

STOAS AND CITY WALLS ON THE PNYX

PREFACE

Exploration carried out in 1930-31 on the Pnyx at Athens made tolerably clear the history of the ancient Assembly Place and the scheme of the auditorium in its several periods.¹ Two short campaigns in the summers of 1932 and 1934 exposed the foundations of a public building on top of the hill to the south of the Assembly Place and produced some new information about the city walls which have always been partly visible on the outer brow of the same hill.² This summary examination, however, raised more problems than it solved about both the Stoa and the fortifications. Exploration was therefore renewed for one month in the summer of 1936 and for two months in the summer of 1937. On this occasion, as before, the work was done under the joint auspices of the Department of Antiquities in the Greek Government and of the American School of Classical Studies at Athens. The excavation was directed jointly by the undersigned. It must be emphasized that further excavation is needed at a number of critical points of both the public buildings and the fortifications, so that certain of the conclusions presented now are to be regarded as tentative. In view of the circumstances of our time, however, it has seemed best to present the available material without further delay. In the following report Mr. Thompson has been responsible for the section on the public buildings, Mr. Scranton for that on the City Walls.³

I. THE STOAS

INTRODUCTION

The excavations of 1932 and 1934 had brought to light the foundations of a stoa-like building of moderate size on the hilltop immediately to the south of the

¹ *Hesperia*, I, 1932, pp. 90-217: "The Pnyx in Athens."

² *Hesperia*, V, 1936, pp. 151-200: "The Pnyx and Thesmophorion."

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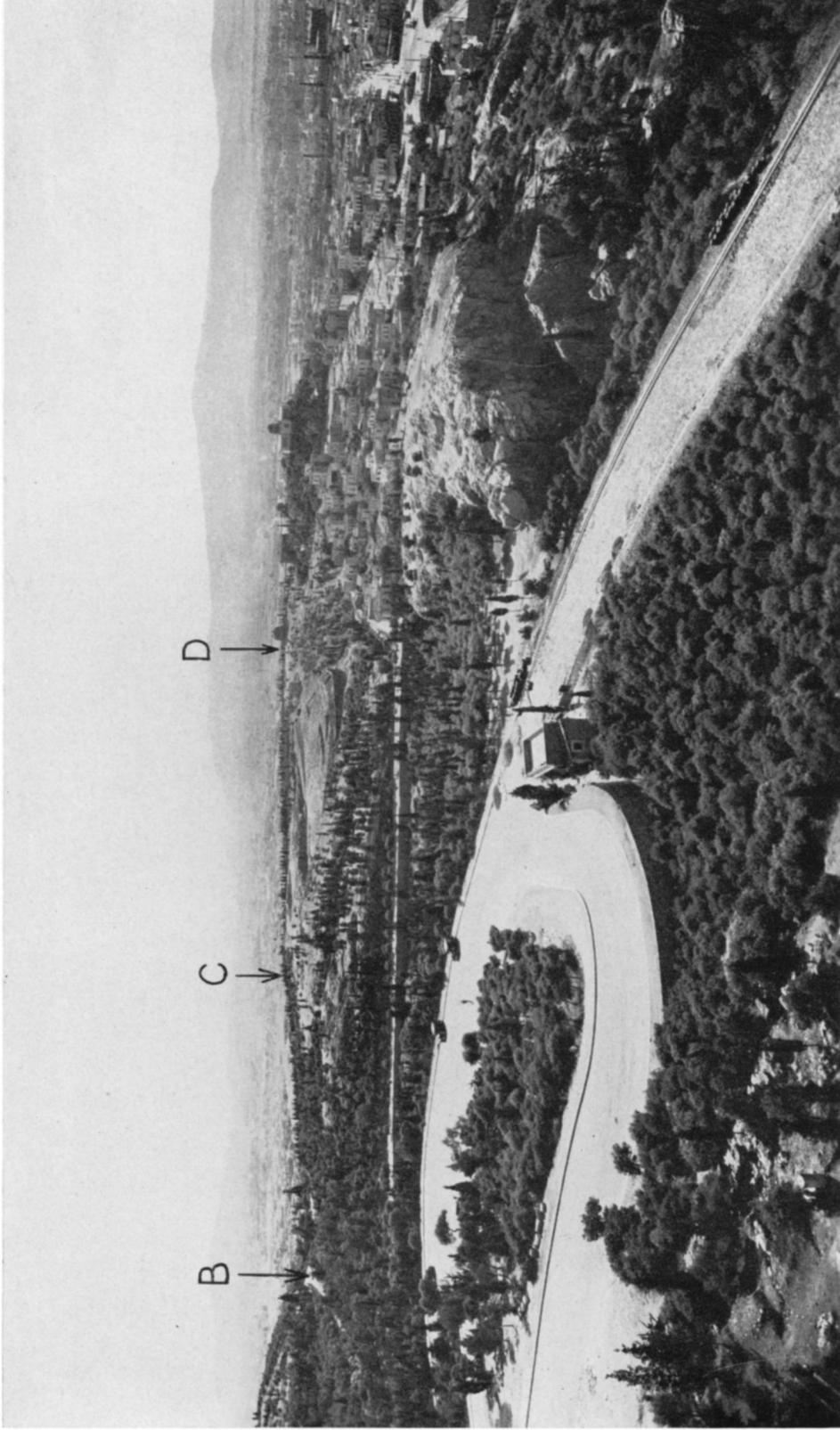


Fig. 1. The Pnyx and the Hill of the Nymphs from the Acropolis

B, Dipylon

C, East End of East Stoa

D, North End of West Stoa

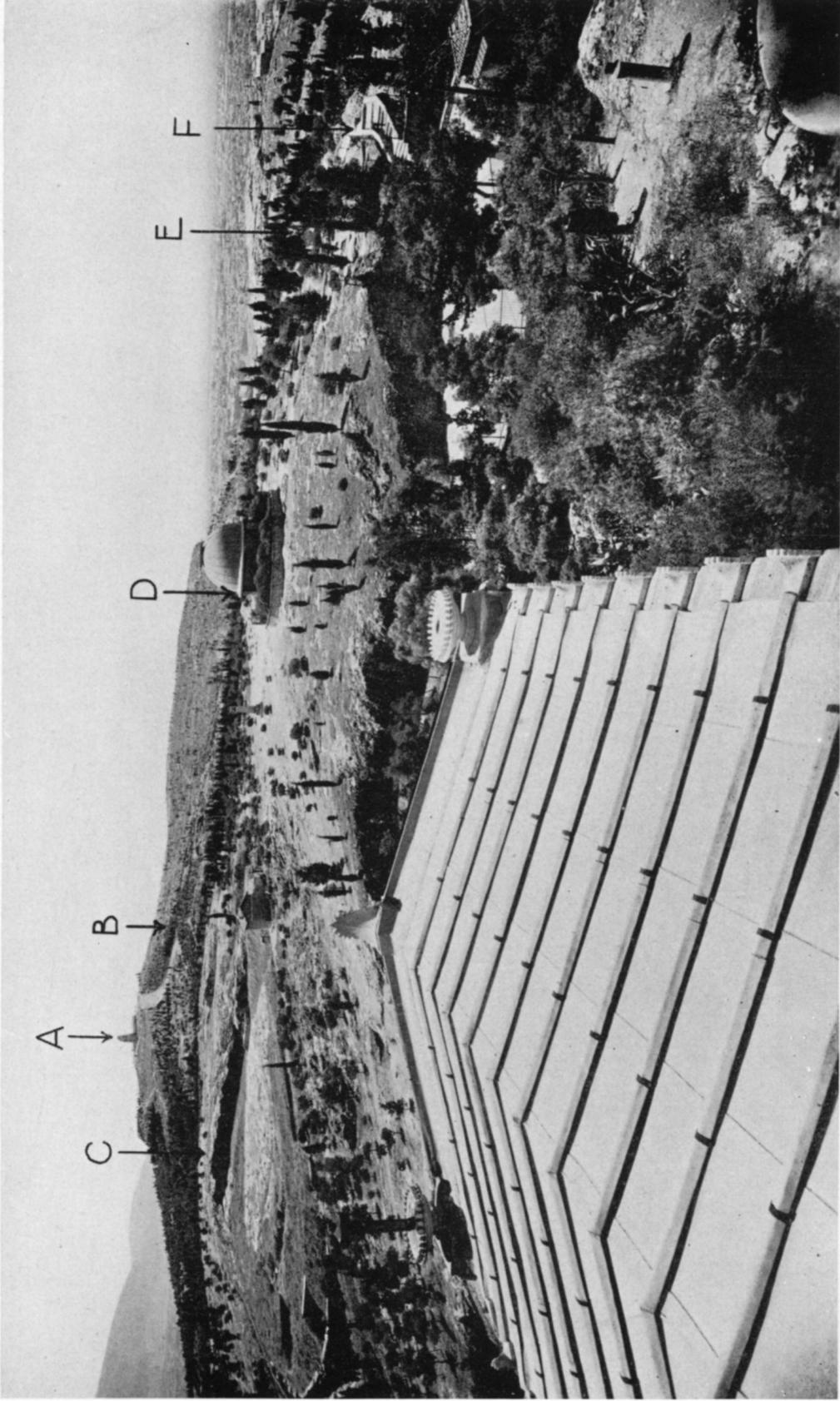


Fig. 2. The Pnyx from the Hill of the Nymphs
A, Monument of Philopappos
B, Tower C4
C, East End of East Stoa
D, North End of West Stoa
E, Tower W2
F, Tower W1

Assembly Place.⁴ During construction, the placing of the building had been slightly altered so that two sets of foundations may now be distinguished. In the report of the earlier excavations this building was labelled the Long Stoa; it was associated with a sanctuary which shared the hilltop and which was then thought to be the Thesmophorion. The exploration of the city walls in subsequent campaigns yielded an unexpected by-product in the shape of a second stoa-like building, $2\frac{1}{4}$ times as long as the first, that occupied the hilltop to the southwest of the Assembly Place (Figs. 1-2). From their similarity in scheme and from their contemporaneity, the two buildings would appear to be parts of one building program. Construction on both was abandoned at an early stage to permit of a fortification wall being laid above the foundations for their back walls. Since their ancient names are unknown, we now propose to call them the East and the West Stoas on the Pnyx. The first and second periods of the smaller building may be known respectively as East Stoa A and East Stoa B.

The West Stoa can be restored with more certainty and so it will be dealt with first.

WEST STOA

The contour lines of Plate XIV show a long and comparatively level area on top of the central Pnyx hill to the southwest of the Assembly Place. This area was skilfully utilized by the architect of the West Stoa, who placed his building so as to reduce to a minimum the cutting down and building up necessary in the preparation of its foundations and at the same time so as to leave room for a terrace of generous breadth between the new building and the Assembly Place. This promenade overlooked the city and the central Attic plain.

The building, measured on its foundation beddings, has an over-all width of 19.30 m. and length of 149.32 m. Subsequent calculation will show that the length between the outer faces of the end walls was *ca.* 148.105 m.; it was probably planned as 450 feet ($450 \times 0.328 = 147.600$). The terrace is 15.80 m. wide through most of its length, but expands toward its eastern end.

The northwestern end of the area of the building has been completely cleared over a length of 24 metres; the remaining two corners were exposed and the front foundations were examined by means of cross trenches at three points. More clearing might profitably be done, especially with a view to making more precise the position of the interior walls and to clarifying the way in which the fortification wall was laid over the foundations of the building.

The entire building is outlined by a bedding dressed from the living rock to a width of 1.75 m. (Figs. 3 and 4). On the northeastern long side the cutting of this width was adjoined on its outer edge by a bedding 1.00 m. wide cut down to approximately the same depth. It is clear that the two beddings were not cut at one and the

⁴ *Hesperia*, V, 1936, pp. 151 ff.

same time but that they are of the same program. No blocks remain of the northwest end wall; none has been found in the limited area cleared in the line of the southeast end wall. Two isolated blocks remain in place near the north end of the southwest wall.



Fig. 3. North End of West Stoa from the Southwest. A, North Corner of Stoa.
B, Front Edge of West Terrace

The northeast foundations have fared best because of the deep filling of earth that sheltered their mid part. At three points the lowest course of large conglomerate blocks was found in place. The main part of the bedding is filled by two rows lying side by side and resting on bedrock. The narrower bedding accommodated a single row of blocks which toward either end of the building rested on bedrock (Fig. 4); in the mid part, where bedrock lies lower, this row of blocks, of the corresponding course, was supported by a packing of field stones (Fig. 5). In the bottom of the narrow bedding rectangular pits occur; three were exposed in the solid rock toward the northwest end of the building, one was found to have been formed by the omission of a conglomerate block toward the southeast end (Fig. 6). These sinkings are of

the full width, or very nearly the full width of the lesser bedding; they are *ca.* 1.70 m. long and descend 0.26 to 0.29 m. below the floor of the lesser bedding. The level readings on the plans (Pls. XV and XVI) suggest that the bottoms of the pits lie lower as the series approaches either end of the building. In the mid part the pits are spaced uniformly at interaxial intervals of 8.06 m.; but the end pits are centred each 10.18 m. from the outermost edge of the bedding for the neighboring end wall.



Fig. 4. Bedding for Northeast Corner of West Stoa, from the Southwest

In the limited area cleared, interior beddings were detected only toward the northwestern end of the building. The workings fall into a line parallel with the long sides of the building and rather closer to its front than to its back. They attain a maximum width of *ca.* 4.00 m. at their northwest end. That part of the bedding immediately adjacent to the northwest end of the building is clean and deeply cut; elsewhere the dressing is shallow and spasmodic by comparison with that for the outer foundations and gives the impression of incompleteness.

For the restoration of the building, it is important to observe that its main front looked toward the northeast. Whereas the approaches to the two ends of the building

and to its southwest flank were naturally rough and were apparently not improved by the architect, the northeast side was made readily accessible throughout its length from the stately terrace. The uniformity in the foundations on all sides of the building might have suggested that the four sides were treated alike, i. e., presumably,



Fig. 5. Front Foundations of West Stoa near its Middle,
from the Southwest

closed with walls, for which the bedding 1.75 m. wide would have been suitable. But what of the narrow bedding adjoining the main working on the northeast flank? That this was intended to carry a gutter for the rain water from the roof is suggested by analogy with similar large buildings such as the Stoa of Attalos in Athens, and is perhaps confirmed by the regularly changing levels of the bottoms of the rectangular

pits. These pits were undoubtedly occupied by deeper blocks of stone in which were cut basins to catch the sand and so facilitate cleaning. The uniformity in the spacing of the pits is noteworthy. Had there been no compelling reason for this regularity, it would undoubtedly have been more economical to use blocks of random length and not adhere too strictly to a uniform spacing. Such, in fact, were the circumstances and the practice, for instance, in the Stadium at Epidauros.⁵ The only ground that suggests itself for the uniform spacing in the present case is the existence of columns



Fig. 6. Front Foundation of West Stoa, near its South End, from the North.
Note the Cavity for a Catch Basin in the Foreground

on the adjoining foundation. On the analogy of the Market of Caesar and Augustus and of the Northwest Stoa of the Athenian Agora, both of which were equipped with gutters and catch basins, the basins may be restored, not opposite columns, but opposite intercolumnar spaces.⁶ The interaxial space of the pits in the building on the Pnyx, viz., 8.06 m., is, of course, impossibly great to correspond to a single pair of columns. Even the half of it is excessive. One third, however, i. e., 2.686 m., would be suitable for a building of the scale of the present.⁷

From Athenian practice of the period we may safely assume that the outer order of the Stoa was Doric and that the frieze had three triglyphs and three metopes to

⁵ *Πρακτικά*, 1902, p. 85.

⁶ For the Market of Caesar and Augustus cf. *Ἀρχ. Δελτ.*, 1930-31, *παράρτημα*, pp. 1 ff., plate; for the Northwest Stoa of the Agora cf. *Hesperia*, VI, 1937, p. 219, fig. 126, p. 339.

⁷ The East Stoa in the Athenian Asklepieion, 2.75-2.76 m.; the Stoa of Eumenes, 2.451 m.; the Stoa of Attalos, 2.423 m.; the Middle Stoa of the Athenian Agora, 3.04 m.; the South Stoa of the Athenian Agora, 2.97 m.

the intercolumniation. A simple calculation will now show that the spacing called for by the colonnade and its frieze harmonizes perfectly with the spacing between the outermost pits and the beddings for the end walls of the building; i. e., on the supposition that there were $3\frac{1}{2}$ interaxial spaces between the outermost pit and the end wall, the end walls may be centred, or very nearly centred on the beddings intended for them.

The number of columns may now be calculated. The measured distance between the midpoints of the two outermost pits is 128.96 m., i. e., $\frac{128.96}{2.686} = 48$ interaxial spaces. To these must be added the $3\frac{1}{2}$ spaces beyond each of the outermost pits, making 55 interaxial spaces in all, enclosed by 56 supports.

For the sake of demonstration we may choose for the columns an arbitrary but plausible lower diameter of 0.75 m. and fix the width of the triglyph at one half this figure, i. e., 0.375 m. The width of the metope may be reckoned as $\frac{2.686 - (3 \times 0.375)}{3}$, or 0.520 m. The walls have been restored with a thickness of 0.70 m. The total length of the building measured on the frieze may be restored as the sum of 55 interaxial spaces and the width of 2 half triglyphs, i. e., $(55 \times 2.686 \text{ m.}) + 0.375 \text{ m.} = 148.105 \text{ m.}$ This figure has been used on the restored plan (Fig. 7) for the length between the outer faces of the end walls measured near floor level; but in actual fact the figure may have been slightly augmented by the thickening of the wall from top to bottom.

The restoration of the exact width of the building at floor level depends on the number of steps beneath the colonnade and on the number of triglyphs and metopes used in the frieze across the end walls. On the foundation bedding beneath the colonnade toward the northwest end of the building we may restore a levelling course or euthynteria and, with great probability, two rather than three steps. A third step would have necessitated a vast mass of additional and costly filling inside the building. It would also have crowded a bedding only 1.75 m. wide, for the normal Athenian practice was to lay a foundation *ca.* 2.00 m. wide for a colonnade with three steps. A simple calculation will show that the end frieze is best restored with a length of 20 triglyphs of 0.375 m. and 19 metopes of 0.520 m., i. e., 17.380 m. The batter on the face of the anta, the width of the step, the projection of the euthynteria may be reckoned as totalling *ca.* 0.48 m., so that the width of the building from the face of the euthynteria to the outer face of the back wall has been restored as 17.86 m. It will be noted that the back wall thus rests in a satisfactory way on its bedding.

Since the beddings for the end walls are of the same width throughout, there would appear to have been no return of the steps around the front corners of the building. Hence the end walls may be supposed to have been carried forward to the front of the stylobate and an *in antis* rather than a prostyle scheme is indicated for the colonnade.

The evidence for the interior arrangements, as already observed, is very exiguous. We may, however, rule out the possibility of interior columns. The normal practice

in such buildings, when both an inner and an outer colonnade were planned, was to equate one inner with two outer interaxial spaces. But we have found that the outer colonnade of the present building numbered 55 spaces, a number which cannot be halved. Since, however, the great width of the building demanded interior supports, we may restore a wall and place it on the line indicated by the slightly worked beddings.

No evidence is available for the treatment of the area between the inner wall and the back wall. The clear opening was great: 9.09 m. on the restored plan. It is unlikely that such a space was roofed without interior supports. The Portico of Philip V on Delos, to be sure, had a clear opening of 8.90 m. But the royal author of the Delian building was clearly bent on showing off, and his architect probably approached the limit of practicability in such construction.⁸ In the case of the Stoa on the Pnyx it is easier to believe that the problem of roofing was simplified by the insertion of cross-walls forming rooms, conceivably two rows of them, between the two long walls.⁹ A thorough search for traces of such cross-walls should be made in the better protected southeastern part of the building. In the northwestern part, however, where the bedrock has been stripped, no trace whatever has been detected, and it must be counted very doubtful whether even the beddings for such walls were ever prepared, even if planned.

We should gladly know whether the architect had planned for one storey or for two. Though no trace of stairways has been found, this must not be taken to exclude the possibility of a design with two storeys—there again the explanation may lie in the interruption of the building program. Several indications, individually slight, when taken together favour the two-storey design.

(1) The careful workmanship and generous width of the beddings for the outer walls.

(2) The comparatively close spacing of the columns. In large Athenian colonnades of a single storey the outer columns are spaced at intervals approximating 3.00 m.: e. g., Stoa of Zeus (3.018 m.); Middle Stoa in the Agora (3.04 m.). Outer colonnades that certainly carried a second storey are spaced well under 3.00 m.: e. g., East Stoa of the Asklepieion (2.75-2.76 m.); Stoa of Eumenes (2.451 m.); Stoa of Attalos (2.423 m.).

(3) The unusual width and depth of the bedding for the inner wall in the part adjacent to the northwest end wall of the building may be due to an intention to insert a stairway at that point.

(4) The extraordinary breadth of the terrace in front of the building suggests

⁸ *Délos*, VII, 1, pp. 62, 162 f.

⁹ In the South Stoa of the Corinthian Agora an open space of slightly over 10 m. between the middle and back walls was divided into two rows of rooms arranged in pairs. The rooms of each pair had a doorway between them and were entered only through a doorway which opened on the porch. *A.J.A.*, XXXVII, 1933, pp. 555 ff.; XXXIX, 1935, pp. 53 ff.

that it was intended to accommodate large numbers of people, and a second storey would have doubled the floor space.

It has been hinted repeatedly above that the West Stoa was never completed. The evidence may be briefly reviewed.

(1) The complete absence of any material from the superstructure, not only in the area of the Stoa but also among the blocks re-used in the later periods of the near-by city wall, though it cannot be counted conclusive in view of the very exposed position, must nevertheless be regarded as strong negative evidence. Particularly telling is the lack of marble working chips behind the front foundations.

(2) The preparations of the bedding for the inner wall, extremely sketchy when compared with the well-worked outer beddings, may best be explained as unfinished.

(3) At neither end of the building is there any trace of a bedding for the continuation of the gutter which would have been necessary to carry off the flood of water in time of heavy rain.

(4) The high level of the northwest end of the Middle Terrace would have involved burying the steps of the Stoa over a length of many metres toward its southeast end.

(5) Although more than 375 square metres at the northwest end of the West Terrace were cleared, no trace of a monument was found on it. This would be a very unusual situation in front of any Athenian public building, quite irrespective of its purpose, had that building been in use for any length of time.

(6) A close comparison of the photograph (Fig. 3) and the plan (Pl. XV) of the northwest corner of the West Stoa will suggest that the bedding for the back wall of the stoa was widened toward the inside of the building to receive the city wall which approached the stoa from the north. Not enough clearance has been made at this point to clarify the situation entirely, but it would appear that the city wall, with a width of *ca.* 3.00 m., was so laid that its outer face coincided with the outer face of the foundation for the back wall of the Stoa, while its inner face rested on a newly prepared bedding well inside the original bedding for the Stoa foundation. This procedure is precisely paralleled in the case of the East Stoa B, of the incompleteness of which there can be no question. Had the builders of the city wall found either of the Stoas completed, they would more probably have left the building intact and reinforced its back wall on the outside.

It would seem likely, therefore, that the construction of the West Stoa had barely gotten beyond the lowest foundations when it was interrupted by the building of the city wall.

