base of a very thin wall or the facing of a thicker one which had disappeared. The extremely small scale of this structure, coupled with its excellent workmanship and apparent lack of relation to neighboring walls, suggests that it may



Fig. 29. Middle Trench (*b*) in Cleared Strip above West Terrace, Looking West

have been a small free-standing shrine or aedicula of some sort set at a crossroads or minor concourse. The westernmost of the three major walls in trench *c*, about 0.50 m. wide, lay *ca.* 2.80 m. from the west side of the ramp. Connected with other walls to its west, it may have formed part of a building. But since it lay close to the edge of the trench and only a little above stereo on both sides, the plan was not revealed.

In the other long strip clearing, running more nearly north and south across the ridge of the hill, the northernmost trench (*d*, Pl. IX) started south from what was probably the second large retaining wall south of the west terrace, upholding another terrace at a level ten to fifteen meters above the latter. The top of the retaining wall had, of course, been carried away, and with it the edge of the terrace itself. Parallel to it, *ca.* 1.35 m. to the south, is the foundation of the north wall of a large structure, substantially built and 0.55 m. to 0.60 m. wide. Of the east end wall of this building, the foundation alone is preserved for a distance of some seven meters south from the

edge of the terrace. This foundation was built with an outer face of large, fairly well shaped blocks, 0.40 m. to 0.60 m. long; the inner part of the wall, of smaller rubble, has largely disappeared. Apparently the wall was originally at least 0.65 m. wide. Farther south, where the covering earth was deeper, the inner, western, face of the wall is preserved above the floor level, but the outer face is gone. The wall here was *ca.* 0.65 m. thick and built of irregular blocks of good size set to an even face. From the rear face of the rear wall—not the terrace wall—to the front of the front wall was a distance of *ca.* 11.00 m. The front wall was *ca.* 0.65 m. wide, and is preserved for two or more courses. Its south face is made of large rectangular limestone blocks, 0.50 m. to 0.70 m. long and *ca.* 0.38 m. high, extending about half way through the wall. The blocks are dressed with rounded faces like those of the great stoa. Probably the outside of the end wall was similarly faced. The inner face of the front wall is less well preserved, apparently like the inner face of the end wall it was not intended to show, and was probably covered with plaster. At a distance of *ca.* 5.65 m. from the southeast corner, the front wall ends in a large limestone block *ca.* 0.70 m. long, dressed with the usual convex face on the south, but on the west picked to a flat plane with a smooth band along the south edge. The smooth band doubtless formed an anathyrosis contact with a jamb or anta, probably of poros. At the base of the wall a poros slab, *ca.* 0.80 m. wide, extended westward. It was uncovered for a distance of only half a meter, but its size and the absence of cuttings indicate that it was a long sill or perhaps a stylobate, rather than the threshold of a doorway. Half way between the front and rear wall lay a third wall, *ca.* 0.65 m. wide, made of good facing blocks on inner and outer sides, with a rubble fill between. At a distance of 2.27 m. from the inside of the end wall this axial wall was interrupted by a poros threshold 1.21 m. long, 0.50 m. wide and 0.34 m. deep, with rabbet and cuttings for hinge socket on the northern edge. As the top of this threshold projected about five centimeters above the ground before excavation, the floor level to the south is probably preserved, while that to the north must be almost wholly gone. No floor was discovered in either region. The axial wall was uncovered for less than a meter beyond the doorway. But if the doorway was in the center of the front wall of the room into which it gave, the latter must have been 5.75 m. wide. Three rooms of this size—the minimum to permit a symmetrical facade—would form a building over 19.00 m. long, and the opening in the front wall would be in the neighborhood of 8.00 m. Since such an opening would require columns to uphold the architrave, the column drum of 0.40 m. diameter found on the prosta sill of the middle house on the terrace below (Pl. XI, Fig. 19) may quite possibly have rolled down from this building. Of course the building may well have been considerably more than 19.00 m. long, and it is not at all impossible that it continued along the terrace above the poros house, and was the source of the fragment of Doric capital found there. The foundations of the east wall appear to continue northward to the terrace wall, but the building probably did not. It is more likely

that a narrow way was left behind the rear wall so that rain water from the roof would not fall onto the terrace below. A gate may have closed the east end of this drainway. The line of the east wall is continued south beyond the front wall of the building by a wall of rough unshaped stones which may have been an enclosure or retaining wall but certainly did not form part of the building.

Farther south in the same cleared strip, a trench of some length was opened on the crest of the ridge (*e*, Pl. IX). Because of the narrowness of the strip, only sections of buildings were uncovered and no complete plan was revealed. At the northern end was a heavy retaining wall of massive uncut boulders for a terrace at a level between five and ten meters above that just considered. South from this and at right angles to it run the walls of a building about 8.00 m. deep and of undetermined width, evidently a public structure of some sort. At the east was a room *ca.* 2.50 m. wide running from front to rear of the building. Along the east side, and at the south toward the front, were foundations of unexplained nature, possibly indicating that a stairway of two flights once occupied this long room, or possibly being survivals of earlier structures. Beside it at the rear of the building was a room *ca.* 4.25 m. deep from north to south, and of undetermined width. It may have been square or elongated from east to west. In front of this room was another *ca.* 2.00 m. deep, presumably a portico or vestibule (Fig. 30, foreground). None of the walls were preserved above the foundations, and there was no indication of the location of any doorway. Before this building, at a distance of four to six meters, ran diagonally toward the southwest a low retaining wall made of extremely large uncut stones. Directly in front of the southeast angle of the building just considered, a particularly large stone, *ca.* 1.50 m. long, was set on end upon a flattened block, like a baetylic monument (Fig. 30, center). This upright stone marked the eastern termination of the massive retaining wall. East of it there were only small stones which might have served as foundations for the threshold of a gateway. The ground rose perhaps 0.50 m. from the building to the retaining wall and also sloped up somewhat from east to west. In this area were various groups of stones which may possibly have been foundations at some period but seemed more likely to be chance blocks or rough steps laid to hold the gradient of an inclined roadway. Before the gate or opening beside the standing stone was a little platform edged with irregular blocks in a curved line, as if for access from a street in the area between the north building and the retaining wall. South of the retaining wall the ground, at the top of the ridge, was fairly level. Here stood another building built of re-used material, including a good deal of poros. It was set parallel neither to the retaining wall nor to the building north of it, but was turned to follow the contour of the hill, with its long side to the northeast. This northeast face was not excavated; what there may have been there in the way of doors or other openings is quite unknown. In the northwest end, a little over 2.00 m. from the low retaining wall, was a door 1.25 m. wide with a threshold made of several