EAST STOA

To the south of the Assembly Place and at a distance of a stone's throw from it, the central hill of the Pnyx range rises to its greatest height in a smooth-topped ridge

(Pl. XIV, Fig. 1). The comparatively level area of the summit was exploited by the builders of the East Stoa who, as in the case of the West Stoa, placed their structure in such a way as to minimize the amount of rock that had to be cut away and the depth of foundation that had to be built. As observed above, the precise placing of the Stoa was altered slightly soon after the start of work. Although even on this second start construction was not carried far, the scheme of the building can be more completely recovered from the second than from the first set of workings. It will, therefore, be simpler to commence with the second period, i. e., East Stoa B. The remains have been described in some detail in an earlier report and, since little new evidence has been produced by the more recent excavations, the present description will be summary.¹⁰

Measured on the beddings for its foundations, the Stoa had an over-all length of *ca.* 66.30 m. and breadth of *ca.* 17.50 m. The outer rectangle was divided unevenly by an inner foundation which ran the length of the building. The relative and the absolute widths of the various beddings show clearly that the north, long foundation was intended for a colonnade above steps, the others for walls.

Blocks remain in position only in the back, enclosed part of the building. They have been exposed at three points in the line of the back or south wall and, toward its west end, have been found to stand still to a height of 2.50 m. The material is the local gray limestone laid as irregular ashlar, with quarry to hammer face, with some broaching and with some edges heavily bevelled with the pointed chisel (Figs. 8, 9). Two rows of blocks, the outer being the larger and more regular, make up an

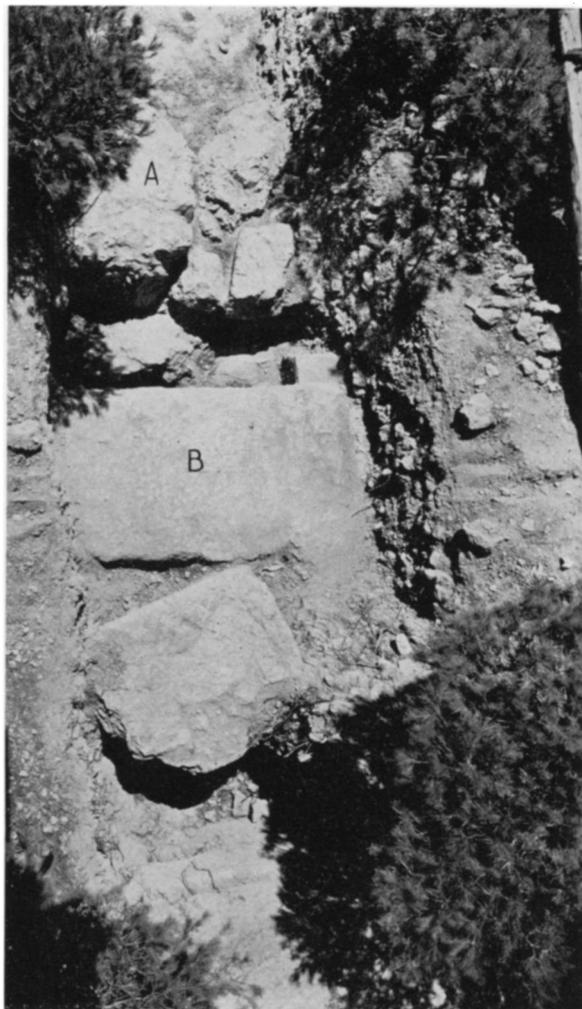


Fig. 8. Foundations for Back Walls of East Stoas A and B, Near Their East Ends, from the North

¹⁰ *Hesperia*, V, 1936, pp. 156 ff.

average thickness of *ca.* 1.20 m. In the line of the east end wall and of the eastern part of the inner wall, the foundation cuttings for Stoa A were filled with small, re-used blocks of gray limestone, which, again, form a thickness of 1.20 m. (Fig. 10). For the remainder of the inner wall, for the west end wall, and for the colonnade we have to work with only the beddings cut in the rock. That for the colonnade is *ca.* 2.00 m. wide.



Fig. 9. Back Wall of East Stoa

In the proposed restoration of East Stoa B (Fig. 7) we have placed the back wall, the two end walls, and the interior wall simply in the middle of their respective foundations. Although this is the ideal solution and may not have been adhered to precisely in fact, yet the margin of error is small. On the assumption that the walls were *ca.* 0.70 m. thick, the building would have measured *ca.* 65.80 m. in length between the outer faces of its end walls. The length was probably planned as 200 feet ($200 \times 0.328 = 65.60$). We have again assumed as most probable that the order was Doric and we have used a column with the same diameter as that of the West Stoa, viz., 0.75 m. The width of the triglyph may be restored as about one half that figure, i. e., *ca.* 0.375 m. Again, we may be reasonably certain that in this period the frieze would have had three metopes to the column space. The width of the bedding for the front foundation is that normally employed in Athens beneath a colonnade with stylobate and two steps and justifies the restoration of such a scheme here. The limited and uniform width of the end beddings precludes the return of the steps around the corners and so indicates that the columns were set *in antis*.

In attempting to recover the interaxial spacing of the columns we have to work with the interval between the axes of the outermost triglyphs. A close approximation to this is given by subtracting from the total length of the building the width of two half triglyphs: $65.80 - (2 \times 0.1875 \text{ m.}) = 65.425 \text{ m.}$ For fixing the length of the interaxial space, several clues are at hand. Since the East Stoa had approximately

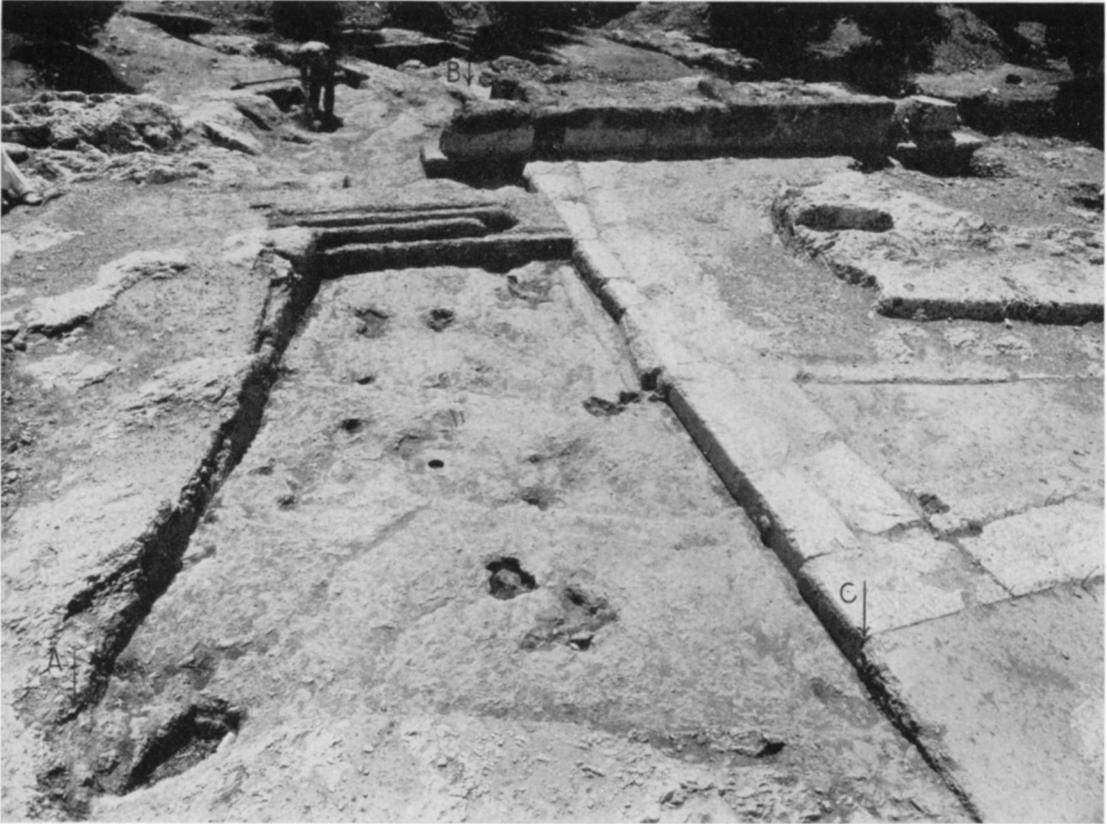


Fig. 10. East End of East Stoa A and B, from the Northeast

- A, Northeast Corner of East Stoa A
- B, Southeast Corner of East Stoa B
- C, Northeast Corner of Enclosed Part of East Stoa B

the same width and the same scheme as the West Stoa, its column spacing was also probably closely similar, i. e., close to 2.686 m. The spacing must have been such, moreover, as to permit of triglyphs and metopes which could be combined to produce a frieze of the right length for the end of the building. A third, though more indirect, hint is given by the desirability of employing in the restoration of East Stoa B a column spacing and a scheme of triglyphs and metopes which could be used also for the restoration of East Stoa A.

A process of elimination will show that the conditions noted above may be met on the assumption that the colonnade was planned to have 22 columns *in antis* with 23 spaces and an interaxial spacing of $\frac{65.425 \text{ m.}}{23} = 2.845 \text{ m.}$ Granted that the triglyph was *ca.* 0.375 m. wide, the width of the metope (x), from the formula $(3 \times 0.375) + 3x = 2.845$, may be fixed as *ca.* 0.573 m. A frieze comprising 18 such triglyphs and 17 such metopes will be 16.491 m. long. The sum of this figure and the interval between the base of the column and the face of the stylobate, say 0.03 m., will be approximately the width of the building between the edge of its stylobate and the outer face of its back wall: $16.491 \text{ m.} + 0.03 \text{ m.} = 16.521 \text{ m.}$ In front of this are to be restored two steps of suitable width, say 0.32 m. Such a restoration will permit the walls of the building and the foundations of its colonnade to fit neatly into their respective beddings. And, as we shall see below, a frieze made up of triglyphs and metopes of the same width as those used here will assure a satisfactory width for East Stoa A.

The problem about additional interior supports is very much the same in the East Stoa as in the West Stoa with the difference that the greater width of the enclosed room in the East Stoa, *ca.* 9.62 m. as compared with 9.09 m., makes still more probable the intention to insert either a row of interior columns, or, still more likely, a series of cross-walls forming rooms. Although the east end of the East Stoa has been stripped for a length of 16 m., no trace has been found of such supports. Their absence may well be due to the incompleteness of the whole project.

As to the question of a second storey, the evidence again is inconclusive. It is worth noting, however, that the foundations for the walls of the East Stoa are markedly narrower and of less substantial construction than those of the West Stoa. This might be taken to suggest that the walls of the East Stoa were not to be carried so high.

We may now turn back for a moment to the first beginning of the East Stoa, i. e., to East Stoa A (Pl. XVI). Its remains lie directly beneath those of the second attempt. The change in placement was effected by revolving the plan counterclockwise some 12° . The remains of Stoa A are even scantier than those of Stoa B, and it is clear that construction had been interrupted at an earlier stage in the first than in the second instance. Since the change in placement would seem to have been suggested by outside considerations, there is no reason to suppose any radical difference in the planning of the two buildings. Actually the beddings will permit the two stoas to have been of exactly equal length, but the earlier version was narrower than the second. No trace has appeared of an interior foundation, and it would seem that work was suspended before this stage was reached.

The remains of East Stoa A consist of a clean-cut bedding, 3.08 m. wide, in the line of its front, and southward returns at the east and the west ends, 3.20 m. and 3.30 m. wide respectively. The more recent excavations have exposed a short length

of foundation that would seem certainly to have been for the back wall of the Stoa, near its eastern end (Pl. XVI, Fig. 8). The part examined is only 2 m. long, 1 m. high, and was probably intended to be underground. It is built of quite irregular masses of the local limestone, two blocks or even a single block forming the total thickness of 1.00 m.

The great width of the beddings for the front and ends of this building is remarkable and is probably to be explained on the supposition that a gutter, like that of the West Stoa, was to be carried along the front of the building and to be returned across either end. It is to be noted that the width of the bedding for the front of East Stoa A is 3.08 m., i. e., 0.33 m. more than the width of the front bedding for the West Stoa, and this difference would just provide for the additional step which may be restored in East Stoa A as in East Stoa B. No pits for clean-out basins appear in the bedding for East Stoa A, but these might well have been added had construction continued.

With units of the same width as those used in East Stoa B, a frieze of 16 triglyphs and 15 metopes may be restored across the end of East Stoa A. The length of this frieze will be 14.595 m., and the width of the stoa measured from the face of its stylobate to the outer face of its back wall, *ca.* 14.625 m., i. e., 1.896 m. less than that of East Stoa B. With such an arrangement the back wall, colonnade, steps and gutter may be restored in satisfactory relation to their beddings.

In the absence of any trace of interior supports the restoration of such must be highly conjectural. On the restored plan, Fig. 7, an inner wall on the long axis is suggested so as to give a porch of the same depth as that attested for East Stoa B and so as to give approximately the same relation in width between porch and back part as that intended for the West Stoa.

One would gladly know the reason behind the decision to alter the placement of the Stoa, i. e., to abandon East Stoa A and begin East Stoa B. The change meant the loss of a good many days of labor. The West Stoa and East Stoa A, moreover, would appear to have been placed in relation to one another and to have been laid out at one and the same time. The relation between the West Stoa and East Stoa B, when they were viewed from the front, would not have seemed so happy. The alteration may have been occasioned by considerations of economy, for, in view of the peculiar contours of the rock, it may have been easier to arrange a terrace of the necessary width in front of East Stoa B than East Stoa A.

Up to this point the incompleteness of East Stoa B has been assumed rather than demonstrated. The evidence, however, is ample: the complete absence of any blocks from the superstructure either *in situ* or re-used in the later fortification walls; the sketchy and apparently unfinished state of the bedding for the inner long wall; the lack of any provision for interior supports in the back part of the building; the incompleteness of quarrying operations on the terrace in front of the east end of the

building; the failure to level the rock for a terrace in front of its west end. The occasion for the abandonment of this building was unquestionably the same as in the case of the West Stoa: the more urgent need of a fortification wall which was laid on top of the newly built foundations.

Toward the eastern end of the area occupied by the East Stoas are tenuous remains of two, possibly three structures which may be of the time of the Stoas.¹¹ The most substantial surviving part is a foundation bedding cut in the living rock parallel to the inner edge of the front foundation of East Stoa A (Pl. XVI, Fig. 10). The bedding may be traced for a length of 9.25 m. It is marked by a series of seven dowel holes, although no block remains in position. No return of this bedding is preserved at either end. The lesser remains consist of foundations in part cut from the rock, in part built up of broken stone; they served for either two small independent buildings or for various rooms of one building. All these foundations show careless workmanship and were apparently intended for slight, perhaps temporary structures. As to their purpose, there is little evidence even for conjecture. But it may be suggested that they carried tool houses or a watchman's shelter necessary in the construction of the Stoas.¹²

PROPYLON

Beyond the west end of East Stoa B scanty traces remain of a large rectangular foundation. The complete clearing and study of the remains were precluded by a much-used modern pathway which runs diagonally across its area and by the trees. More evidence for its reconstruction and use might also be gotten by deeper clearing to the west and south.

The north front of the foundation was aligned with the front of East Stoa B; toward the south its foundation beddings are buried beneath a mass of masonry belonging to the city wall, but they would seem to have extended to the line of the back of the Stoa. The beddings of the two structures are separated by an interval of 1.75 m. The east to west width of the bedding for the monument may be measured as *ca.* 13.00 m.; its length from north to south may be taken as equal to the width of the bedding for the Stoa, i. e., *ca.* 17.50 m.

Throughout the area of the monument the bedrock was dressed to receive a massive, i. e., continuous foundation. The photograph (Fig. 11) and the levels marked on the plan (Pl. XVI) will show that the bedrock here sloped steeply down toward the west and south, so that the beddings had to be cut in an irregular, stepped fashion. Of material certainly attributable to the monument there remain in place only a small block of gray limestone at the northwest corner and a half dozen large blocks of conglomerate in the east central part.

¹¹ For a detailed description cf. *Hesperia*, V, 1936, pp. 163 f.

¹² Similar, though better-preserved foundations, have come to light within the main foundations for the Odeion in the Athenian Agora (not yet published).

The foundations themselves afford little clue to the form of the structure which they carried. One hint, however, is to be noted. The line of the north edge of the bedding is drawn forward at the northwest corner by *ca.* 1.50 m. This can only mean that the monument was approached from the north by steps and that the number of steps increased from the east toward the west in order to make good the falling gradient. The west edge of the bedding is parallel to the axis of the monument so that no such arrangement existed there; for the south edge the evidence is not available,



Fig. 11. Bedding for Propylon (?) from Northwest. The Arrows Mark the Northeast and Northwest Corners

although it would seem that the change in level between the southeast and southwest corners was less violent so that steps on that side might not have required so marked a distortion of the plan.

The monument was obviously placed with respect to East Stoa B. Hence work on it must have begun after the change in the orientation of the East Stoa. There is no reason to doubt that the construction of the monument was halted, like that of the Stoa, by the laying of the city wall. These considerations, coupled with the perfect alignment of the two buildings, may be taken to prove that they were parts of one and the same building program.

The evidence for the identification of the monument is chiefly indirect. Its orientation and massive foundation are against its having been intended as a temple. Its proximity to the Stoa and the approach from the short north side rule out its

identification as an altar. The size of its foundation is excessive for any normal sculptured monument. The strong probability that the structure formed part of the same building program as the stoas would also weigh against any of the above possibilities.

Of the very limited number of possible identifications that remain for such a monument, the most likely is that the structure was to be a propylon or ornamental entrance to the area on which the stoas faced.¹³ Such a gateway would have been desirable at this point on both aesthetic and practical grounds. Its north front would undoubtedly have been gabled and so would have introduced an agreeable variety into the long expanse of sloping roofs which the stoas would have presented to the terraces and to the Assembly Place. It would probably have been made to stand out prominently by the use of an order of larger scale than those of the Stoas. In a practical way it would have served as the most convenient approach to the area in front of the Stoas and to the Assembly Place for all the citizens of southern Athens. They would naturally then, as now, have left the main roadway (the Road through Koile?) in the saddle between the central Pnyx Hill and the Museum and would have taken a path that followed closely the contours of the hillside to the site of the monument in question. That such a line of traffic existed in antiquity is proven by the inclusion of gateways at the southwest corner of the monument in successive periods of the city wall which was subsequently carried over the foundations of stoas and monument. A modern road follows the same course.

Another bit of evidence that favours the identification of the monument as a propylon is afforded by an extensive cutting begun, but never finished, near the western end of the scarp that bounds the south side of the Middle Terrace (Fig. 12). Over an area *ca.* 4.00 × 10.60 m. the rough rock had begun to be dressed down to a level *ca.* 1.15 m. above that of the Middle Terrace. The face of the scarp that separated this newly dressed area from the Middle Terrace was cut clean and true; subsequently, perhaps much later, a flight of three short steps was cut in the scarp. This stairway, though too small to be associated with the original design of the major cutting, suggests its purpose, *viz.*, that it was the beginning of a broad flight of stairs leading from the Middle Terrace to something above. The scale of the undertaking and its incompleteness make probable its attribution to the same building program as the stoas. We may therefore conjecture that the stairway was intended to lead to a terrace in front of the East Stoa. It will be seen from the elevations on Pl. XVI that the dressed floor into which the stairway would have been cut lay at a level just midway between that of the Middle Terrace and the terrace-to-be in front of the East Stoa. Each half of the difference in level might have been negotiated by a flight of five steps of suitable height (*ca.* 0.23 m.), with a broad platform between.

¹³ This identification was first proposed by Dorothy Burr Thompson.

Had the stairway been intended to serve only a terrace in front of the East Stoa, it would undoubtedly have been placed near the middle of that terrace. It would seem likely instead that the stairs were to have led both to that terrace and to our "propylon." Significant for this connection is the close correspondence in width between the stairway and any building that may have rested on the foundation in question; and, further, the fact that the five steps needed to adjust the difference in level between the unfinished platform for the conjectural stairway and the floor of the "propylon" would

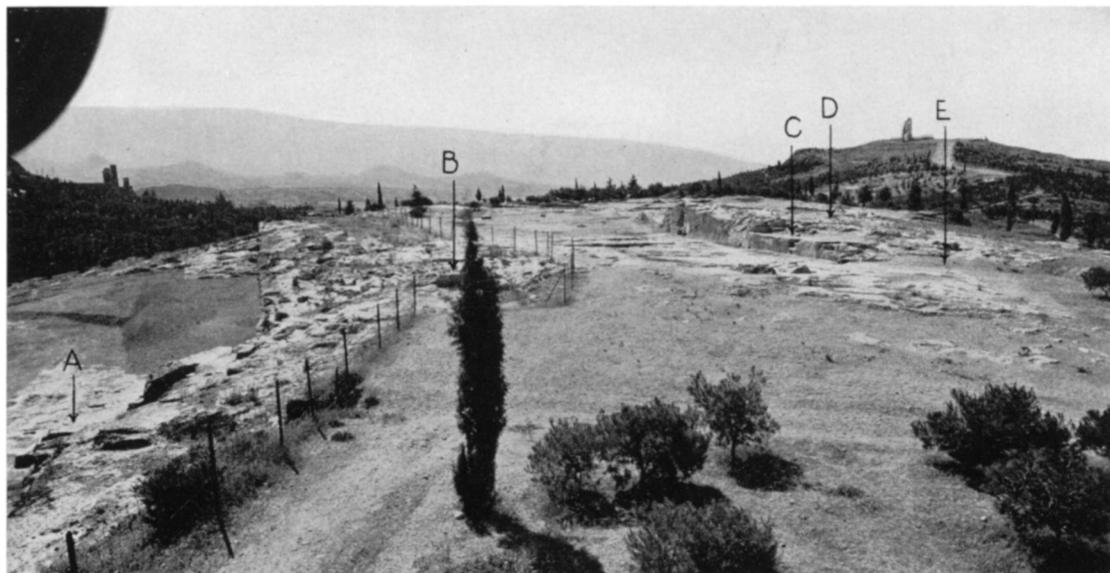


Fig. 12. Middle Terrace from the Northwest

A, Bema
B, Altar (?)

C, Cutting for Stair (?)

D, Northwest Corner of East Stoa
E, Northeast Corner of West Stoa

satisfactorily account for the extension of the foundation at the northwest corner of the "propylon." We may suppose that the floor of the "propylon" lay at the same level as the terrace in front of the East Stoa and that the angle between the two was filled by a sloping earth floor in such a way that one coming from the south through the "propylon" might either have continued straight ahead to the Middle Terrace or turned right to the terrace in front of the East Stoa.¹⁴

For the detailed restoration of the propylon there is no specific evidence available. An adaptation of the scheme of the Mnesiclean Propylaea would be suitable in both plan and elevation and such has been used in the restoration sketch, Fig. 13. It must be emphasized, however, that the details of the design are very largely conjectural.

¹⁴ At the inner front of the Propylaea on the Acropolis a similar arrangement was used to meet a similar, though less marked, difference of levels. Cf. *Hesperia*, V, 1936, p. 454, fig. 7.