stones. Within, a wall divided the building lengthwise into a front part *ca.* 3.00 m. deep and a back part *ca.* 2.60 m. deep, which in turn was divided into a series of rectangular cubicles with doors in the corners opening from this front section. The first room was *ca.* 3.25 m. wide, with a doorway *ca.* 0.80 m. wide and a threshold of small stones. The second cubicle was of like size or a little smaller,—the wall between it and the third cubicle is very badly wrecked,—and no threshold remains in the doorway opening, now *ca.* 0.65 m. wide. The rear wall continues for the distance of a third



Fig. 30. Middle Trench (*e*) in North-South Cleared Strip above South End of North Terrace, Looking Lengthwise from Northwest. In Center, Upright Stone with Retaining Wall at Right. In Lower Half of Picture Walls of Large Public Structure

cubicle, and a few stones which may belong to the side wall are preserved at about three meters from the second one, but the front wall is altogether gone. Whether the building extended beyond this third room is doubtful, since at that point the grade begins to fall off sharply to the east, and the confused fragments of wall beyond it seem to belong to another system. It is possible that the wall dividing the first from the second cubicle continued, with a door in it, to the front wall of the building, perhaps to divide a closed vestibule from an open front wall beyond. Beside—that is, northwest of—this hypothetical cross wall is a mass of masonry of unclear form or function which may be the base of a stairway to a second story, mounting from the vestibule. In the diagonally opposite corner of this vestibule, just within and to the left of the entrance door, a small group of half a dozen or more terracottas were found on, or in, a very hard layer of lime and pebbles. They were so rotted that only

one could be dug out in a complete, though broken, condition. It had the form of a seated grotesque human figure. With this were fragments of two plaques, each showing a horseman galloping to right with spear in hand, with apparently a serpent below the horse, three small jugs (two with trefoil lip 0.085 m. high) complete except for broken handles which were found near by, and one jug badly shattered. One of the jugs was found to contain eight small bronze coins of the late fourth to third century<sup>51</sup> and a disk of lead. A similar jug was found at or beyond the south end of the building and two small jars of different shape, broken but complete, were found with a small intact saucer in the second cubicle. Other fragments of terracotta pottery and figurines, including a spirited bull, *ca.* 0.08 m. long by 0.075 m. high, were found in the earth of the area, but these could not be said with assurance to have been in the building while it was standing, since similar terracottas were found in every part of the excavation.

The southernmost trench in the long cleared strip (*f*, Pl. IX, and Fig. 7) lay quite on the east side of the acropolis hill, where the slope was steep. It revealed the remains of a series of walls at right angles to one another apparently all forming part of a single complex. This was probably a house, though the limits of the excavation prevented development of the plan. Many poros blocks were found, mostly fallen, and a mass of stones in the center of the trench which seemed to be, in part at least, the foundations of a flight of steps. There may have been here an “*andron*” with “*gynaikonitis*” above it, facing north across a narrow court toward a southward facing “*oikos*” on the other side.

So the picture revealed by the excavations on the Acropolis hill remains consistent. It is, throughout, that of a prosperous settlement of the fourth century, with residences, public buildings of various kinds as well as semi-public enterprises, such as shops, inns, and baths. One large public square there was, and at least one prominent sanctuary, that of the great mother goddess, here called Mother Antaia, but whether the sanctuary is incidental to the settlement or the square and indeed all the settlement an appendage of the sanctuary is uncertain. What is certain is that the whole complex came fully into being in the fourth century with no indication of gradual preliminary growth, and after thriving for a generation or two, as shown by active rebuilding, launched on a program of large scale expansion, and then was abandoned by its inhabitants, as suddenly as it had been settled. The end of the story is historically explained by the forcible transfer of the Colophonians to Ephesus; the reason for the sudden commencement can only be guessed, but important indices are furnished by an inscription found most opportunely in the Metroön in 1922. The text

<sup>51</sup> The coins, as far as they were legible, consisted of two types: 1) Milne Period V, Group A; 2) the type with obverse, head of Apollo laureate r., long hair; rev., horse stepping r., ΚΟΛ; placed by Milne in his period VI, Group B (*ca.* 285-190 B.C.); cf. No. 149. Dated in *British Museum Catalogue (Ionia, p. 40, No. 35)* 350-300 B.C.

has already been published in full by Meritt;<sup>52</sup> the section of particular significance (lines 6-28) may be translated as follows:

In order that the people of Colophon, since King Alexander and Antigonos bestowed freedom upon them, may show themselves in every way zealous of preserving the glory of their ancestors, be it resolved by the people in the name of Good Fortune and for the safety of the entire people of the Colophonians, that the ancient city, which brought glory (in the eyes of all Greeks) to our forefathers when they received it from the gods and established it and when they founded its temples and altars, be enclosed within a common system of walls together with the present city. In order that this may be effected with all speed, the priest of Apollo, the other priests and priestesses, and the prytanis together with the council and those appointed in this decree shall on the fourth day of the ensuing month go down into the ancient market place to the altars of the gods which our ancestors bequeathed us and shall vow to Zeus Soter, to Poseidon Asphaleios, to Apollo Klarios, to the Mother Antaia, to Athena Polias, and to all the other gods and goddesses as well as to the heroes who occupy our city and country, that, when our blessings have been consummated, they will hold a sacred procession and perform a sacrifice in whatever manner the people may decide. Ten men are to be appointed who shall plan the walls: how they are to be drawn and how they are to be joined to the existing ones so as to obtain the maximum of strength. After due consideration they shall approve of an architect, whoever seems to them best qualified to take charge of the work on the walls. They shall also consider and approve of the salary for the architect, plan for the raising of foreign money, study the manner in which the roads and building lots shall be laid out and advantageously sold [or leased], and plan for setting aside a market place, workshops, and all other necessary public buildings. The men designated are to complete these tasks as rapidly as possible.