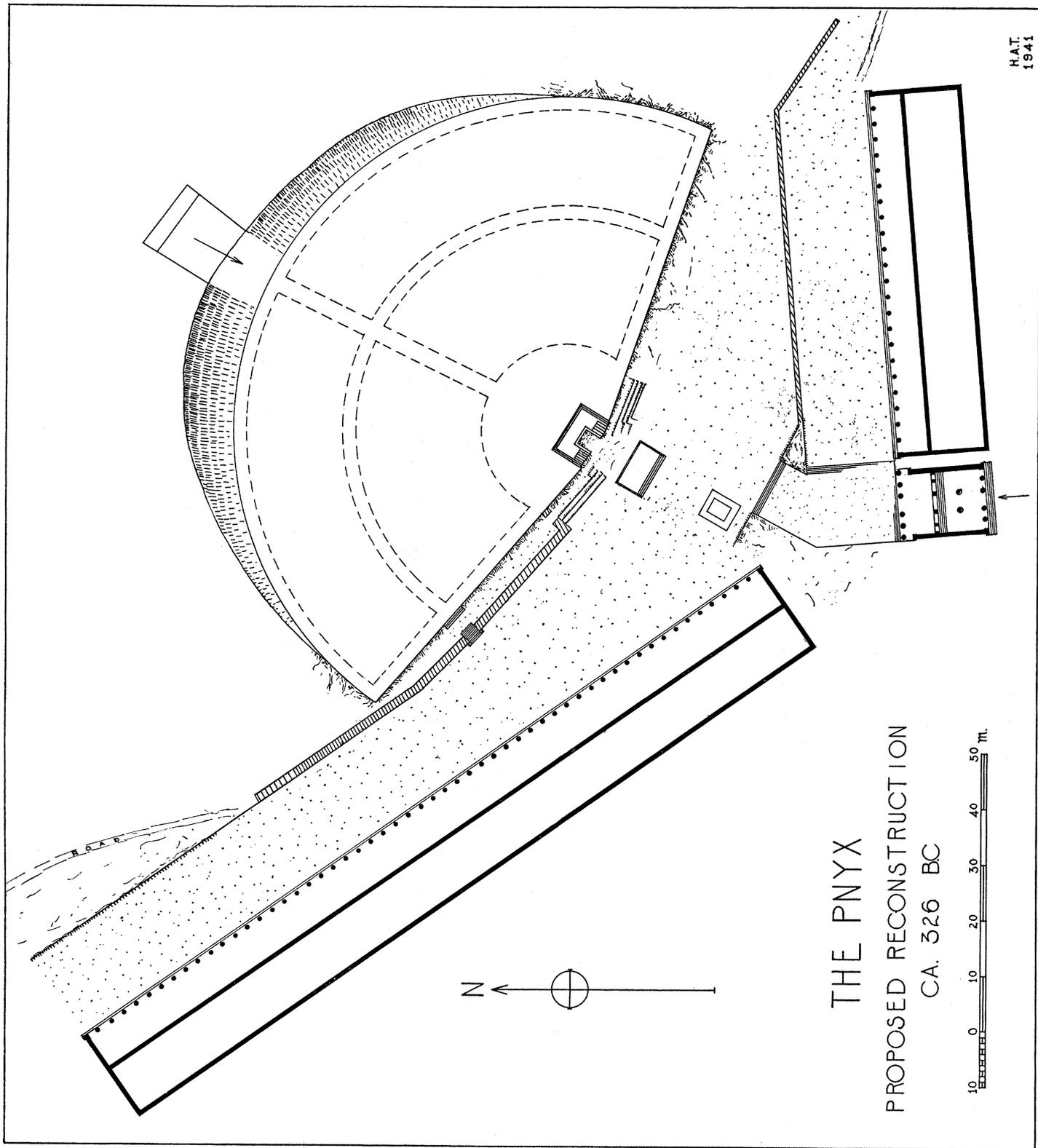


Fig. 13. Reconstruction of the Pnyx

TERRACES

The broad promenade on which the West Stoa faced has been labelled the West Terrace. Toward either end the level area was gained by cutting down the living rock, in the mid part by an earth filling which had to be supported along its front edge by a stone wall. The remains of this supporting wall have been explored only in the area adjacent to the Assembly Place and they have been described in detail in the report on the Assembly Place.¹⁵ Three colossal and roughly hewn blocks of the native limestone still stand in place (Fig. 14), and elsewhere the dressed bedding is

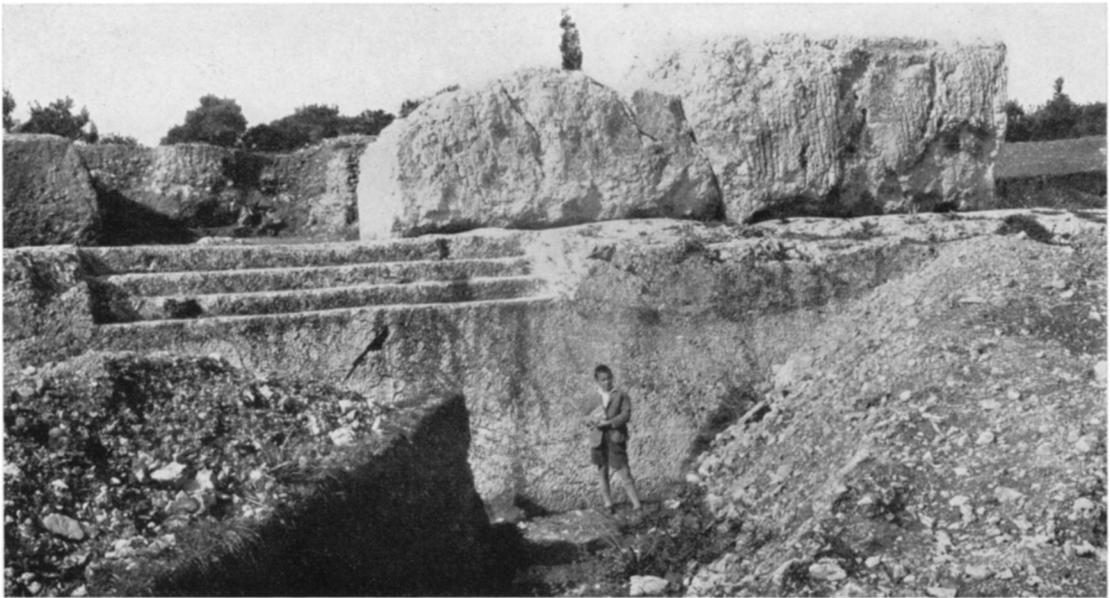


Fig. 14. Retaining Wall of West Terrace from Northeast

clearly defined. Communications between the Terrace and the Assembly Place were afforded by a stairway set into the terrace wall and another in the shoulder of the scarp that here formed the front of the auditorium.

The terrace in front of the West Stoa was continued toward the southeast by another broad level area, formed by boldly cutting down the shoulder of the hill; this we may call the Middle Terrace (Fig. 12).¹⁶ The area is now bounded on the north by the cutting for the front of the Assembly Place of the Third Period, on the south by the vertical scarp, as much as 2.75 m. high, left by the cutting for the terrace. Although this terrace has not been fully cleared toward the southeast, it would seem to have extended to a point approximately opposite the southeast corner of the Assembly Place of the Third Period. In this area the terrace dies out: its floor slopes up,

¹⁵ *Hesperia*, I, 1932, pp. 155 ff.

¹⁶ *Hesperia*, V, 1936, p. 165, fig. 14.

the dressing becomes rough and spasmodic. The northwestern part of the terrace is clearly marked as its most popular and most used part by the presence there of beddings for five large monuments.¹⁷

The Middle Terrace would seem to have been designed without regard for either the East or the West Stoa. The lack of co-ordination in plan is evident from a glance at Pls. XIV and XVI. Equally significant is the discrepancy in levels. The Middle Terrace, even in its lower northwest part, lies over 1.15 m. above the level of the bottom of the euthynteria of the West Stoa, i. e., well above the level even of its stylobate,—a most unsatisfactory situation. Its relations with the East Stoa were still less happy, for there the terrace lay *ca.* 2.00 m. below the level of the bottom of the euthynteria of Stoa A, over 2.00 m. below that of Stoa B. Hence it may be taken as certain that the Middle Terrace is not part of the same program as the Stoas. Is the Terrace earlier or later? Several considerations suggest that the Terrace is earlier than the Stoas. In the first place one might logically assume that this part of the hilltop, closely adjacent to the Assembly Place of all periods, had been levelled before the remoter area represented by the greater part of the West Terrace. Secondly, the scarp that bounds the Middle Terrace toward the southwest would seem to have been cut down in its most southeasterly part by the foundation bedding of East Stoa A. To attempt to fix the date of the Middle Terrace more closely would be difficult, perhaps rash. It may be surmised, however, that the Terrace was cut by those who arranged the Second Period of the Assembly Place (404/3 B.C.) and that much of the building stone for that construction was cut here.

On the shoulder of the hilltop between the southeast corner of the Assembly Place and the East Stoa are scanty remains of two walls, intended to support an East Terrace (Pl. XVI).¹⁸ The upper, slighter wall seems obviously to have been the earlier and to have been replaced by the heavier wall. The style in which the few surviving blocks of the latter wall are worked closely resembles that of the back foundation wall of East Stoa B and suggests their contemporaneity. The slighter wall might then be contemporary with the cutting of the Middle Terrace. But this is very problematical. In the restoration sketch (Fig. 13) it is suggested that the architect of East Stoa B would have used the heavier of the two walls to support the eastern part of the terrace which he undoubtedly planned, but never completed, immediately in front of the Stoa.

The projected terrace in front of the East Stoa had been barely begun when the entire building program was abandoned. A certain amount of rock cutting had been done in front of the east end of the Stoa, but even here the marks of unfinished quarrying are still apparent (Pl. XVI). On the restoration sketch (Fig. 13) it has been assumed that the width of this terrace would have been fixed in the same way

¹⁷ These are described in detail in *Hesperia*, V, 1936, pp. 165 ff.

¹⁸ For a detailed account and photograph cf. *Hesperia*, V, 1936, pp. 164 f., fig. 13.

as that in front of the West Stoa, i. e., as equal to the width of the floor of the Stoa. Such an arrangement would have involved the cutting down of a certain amount of rock in front of the western as well as in front of the eastern end of the Stoa and the erection of a retaining wall with a maximum height of *ca.* 2.00 m. in front of the mid part of the building. As pointed out in the discussion of the Propylon, access to this terrace from both the Propylon and the Middle Terrace was probably gained at its western end.

DATE OF THE STOAS

There can be no question that the two stoas were parts of one and the same building program. This is shown by their similarity in scheme, by their relation to one another and to the Assembly Place, and by the fact that work on both was ended by the same circumstance, viz., the necessity for fortifications on the hilltop.

For the absolute date of the buildings little help is to be gotten from their meagre architectural remains. Most helpful are the traces of channel dowels in the structure that intervened between Stoas A and B, and the cuttings for \square clamps in the re-used blocks in the foundations of East Stoa B. Clamps and dowels of these types were probably not used in Athens before the third quarter of the fourth century B.C.¹⁹ Consequently the building program may be put as late as that time.

Further help in dating may be gotten from the pottery associated with the construction. Potsherds were found in a small cistern which was put out of use and filled in by those who laid the northwest foundation of the West Stoa; in the footing trenches of the surviving foundations for the front of the West Stoa; in contemporary filling brought in to level the hilltop in the mid part of the front of the same building; and in undisturbed packing thrown into the foundation trenches of East Stoa A alongside the surviving foundation blocks of East Stoa B. The material from these various places is uniform in date and may be dated in the middle and third quarter of the fourth century B.C. Representative pieces from contemporary filling near the middle of the front foundation of the West Stoa are illustrated in Fig. 15, *a*, *b*, and *c*.

a. Fragment of a Red-figured Lid.

Maximum dimension, 0.10 m. There remains a part of the design around the knob, and a part of a woman's head facing a griffin.

b. Fragment of a Red-figured Lid.

Maximum dimension, 0.105 m. A rim piece. On the pendent rim, a band of egg-and-dot. On top, a woman seated, facing a figure who

comes from the left bearing a box and a round-bottomed basket (?). From each of the bearer's hands hangs a long ribbon.

c. Terracotta Lamp.

Height, 0.04 m.; diameter, 0.07 m. Rear part and tip of nozzle broken away. On the shoulder, a pierced knob. Black glaze on the inside and in a band around the rim.

For the motives and style of the red-figured pieces, pertinent parallels may be found, *inter alia*, among the latest material from the houses of Olynthos that were

¹⁹ Cf. *Hesperia*, VI, 1937, pp. 102 f.

abandoned in 348 B.C.²⁰ The lamp is a variant of Broneer's Type VII,²¹ The same shape and distribution of glaze are found among the latest lamps from Olynthos.²² But the pierced knob does not occur on the published lamps from that site. This



Fig. 15. Pottery Associated with West Stoa (a, b, c) and Compartment Wall (d, *infra*, p. 334)

feature is common, however, on the earliest lamps from Alexandria, which have much the same shape.²³ A date in the latter part of the third quarter of the fourth century is thus indicated.

²⁰ Cf. *Olynthus*, V, pls. 110-112.

²¹ *Corinth*, IV, ii, pp. 45 f.

²² *Olynthus*, II, p. 143, nos. 89, 90, fig. 307; V, p. 282, nos. 125-133, pl. 201.

²³ Breccia, *Necropoli di Sciatbi*, pp. 76 ff., pl. LVII, 125, 126. Cf. also the lamps from Hellenistic groups A and B from the Athenian Agora, *Hesperia*, III, 1934, pp. 460 f.

Since the pottery from the various points around the two stoas is considerable in bulk and strikingly consistent in character, it proves that the building program was begun certainly not before the third quarter of the fourth century and probably not long, if at all, after.²⁴

PURPOSE OF THE STOAS

The evidence for the intended purpose of the Stoas is at first sight meagre. There appears to be no reference to them in inscriptions or in the ancient authors, nor was such mention likely in view of their incompleteness. We must, therefore, be content with the evidence to be drawn from the scheme of the buildings and from their relation to one another and to their neighbours.

It was suggested in the earlier publication that the East Stoa, then referred to as the Long Stoa, was to be associated with the sanctuary of which traces were found in front of the Stoa and which was then identified as the Thesmophorion.²⁵ But the more thorough exploration of the area has failed to reveal any additional remains of the sanctuary; no trace, for instance, of the *megara* or underground chambers which were the most characteristic known feature of the Thesmophorion. The late date of the votive offerings (late fourth and third centuries B.C.) also militates against their association with the Thesmophorion, which certainly existed in the fifth century if not before. Hence, though there can be no question of the existence of a sanctuary on the hilltop in front of the east end of the East Stoa, its identification with the Thesmophorion must now be counted very dubious.²⁶ And since the votives postdate the abandonment of the East Stoa there is no longer any cogent evidence for associating sanctuary and stoa.

Before the plan of the West Stoa and its relation to the fortification wall had been elucidated, that building was tentatively identified as an arsenal.²⁷ But this identification is vitiated by the radical difference in plan between the Stoa and known arsenals such as the closely contemporary Arsenal of Philo in the Peiraeus and those of Pergamon. Furthermore, there is no reason to believe that at the time when the Stoa was begun the top of the Pnyx Hill would have been counted a convenient base of military operations.

That the two stoas were designed for the same or a similar purpose is now clear from their essential identity in plan. The contours of the hilltop made it more eco-

²⁴ The East Stoa had been dated in the first century after Christ in the earlier publication (*Hesperia*, V, 1936, pp. 168 f.) on the evidence of pottery found in association with it. The subsequent and more thorough exploration has shown that the earth fillings from which that pottery was recovered were made long after the abandonment of the construction of the building.

²⁵ *Hesperia*, V, 1936, pp. 182 ff.

²⁶ Professor Oscar Broneer has recently suggested that the Thesmophorion shared with the Eleusinion a site on the north slope of the Acropolis. *Hesperia*, XI, 1942, pp. 250 ff.

²⁷ *A.J.A.*, XLIII, 1939, p. 166 (L. T. Shoe). The undersigned, and not Miss Shoe, were indiscreet.

nomical to cover the required space with two buildings rather than one and aesthetic considerations may also have suggested the division. The plan of the buildings would be more helpful for the present problem if we were certain how the back part of each building was intended to be treated. But, however that may be, a large proportion of the floor space of each building was clearly designed as a promenade where an enormous number of people might have strolled, sheltered from sun and rain.²⁸ That great throngs were expected is shown further by the very generous width of the terrace in front of the West Stoa. Its width, *ca.* 15.80 m., well over twice that of the terrace associated with the normal stoa in market place or sanctuary, is best paralleled in the Theatre Terrace of Pergamon which accommodated the vast crowds from the Theatre.²⁹

At the time when the Stoas were designed there was, so far as we know, only one occasion for great crowds in their vicinity, *viz.*, the meetings of the citizens in the Assembly Place. The general plan shows that the stoas were placed so as to be as conveniently accessible from the Assembly Place as the terrain permitted. The Assembly Place, as already observed, was united to the West Terrace by a stairway. Hence there can be little doubt that the Stoas were originally and primarily intended for the convenience of the citizens attending the Assembly. The spacious terraces would have been popular as promenades before and after meetings, while the roofed porches would have been convenient refuges in case of sudden rain and might often have enabled the Assembly to hold a recess for the duration of a shower rather than to break off its business for the day.

One will recall the passage (V, 9) in which Vitruvius prescribed that colonnades should be built behind the stage of a theatre to provide shelter for the audience at a play in case of rain. Among the examples of such prudent arrangements quoted by Vitruvius is the Theatre of Dionysos in Athens. To the Athenian theatre-goers of Vitruvius' day there were available the colonnade set against the back of the theatre, the porches of the Temples of Dionysos, the Odeion of Pericles, the two-storied Stoa of Eumenes and perhaps also, though Vitruvius did not mention them, the Stoas of Asklepios. A comparison of the plans of the Theatre of Dionysos and its environs with that of the Assembly Place with its projected stoas will demonstrate the essential similarity of their arrangements.

In the case of the Theatre of Dionysos, the first colonnade built expressly for the convenience of its audience was that attached to the scene building. This colonnade was presumably finished, along with the stone theatre itself, by Lykourgos, at a time

²⁸ The floor space of the porch of the West Stoa would have measured *ca.* 1000 sq. m., that of the East Stoa B *ca.* 350 sq. m.

²⁹ Stoa of Attalos in Athens, *ca.* 6.10 m.; Middle Stoa in the Athenian Agora, *ca.* 5.50 m.; South Stoa in the Corinthian Agora, *ca.* 7.50 m.; Sacred Stoa in Priene, 6.47 m.; Stoa of Athena Polias in Priene, *ca.* 5.00 m.; Theatre Terrace of Pergamon, *ca.* 15 m.

very shortly before work began on the Stoas of the Assembly Place. It is tempting to suppose that the provision of such facilities at the Assembly Place was suggested by the newly completed theatre. That the buildings by the Assembly Place are the later in conception is testified by the difference in scale: the Stoa by the Theatre has the modest dimensions and simple scheme typical of the classical period; the West Stoa on the Pnyx, in its vast size and more elaborate plan, heralds the Hellenistic Age. The West Stoa was probably the first colonnade in Athens to be planned on the colossal scale that was to dominate in the second century B.C.

If we assign the porches of the stoas on the Pnyx to the members of the Assembly, what are we to do with the back parts of the buildings? That all or any considerable proportion of that space should have been required for public offices, archives and the like is altogether improbable in view of the modest provision for such services even in connection with the Council House of the Five Hundred in the Agora. If the buildings be restored in the way that is structurally most satisfactory, i. e., with a series of rooms opening through the inner long wall onto the porch, they will be identical with many stoas that were built around the market places of the Greek cities from the fourth century B.C. onward. The great majority of the rooms in these commercial buildings undoubtedly served as shops. No more probable use suggests itself for the rooms of the Stoas on the Pnyx. The commercial advantage of proximity to crowds so large and so regular is obvious. A few years earlier the author of *Ways and Means* had proposed as one device for increasing the public revenues and beautifying the city that the state should build and rent shops for retail dealers in the Peiraeus and the city (Xenophon, *De vectigalibus*, III, 13). One might well regard the present program as a practical application of such a proposal.

REMODELLING OF THE ASSEMBLY PLACE

The discovery of the stoas on the Pnyx raises a serious problem in the history of the Assembly Place proper. On the basis of the earlier exploration, three periods were distinguished in the history of the auditorium. The first, in which the seating floor had the slope of the hillside, was assigned to the turn of the sixth and fifth centuries; the second, which involved a complete reversal in orientation, was attributed to the Thirty Tyrants of 404/3 B.C.; the third, a grandiose restoration and enlargement of the second, was counted not earlier than the beginning of the second century of our era.³⁰

The auditorium of the Second Period, which would seem certainly to have been that found in use by the architect of the stoas, was flimsy in construction, feeble in design; it would have been quite overshadowed by the splendid new buildings on the hilltop, although these were undoubtedly subsidiary to it in purpose. One would gladly

³⁰ *Hesperia*, I, 1932, pp. 215 ff.

believe, therefore, that the new program of the fourth century included also a re-modelling of the auditorium.

Several pieces of evidence do, in fact, suggest that the auditorium of the Third Period was part of the same program with the stoas and propylon on the hilltop. The West Stoa, the West Terrace, and the auditorium are related to one another in an organic way that is best explained by regarding them as contemporary elements of one design. This is most clearly shown by the fact that the retaining wall of the West Terrace through much of its length is parallel to the front of the auditorium and by the perfect correspondence between the stairways in the retaining wall and in the



Fig. 16. Retaining Wall of Assembly Place from Northeast

shoulder of the scarp at the front of the auditorium. Contemporaneity is suggested also by the similarity in the masonry of the back wall of the East Stoa (so far as it has been exposed),³¹ of the retaining walls of the West³² and East³³ Terraces, and of the great curved retaining wall of the auditorium.³⁴ All four walls are built of the local limestone; in all, the coursing tends to be horizontal but is not rigidly so; the individual joints with rare exceptions are either perfectly horizontal or vertical; the faces of the blocks are heavily and irregularly bossed, but their edges are not drafted; in the case of the great retaining wall of the auditorium and the back wall of the East Stoa, the faces of the blocks are striated with long furrows left by the pointed chisel with which the final trimming was done. Equally striking is the similarity between the pottery, lamps, loom-weights, figurines, etc., found in association with the stoas and the corresponding material from the greater part of the earth filling

³¹ *Hesperia*, V, 1936, pp. 160 f., figs. 10, 11.

³² *Hesperia*, I, 1932, p. 167, fig. 42.

³³ *Hesperia*, V, 1936, p. 164, fig. 13.

³⁴ *Hesperia*, I, 1932, pp. 144 ff., figs. 26-29.

of the auditorium of the Third Period. In both cases the material is chiefly of the late fifth and first half of the fourth century, but it does unquestionably extend into the third quarter of the fourth century.³⁵

The chief arguments advanced in an earlier study for assigning the auditorium of the Third Period to the second century after Christ were the discovery of pottery of the Roman period behind the great curved retaining wall and the approximation in style between that wall and Athenian buildings of the Hadrianic period.³⁶ It is to be emphasized, however, that the late pottery was found in limited areas, directly behind the great retaining wall and among the masses of broken stone banked against the inner face of that wall. The late material may have reached that position in the course of a completion or extension or repair of the retaining wall, conceivably in consequence of the removal of stones from the wall and the filling behind it. As for the style of the great wall, the comparison with the newly exposed masonry on the hilltop above would appear to be more cogent than with the Hadrianic walls.