From this it is evident that at the end of the fourth century there was an "ancient city" quite separate from the "present city" or center of population when the resolution of the demos was indited. Further, the "ancient city" was of legendary origin, and at the time of writing it may have been marked only by sacred precincts. Beside the two cities there was also an "ancient market place," presumably near or in the "ancient city" and certainly on lower ground than the "present city." The "present city" was already surrounded by fortifications, the "ancient city" may or may not have been, but a circuit of walls linking the two areas together was an undertaking now newly launched. In describing the fortification walls which he mapped in 1886, Schuchhardt<sup>53</sup> expresses the opinion that though the main circuit walls (Fig. 1) and towers show minor variations of technique, they are probably all contemporaneous and of the late fourth century, with the exception of those around the acropolis. These are of unsquared masonry and may, he thinks, be somewhat earlier. The inference from the inscriptions and remains is unavoidable that the "present city" was that upon the acropolis, in which naturally the inscription was found; that its fortifications antedate the end of the fourth century while all the rest of the circuit walls postdate the inscription (the junction at the round tower on the east side of the acropolis above

<sup>52</sup> *A.J.P.*, LVI, 1935, pp. 358-371. Meritt now accepts a date near the end of the century instead of 334, which he originally suggested. Cf. note 10 on p. 95, above.

<sup>53</sup> *Ath. Mitt.*, XI, 1886, pp. 406-407.

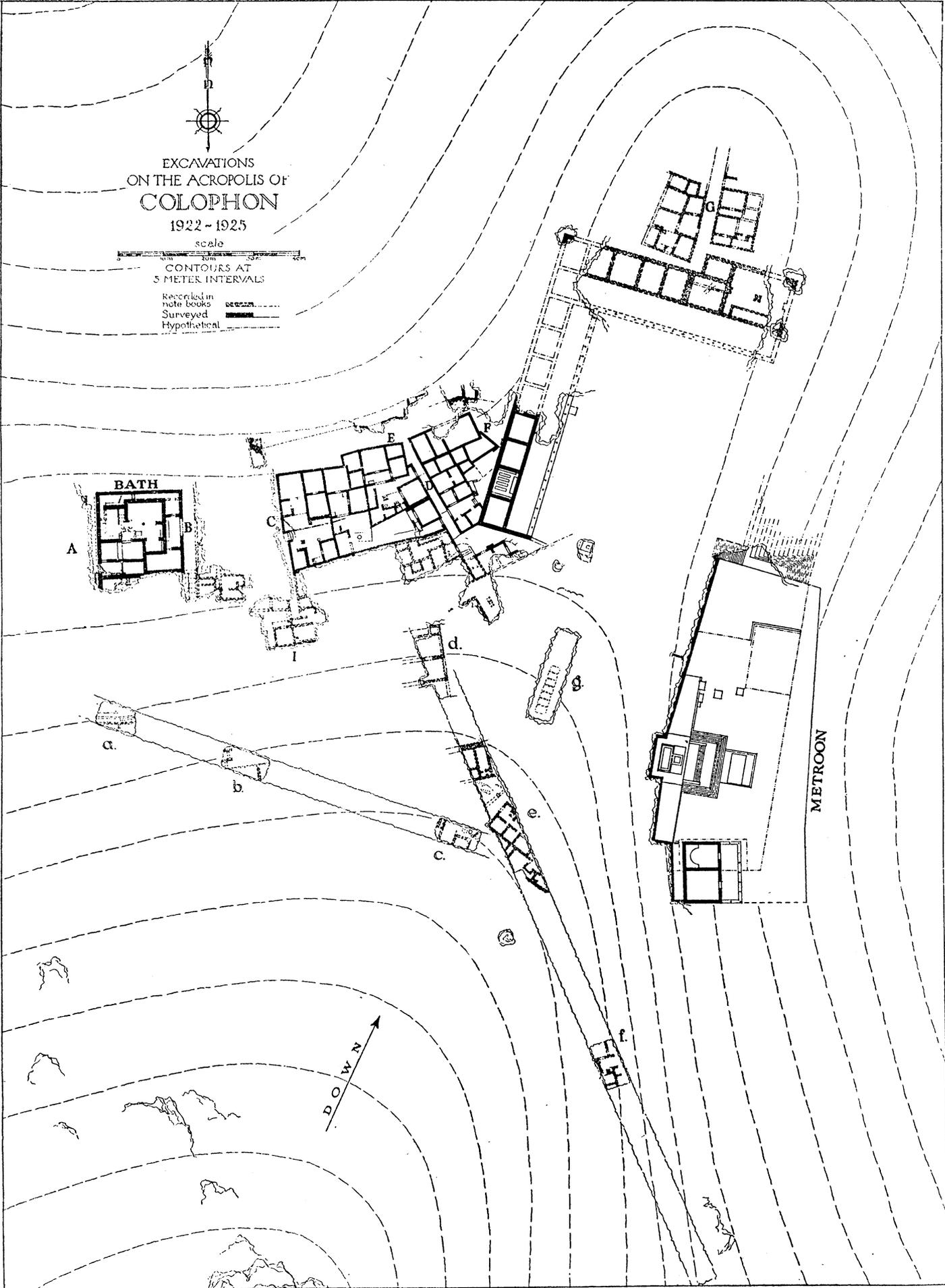
the Kabakli-dere is to be noted), that somewhere within the larger circuit lay the site of the earlier city, unfortified and perhaps abandoned during the period of occupation of the acropolis.