The balance of evidence would thus now favour for the Third Period of the auditorium, or at any rate for its design, a date in the fourth century before Christ rather than in the second century after Christ. A final decision should be deferred until the stratification behind the great retaining wall can be re-examined and the masonry of the various walls compared more closely on the spot.

THE ALTAR (?) ON THE MIDDLE TERRACE

On the north shoulder of the Middle Terrace, directly above the bema of the auditorium of the Third Period, may be seen a foundation bedding cut from the living rock (Pls. XIV, XVI, Fig. 12). The dressed surface measures $8.90 \times ca. 6.00$ m. in outline, but is broken by an island *ca.* 1.80 m. wide toward the northeast side. No blocks remain in place. The bedding lies on the axis of the bema and is approached from the top of the bema over an open, sloping area. This passageway is flanked to north and south by three ranges of rock-cut benches; on the north the first bench was kept well back from the front of the auditorium to leave room for the continuation of the corridor that ran between the front of the auditorium and the retaining wall of the West Terrace.

In an earlier article it was suggested that this bedding might have supported seats of honour, a *proedria*.³⁷ In the light of the new discoveries on the hilltop a more probable identification may now be proposed. The bedding has dimensions and plan appropriate to a monumental altar which would have faced toward the auditorium

³⁵ The small objects and the terracotta figurines have been studied by Gladys R. Davidson and by Dorothy Burr Thompson; they will appear in *Hesperia*, Supplement VII. The red-figured pottery is now under consideration by Lucy Talcott. I am grateful to all three scholars for their opinions on this problem.

³⁶ *Hesperia*, I, 1932, pp. 180 ff.

³⁷ *Hesperia*, I, 1932, pp. 163 f.

in a northeasterly direction, and would have had steps on its southwest flank. Placed thus, the altar would have been readily accessible from the bema, sacrifices on its top would have been made in full view of the entire audience, and the structure would have served as a focal point for the whole scheme of auditorium, stoas, and propylon.³⁸

AUTHORSHIP OF THE BUILDING PROGRAM

Now that the scheme, the date and the purpose of the building program on the Pnyx have been fixed with fair precision, one is tempted to search out its author. A date in the latter part of the third quarter of the fourth century, which is shown by the internal evidence adduced above to be the most probable, would make the beginning of the work fall within the regime of Lykourgos (338-326 B.C.). Nor could a more likely author be found. The program on the Pnyx is another expression of the spirit evident behind the public work certainly completed or initiated by Lykourgos: the Theatre of Dionysos, the Panathenaic Stadium, the Shiphsheds and the Arsenal in the Peiraeus, the Gymnasium in the Lyceum. All were intended for the convenience and well-being of the citizens at large and at the same time for the beautification of the city; all breathed confidence in the abiding greatness of Athens and of the Athenian democratic system.

The attribution to Lykourgos is strengthened by a review of Athenian history in the generation after his death. That a program so costly should have been initiated in the midst of the "Lamian War" (323-322 B.C.) is scarcely conceivable. The spirit of the project was quite inconsistent with the constitutional reform of 322/1 B.C., which drastically reduced the number of citizens and curbed many democratic powers. Nor does it agree any better with the temper of Demetrios of Phaleron whose attitude toward democratic government had been moulded by Aristotle and Theophrastus, whose realism could have allowed him little hope for any substantial revival of Athenian freedom and whose economical spirit in public finance prompted him to

³⁸ The dimensions of the bedding show a striking correspondence with those of the marble altar in the Athenian Agora to the east of the Metroön (*Hesperia*, II, 1933, pp. 140 ff.). The altar in the Agora measured 8.76 × 5.43 m. on its lowest step. The disposition of its superstructure, moreover, would agree with the plan of the bedding on the Pnyx. The four marble steps of the Agora altar are cut two to the block; one fragmentary but still enormous marble orthostate remains from the altar proper. This megalithic tendency is reminiscent of the retaining walls of the Auditorium of the Third Period. The Agora altar has been dated to the latter part of the fourth century before Christ (R. Stillwell, *loc. cit.*; L. Shoe, *Greek Mouldings*, Index *s. v.* Athens, Agora Excavations, Altar of the Heudanemoi); but there is ample evidence (mason's marks, double setting lines, and duplicate dowel holes) to show that it was moved to its present position from elsewhere, at a time not earlier than the advanced Hellenistic period (among the masons' marks is an alpha with broken bar). One is tempted to think that this altar originally stood on the Pnyx, and that, when the Pnyx had been practically abandoned by the Assembly, it was moved down to the Agora, again to stand in the midst of public life in front of the Metroön and at the edge of the Orchestra.

censure Pericles' lavish expenditure on the Propylaia.³⁹ The terrible confusion, political, military, and financial, that filled the forty-six years subsequent to the coming of Demetrios Poliorketes in 307 B.C. would alone have precluded any such grand program within that period.

If Lykourgos be recognized as the most probable author of the project, the beginning of construction may be assigned tentatively to the closing years of his active career, i. e., to the period 330-326 B.C. By that time the heavy work would seem to have been well advanced, if not already completed, on the Theatre, Stadium, and Arsenal so that a large force of quarrymen and masons would have been free and eager for the work on the Pnyx. In the breadth of its conception, as also in the sheer mass of its fabric, this program might well be counted the greatest of Lykourgos' public works, a fitting climax to his career and a splendid, if pathetic expression of his faith in Athens.

II. THE CITY WALLS

INTRODUCTION

In Athens, where so many of the more glorious monuments of antiquity are preserved, fortifications have suffered more disastrously than in other places of similar consequence.⁴⁰ Various early travelers found traces of the walls sufficient to give them the plan, but it is probable that most of what they saw was built a thousand years and more after Themistocles. In the Kerameikos, by chance, the walls of many periods are well preserved, and stand now to a good height. In almost every other part, the very restorations which have increased the height of the walls in the Kerameikos seem time and again to have razed the fortifications to the foundations, so that now, in the few places where the walls can be seen, we seldom find more than a single course of blocks from classical construction, and often the mortar and rubble of early Christian or Byzantine builders fills the rock-cut bedding of the original construction.

The time is fast passing when it is possible to examine the circuit walls of Athens by scientific excavation, and to determine the exact course and the history of the wall in its various periods. Although even now occasional accidental finds of well-preserved stretches are made, the growing modern city has spread over and beyond the ancient circuit in all directions, so that for the most part the traces of the walls have either been destroyed or are concealed by large buildings or paved streets.

³⁹ Cicero, *De officiis*, II, 17, 60.

⁴⁰ See Judeich, *Topographie von Athen* (ed. 2), pp. 113-165 for a survey of earlier investigations of the city walls; also, especially, Noack, *Ath. Mitt.*, XXXII, 1907, pp. 123 ff. and 474 ff.; also, Scranton, *A.J.A.*, XLII, 1938, pp. 525-36.

There still remain, however, two general areas where the course of the ancient wall runs through open ground. One of these is in the Public Gardens, northeast of the Olympieion. Here extensive plantings make digging for antiquities a moral impossibility; but after examining the ground one may see that the earth is not often deep over the bedrock, and in the absence of remains of the walls above ground, there would seem but little chance of their preservation below ground. This cannot be accepted too implicitly, however, for in the other area, the region of the Pnyx, the possibility of finding traces of the wall in many places seemed equally remote. Here, on the Hill of the Nymphs, certain remains had long been visible, and on the Museum Hill were other remains somewhat better preserved. These related fragments had been attributed by some scholars to Themistocles, by others to Cleon. On the crest of the Museum slight markings in the rock, at its western end some roughly polygonal blocks, and at the western foot of the range a few isolated blocks might tentatively have been associated with the circuit wall or the Long Walls. But the entire region is now a park and the young forest of ever-growing pine trees makes surveying and the laying out of trenches increasingly difficult.

The account which follows is a report of the excavations in the latter of these two areas, the region of the Pnyx, the results of which are concerned with five major periods of construction: (*A*) Traces of a group of buildings on the Pnyx, described above by H. A. Thompson. (*B*) A wall completed along the entire range, called from the manner of its construction "the Compartment Wall." Associated intimately with this is a fortress on the Museum. (*C*) An extensive modification and repair of the Compartment Wall, called from its very distinctive material "the White Poros Wall." (*D*) A general restoration of later date known as the "Roman Repair." (This is not the only repair of Roman date by any means, but we refer to the others as "minor Roman repairs.") (*E*) A thorough-going reconstruction and modernization of the defenses carried out in rubble and mortar which we call "the Mortar Repair." A second, but very late, addition to the wall in one place was also carried out in mortar, but was apparently very limited in scope and may be included with "the latest phases."

During the course of the excavations the opportunity was taken to examine traces of the outer circuit in the immediate neighborhood, with the hope of establishing facts about the Themistoclean wall. A search was also made for possible remains of the Long Walls and of the Phaleric Wall, but it was impossible to examine any of the traces by excavation.

Before we discuss the actual finds, we may say a word about the theatre of operations in its narrower aspect. The "Pnyx," as has been pointed out many times before,⁴¹ includes the three peaks known as the Museum Hill, the Pnyx Hill proper, and the Hill of the Nymphs. These three summits constitute a range, being separated from

⁴¹ Plato, *Kritias*, 112 a; Jane Harrison, *Mythology and Monuments of Ancient Athens*, 1890, p. 107.

one another only by depressions or cols. On the east they are loosely connected with the Acropolis by the Areopagus, and on the west they send out spurs toward the Peiraeus. The panorama, Fig. 17, combined with Plate XIV, gives an idea of the topography with which we are dealing (see also Figs. 1, 2, 11, 20, 34, 41, 42).

The actual excavations were carried out in a series of trenches beginning on the northwestern slopes of the Hill of the Nymphs, and continuing to the southwestern slopes of the Hill of the Muses, covering a front almost a kilometre long. In general



Fig. 17. The Hill of the Nymphs, the Pnyx, and the Museum, from the Western Spur of the Pnyx

these trenches, with the walls which they expose, lie on the westward slope of the crest of the range, along the slope remote from the city. More than seventy trenches or pits revealed the essential points of the monuments under study, although some details remain obscure. The excavations began at points along the wall which was already known and indicated on plans such as Judeich's, but new discoveries soon made it necessary to operate in areas where ancient remains had not hitherto been suspected.

THE COMPARTMENT WALL

We may now turn to a discussion of the Compartment Wall, the earliest completed wall along the Pnyx ridge. This wall was traced southward from a point on the northwest spur of the Hill of the Nymphs. It was found to pass over the foundations of the West Stoa on the Pnyx, and to cross the unfinished foundations of the East Stoa. In the col between the central Pnyx and the Museum Hill it was broken by a double gate, from which it ascended the ridge of the Museum to the peak. On this stretch are preserved remains of several towers. On the city-ward slope of the summit of the Museum Hill was constructed a wall joining the Compartment Wall to the Themistoclean wall east of the peak, thus enclosing a roughly polygonal area around the peak. The fortress so contrived is built in much the same style as the Compartment Wall elsewhere.

The style of construction of this wall is distinctive, and has suggested the name which we have given it—the Compartment Wall. Facings of ashlar orthostates enclose a mass of rubble and earth packing. The orthostates are laid with two

stretchers alternating with one header; the headers project inward from either side to meet in the middle and form compartments in the core, equal in length to the combined lengths of two stretchers. The width of the wall varies, but is on the average 3.00 m. The most characteristic section is seen at the east end of the East Stoa.⁴² Here (Fig. 18) the orthostates are 1.35 m. in length, 0.65 m. in height, and 0.48-



Fig. 18. Compartment Wall above East End of East Stoa B, from the North

0.50 m. in thickness. The blocks are well cut and carefully jointed with a band of anathyrosis about 0.10 m. wide along the outer joint surface. The tops are dressed to receive another course of blocks and a few pry-holes are to be found. The surfaces were sometimes dressed nearly flat, although when the natural cleavage surface was more or less flat it was not worked. At the vertical joints the corners were given a bevel bringing the joint surfaces to an even line; the width of the bevel varies because the surfaces are uneven. The edges along the tops of the blocks may have been so beveled, but they are too much weathered to allow certainty on this point. The stone is a coarse conglomerate.⁴³

⁴² Part of our description is taken from *Hesperia*, V, 1936, p. 192.

⁴³ One of the best parallels for this type of masonry is the section of wall near the theatre at Miletus. See von Gerkan, *Die Stadtmauern, Milet*, II, 3 (1935), p. 109, fig. 60 and fig. 68. The Miletus wall is said to date from about 300 B.C. For other parallels, see Scranton, *Greek Walls* (1941), pp. 181, List D 10 and 182, List D 13.

THE COMPARTMENT WALL ON THE HILL OF THE NYMPHS

It will be convenient to begin our description of the Compartment Wall with the stretch about 40 m. long which is preserved on the northwest spur of the slope of the Hill of the Nymphs (Fig. 19) ; this was partially uncovered by Noack ⁴⁴ in 1906, and



Fig. 19. Compartment Wall on Northwest Spur of Hill of Nymphs, from the North

was briefly described by him. The wall is of irregular thickness, ranging from 2.90 m. to 3.38 m. It was built largely of blocks of conglomerate arranged so as to form two faces, with a filling of broken stones and earth. At one point one of the headers projects *ca.* 0.30 m. in front of the wall, as though for the spring of a tower, but we found no other traces of any tower and the peculiarity may be attributed to carelessness in the laying of the foundation courses. Quantities of re-used materials were employed, ranging from roughly squared building blocks to marble blocks from monument bases. It may be that some of the re-used material dates from later repairs, for as preserved the wall is far more irregularly built here than in most places elsewhere.

⁴⁴ Noack, *Ath. Mitt.*, XXXII, 1907, pp. 508-9 ff.

The point of attachment of this section to the Themistoclean circuit is probably to be placed some metres northwest of the present end of the bit preserved, on ground since removed by quarrying. Noack, in his investigations of 1906, examined some stretches of the city circuit between the foot of this spur and the Dipylon, and traces of the Themistoclean circuit are even now to be found at the foot of the westward spurs of the range. The topographical considerations which originally suggested the restoration of the circuit which Judeich has accepted still hold, and we have found



Fig. 20. The Hill of the Nymphs, from the Southwest. Arrows Mark Place of Compartment Wall in Upper Left of Picture

nothing to suggest that the outer wall lay as high up on the slopes of the Hill of the Nymphs as the remains we have examined. There are numerous evidences of modern quarrying below our stretch, consisting of drill holes for blasting, which afford sufficient clue to the fate of the circuit wall below.

From the remains of the Compartment Wall still to be seen, its line probably ascended toward the peak of the Hill of the Nymphs without, perhaps, reaching the summit. The gardens and buildings of the Observatory which at present cover the upper part of the hill have made it impossible to search for the wall, if indeed they have not assisted in its destruction (Fig. 20). From this slope the course may have been almost due south. Here, again, modern arrangements conceal any traces which may exist of the wall. But that anything has survived may be doubted, for the present

deep saddle between the Hill of the Nymphs and the Pnyx Hill proper is formed by a quarry of some size and of a date probably later than the wall. It consists of a large level area cut out of the solid rock (*supra*, p. 271, Fig. 2). Bounded on the Pnyx side by a vertical scarp of cut bedrock, facing a little west of north, at its eastern extremity it merges with another vertical scarp that extends towards the Assembly Place. On the side of the Hill of the Nymphs it is difficult to ascertain how much quarrying has been done, but it is apparent that some working has been carried on even there. Thus it is evident that whatever natural saddle existed between the Hill of the Nymphs and the Pnyx proper has been markedly lowered by the quarrying operation. The fact that all lines of Greek fortification across the Pnyx come to an end on the brow of this vertical scarp indicates that the quarrying was done after the walls had been built, and resulted in their destruction. The date of the operations can be only surmised. Cisterns, which had been partially cut away by the quarrying, but which had previously been filled, are of little help. Only one was left in such a state that we could examine its ancient filling, and the few sherds removed indicate only that the cistern had been filled toward the end of the third century B.C. Thus the quarrying is later than that date. There are no traces of drill marks, so that the work cannot be modern or recent. Most probably it was done during the Roman peace.

THE COMPARTMENT WALL ON THE CENTRAL PNYX HILL

Above the edge of the quarry scarp at the north end of the Pnyx proper are some rock cuttings (Pl. XV); most of them belong to houses, but their eastern edge probably marks the line of the Compartment Wall. A well-defined road breaks through the line here (Fig. 21); north of the road the rock is worked in a broad flat area the eastern and southern edges of which are clearly defined, though its western edge is indistinguishable. It could, however, have borne a tower or bastion some 4.20 m. wide, designed to flank a gateway. There is a small cutting which projects southward at the southeastern corner of the area, and this small cutting could have carried a jamb for the gate.

The road itself is interesting; the wheel marks are clearly visible here, and its course can be traced along the Pnyx to the southeast (Pl. XIV) and less clearly westward on the central spur of the Pnyx. A highway to the country would have gone by lower ground rather than over the crest of the ridge, but this was probably the main street of the settlement on the Pnyx and its seaward spur.⁴⁵

The traces of the wall on the southern side of the road are even less distinct. There are numerous cuttings in the rock, but most of them are almost certainly earlier and are to be associated with dwellings. But the bedrock at this point is relatively

⁴⁵ Only an incomplete notion of the elaborate extent of the remains of this settlement, preserved in rock cuttings, can be gained from Judeich's plan (*op. cit.*, plan I) or Curtius-Kaupert, *Atlas von Athen*, Blatt III. With accurate surveys of the region, the original plan might be almost perfectly recovered.

smooth, and the blocks could have been laid directly on the natural surface. There could scarcely have been a large tower, however, for the road bends toward the south in such a way as to indicate that the wall was no wider than the normal three metres. The only immediate defense for the gate must have been the thickening of the wall to the north of the road.

A few metres to the south the wall made a bend toward the southwest. The next traces of it (Pl. XV) are a few blocks of conglomerate lying on almost unworked bedrock, confining masses of small stones and earth. The construction preserved is



Fig. 21. Ancient Road at North End of Pnyx, from the West. A, Wheel Ruts.
B, Cuttings of White Poros Period

most wretched in appearance, but was nothing more than the bedding for the lowest visible courses of the wall, about 3.00 m. thick. The wall then turns again to the south. The remains at this place are so poorly preserved and the opportunities for investigation are so limited by trees, fences, and roads, that it was not found possible to study the remains in this area thoroughly; but it is possible that a tower stood at the corner, for we found masses of packing outside the line of the wall which may be from the foundations of a tower, although this point remains unsettled.

About 7.00 m. south of this corner, the Compartment Wall evidently met the corner of the foundations which had been prepared for the rear wall of the West Stoa.⁴⁶ The original bedding was widened by cuttings along the inner face of the

⁴⁶ *Supra*, pp. 272, 280.

original line of stoa wall, carrying the Compartment Wall with a width of 3.00 m. The fortification would seem to have followed the line of the stoa wall throughout its length, along the western brow of the hill. The cuttings for the foundations are few and indistinct. Not only do they cross many earlier cuttings belonging to houses, drains, and the like (*supra*, p. 273, Fig. 3), but in places within the line of the foundations there are rock surfaces which have never been dressed at all. One instance may be cited where a foundation block must have rested partly on a steeply sloping natural ledge, partly on packing in a hollow of the rock; the packing has now disappeared. At no place along the length of the building did we find certain indications of towers for the wall. They must have existed, however, and one might be restored about half way along the building. As will be seen, the interval of the towers on the Museum Hill seems to have been about 75-80 m., which would allow one tower half way between the north end of the Stoa and the tower of the southwestern shoulder of the hill.⁴⁷

The exact disposition of the Compartment Wall between the West Stoa and the southwest shoulder of the hill remains uncertain (Pl. XVI). At the southwestern corner of the Stoa the bedrock is worked outside the line of the building in an undefined area; this and the numerous other worked beddings, many of which were probably prepared in the first place for houses, may possibly have carried the Compartment Wall. Two possibilities, however, may be noted. The first is that the Compartment Wall turned east to follow the line of the south end of the West Stoa, until a point about the middle of the building, turning south again with its rear face along the line of cuttings extending southward from a point 7.80 m. from the southwest corner of the Stoa. This line of cuttings probably belonged originally to a house, and there is a gap of some 0.50 m. between it and the wall of the Stoa. But such a gap could easily have been bridged by a stone set in packing, rather than on dressed rock, or a small postern may have been here. Another possibility is that the Compartment Wall left the southwest corner of the Stoa with only a slight bend to southward, utilizing the slightly worked bedding about 25 m. to the south, opposite the middle of the bedding prepared for the Propylon (*supra*, p. 286). In either case, the line was probably broken by a gate lying opposite the middle of the south side of the bedding for the propylon. The gate is suggested by two cuttings in bedrock lying approximately parallel about 3.90 m. apart, a figure which corresponds approximately with that for the gate at the north end of the hill, although the latter cannot be accurately measured. The southern bedding disappears beneath the mass of masonry

⁴⁷ There is a late tower (M6) only about 40 m. south of the dipylon on the road through Koile, and uncertain traces of rock cuttings half way between each pair of towers on the Museum Hill suggest the possibility that the towers of the Compartment Wall may have been spaced about 40 m. apart. The evidence is so slight, however, that we cannot press it to prove that every tower was only 40 m. from its neighbor.

to be associated with a later construction (*infra*, pp. 348-352), but we may assume, with no fear of great error, that the wall continued from here directly to the south-west corner of the East Stoa, where masonry of the Compartment Wall is still to be seen *in situ*. There is every probability that a tower of some sort was located at the corner of the fortification here, protecting the gate, and flanking the curtain to north and east. But various conditions made it impossible to examine this area, so that the nature of the tower must remain unknown until further investigation is possible.

In its course over the rear wall of the East Stoa, the fortification exhibits a curious peculiarity. There is a well-dressed, rock-cut bedding all along the ridge, about 5.00 m. behind the face of the rear foundation of the Stoa at the west end, 4.00 m. at the east end, and extending some 3.20 m. beyond the Stoa to the east. Thence it turns southeast and is lost after a few metres, continuing parallel to the line of the Compartment Wall. This cutting has every indication of having been intended for a fortification, and yet the Compartment Wall itself does not use it, but on the contrary, at the west end of the Stoa, is supported on several courses of stone built against the rock slope below the cutting in question. It is possible that this cutting was originally intended for the Compartment Wall, but that later its width (assuming that the Stoa wall marks the field face) was considered excessive, and the width of the wall was reduced, necessitating the abandonment of the original cutting. There is also, however, a bare possibility that this and some other unexplained cuttings may belong to a still earlier scheme of fortifications that never got beyond the initial stages. In support of this is the superior quality of the cutting, compared to the workmanship certainly associated with the Compartment Wall; against it is the complete lack of any other evidence, and the possibility of explaining it, however unsatisfactorily, as a false move on the part of the Compartment Wall builders.

It is at the eastern end of the Stoa that we see for the first time a well-preserved stretch of the Compartment Wall as it was meant to be seen above ground (Fig. 18). It was from this section that our description of the style of the wall was drawn. Although the blocks here are laid on a perfectly smooth, previously worked bedding and on the foundation blocks of the East Stoa, in one instance a wall block which is less high than the others is laid on a stratum of packing some five centimetres in thickness, to bring its top surface level with the others.