A study of the topography reveals, as the most probable site for the "ancient city," a long ledge of rock to the north of the acropolis, the western end of which drops almost vertically to the right bank of the Değirmendere (Figs. 1 and 3, 8). It seems improbable that more than the very scantiest remains of any sort could be preserved on this barren and disintegrating ridge, though apparently at the eastern end Schuchhardt found traces of fortifications; even where there is a covering of earth, little of importance can be hoped for (cf. Fig. 30). The ancient market place, with the altars of the gods, would be more apt to be beside rather than upon the narrow hill, and since the level ground to the north was not included within the new circuit walls, it should be looked for to the south. Hereabouts should be what remains may still be found of the city sacked by Gyges, notable in antiquity for its wealth and luxurious living. The seventh century, one of poverty and oppression, probably saw little or no building anywhere in Colophon. Where the city first showed growth again under the Persian rule cannot be said: perhaps it was still on the unwalled site of the "ancient city," perhaps remains might be found in lower levels on the acropolis. To judge from the coinage, prosperity revived by the beginning of the fifth century, but declined under the rivalries of Persian and Athenian politics until the fourth century brought peace and wealth again.

From lack of historical reference to this period of the city's life, the causes of the renaissance which accompanied the transfer of habitation to the acropolis remain unknown. But coinage and the excavated remains both indicate a marked change of fortune, continuing through the century and leading to the great expansion so hopefully embarked upon before the final shipwreck. Perhaps the fifth century saw Colophon upon the older site; though if the ancient market place remained continuously the civic center, would it have seemed so distinct from the "present city" of the late fourth century as the inscription indicates? Certainly no fifth-century remains were found on the acropolis and no fifth-century graves on the adjacent necropolis hill. The possibility must therefore be envisaged of still a third location quite outside the line of the Hellenistic walls—perhaps somewhere on the Traça çay—for the city of the Athenian tribute lists.