The wall left the Stoa at an angle of 130° (Fig. 22) and was so placed that its outer face fell precisely on the corner of the foundations of the building. In the corner a notch was cut to receive the wall block. From the corner where it leaves the Stoa, the wall proceeds about southeastward. In this stretch there are but few remains of the original construction. Scarcely any blocks remain *in situ*; the little masonry that is left belongs to a later reconstruction. The line can be followed by a few cuttings whereby elevations in the natural rock were removed to form partial beddings for the two faces of the wall. The hollows must have been filled with packing, of which only

a little remains. About 22.00 m. below the Stoa, there was a tower (C1). The junction of the tower and curtain is now marked only by the dressed bedding, but the front wall of the tower still exists in foundation. These foundations consist of re-used blocks of various sorts laid on worked beddings or on packing. The tower measures 6.80 m. in projection and 8.50 m. in width (Fig. 23).



Fig. 22. Southeast Corner of East Stoa with Remains of Compartment Wall and Tower M 4, from the Southeast

Below the tower the curtain formed an angle and continued southward toward the saddle between the Pnyx proper and the Museum. About 30.00 m. below the tower it was possible to examine the wall in one of the most illuminating of all the trenches (Figs. 24, 25, 26). Here an accumulation of earth, six to seven metres deep, had gathered over the wall. In the heart of this filling the wall stood preserved to a height of about 3.00 m. It had been twice rebuilt, and finally repaired in the latest of the important periods we shall notice. The facts concerning the original construction are of some interest. The style again is that observed at the eastern end of the East Stoa. Orthostates of conglomerate formed the two faces. The surfaces

again were sometimes the natural cleavage, or quarry face; sometimes they were carelessly dressed. The vertical edges and the upper edge were beveled. Our exploratory trench was not wide enough to expose more than two stretchers; the existence of headers can only be assumed. The thickness of the wall is about 2.75 m. It rests again partly on dressed bedrock, partly on packing.

Significant again for the earlier history of the Pnyx is the fact that when this



Fig. 23. Southwest Corner of Tower C 1
from the South

section of the wall was built, an already-existing house was demolished. The outer face of the wall was set through a floor made of pebbles, laid mosaic-wise in cement and ground flat. The mosaic floor was 2.45 m. in width (east to west). It was surrounded by a border of plain cement at least 0.30 m. wide, raised 0.02 m. above the central part of the floor. The room for which the floor was made was probably the dining room of a house of some quality. Most of the debris of the destroyed household had been carried away, but two strata of earth about 0.40 m. thick lay directly on the floor, consisting of crumbled mud brick and working chips from the wall (VIIIa and IXa, Fig. 26). To the rear of the wall were no signs of earlier construction. The earliest accumulation on the native rock seems to be construction debris from the wall (XIb, Xb, Fig. 26). Directly on this lay a series of road levels, each clearly defined by hard-packed surfaces of fine road metal (IXb-VIb, Fig. 26). The road had evidently been estab-

lished immediately after the building of the wall, and rose during a period of two centuries by succeeding deposits of material, probably wash from higher up on the hill. This road perhaps connected the gate to the south with the road already noted as passing along the crest of the hill and issuing from the gate at the northern end.

THE DIPYLON ABOVE THE GATES

The next point at which the wall was examined was in the modern road which now passes south of the Church of St. Demetrius, in the saddle between the hills

(Fig. 34). Through this depression an ancient road issued from the city, and, soon after leaving the gate, branched in several directions. One line kept fairly high along the slopes of the Museum Hill, leaving the city through Judeich's Melitean gate. The



Fig. 24. Trench North of St. Demetrius, from the West

other followed the bottom of the gully which leads westward, giving off side streets to the settlements on each neighboring slope. In spite of the fact that this is the road which passes through a pronounced hollow, it is the upper, left-hand branch which was, or which led to, the road through Koile.⁴⁸ The lower road is more easily ex-

⁴⁸ This follows if we accept Judeich's plausible location of the Melitean Gate. Polemon

amined, and well deserves a few excursive remarks in description. The first traces of it appear some two hundred metres beyond the Dipylon Gate where the bedrock has been washed clear of earth. From this point almost as far as the line of the

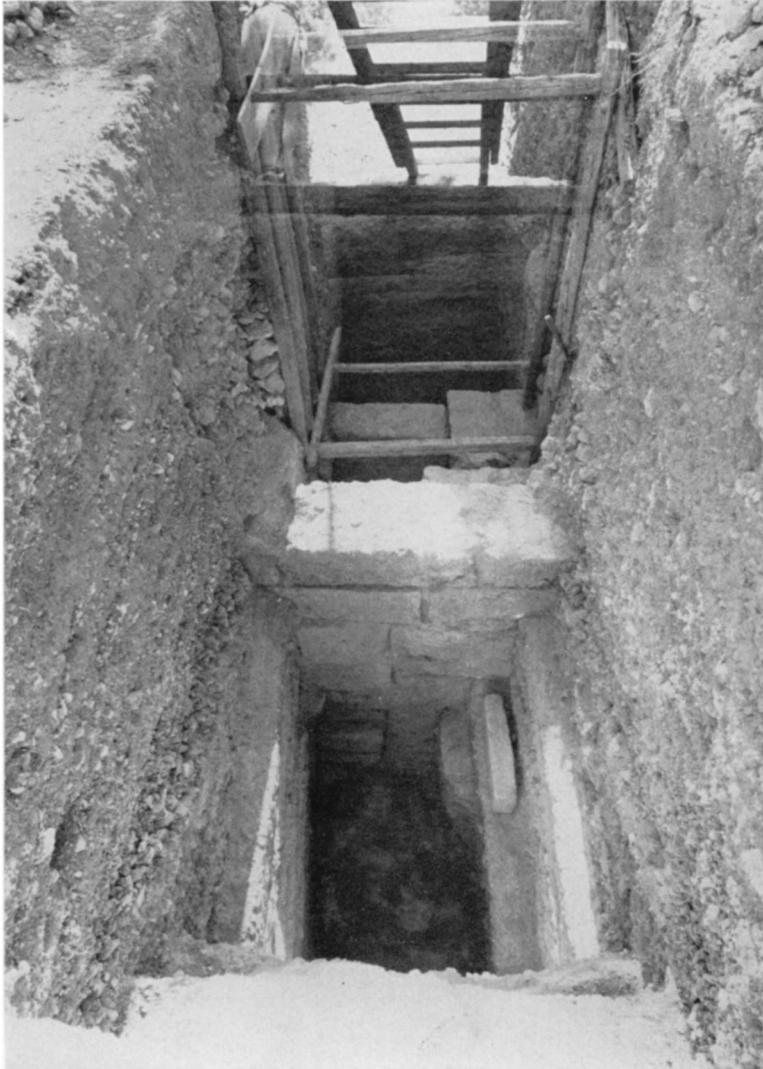


Fig. 25. Trench North of St. Demetrius, from the East

Themistoclean wall it is easily followed, and often completely exposed, in the rock floor of the valley. The ruts worn in the solid rock by the wheels of the carts are

(Marcellinus, *Life of Thucydides*, 16; Preller, *Polemonis Fragmenta* [1838], frag. IV) places Kimon's grave beyond the Melitean Gate; Herodotus (VI, 103) puts the grave beside the road through Koile "before the Asty." This means outside the Long Walls too, according to Judeich, *Topographie*², p. 140.

everywhere well defined, and in some places reach a depth of twenty to thirty centimetres (Fig. 27). In places there are two sets of ruts, indicating a two-lane highway; in other places the width is reduced to one lane, with well-defined by-passes. A little below the point where the road is first visible, a rock-cut channel enters the line of traffic. It comes from the central Pnyx hill to the north, and continues along the northern side of the road as far as the channel can be traced. This channel is about 0.50 m. deep, and approximately as wide. In places remains of a stucco lining can be seen. In at least two places transverse gullies or chasms in the bedrock must originally have been filled with road metal since disappeared, for both wheel ruts and drain are interrupted by them.

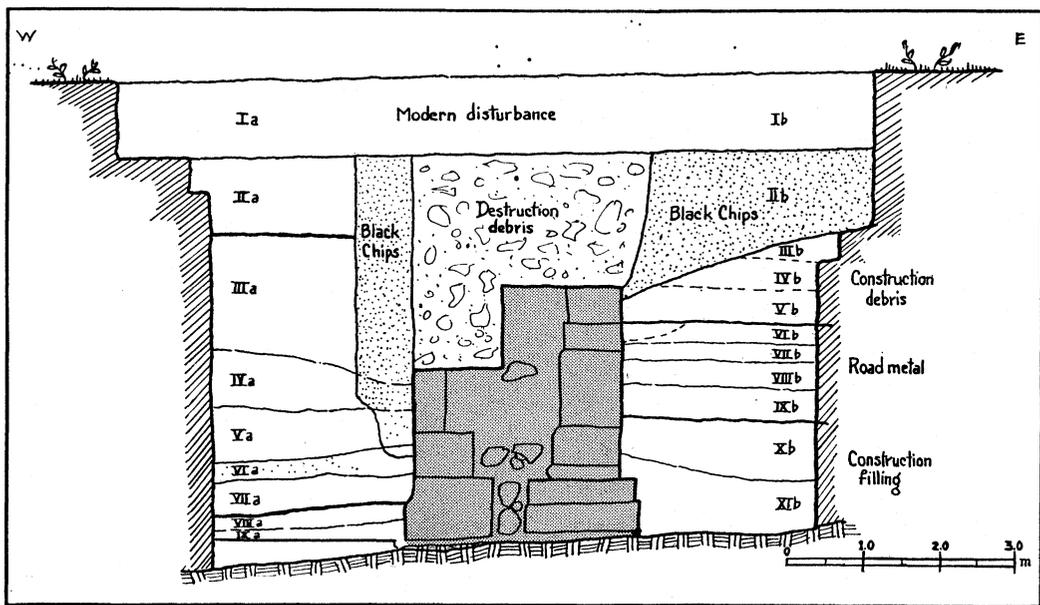


Fig. 26. Section Showing Stratification in Trench North of the Church of St. Demetrius

In parts of its length the road is bordered by a continuous flat bedding, which follows the slight turns, and is doubtless to be interpreted as the bedding for a low retaining wall or kerb. Numerous cuttings for houses and buildings border the road; stairs, alleys, and side streets, indicated by slighter wheel ruts, lead away from it on either side. A marble block, curved in plan, is to be seen at the point where the road first appears below the gate; it is doubtless part of an exedra which presumably stood near by, facing the passing traffic. Relics of a period after the region ceased to be inhabited are a few columnar grave monuments, numerous rock-cut graves, and many tile-lined and tile-covered burials scattered along each side of the ancient road.

The road we have been describing is one of the best defined ancient thoroughfares

to be seen anywhere in Greece; it was evidently an important artery of traffic, and must have been of some significance in Athens. We find a ready explanation for this preëminence in the fact that it must have been one of the two main highways from Athens to the Peiraeus. The other, leaving from the Peiraic gate, proceeded on level ground for the entire distance, and must under normal circumstances have been the more commonly used. But our road between the Pnyx and the Museum was almost



Fig. 27. Ancient Road to Long Walls

certainly the continuation of the road between the Long Walls; at least we found no road as well marked by travel in the one other logical place, i. e., between the Pnyx and the Hill of the Nymphs. This is probably because the slope from the latter col is very steep towards the city, whereas from the Dipylon there is a gentle grade to the valley between the Pnyx and the Areopagus. Thus we may suppose that from the opening of the Peloponnesian War until the abandonment of the Long Walls, all the provisions which were shipped to Athens during times of siege passed up from the Peiraeus between the Long Walls, along our road and into the city. Before the construction of the Long Walls, the road may have been used by those going from the Agora to Phaleron, a route which may also have been popular in late Hellenistic, Roman, and Mediaeval times.

The builders of the Compartment Wall provided for the road with a double gate or dipylon, which we shall find reason to identify as the “Dipylon above the Gates.” Of this gate complex, the northern half lies almost entirely under the church yard and church of St. Demetrius. The southern half was uncovered and examined during the course of the excavations (Pl. XVII and Fig. 28). All periods of construction



Fig. 28. South Gate Tower of Dipylon (C3), from the North

observed elsewhere along the line were represented here, as well as indications of even another repair, showing that the gate was an important part of the system. The complex in its original form consisted of two large towers in the line of the wall, flanking the broad entrance to a court formed by heavy spur walls leading cityward from the towers to a somewhat lighter, inner cross-wall in which was the actual gate (Fig. 29).

The south front tower (C3) was almost square—about eight metres on each side. It was built in a style characteristic of the Compartment Wall, as hitherto observed. The bedding for the foundations was prepared by working away the bedrock in places, and by filling the hollows with packing. The foundations below ground level consisted

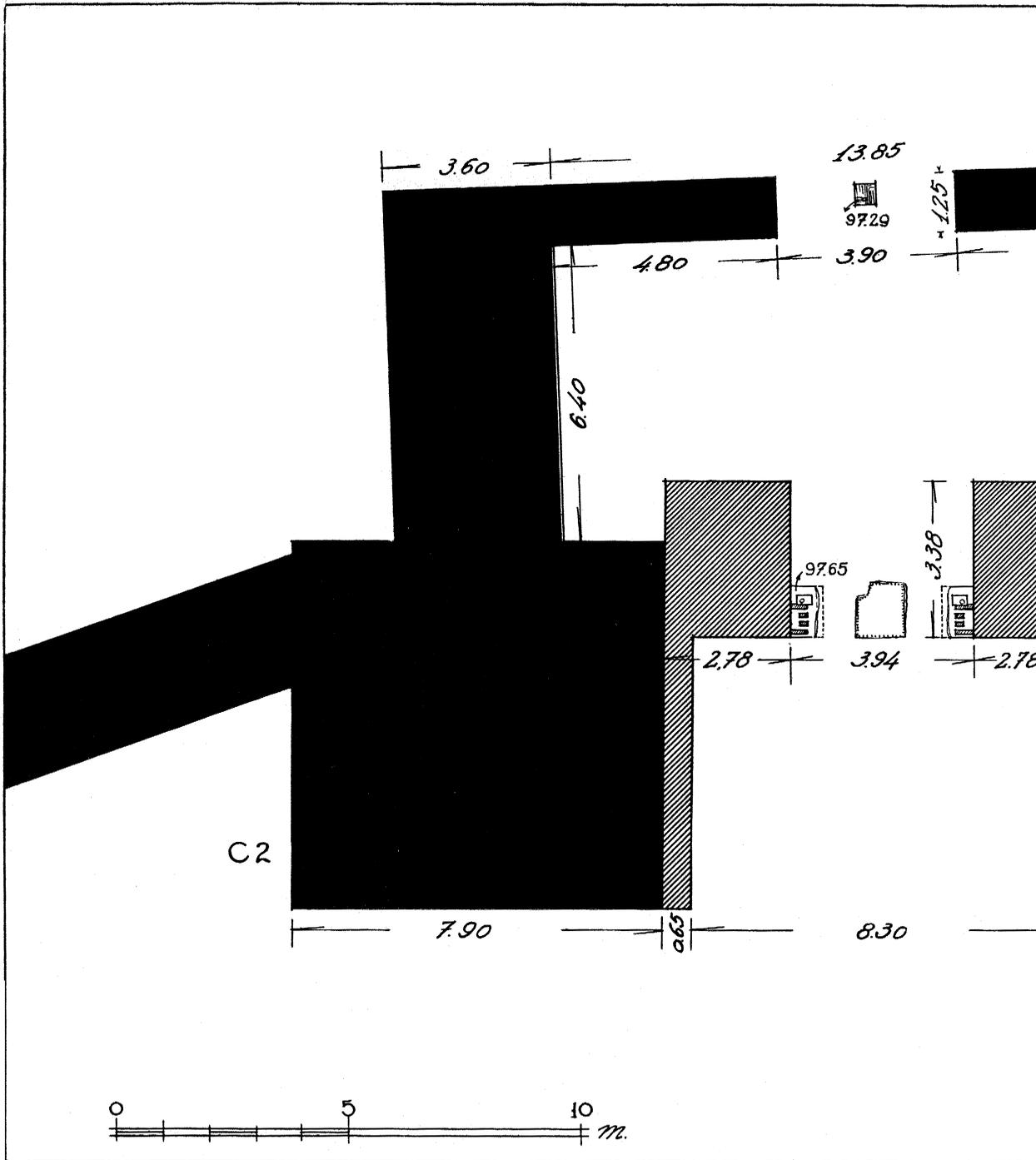
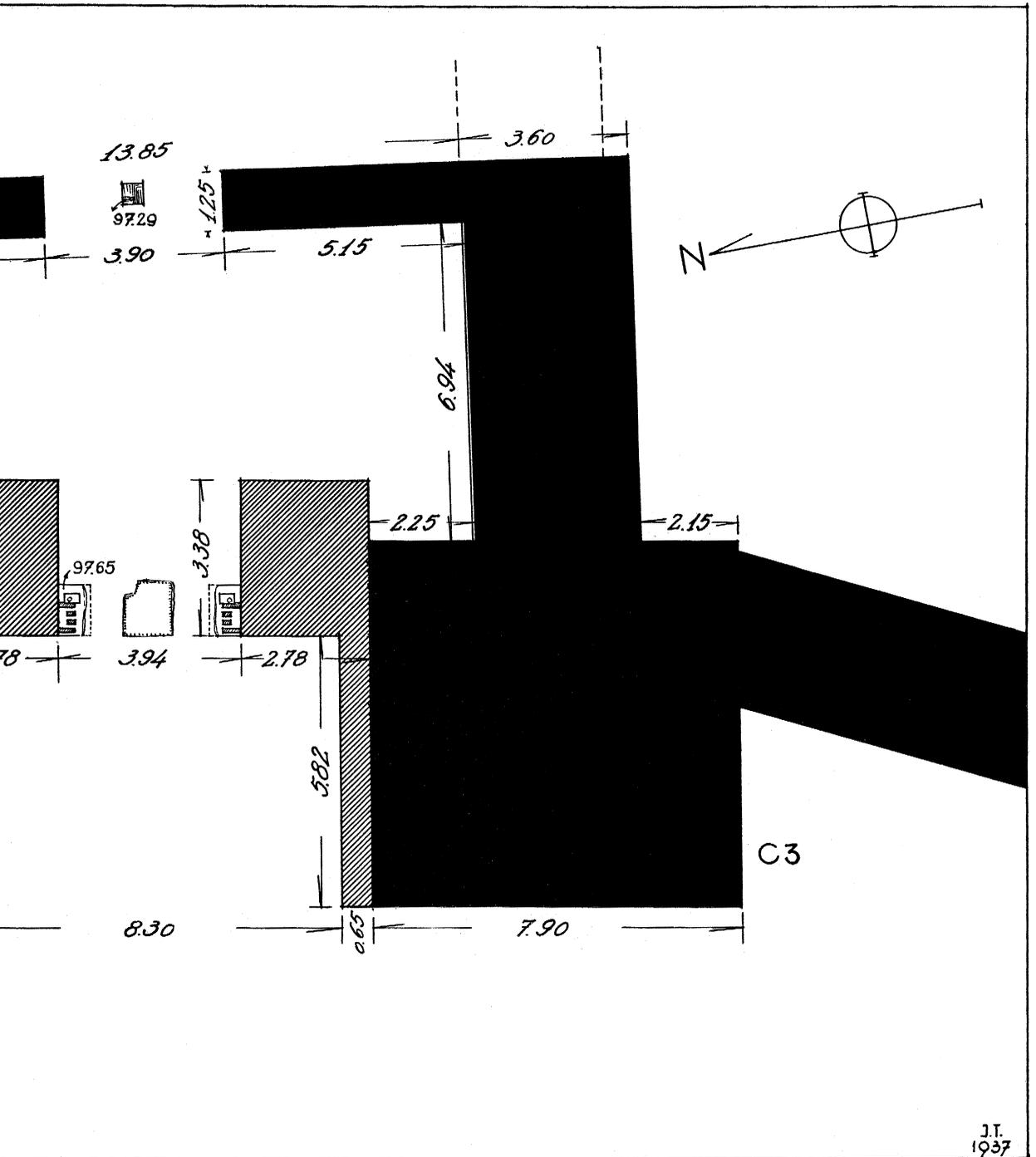


Fig. 29. Plan of the Dipylon of the Compartment Wall (Black), with Additions



ment Wall (Black), with Additions of the White Poros Period (Shaded)

of re-used blocks of various materials. On this underpinning was laid a facing of orthostates, in which (where possible) headers alternated with stretchers, although the rhythm of two stretchers to one header was not observed. This is probably to be attributed to the fact that the dimensions of the tower do not permit the arrangement of blocks of standard size in that way (six stretchers and two headers would give a face of about 9.00 m.; four stretchers and three headers would give a face of about 7.00 m.). The coursing was probably pseudo-isodomic; i. e., a low course alternated with a high course of orthostates. This is assumed from an examination of the south wall (Fig. 30). The preserved course of orthostates, which was intended to be the

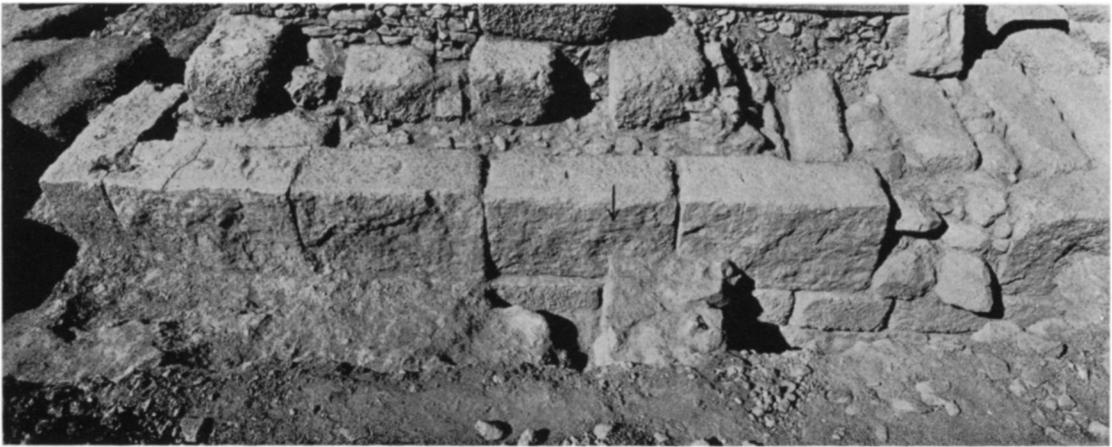


Fig. 30. South Wall of South Gate Tower (C3), from the South. Arrow Marks West Face of Curtain

lowest visible, has pry-holes on the top of the blocks for the setting of a regular series of blocks of approximately standard length. Behind the orthostates the packing is brought to a flat surface level with the top of the orthostates. On this packing rests a series of blocks arranged as headers, separated from each other by spaces filled with packing. The ends of the headers lie *ca.* 0.70-0.80 m. behind the face of the tower. Thus it would seem that the next course of facing blocks was intended to project into the body of the tower about 0.70 m., or more than the normal thickness of the orthostates. The blocks were probably not 0.70 m. square in cross section, but were more likely less high than deep, and would thus seem to have been laid flat, the smallest dimension being the height. The height of the low course may be calculated from the fact that the top of the orthostates on the south wall is 1.15 m. above the top of the orthostates on the north side. This difference is equivalent to an orthostate course of 0.75-0.80 m. in height, and a low course of 0.35-0.40 m. in height. Confirmation is perhaps to be seen in the construction exposed on the south wall where it joined the curtain. Here the filling for the curtain had been removed, and the coursing is as

deduced above. The treatment of the blocks is the same as hitherto noted—natural or quarry face, sometimes moderately flattened; beveled edges, here at all joints. Cuttings for hook clamps show that the southwestern corner block was fastened to each of its neighbors. Clamps have not been observed elsewhere in the wall construction.



Fig. 31. South Wall of Dipylon Court, from the South. Arrow Points to Southwest Corner of Court

Within the facing of the tower were laid blocks arranged as headers separated by irregular intervals. The spaces between were filled with small stones, broken pieces of wall blocks, and working chips. The wall thus formed was approximately two metres in thickness. It had no inner face, but the core of the tower was filled with stones, chips, and earth. This filling was packed tight and hard, and brought to a level surface. It is possible that the irregular courses of blocks extended throughout the core, but it is perhaps more probable that the surface of the packing was used as a bedding for brick, which, above some point impossible to determine, became the exclusive building material.⁴⁹

From about the middle of the city side of the south tower a spur wall about 3.60 m. in thickness projected inward (Figs. 31, 32). As nearly as can be judged from the ill-preserved foundations, the outer face of the spur wall was finished in the same way as the tower

itself. The inner face requires special comment. The lowest, euthynteria, course is of well-dressed blocks of limestone. The only preserved block of the second course is of Hymettian marble, evidently re-used. It is finished on the exposed face with the toothed hammer. It has a setting line on the top, *ca.* 0.085 m. from the face; on the end toward the tower it has a cutting for a square dowel with pour channel. On the opposite end is the cutting for a hooked clamp.⁵⁰ A dowel cutting on the lower surface at the same end has no corresponding dowel cutting on the block beneath, sufficient

⁴⁹ It is worth noting that a late Hellenistic tower in the Peiraeus (Wrede, *Attische Mauern* [1933], plate 60 with text) seems to have a core of hard-packed rubble, on which rest several courses of mud brick. On the brick are laid courses of masonry throughout the tower. Some three of these courses are preserved.

⁵⁰ Inadvertently omitted on the plan of actual state.

proof that the block is re-used. It is possible, then, though not certain that the entire court was faced with re-used marble blocks.

The spur wall continues from the tower on the side of the court for about 6.94 m. Then it returns at right angles across the inner end of the court a distance of *ca.*



Fig. 32. South Wall of Dipylon Court, from the North. Arrow Points to Southwest Corner of Court

5.15 m. with its thickness reduced to *ca.* 1.25 m. None of the superstructure is preserved, but the packing for the setting of the blocks could be followed in the bottom of the trench from which late pillagers had removed the blocks. The only part of the northern half of the dipylon which could be examined was the end of the corresponding inner cross-wall. Here are preserved three foundation blocks—two stretchers lying side by side, with a rectangular block across their ends. Presumably the latter served as a foundation for a block supporting the door jamb; the corresponding block has been removed from the south cross-wall, but a bedding for the block is there preserved. A small stone *ca.* 0.45 m. square lies in the centre of the opening between the ends of the stretchers on the north, and the division of earth which represents the

inner edge of the jamb-foundation block on the south; this central block may have been an underpinning for a door stopper of some sort. The width of the gateway would thus seem to have been approximately 3.90 m. Nothing more of the nature of the gate can be determined.

It might seem possible to recover the distance between the outer towers simply by restoring the northern half of the complex symmetrically, but this is unfortunately difficult (Fig. 29 and Pl. XVII). None of the angles in the southern half is truly a right angle, and we can hardly assume a more accurate plan for the northern half. If we suppose that the axis of the gate complex passed through the middle of the inner gateway, and was parallel to the north face of the south tower, and that the complex was symmetrical on this basis, we get an interval of *ca.* 9.80 m. between the outer towers. But in connection with our study of a later period of the dipylon we shall find reason to believe that the spacing of these towers was only 9.50 m. at the inner corners, and possibly a little wider, or *ca.* 9.60 m. at the outer corners (*infra*, p. 352).

We found indications that the south spur wall continued cityward beyond the inner cross-wall, but were unable to examine it fully because of the trees and plantings of the park on the adjoining slopes of the Museum Hill. Presumably this continuation of the wall served as a retaining wall for a terrace to the south, protecting the road from wash from the higher ground. It may, of course, and probably did, serve also as a means of access to the top of the gate tower.

The curtain which led southward from the south front tower presents some problems at the point of juncture (Fig. 33). A space some 0.80 m. wide in the tower wall at this point was never occupied by blocks; the filling of the tower and the curtain was continuous. The inner, city face of the curtain is clearly indicated by a row of foundation blocks leading off from the very northeastern corner of the tower. This inner face was not bonded with the tower except for the cutting of a shallow notch into the tower wall blocks. No special foundation for the outer face is preserved, nor is there any indication of bonding for the outer face. But the wall of a house, destroyed on the construction of the tower, must have been used for the foundation of the outer facing of the city wall, supplemented by some packing of small stones. This house wall is built of well finished blocks of limestone, jointed polygonally. The wall had been covered with a coat of good plaster. On the building of the city wall, the space between one house wall and the foundations of the inner face of the city wall had been filled with stones and earth; the gaps in the house wall were made good with small stone packing, and the city wall was carried up on these foundations.

The width at this point is greater than hitherto, being some 3.30 m. in all. Not improbably, a flight of stairs, or ramp, led from the slope of the hill behind the wall to the upper level of the tower at this point. A further peculiarity may be seen in the setting mark scratched on the uppermost of the preserved blocks of the tower at the junction of the outer face of the wall (Fig. 30, to right of arrow). It is natural for this line to mark the outer face of the wall, but it lies just along the inner edge of

the house wall which evidently supported the wall facing here. Quite possibly the setting mark was originally cut to indicate the landward face of the curtain, but when construction began, it was decided to utilize the house wall as a foundation, and the face of the fortification was advanced by that much beyond the originally intended line.



Fig. 33. Junction of Curtain and South Face of South Gate Tower (C3), from the Southeast. A, West Face of Curtain. B, East Face of Curtain. C, Wall of Pre-Dipylon House.

The conception and construction of this gate offer little that is particularly remarkable from the point of view of comparative military architecture. The idea of a court, protected in front by towers, and with a gate that can be closed in back, is thoroughly common. A rather remarkably close parallel might be mentioned, how-

ever, in the Neapolitan gate at Philippi.⁵¹ Both are distinguished by their simplicity and regularity, and the plans would appear to be almost identical. The Athenian gate may be of particular value in showing that the word "dipylon" was applied to this type of gate (as we shall see to be the case) in spite of the fact that there was only one actual door that could be closed.⁵²

THE COMPARTMENT WALL ON THE MUSEUM HILL

The course of the wall up the slopes of the Museum follows approximately the modern path (*supra*, p. 287, Fig. 11; also, Figures 34, 42). For some forty metres up the hill the wall has lain exposed for many years, the tops of the blocks showing in the trodden path. Along a stretch of some ten metres we cleared the debris away from against the faces, and examined the filling of the curtain. The construction as before is of conglomerate blocks, here too much weathered to show the original style of dressing. They are arranged as headers and stretchers, two of the latter followed by one of the former, in each course. They are laid on blocks of re-used material of all sorts, which in turn are bedded now on roughly worked bedrock, again on small-stone packing. The thickness of the wall is here about 2.80 m. (Figs. 35, 36). A late tower (M6) was examined against the face about forty metres from the gate; nothing of a date certainly contemporary with the Compartment Wall was found, but some workings in the bedrock may have belonged to a tower of the early period. They cannot be considered positive proof of such a tower, however. About eighty metres above the gate the wall reaches the shoulder of the hill. Here on the northern edge of the shoulder there was a tower (C4) which commanded at once the area in front of the gateway, and the road for some distance down the valley. It is so ill preserved that little could be learned of its original construction. The plan, however, can be determined with a margin of error of a few centimetres, by the scanty remains of foundations or by the line of earth which had heaped up against the blocks since extracted. The tower, not quite rectangular, measured 8.00 m. on the south and west, 12.00 m. on the north. A short flank of *ca.* 3.50 m. enfiladed the curtain above the Dipylon.

From this point the wall proceeds a little east of south in an almost straight line toward the monument of Philopappos. From a point about thirty-five metres south of the last mentioned tower, a stretch some twenty metres in length is fairly well preserved, although it is so overgrown with trees that no attempt was made to clear it.

⁵¹ *B.C.H.*, LXII, 1938, pp. 26 ff., pl. IX.

⁵² Other dipylons in Athens (Judeich, *Topographie*², pp. 135 ff.), Peiraeus (Judeich, *op. cit.*, p. 152), Assos (Clarke, Bacon, Koldewey, *Investigations at Assos* [Cambridge, 1902], pp. 197, 209) are almost as simple fundamentally, but larger. Others, as at Mantinea, are more elaborately and consciously varied (Fougères, *Mantinee et l'Arcadie orientale* [Paris, 1898], *passim*; idem, *B.C.H.*, XIV, 1890, pp. 65 ff.). The oldest simple example in Greece is probably Gate A at Gla (*Ath. Mitt.*, XIX, 1894, pl. X).

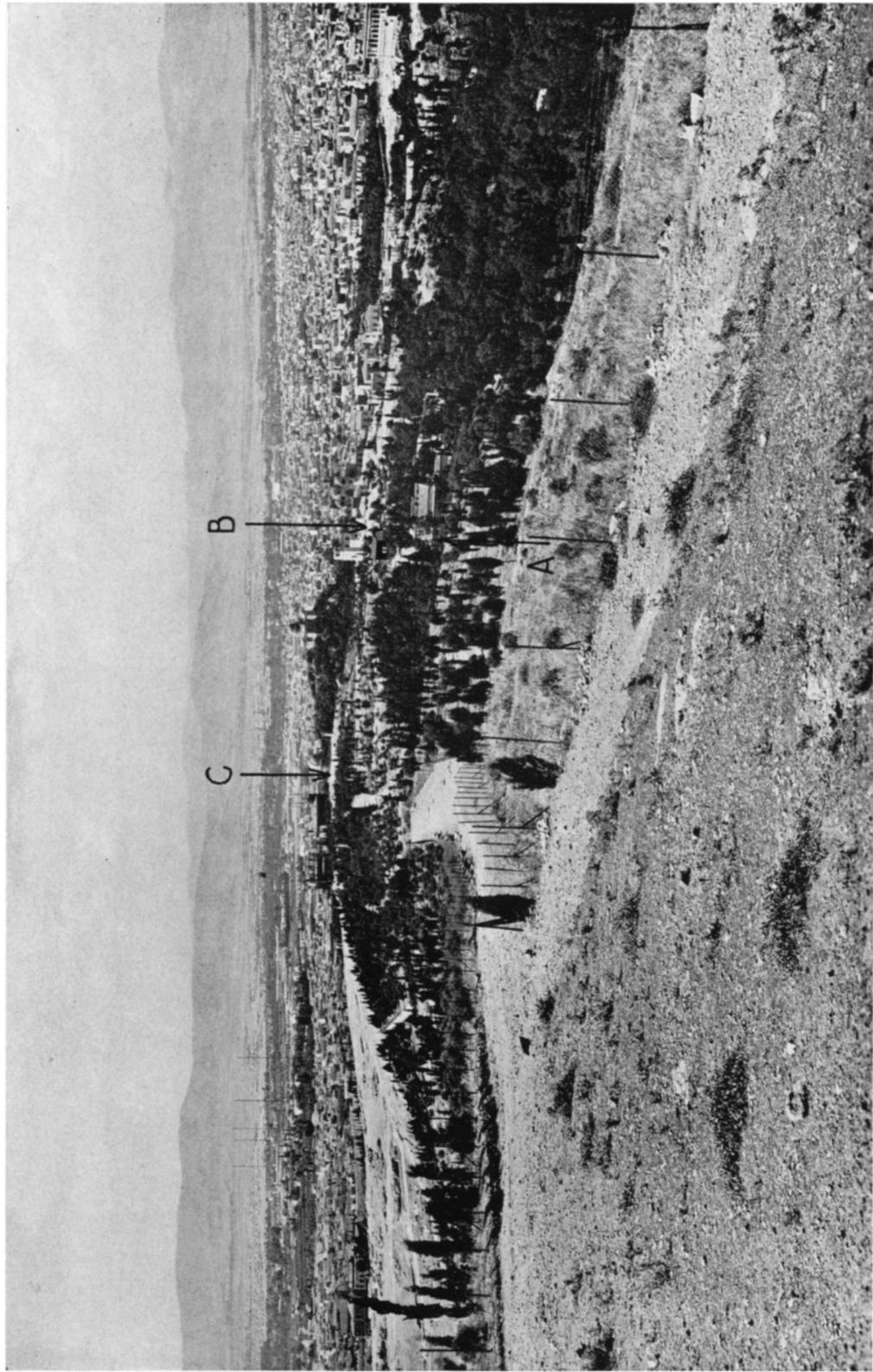


Fig. 34. The Pnyx, from the Museum Hill. A, Dipylon. B, East End of East Stoa. C, North End of West Stoa



Fig. 35. Inner Face of Compartment Wall on Slopes of Museum, above Dipylon



Fig. 36. Interior of Compartment Wall on Slope of Museum above Dipylon

A late tower (M7) was examined at the beginning of the stretch, and again worked bedrock was found that may possibly indicate an early tower. The construction of the wall is similar to that observed before, although the conglomerate blocks are so weathered as to make the details of surface dressing obscure. The width of the curtain in this stretch attains the unprecedented maximum of 3.40 m. The section terminates about eighty metres above the shoulder in a fine circular tower (C5) 8.00 m. in diameter, the plan of which deserves comment (Fig. 37).



Fig. 37. Round Tower (C5) of Compartment Wall on Museum Hill, from the Northwest.
A, Bedding for Brick in Compartment Wall. B, Outer Face of Tower of Mortar Repair

The facing of the city side of the wall continues without a break behind the tower. The field face, however, when it reaches the spring of the tower from the north, comes to a complete stop, and is only imperfectly bonded with the tower. The field face of the curtain descending the hill from the south, on the other hand, continues without a break behind the tower until it reaches the point of the northern spring. Here it curves outward (Fig. 38), describes a circle, and returns on the uphill side in an almost straight line to meet itself at right angles without bonding. Thus the entire facing wall of the tower is one with the field face of the curtain to the south. No part

of the facing which was intended to be visible is preserved. Only the foundations of the tower exist, and those are incomplete. They consist of many re-used blocks, but include some cut for the immediate purpose. They were bedded sometimes on solid rock, but in the front section of the tower were laid on clean earth rammed to extraordinary hardness. The interior of the tower was filled with small stones and clay. There are definite strata of these materials, leading to the assumption that the filling was thrown in perhaps to the level of the top of each course as it was laid, then rammed



Fig. 38. Filling of Compartment Wall behind Round Tower (C5). Arrows Mark Inner and Outer Faces of Wall

tight. The curtain behind the tower also exhibits the same peculiarities. The filling was removed in a pit between the facings, to bedrock. The wall foundations are preserved to a height of about 1.50 m. At that level, the filling for the curtain had been tamped hard and flat. Across it, at irregular intervals, were built step-like walls of small stones, producing a series of short low terraces. The most probable solution is that at this level the filling was terraced off for the reception of brick. Remains of sun-dried brick were found *in situ* on the steps; these bricks as found measured *ca.* 0.27 m. by 0.22 m., but they have been so worn by water that neither of these dimensions is certainly complete. They are preserved only *ca.* 0.05 m. in height. The

only objection to restoring the upper part of the wall in brick is the fact that little melted brick remains on the walls. It is surprising that large quantities of brick should have disappeared so completely, although the steepness of the hill makes it conceivable.

For the next seventy metres the wall has almost completely disappeared. Its course is marked by fragments of later construction, which give the direction, and by rock cuttings which go far to complicate the situation. A late tower M8 was found



Fig. 39. Construction inside Postern in Compartment Wall, beside Tower C6, from the North.
A, Inner Face of Curtain. B, Poros Cornice Block

half way along this stretch. At the end of the distance there are the insignificant remains of a rectangular tower 8.00 m. square (C6), of which only the foundations for the south wall remain. For the north wall a series of rock cuttings whereby the highest points were removed for the reception of blocks indicates the line. The arrangement of blocks of the curtain at the northern spring of the tower is most unusual (Fig. 39). In line with the northern wall of the tower a well-defined wall of blocks (Fig. 39, at top) crosses the curtain. One of these blocks projects a few centimetres beyond the curtain on the city side, and its end rests on the end of a block

which is tightly joined to a third block within the curtain. The second block rests only on hard-packed earth, and although it has anathyrosis on the extremity facing the city, there are no other blocks or traces of other blocks contiguous to it. About 1.40 m. north of this (Fig. 39, above first fence-post) a second line crosses the curtain. The facing on the city side is missing, but evidently rested on a foundation that included a cornice block of poros. About 2.30 m. north from this (Fig. 39, above Block A) a single header projects some 0.15 m. from the wall on the city face, but there seems to be no trace of bedding for inward continuation. There seems to be no better explanation of this difficulty than that a postern gate lay between the two lines of headers, the gate being closed later by the insertion of blocks. The southern projecting block may be the foundation for a stair or ramp, affording access to the top of the wall above the postern. The projection of the header to the north of the gate can be explained only as carelessness. Of this construction, the postern at least is probably original; some of the work may date from reconstructions.

This is the last point at which any remains of the superstructure of the Compartment Wall can be observed *in situ*. Some thirty metres above the tower the line of the curtain was exposed, but the only remains were numerous cuttings in the bedrock not all of which need belong to the fortifications, and of a line of packing for the support of the foundation blocks of the city face of the wall. Cuttings, however, indicate that the wall ascended the hill further and met the Themistoclean circuit west of the peak.⁵³

⁵³ We observed traces of the Themistoclean wall at various points along the ridge of the Museum Hill. To the southeast we found slight rock cuttings in connection with the towers of the Mortar Repair period, which indicate that the classical defenses of the region followed the same line as those of the early Christian period. The traces on the peak of the Museum are followed on our plan (Pl. XIV). From the tower of the White Poros period which marks the point at which the Compartment Wall reached the crest of the hill west of the peak (C7), we were able to follow more or less distinctive cuttings in the bedrock all along the crest of the ridge almost to its western end, except where quarrying had encroached on the line. This line is indicated by Judeich, on the cliff which marks the western extremity of the northern slopes of the hill; *ca.* 2.50 m. below the crest we observed an incomplete line of roughly polygonal limestone blocks, indicating the course of a line of wall *ca.* 3.00 m. thick. The wall would have consisted of two outer facings and a filling of rubble. Seventy metres below the crest are some blocks which suggest a tower in the wall; the dimensions cannot be recovered with certainty, but it would appear that the tower projected about 3.00 m. and was perhaps 5.00 m. wide. (These traces are indicated by Curtius, *Sieben Karten zur Topographie von Athen* [1868], plans 3 and 4; Curtius-Kaupert, *Atlas von Athen* [1878], plan 3.) From the hollow where Judeich indicates the Melitean Gate the wall proceeds some metres to the southwest along a ridge, and thence almost due north along the foot of the westward spurs of the Pnyx ridge, as Judeich shows on his plan. A single line of roughly polygonal blocks still exists to the south of the intersection of this line of wall with the stream issuing from the valley between the Museum and the central Pnyx. No further traces exist to the north. The traces of the south Long Wall indicated by Judeich on the hill to the west of the junction with the Themistoclean circuit still exist, at least in part. They consist of fairly well-dressed blocks of limestone in the shape of trapezia.

THE MUSEUM FORT

At a point midway between the last square tower and the junction with the Themistoclean circuit we are introduced to another phase of the building period of the Compartment Wall. From the Compartment Wall at this point to the easternmost nose-like brow of the Museum Hill there runs a cross-wall which forms the city side of an enclosure on the hilltop, the other two sides being closed by the Compartment Wall and the Themistoclean circuit. At the angle which this cross-wall makes with the Compartment Wall there was a large tower (D1), some 14.00 m. by 9.50 m. The remains of this are confined to rock-cut beddings, which are obscure enough, for they cross earlier cuttings and are crossed by later workings. The walls of the tower were only about 2.00 m. in thickness.

From this tower there leads a series of rock-cut beddings eastward along the face of the hill. The cuttings are in two parallel lines, indicating the one-time existence of a wall with two faces and a rubble core, with foundations about 2.10-2.40 m. thick. The superstructure, however, may have been as little as 2.00 m. This wall led directly to the great central tower (D2) excavated by Skias toward the close of the last century.⁵⁴ Of the central tower, 9.50 by 11.00 m., the foundations and parts of the first two courses remain (Fig. 40). The lower course is of blocks laid flat, forming a solid platform 2.10 m. in thickness. The blocks are about 0.45 m. in height. The second course is of orthostates about 0.65 m. in height. The surfaces have the quarry face; the edges on all joints are beveled. Two stretchers alternate with one header. The material is conglomerate. Thus the style is identical with that observed heretofore in the course of the Compartment Wall. The corner block, in the low course, is treated with corner drafting. The tower was built over many pre-existing rock cuttings, of which the purposes are not all apparent. Within the tower, a rock-cut basin with a plaster lining may be all that remains of a cistern in the base of the tower.

Further east the wall followed the brow of a cliff or ledge of rock. In places it was built on a slope of considerable steepness, so that the cuttings for the foundation come again to consist of parallel beddings for each face. At the points where the slope is steepest the faces must have been as much as 3.50 m. apart, but one may assume that a pronounced batter soon reduced the thickness of the superstructure to about 2.00 m. Following the crest of the ledge the curtain makes a rounded turn and ascends to the nose-like rock which is the eastern extremity of the peak of the hill (Fig. 41). On this rock there are numerous cut beddings, some of which must belong to the earlier, Themistoclean, construction; but on the basis of other cuttings we know that the cross wall here, as at its western end, terminated in a strong tower (T1), here set on the high eminence in the angle between cross-wall and circuit wall.

⁵⁴ Skias, *Πρακτικά*, 1898, pp. 68 f.; Judeich, *op. cit.*, p. 162.



Fig. 40. Tower D2 of Fort on Museum, from the Northeast



Fig. 41. The East Brow of the Museum Hill, from the Southwest

THE DATE OF THE COMPARTMENT WALL

The evidence for the dating of the earliest completed *diateichisma*, the Compartment Wall, is fortunately adequate. It is threefold: literary, epigraphic, and ceramic. Sherds were obtained in considerable quantities and in significant relation to the construction from three widely separated places along the course of the wall, and in numerous other places were found smaller deposits which correlated closely. Some of these have been mentioned in passing, but the entire body of evidence will be reviewed here. The sherds came from contexts of four types: houses destroyed to make way for the wall; construction debris; filling inside the wall; and later accumulation against the face of the wall.

The house which was razed by the builders of the Dipylon above the Gates at the road through Koile (see above, pp. 322-3) dated from after the middle of the fourth century before Christ. This is established by the presence of sherds found under the floor of the house and like those from the latest period of the majority of houses at Olynthos (destroyed in 348 B.C.). In the trench to the north of the Dipylon (Fig. 26), where the wall had been set through a mosaic floor (p. 312), a few sherds of the mid-fourth century were found beneath the floor level in a small area where the mosaic had been broken. The houses are accordingly not earlier than the middle of the fourth century B.C.; the wall is later.