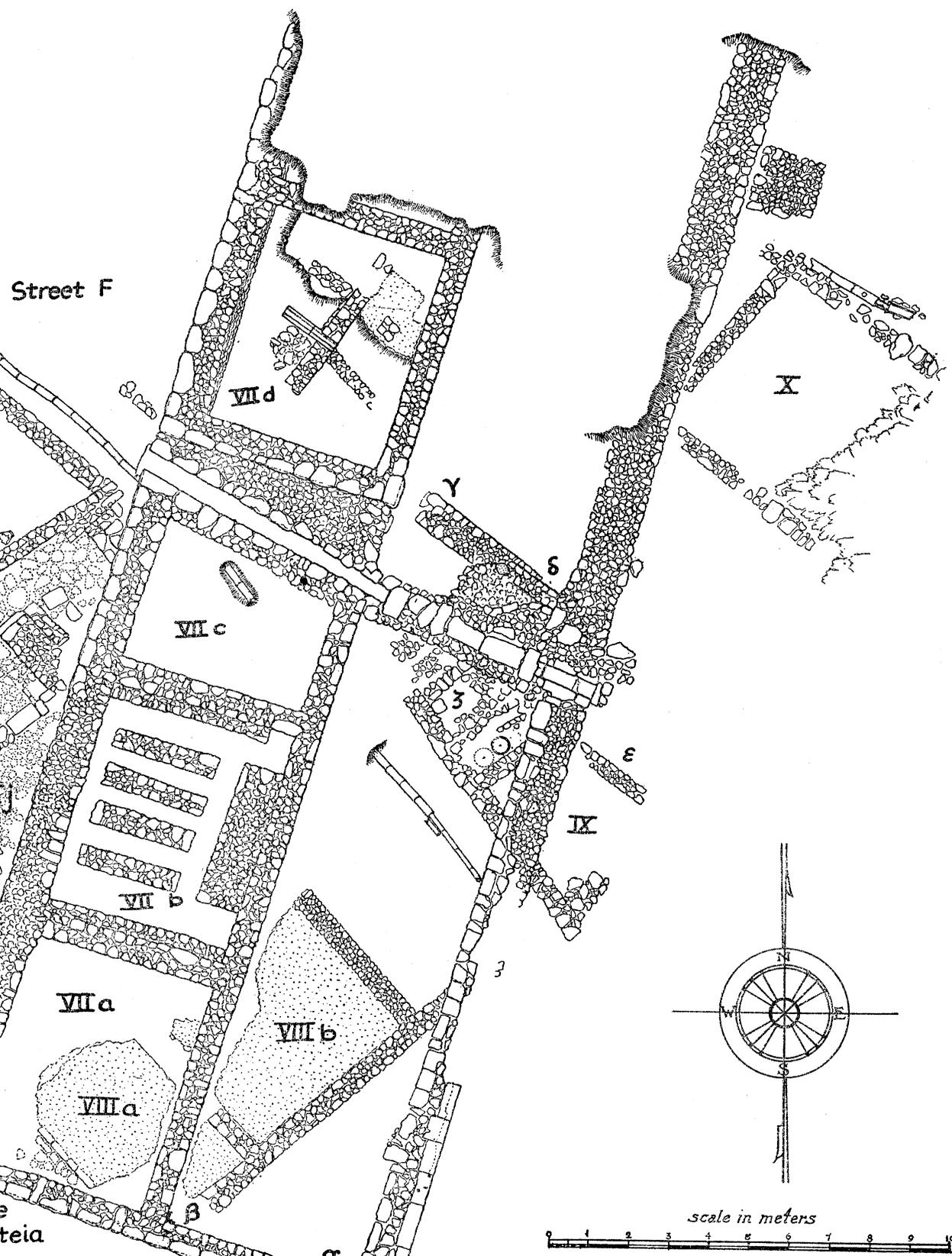
LEICESTER B. HOLLAND

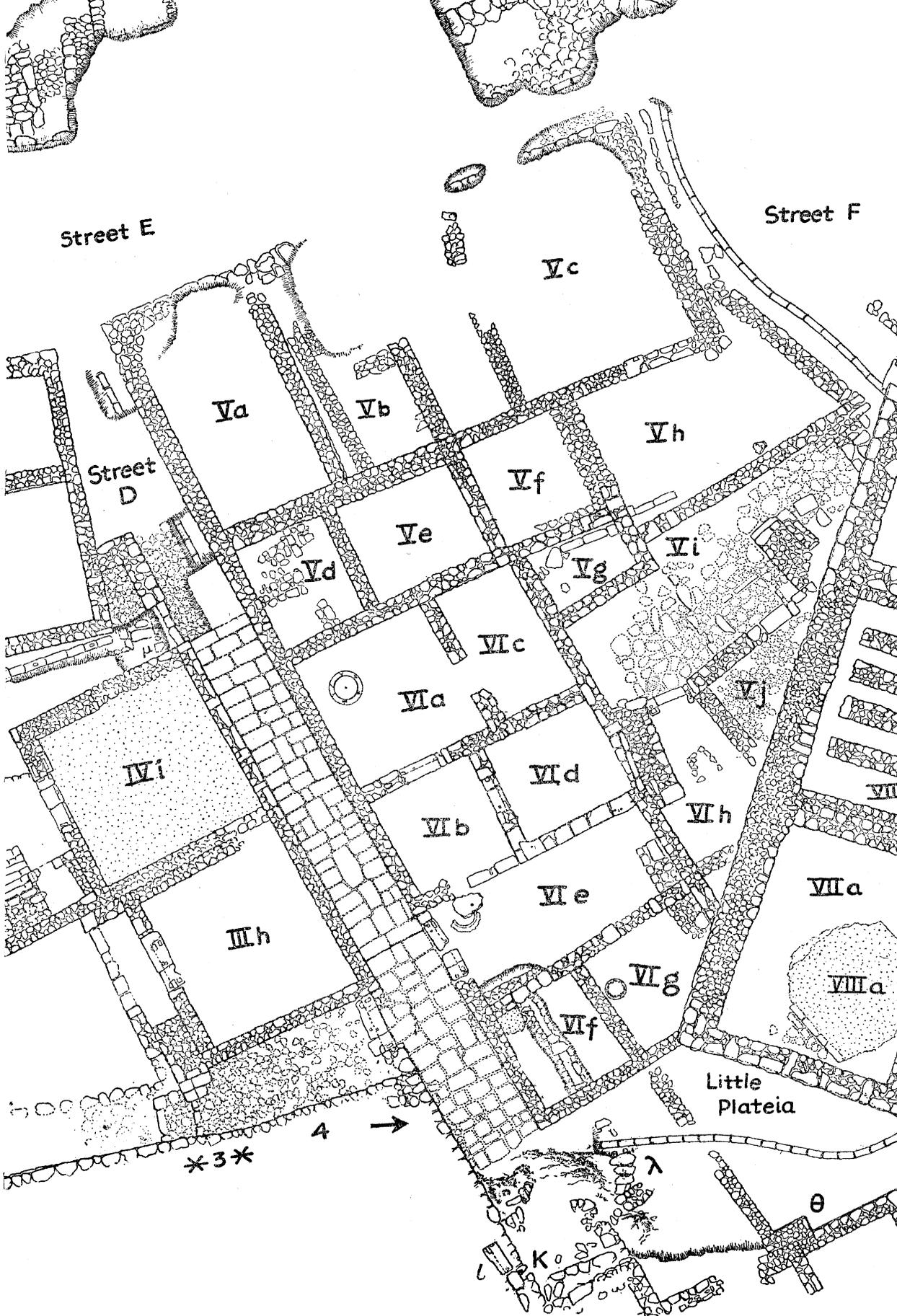
PHILADELPHIA, PENNSYLVANIA



GENERAL PLAN







Street E

Street F

Street D

Va

Vb

Vc

Vh

Vf

Ve

Vd

Vg

Vi

VIc

VIa

Vj

IVi

VIb

VIc

VIe

VIh

IIIh

VIb

VIe

VIIa

VIg

VIh