In the same trench to the north of the Dipylon above the Gates, outside the wall, two strata (VIIIa and IXa) totalling some 0.40 m., lying on the house floor, and a thicker stratum (XIb) about 0.85 m. deep, on the city side of the wall, which can be identified as construction debris by the presence of working chips, produced a fair amount of sherds of the late fourth century B.C. These were similar to those found in the filling of the wall.

The filling inside the wall was examined at four places; in the trench to the north of the Dipylon; in the Dipylon south tower; in the well-preserved section about forty metres above the Dipylon on the Museum Hill, and in the circular tower (C5) on the upper slopes of the Museum Hill. Large quantities of sherds were recovered, belonging uniformly to the second half of the fourth century B.C., and as late as the last quarter of the century. Numerous parallels exist between these sherds and the earliest material from the cemeteries at Alexandria, and from Groups A and B in the Agora.⁵⁵

A happy bit of corollary evidence is supplied by the series of road beds which had accumulated behind the wall in the trench north of the Dipylon. Five successive layers of road metal were distinguished (VIb to Xb, Fig. 26). Of these the earliest, directly overlying the construction debris at the bottom of the trench, contained sherds of the earliest third century. The succeeding accumulation, about 1.25 m. in depth, showed

⁵⁵ *Hesperia*, III, 1934, pp. 313 ff.

in each stratum a progressively later date. The latest, at the top of the series, contained sherds of the mid-second century B.C., so that the road may be said to have been renewed about once every twenty-five years.

We have seen that the West Stoa is earlier than the Compartment Wall, but since the fortification followed so closely the slightly worked bedding for the rear wall of the Stoa, they cannot be far separated in time. For if they had been, the bedding for the wall of the Stoa would have been covered and forgotten. Hence, the date of the Stoa itself will be only slightly earlier than that of the wall. And, in fact, the pottery from the wall was quite the same as that from the Stoa, the later pieces being very few and hardly distinguishable. As the date of the Stoa has been placed a little before 325 B.C., the wall can be only a little later.⁵⁶

In short, we are in possession of a gratifying amount of ceramic evidence which puts the construction period of the Compartment Wall about the end of the fourth century B.C. It is not difficult to find references to this construction in the written history of the period. The great inscription relating to the restoration of the walls of the Asty and of Peiraeus, and the Long Walls, dated in 307/6 B.C. (*I.G.*, II², 463)⁵⁷ is sufficient proof of extensive work done on the defenses of the city in this period. We cannot suppose that this decree records the decision of the people to build the *diateichisma* which we have been examining. The inscription is fairly well preserved, and the text specifies only repairs and reconstructions on the Long Walls, and the circuits of the Peiraeus and the Asty. There is no mention of completely new works to be initiated. On the other hand, from the text we are able to deduce the fact that provision had been made for the fortification under discussion. In line 53 of the text, specification is made "of the circuit (of the city excepting) the *diateichisma* and the *dipylon above the gates*."⁵⁸ This phrase describes our wall so perfectly that it must be the same. The phrase also implies that the *diateichisma* and the *dipylon above the gates* were already in existence, or that they were otherwise provided for.

It has generally been assumed that the *diateichisma* of the inscription was built

⁵⁶ For a discussion of the ceramic evidence for the date of these structures, see *supra*, p. 293, Fig. 15. This pottery is characteristic of that found everywhere with the Compartment Wall. From the wall itself comes (*d*).

d. Black-glazed kantharos. From among the construction debris of the Compartment Wall in the trench north of the Dipylon. Diameter, 0.125 m. Base and handles are missing. On the neck in letters made of clay slip: ΑΦ[Ρ]ΟΔΙΤΗΣ.

The high stem and the presence of the inscription preclude a date before the second half of the fourth century B.C. On the quality of its fabric and glaze the piece could scarcely be paralleled later. For the practice of inscribing the names of divinities on drinking cups, see *Hesperia*, III, 1934, p. 339, no. B23 and p. 342, no. B37.

⁵⁷ To this inscription has recently been added a new fragment from the Agora, Meritt, *Hesperia*, IX, 1940, pp. 66-72.

⁵⁸ The almost universally accepted restoration, suggested by Mueller and developed by Kolbe, *Berl. Phil. Wochenschrift*, XXVII, 1907, pp. 331 ff.

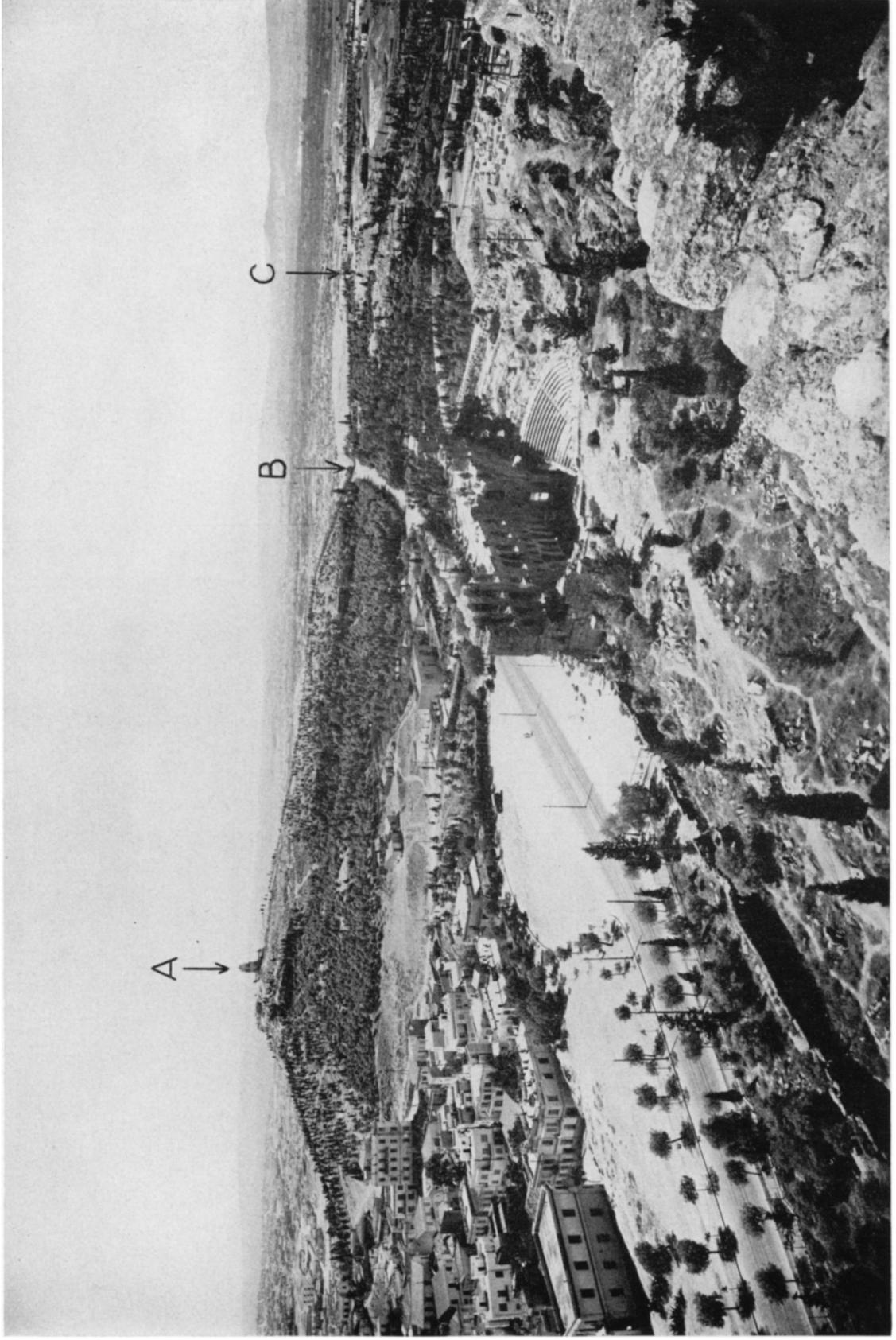


Fig. 42. The Museum and Pnyx, from the Parthenon. A, Monument of Philopappos. B, Dipylon. C, East End of East Stoa

by Cleon *ca.* 425 B.C., and hence already in existence. Indeed, the traces of fortifications which have always been visible along the Pnyx range have almost universally been identified with a wall supposed to have been built by Cleon at this time.⁵⁹ The sole literary evidence for this construction was found in Aristophanes' *Knights*:

Lines 817-8:

σὺ δ' Ἀθηναίους ἐζήτησας μικροπολίτας ἀποφῆναι
διατειχίζων καὶ χρησιμῶδων ὁ Θεμιστοκλεῖ ἀντιφερίζων

The scholiast on the passages states it for a fact that Cleon built a *diateichisma* or cross-wall having in mind that the population of the city had decreased because of the wars and that it had become or soon would become difficult to man the entire length of the Themistoclean circuit. Cleon, therefore, according to the scholiast, put in a cross-wall to shorten the circuit if need arose:

Scholia 817: μικροπολίτας: Διὰ τὴν ἐκ τοῦ πολέμου στενοχωρίαν τῶν ἀναλωμάτων καὶ τὴν τῶν ἀνδρῶν σπάνιν συνέστειλαν τὰ τεῖχη.

818: διασχίζων: Συνάγων καὶ συστέλλων τὰ τεῖχη. διὰ γὰρ τὸν πόλεμον καὶ τὰ ἐπὶ τοῖς φρουροῖς ἀναλώματα, καὶ τὴν τῶν ἀνδρῶν σπάνιν συνέστειλαν τὰ τεῖχη.

It is universally pointed out that the only place where such a contraction could have been contemplated is along the Pnyx. But we found no traces of any wall of such an early date. Even at the Dipylon above the Gates, where any wall must pass, there was no indication of a wall having been built across the col before the Compartment Wall. Indeed, occupying the site of the southern tower, in the line which any wall must follow, there were remains of a house which had been standing in the latter part of the fourth century. Hence it would seem almost incontrovertible that Cleon did not build a *diateichisma*, in fact, though he may have expressed the desire to do so, giving the inspiration for Aristophanes' remark. Perhaps, if this be true, the cuttings behind the Compartment Wall along the East Stoa (*supra*, p. 310) could be associated with an abortive attempt of Cleon's to build a *diateichisma*, but we have seen that even this is doubtful.

Other possible dates for a *diateichisma* suggested by literary evidence would be around the middle of the fourth century.⁶⁰ Yet, again, the fact that our pottery proves

⁵⁹ Judeich, *Topographie*², p. 161, gives a summary of views heretofore held on the subject. As previous theories have been superseded by the results of the present excavation, they need not be discussed further. It may be noted, however, that Noack, in 1906 (*Ath. Mitt.*, XXXII, 1907, pp. 508-9) decided on the basis of excavation that the section preserved on the Hill of the Nymphs, at least, could not be earlier than the fourth century. Frickenhaus, in *Athens Mauern im 4ten Jahrhundert* (Bonn, 1905), p. 32, note 1, doubts the existence of a *diateichisma* of Cleon. His grounds, however, are specious; he argues that a "diateichisma" must cross an isthmus or the like, and hence could exist only in the Peiraeus.

⁶⁰ Judeich, *Topographie*², p. 86. For echoes of possible work on the fortifications in the middle

a late fourth-century date for the Compartment Wall, and the absence of traces of a wall earlier than the Compartment Wall, militate against using these notices for fortification in the region of the Pnyx at that time.

Hence we must suppose that the decree *I.G.*, II², 463 provided for the repairs of existing fortifications, but that another, approximately contemporary decree, provided for the construction of the Compartment Wall. The need for armament is reflected in literature, which gives evidence for an extra accumulation of arms and supplies in preparation for the Four Years' War.⁶¹

We may even come to a notion of how long a period was covered by the building of the wall. The cross-wall on the Museum Hill, enclosing the area just below the peak (pp. 331 ff.) must, under the circumstances, be the Macedonian fortress, as has been long accepted. This was apparently built by Demetrius Poliorcetes in 294 B.C.;⁶² at least his placing of a garrison on the Museum is the first recorded use of the fortress, and such a stronghold would have been of no apparent use to the city. Although no definite indication of the nature of the contact between the fortress wall and the *diateichisma* was found to show whether the former was of a piece with the latter or added afterwards, there can be little doubt but that the fortress was begun before the *diateichisma* was completed. The rock cuttings would suggest that the two bonded, although they do not prove it. The construction of the central tower of the fortress is so similar to that of the *diateichisma* that we must suppose that the same material, the same workmen, the same architect, contributed to the construction of both. Thus the entire building period may have been as long as fourteen or fifteen years.⁶³ If it was carried out at so leisurely a pace, it could scarcely have been a matter of immediate importance. The city circuit at that time had been repaired and was in good condition, and afforded ample protection for the city. The Compartment Wall was part of a far-sighted program whereby it was seen that eventually the Long Walls and part of the original circuit would have to be abandoned.

The fate of the structure is a problem in itself. Some parts of it survived to be repaired and used for a thousand years and more. Other parts seem literally to have disappeared in little more than half a century. The fortress on the Museum Hill seems

of the century, Cornelius Nepos, *Timoth.*, 4, 1; Xenophon, *De vect.*, 6, 1; Demosthenes, XIX, 125. Somewhat later, about 338 B.C., the walls seem to have been extensively repaired: Lycurgus, *Leokr.*, 44; Aeschines, III, 236; for the Peiraeus, *inter alia*, *I.G.*, II², 244.

⁶¹ *I.G.*, II², 374, 468; 1487; Plutarch, *Vit. orat.* X, 851 D.

⁶² Plutarch, *Demet.*, XXXIV, 5; Pausanias, I, xxv, 8; Skias, *Πρακτικά*, 1898, p. 68; Judeich, *op. cit.*, p. 91.

⁶³ Cf. *I.G.*, II², 505, mentioning work on the city wall and south Long Wall, ca. 302/01 B.C., and *I.G.*, II², 774, dated ca. 250/49 honoring Aristomachos of Argos for aiding Athens, among other things, in work on the walls presumably soon after 300 B.C. Dinsmoor, *The Athenian Archon List in the Light of Recent Discoveries* (Columbia University Press, 1939), pp. 146-8 dates this inscription 252/51 B.C.; Pritchett and Meritt, *Chronology of Hellenistic Athens* (Cambridge, 1940), pp. xxi and 99, date it 253/2 B.C.

to have been captured and partially destroyed *ca.* 288 B.C.⁶⁴ in what must have been one of the most spirited events of Athenian history in the Hellenistic period. The fortress, which for over five years had stood a grim insult to the Acropolis, was captured by storm. The Macedonian garrison which had inhabited it, in full view of the temples of the Acropolis (Figs. 41, 42) commanding from their point of vantage the entire city, were surprised by a group of intrepid plotters and either killed or expelled. It must have seemed a mad venture indeed to lead a body of men up the steep slopes of the hill to the walls, which in most places rested on the edge of unscalable cliffs, and the leader, Olympiodoros, well deserved the fame that lasted until the time of Pausanias and after.

If the storming occurred in 288 B.C., any damage which the walls and towers incurred must have been soon repaired, for we know that in 268/7 B.C., the ephebes were standing garrison duty on the Museum.⁶⁵ There is no evidence to show when this practice began nor how long it lasted, but we are perhaps justified in assuming that the fortress was used by the Athenians for their own purposes not long after its capture from the Macedonians, perhaps continuously up until the next chapter in its eventful history.

This next episode was an outcome of the Chremonidean War. During those troubled days the fortifications of the city everywhere must have been in good repair, for the city withstood a long siege culminating in surrender in 262 B.C.⁶⁶ A result of this war of immediate interest to us is the fact that the fortress on the Museum was occupied by the troops of Antigonos in 261 B.C. This second period of Macedonian occupancy terminated, apparently, in 256 B.C.⁶⁷ The circumstances attending the withdrawal of Antigonos' troops are not fully explained; Pausanias says he took them away voluntarily. The later history of the fortress itself cannot be followed.

As for the rest of the Compartment Wall, we shall see that the section on the central Pnyx Hill would seem to have disappeared in the following generation, or at least to have been completely neglected. Houses were built directly in front of it at the west end of the Pnyx, suggesting that even if it still stood undamaged it was not regarded as of military importance.⁶⁸ If it was destroyed by violence, in the

⁶⁴ *I.G.*, II², 654, 666, 667. Pausanias, I, xxvi, 1 and 2; Plutarch, *Demet.*, XLVI; cf. Beloch, *Griech. Gesch.*, IV, 1², p. 232; 2², p. 105. Dinsmoor, *Athenian Archon List in the Light of Recent Discoveries*, pp. 61-2, would date this in the Chremonidean War. He dates *I.G.*, II², 654 in 287/6 or 286/5 (p. 39), 666 and 667 in 268/7-267/6 (p. 42); cf. Pritchett and Meritt, *Chronology*, pp. xvii and xix.

⁶⁵ *I.G.*, II², 665, line 12. See redating by Meritt, *Hesperia*, IV, 1935, p. 584, and dating in 268/7 or 267/6 by Dinsmoor, *op. cit.*, p. 42; cf. Pritchett and Meritt, *Chronology*, pp. xix and 27.

⁶⁶ Tarn, *J.H.S.*, LIV, 1934, pp. 28 and 39. This more or less traditional dating of the war in 267/6-263/2, Dinsmoor, *op. cit.*, pp. 58 ff., would change to 270/69-263/2 B.C.; but cf. Pritchett and Meritt, *Chronology*, pp. 33-34 and 72.

⁶⁷ Pausanias, III, vi, 6; see Ferguson, *Hellenistic Athens* (1911), pp. 182 and 191.

⁶⁸ Not only is it *a priori* probable that a clear space should have been required in front of a



Fig. 43. Round-faced Tower (W2) of White Poros Wall, from the North.
Arrow Points to Mouth of Cistern



Fig. 44. Round-faced Tower (W2) of White Poros Wall, from the West

absence of evidence of other events which might have caused such a catastrophe,⁶⁹ we may suppose that the damage was done in reprisal at the end of the Chremonidean War, but was not repaired partly because of foreign domination, partly because reliance was still laid on the outer circuit and the Long Walls.

THE WHITE POROS WALL

It was not long before the fortifications of the city were completely reconditioned and renovated. On the Pnyx, we see the Compartment Wall repaired in some stretches, replaced in others. These changes were effected by builders employing a material so characteristic that it may easily be recognized at any point along the wall. The material is white poros, a stone which, when fresh from the quarry, is almost as soft as chalk, but when dry or after long exposure to the air, becomes reasonably firm and strong. In addition to the incidental repairs to be noted on the Compartment Wall where it still remained as the line of defense, the program involved the entire reorganization of the section along the central Pnyx Hill on a different line (Pl. XIV). The Compartment Wall had remained in places above the actual brow of the hill, in order to use in its course the foundations of the West Stoa, but the new wall followed along the very edge of the brow and sometimes a little below. The new position gave the defenders a greater advantage over the enemy, who had to approach over a steeper slope.

It might seem plausible that the White Poros Wall was an addition, a secondary or outer line of defense in front of the Compartment Wall. For this arrangement there would be some parallels,⁷⁰ but in the greater part it does not seem probable. Apart from reasons already given for assuming the destruction of the Compartment Wall, or its disintegration, at one point the White Poros Wall was only about 1.50 m. in front of the line of the Compartment Wall, too close for active passage of troops. Furthermore, we see (*infra*, pp. 346-348) that in one place where the Compartment Wall was certainly standing, the White Poros Wall was less substantially built.

fortification, but there is some direct evidence for the practice, although not entirely consistent. An inscription from Nisyros (*I.G.*, XII, 3, 86), cut on the face of a wall, claims five feet before the wall as public property, but does not specifically prohibit building. Another inscription from Paros has been restored by Dittenberger (*Syll.*¹, 308) to require three feet clear before a wall, but in the *Corpus* (*I.G.*, XII, 5, 115) the inscription is referred to a harbor. An inscription on the Paulus Tower at Ephesus (Benndorf, *Jahreshefte*, 1899, Beiblatt, p. 33) demands fifty feet clear outside, forty feet inside the wall, and Philo, *Mechan. Synt.*, V, 80 (Τειχοποικῶν, sec. II), urges sixty cubits. See Dawkins, Wace, *B.S.A.*, XII, 1905/06, pp. 167 ff.

⁶⁹ Ferguson, *op. cit.*, pp. 188-237.

⁷⁰ Philippi, *B.C.H.*, LXII, 1938, pp. 7 ff., 24 ff., pls. I, V-VIII, where, although some parts seem to be Byzantine, others must be earlier. At Kadikalessi in Mysia there may be another example (*Ath. Mitt.*, XXIX, 1904, p. 271). In other examples (e. g., Eretria, *A.J.A.*, VII, 1891, pp. 382 f.; cf. Scranton, *Greek Walls*, p. 39), one line probably replaced the other.

The White Poros Wall was in most places *ca.* 2.00 m. in thickness, built of ashlar blocks 1.35 m. long, 0.65 m. wide, and 0.45-0.50 m. high. The blocks were arranged as headers and stretchers in alternate courses. Each course consisted of a range of stretchers on one face, one of headers on the other. This disposition was alternated with each course, so as to show a course of stretchers alternating with one of headers on each face. The relative thinness of the wall and the great mass of broken stone in the trench resulting from the destruction of the wall suggest that it was of solid masonry to the top. The blocks in the lower courses (Fig. 51) were treated with a broad bevel or champfering about 0.04 m. wide on all edges. A drafted band about 0.10 m. wide extended along the bottom and two sides of each face, leaving in the centre a boss projecting some 0.05 m. In Figure 51, the side drafting is wider—0.15 m. and 0.20 m. The surface of the boss was carefully roughened by chiseling, but was left in a fairly flat plane. The upper courses are nowhere preserved *in situ*, but it is possible that they were treated differently. Relatively few fragments of blocks with drafted edges were found in the destruction debris, but some quantities of broken blocks were found with a different type of surface. This was produced by the use of a toothed chisel about 0.07 m. broad, applied closely and evenly over the entire surface of the block to give the face the appearance of having been dressed with a comb. The same chisel was used to produce the bearing surface, but in such cases the treatment is less uniform. Exact parallels for this treatment are lacking, probably because the use of so soft a stone is rare. A part of the precinct wall of the Asklepieion in Athens—at the east end of the south side—is similar in spirit;⁷¹ the stone is much harder, and the effect was produced by the close application of the pointed chisel.

The wall was reinforced by a series of buttresses along the inner face (Pl. XVI, Fig. 45). These buttresses are built of the same sort of stone and are certainly contemporary, although they are not always bonded to the wall. Their construction is less careful and even; they measure about 1.35-1.40 m. square in plan, being composed of two blocks in each course laid at right angles to those in the course below, and the courses are not always of the same height. Occasionally the plan is as much as 2.00 m. in width by 1.35 m. in projection. They were probably spaced at intervals of *ca.* 4.60 m., centre to centre (*ca.* 14 Greek feet).⁷² They were doubtless two-fold in purpose—to strengthen the wall and to support the parapet walk. Similar buttresses are found elsewhere, although rarely;⁷³ they have been identified by Stählin with the

⁷¹ Wrede, *Attische Mauern*, 1933, plate 73. Scranton, *Greek Walls*, p. 106; p. 173, Lists C 7 and 8; p. 178, List D 4.

⁷² Behind the East Stoa they are *ca.* 4.00 m., or 12 Greek feet.