VIIIa

Little Plateia

\*3\*

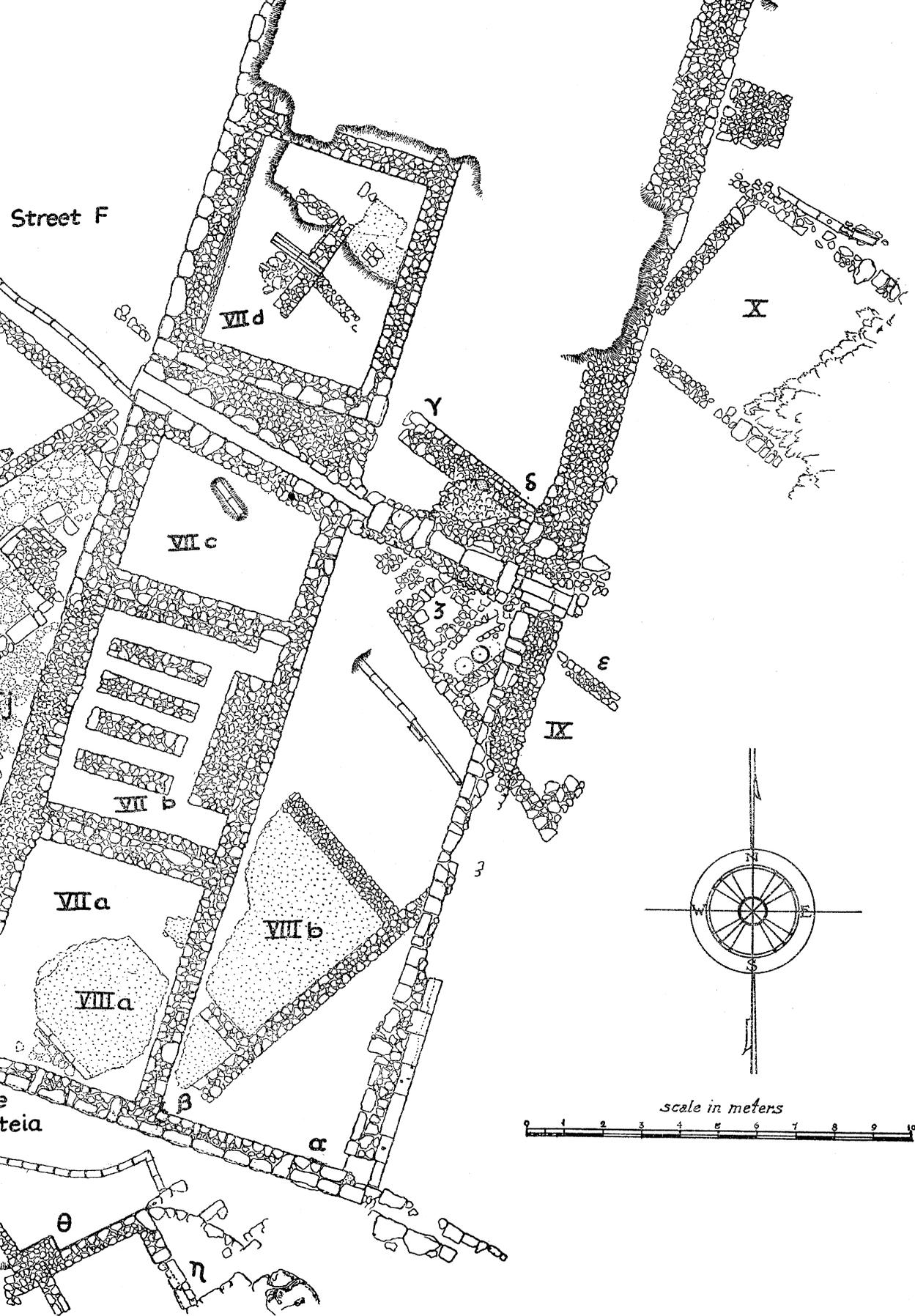
4

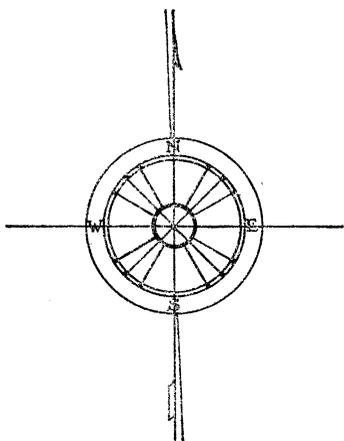


λ

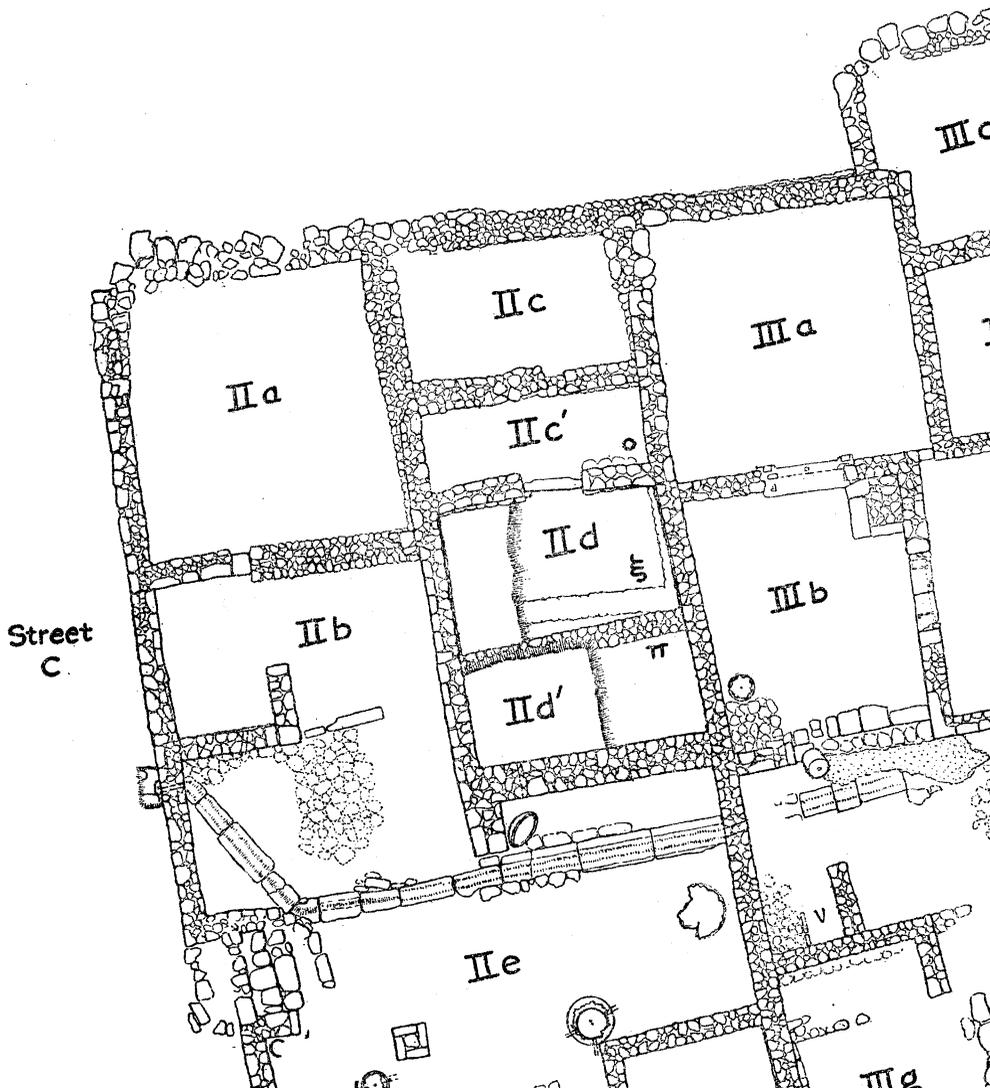
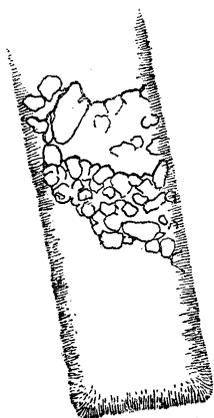
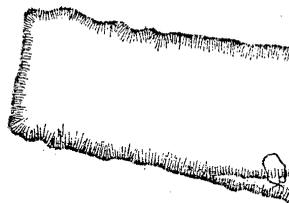
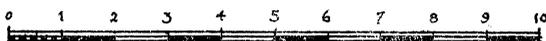
θ

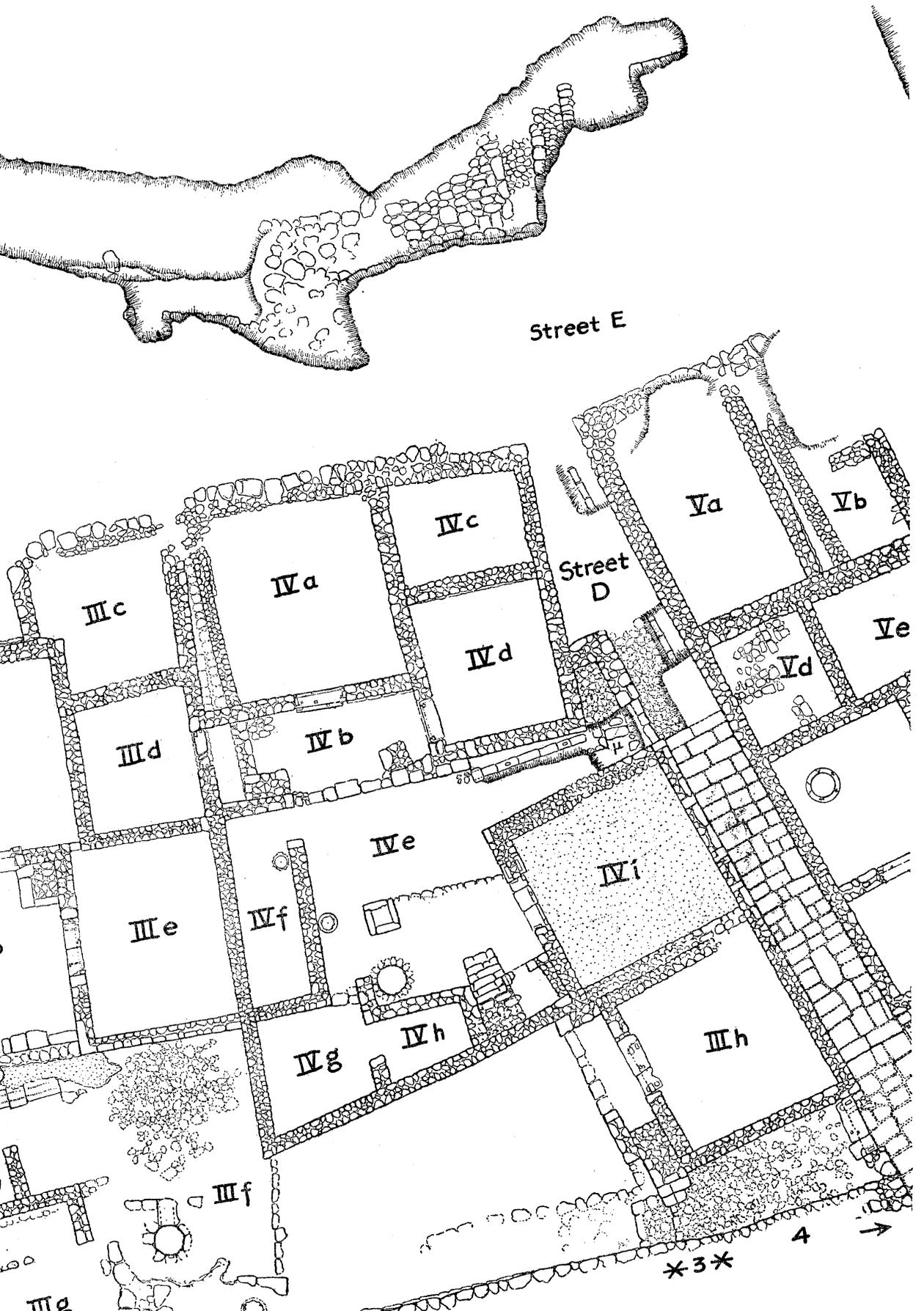
K

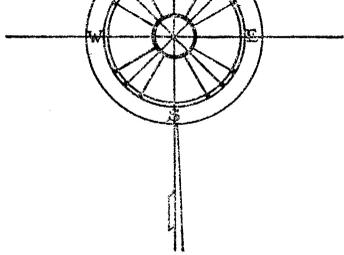




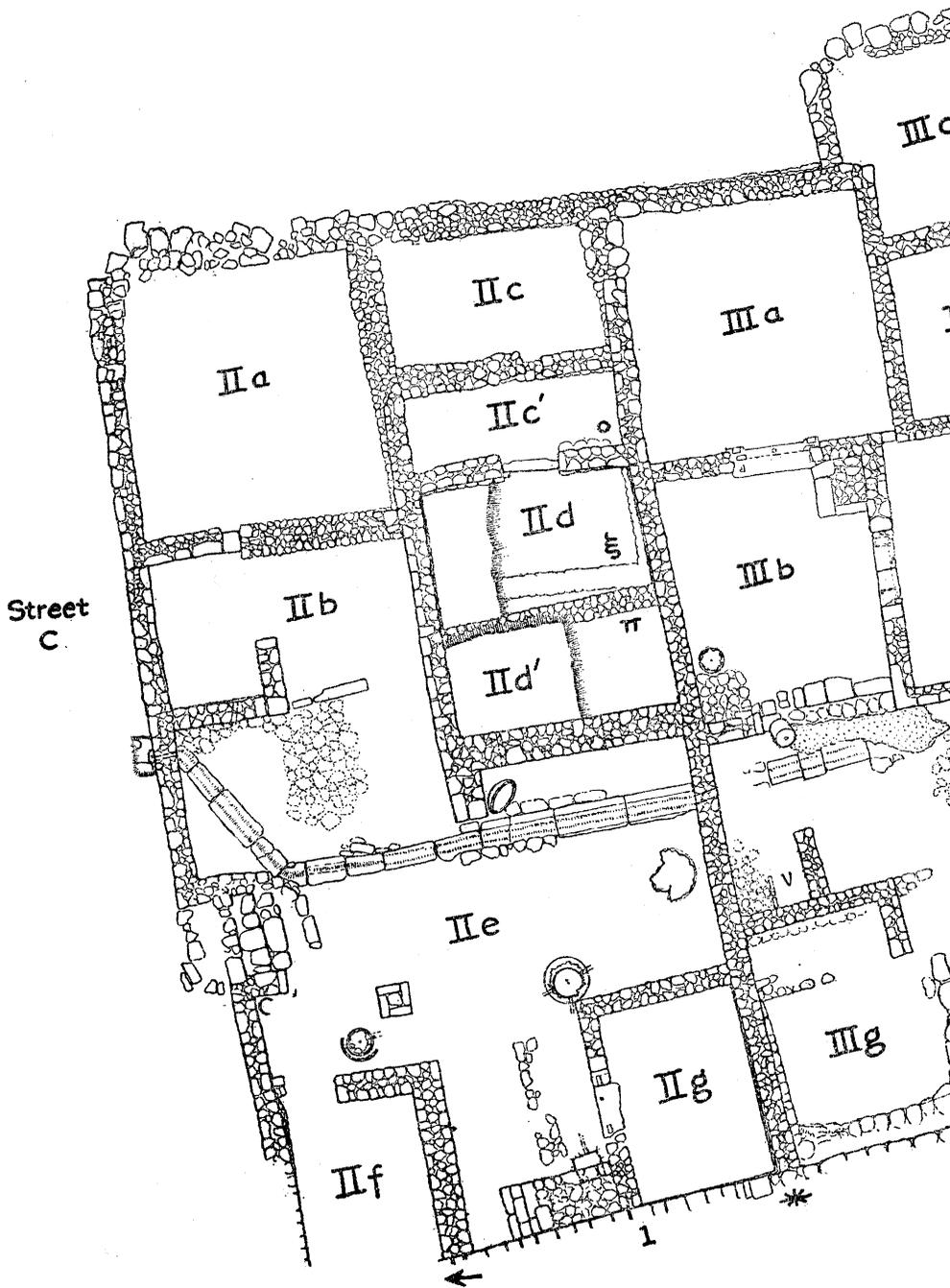
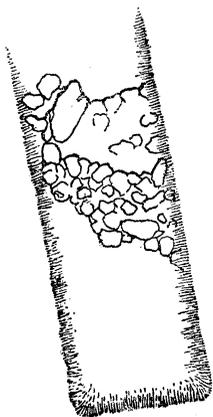
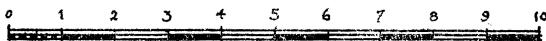
scale in meters



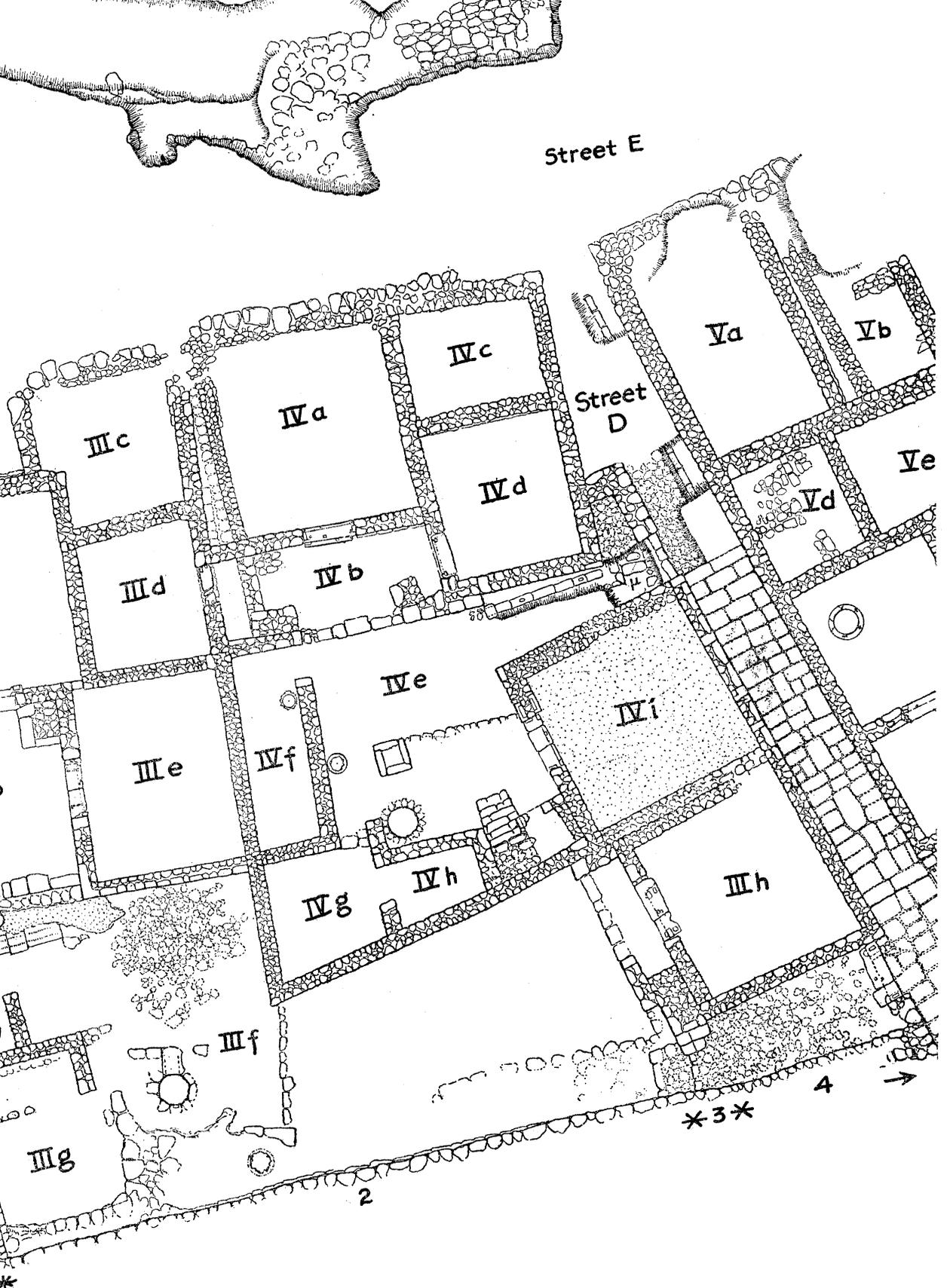




scale in meters



BUILDINGS WEST OF



INGS WEST OF STREET D