⁷³ Demetrias: Stählin, Meyer, Heidner, *Pagasai und Demetrias* (Berlin, 1934), pp. 58, 82. Perge: Lanckoronski, *Städte Pamphyliens und Pisidiens* (1890), Vol. I, p. 62. Side: *ibid.*, pp. 129-130. Pompeii: Mau-Kelsey, *Pompeii* (1899), pp. 231 f. Rhodes: cf. Kromayer, Veith, *Heerwesen und Kriegführung der Griechen und Römern* (1928), p. 236 and fig. 84; cf. p. 242. Velia: *Jahrbuch*, IV, 1889, p. 180. In general, see Droysen in Pauly-Wissowa, *R.E.*, s. v., Befestigung, col. 192.

ikria described by Philo of Byzantium.⁷⁴ The buttresses of the White Poros Wall on the Pnyx may have supported either beams or arches for the parapet walk; the lack of fragments of voussoirs in the destruction debris may be thought to suggest trabeated construction at the top.

THE WHITE POROS WALL ALONG THE CENTRAL PNYX

The description of the wall may begin at the gateway in the Compartment Wall at the northern end of the central Pnyx hill. Here the roadway already mentioned was closed at some period by blocks which rested on a series of cuttings crossing the road at the inner corner of the northern jamb of the Compartment Wall gate (Pl. XV, Fig. 21). The road was thus forced to bend to the south, avoiding this masonry. Shallower wheel marks may be seen leaving the older road about two metres east of the gate (inadvertently omitted on the plan, Pl. XV). The road must have crossed the ruins of the southern jamb of the Compartment Wall gate on a hard road stratum of gravel which was found in the area south and east of the original gate. About 2.60 m. from the western edge of the Compartment Wall as represented by the cutting north of the gate, is the edge of a deep cutting in the bedrock, on which traces of plaster remain. This cutting must have been occupied by a house. In the floor of the first house-cutting were laid the foundations of the White Poros Wall, of which one course still remains. They were built tight against the cuttings, but no traces, either of blocks or of beddings for blocks, remain on the bedrock above or to the east of the house wall. Some light working on the top of the bedrock by the house wall beyond the end of the White Poros fortification wall may be taken as bedding for a door jamb. Thus we may assume that a gate existed between the end of the White Poros Wall and the thickening of the Compartment Wall. As no remains of white poros of any sort were found north of this point, it may be assumed that the Compartment Wall was not materially damaged in that stretch, and that the poros wall builders simply repaired it. The cuttings which cross the road (mentioned above) may be taken as beddings for a structure against the corner of the restored Compartment Wall, possibly the foot of a stairway leading to the parapet walk. The road, having swung south to avoid this obstruction, then doubled back northward and passed out through the new gate on a bed of earth and debris. No traces of this remain, because of the subsequent quarrying and the modern stairs which lead down into the bed of the quarry.

From this gateway the White Poros Wall leads directly to a square tower (W1). The northern face of the tower is continuous with the wall leading from the gate.

Examples from Chalkis (Aetolia), Phyle, and other sites given by Stählin are not really comparable; the buttresses in these cases are confined to the parapet.

⁷⁴ Philo, *Mechan. Synt.*, V, lxxx, 33 f. (Τειχοποικόν, sec. III, 5).

The northwest corner of the tower is about 13.00 m. from the gate jamb. The tower has a western face of *ca.* 9.30 m. and projects from the curtain to the south for a distance of *ca.* 6.60 m. The tower was bedded on cuttings made for numerous earlier houses or other buildings which had been destroyed to make way for it. Along the rear face of the tower, about 3.30 m. from the wall to the gate, was a buttress projecting 3.50 m. inward, with a thickness of 1.35 m. About 3.40 m. to the south was another buttress projecting 4.00 m., with a similar width. From the city face of the last buttress to the end of the gate wall there extends the foundation of a wall only 0.50 m. in thickness, built of small stones and mud; it allows a passage between itself and the end of the first buttress. Although it cannot be determined whether this thin wall is contemporary with the buttresses or later, or even perhaps the remains of the wall of the ruined house, it would seem possible that at one time during the history of the White Poros Wall the spaces between the two buttresses and the gate wall were used as guardrooms for the gate watch. As the buttresses are of extraordinary length, and cannot have had any structural function so far as supporting the tower itself is concerned, it may be deduced that they were originally intended to form such guardrooms.

From Tower W1 the wall swung southwestward to the roots of the broad central spur of the Pnyx range toward the sea. Here there was a magnificent tower with short straight sides and rounded front, W2 (Pl. XV, Figs. 43, 44). The length of the straight sides is *ca.* 4.00 m.; the total projection was *ca.* 9.00 m., and the width *ca.* 11.00 m. The tower was not of solid masonry, but had a core composed largely of working chips from the construction of the wall. The tower walls are 2.50 m. in thickness at the base, but they were reduced by a batter on the outer face to a probable thickness of 2.00 m. On the north side, where the third course of blocks is preserved, the highest is set a distance of 0.27 m. inward from the outer face of the lower blocks. A setting line on the highest block indicates that the next course had been retracted *ca.* 0.12 m. Another such retraction, of 0.10 m., would reduce the thickness of the upper part of the wall to the normal thickness of 2.00 m. The preserved blocks are in no case well finished on their exposed face, so that they were apparently not meant to be seen.

Three buttresses supported the back of the tower. The southernmost projects 2.50 m.; the central one, 2.00 m., and the third 2.40 m. The first two are *ca.* 4.90 m. apart, the second two *ca.* 4.70 m., measured from centres. Although they are thus larger than the normal buttress, they are yet smaller than those at the northern gate, and represent probably not guardrooms but an extended parapet walk, with perhaps arrangements for ascending to the tower.

From the southeastern corner of tower W2 the wall proceeds in a southeasterly direction for *ca.* 40.00 m. to a point where it makes a slight angle to the south (Fig. 45). In the angle is a rectangular tower (W3) with a projection of *ca.* 10.00 m. and

a width of 11.00 m. The walls of the tower were about 2.00 m. in thickness, and enclosed a core of working chips and other stony material. Some forty metres to the south is a third square tower (W4), built in the same fashion. As its front wall rests on a slope, it was given a batter. This would appear from the fact that the trench left by those who destroyed the front wall and removed the stones from between the



Fig. 45. Blocks of Curtain (A), Buttress (B), and Bedding (C) for Northwest Face of Tower W3 of White Poros Wall, from the South

masses of earth which had accumulated against the sides, is 2.60 m. wide at the bottom. A fourth tower (W5) lay about forty metres to the south. The technique of construction is in general the same, although it may be doubted whether the walls were given a batter. The projection was only *ca.* 8.00 m.; the face of the tower measured *ca.* 8.50 m. in width at the base. The curtain here apparently made an angle, and an offset in the wall behind the tower probably indicates a stairway leading to the parapet walk. About twenty metres south of the propylon bedding (Pl. XVI), the wall was examined in a trench cut across its course. It was found that during the construction of the wall a number of houses on the city side had been destroyed. The debris from

their ruins had been spread out and terraced off with working chips from the dressing of the wall blocks.

At the southwestern corner of the hill, the Poros Wall turned eastward. The angle so formed (Pl. XVI) is protected by a great rectangular tower (W6) which projects *ca.* 9.40 m. from the westward-facing curtain, has a front of *ca.* 10.80 m., and returns 12.00 m. to form an obtuse angle with the curtain facing south. The walls



Fig. 46. Masonry of Northern Spring of Tower W6 of White Poros Wall, from the East.
A, Buttress; B, Curtain; C, Spring of Tower

of the tower itself are 2.00 m. in thickness, and the core was filled with working chips of limestone and white poros. The curtain did not, as usual, extend along the rear face of the tower, but massive buttress-like enlargements (Fig. 46) closed the space except for an opening of some 2.50 m., which may be taken as an entrance from the ground level on the city side of the wall to the first floor of the tower, which would have been some three metres above the ground level outside. A block lies outside, but in the axis of this entrance way. In it is cut a circular bedding some 0.25 m. in diameter and 0.10 m. deep. Its purpose is uncertain, but it may have had some function in connection with a door. Here again the wall builders seem to have demolished numerous houses, which had occupied extensive rock cuttings in the side of the hill.

About 14.00 m. to the east of the corner tower is a small postern in the White Poros Wall (Figs. 47, 48, 49). On each side of the postern on the city face are large flanking buttresses. That to the east was not completely uncovered, but its projection, 1.75 m., is similar to that of the other, and it was probably of the same width, i. e., 2.63 m. The western buttress lies directly opposite a bastion-like structure which will



Fig. 47. Interior of Tower M2, from the North, Showing Graves of the 4th-5th Century after Christ. A, Southeast Corner of Tower M2. B, Buttresses of White Poros Wall, Flanking a Gateway

be discussed below. The postern is covered by later construction. The northern corner of the western jamb is visible, however. A well-defined stratum inside the door, of beaten poros chips and earth, indicates the entrance level. There is no sign of wheel traffic, nor is the surface packed hard enough to suggest that there was much foot traffic. Probably the gate was entirely for military use.

From this point eastward the wall has almost completely disappeared. Only the rock-cut beddings are visible, and some packing or irregular leveling blocks are preserved. These indications are enough, however, to show that the wall was reduced in thickness to *ca.* 1.35 m., i. e., the length of one block (a course of headers) or the



Fig. 48. Gateway Between White Poros Wall and Bastion by the Propylon, from the South. A, Buttress of White Poros Wall. B, South Face of Bastion. C, Bedding-Blocks for Door Jambs of Roman Repair. D, Masonry of Mortar Repair

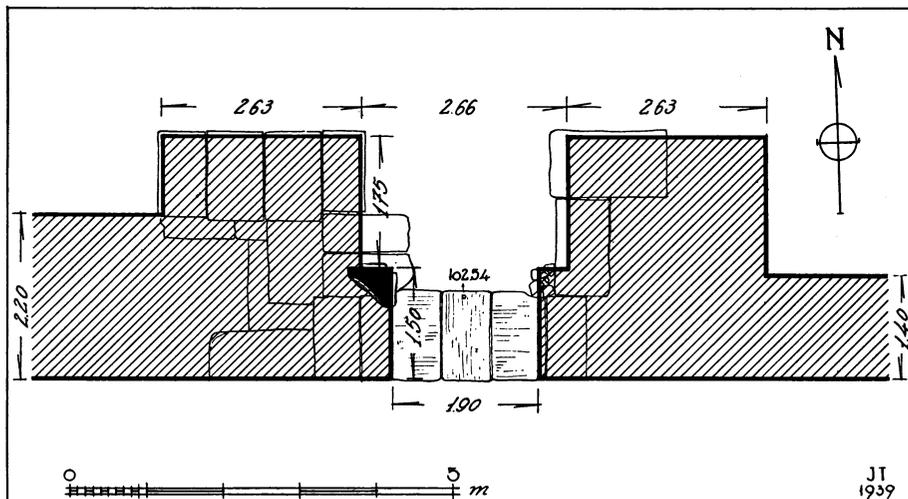


Fig. 49. Postern in the White Poros Wall Near the Southwest Corner

combined widths of two (two ranges of stretchers). The buttresses, by compensation, are arranged more closely, being spaced *ca.* 3.93 m. apart, measured on centres. Below the western part of the East Stoa are extensive workings in the bedrock (Pl. XVI, Fig. 50) that may be associated in part at least with the Poros Wall. The nature of the structure which stood on them is not clear (*infra*, p. 351, note 76). It measured 8.00 m. wide and 3.60 m. deep behind the wall. It is not part of the original scheme, for its bedding irregularly covers parts of the buttresses which were normally laid out. Just beyond this was a tower 9.60 m. wide and projecting 8.00 m. (W7), similar to the other square towers. Its well-preserved corner is a good illustration of the quality of workmanship employed in the construction of the wall (Fig. 51). From this tower the wall has been traced no more than eight or ten metres. Its exact course from here on is a matter of doubt, but it must have made contact with the earlier Compartment Wall somewhere near the tower below the eastern end of the East Stoa. Although a considerable part of the area in question was explored, no trace of the Poros Wall was brought to light, but the earth in the region has been much disturbed, both in Roman and in later times, so that it would be costly to search more exhaustively. Still, the point is a relatively small one, and our explorations have reduced the possibilities to a few, and the probabilities to that indicated on our plan (Plates XIV and XVI),—i. e., the White Poros Wall continued to the face of the Compartment Wall tower southeast of the Stoa; there may have been a postern gate along the face of the tower.

The reduced thickness of the wall in this stretch from the postern gate to the contact with the Compartment Wall would seem to require some explanation. It may be that the steep slope below was considered protection in itself. It is altogether probable that the Compartment Wall over the Stoa, which made contact with the Poros Wall also over the bastion by the postern, was still in existence at the time, and that there was a double line of defense along the southern brow of the hill forming a strongly fortified post for a small garrison. As part of a double line of fortifications, the Poros Wall may have been considered strong enough with its reduced thickness. For a clue to these arrangements, we may turn to a mass of masonry occupying the southern end of the bedding for the Propylon noticed above (*supra*, p. 286; Pl. XVI).

From the southwest corner of the East Stoa, a line of heavy wall was constructed to the western edge of the bedding for the Propylon (Fig. 52). This wall is built of headers and stretchers, with blocks measuring about 0.45-0.50 m. by 0.65-0.70 m. by 1.25-1.40 m. They are dressed in a manner similar to the blocks of the White Poros Wall, with drafted bands *ca.* 0.06-0.10 m. in width, leaving a boss with a projection of 0.02-0.08 m. The lower edges, and one lateral edge, are beveled. The material, on the other hand, is conglomerate stone. The southwestern corner is not square, but has been smoothly rounded.⁷⁵ The masonry was evidently originally in-

⁷⁵ *Hesperia*, V, 1936, p. 193, fig. 25.



Fig. 50. Bedding for White Poros Wall, and Earlier Cuttings, below East Stba, from the South. A, Curtain; B, Buttresses



Fig. 51. Southwest Corner of Tower W7 of White Poros Wall, from the Southwest

tended to extend for some unknown greater distance into the bedding for the Propylon, but after the third corner block had been laid, the plan was changed (Fig. 53). The width of the wall leading from the East Stoa was fixed at *ca.* 3.40 m. or a little less along the southern face; the western face was drawn back 0.30 m. from the edge of the lower blocks, and extended south instead of north in a bastion *ca.* 3.20 m. wide and 3.55 m. long. This is not exactly at a right angle to the line of the wall; in fact,



Fig. 52. Southwest Corner of East Stoa with Fortification Wall Above

its most significant relationship seems to be that its eastern face is in line with the eastern face of the buttress flanking the White Poros postern on the west. The conglomerate bastion and the White Poros buttress are separated by an interval of *ca.* 2.00 m.

The explanation for this complex may be somewhat as follows. During the interval between the construction of the Compartment Wall and the White Poros Wall, the former fell into disrepair, or was destroyed in part (*supra*, p. 338). When the White Poros Wall was planned, it was decided to eliminate the section from the corner of the hill to the northern end, but to repair the section across the East Stoa to the Dipylon, forming a sort of fortress, when taken together with the White Poros Wall below it. In the remodeling, a massive platform was to be built in the bedding previously prepared for the Propylon, probably for artillery. To prevent injuries to people hurrying from the hill into the fortress, the corner of the platform was smoothly rounded.

Then it was decided to close the entrance to the fort by a gate, and to abandon the artillery platform. The masonry was in part relaid, to continue the line of the Compartment Wall from the Stoa foundation, and the bastion was built out to close the entrance to the fort, except for a gate. The reason for abandoning the artillery



Fig. 53. Masonry of Fortification Walls Above West End of East Stoa B and Propylon, from Northeast

platform may possibly be seen in the construction—obviously an after-thought—of a smaller platform behind the White Poros Wall below.⁷⁶ There is no trace of a gate between the bastion and the White Poros buttress of this period, but the later gate here (*infra*, p. 366) may have removed all traces of such.

In this work the builders may well have used the conglomerate blocks from the

⁷⁶ This latter seems too small and ineffectively located to make the explanation completely convincing. Mr. Keene Richards, Chief Engineer at Vassar College, suggests plausibly that the bedding was for a repair or strengthening of the wall, possibly under siege. Cadet Peter Moody of West Point suggests, perhaps more plausibly, a storeroom or guardroom. Either of these explanations would eliminate the connection with the structure on the Propylon bedding.

demolished Compartment Wall to the north, dressing the old blocks in their own style, and laying them in massive header and stretcher systems, as in the rest of the White Poros Wall. Thus we may also explain the absence of re-used material elsewhere along the White Poros Wall, directly in front of the Compartment Wall.

THE DIPYLON ABOVE THE GATES IN THE WHITE POROS PERIOD

Although the stretch along the Pnyx proper is the only section where the Compartment Wall was completely replaced by the White Poros Wall, there are traces of repairs by the White Poros builders along the remaining length of the earlier defense. In the trench north of the Church of St. Demetrius, we found quantities of poros fragments in the destruction debris, although there were no poros blocks *in situ*.

In the Dipylon above the Gates, we found indications that the entire gate system had been remodeled at this period (Pl. XVII, Figs. 29, 54). A buttress with a projection of 2.78 m. and a depth of 3.38 m. was set against the inner corner of the south tower in such a way as to extend beyond the corner a distance of 1.35 m., inward towards the inner gateway. This buttress is preserved only in foundation. The foundations are of miscellaneous poros blocks and re-used material, including a cornice block of limestone (*infra*, p. 382). Against the outer corner of the buttress, on the entrance side, lies a block of white poros bearing cuttings for a wooden door jamb. North of the buttress is a cutting in the earth in the middle of the passageway, from which had been removed blocks that must have held a socket receiving the vertical catch-bar of the two leaves of the door, a door stop, or a similar arrangement. In the absence of the actual blocks we are unable to determine the nature of the construction here. The center of the cutting in the earth, however, is 1.97 m. from the face of the buttress, by which we can restore the gateway with an approximate width of 3.94 m., or about the same as that of the inner gate. The total distance between the two outer towers at their inner corners would thus be *ca.* 9.50 m. In view of the lack of precision in laying out angles, the outer corners were probably not exactly the same distance apart, possibly a little more separated, judging from the fact that the outer gate is if anything wider than the inner. But the difference could not be great, and we have assumed that the interval between the outer corners would be *ca.* 9.60 m.

It will be clear from the plan of the actual state (Pl. XVII) that we were prevented by the presence of the Church from exploring the corresponding area on the opposite side of the gateway, but there can be little doubt that a precisely similar buttress and jamb bedding are to be restored on that side.

In the block of white poros which served as the foundation for the door jamb we found *in situ* the iron pivot on which the gate swung, and in a thin stratum of hard-packed earth which covered the block we found a number of iron studs and heavy nails evidently from the door itself. This material gives an unusual opportunity for studying the actual construction of the door, to which we may now briefly turn.

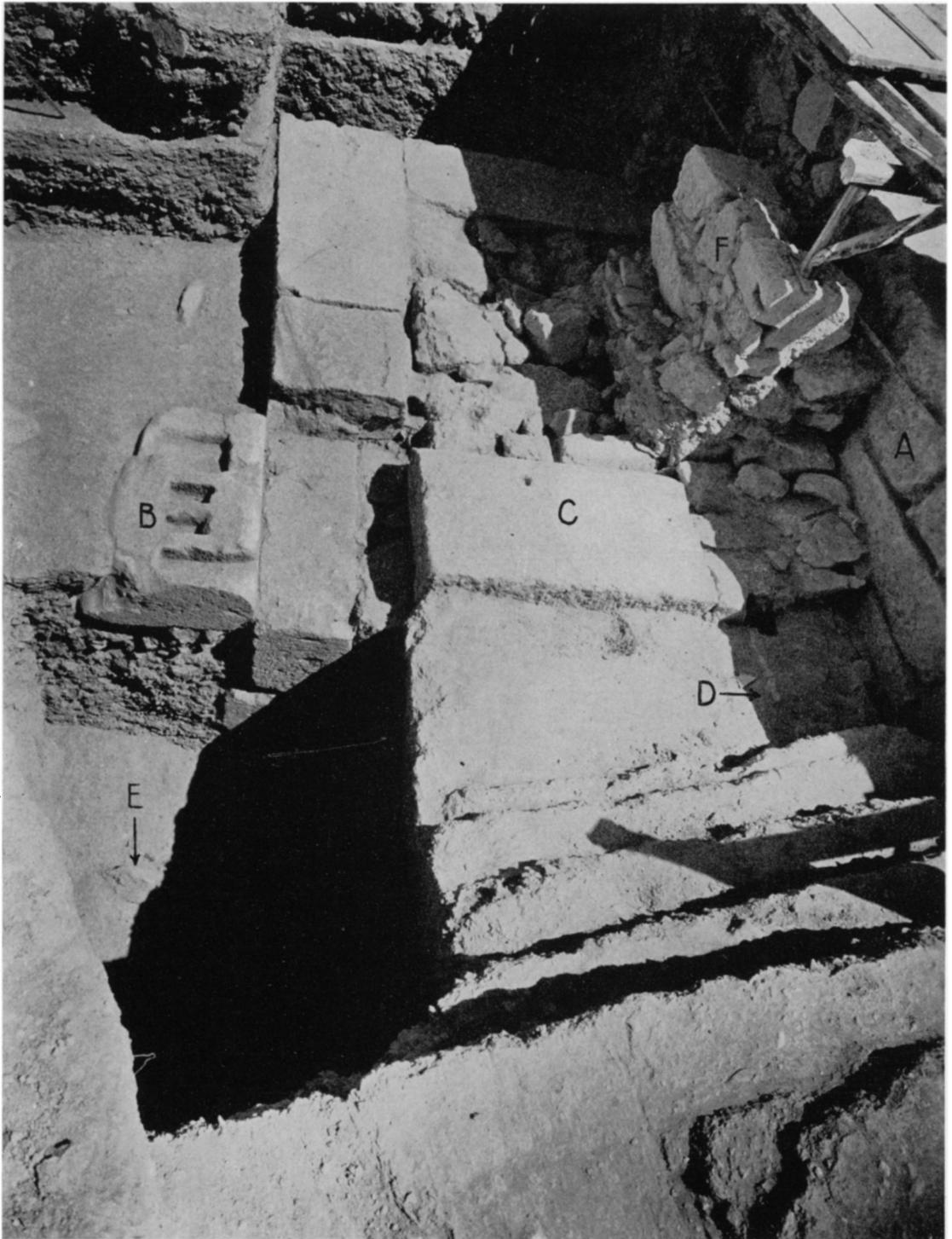


Fig. 54. Butterss of White Poros Period in the Dipylon, from the West

A, North Face of Tower C3
B, Bedding for Door Jamb
C, Re-used Cornice Block

D, Bedding for Bench?
E, East Edge of Bedding for Middle Tower
F, Mediaeval Butterss

The foundation block (Figs. 54, 55) projected 0.67 m. from the buttress into the passageway and was 1.12 m. long. Against the face of the buttress at the outer end is a specially prepared surface *ca.* 0.70 m. long and 0.43 m. wide, raised *ca.* 0.085 m. above the general level of the block. About 0.05 m. inside the edge of this surface toward the passage are four cuttings in the block *ca.* 0.10 m. deep; of these the outermost is *ca.* 0.37 m. long and 0.108 m. wide, lying along the outer edge of the area; the next two are *ca.* 0.15 m. long and 0.108 m. wide, along the edge toward the gate. The innermost is 0.37 m. long and 0.13 m. wide. The last cutting is open on the edge

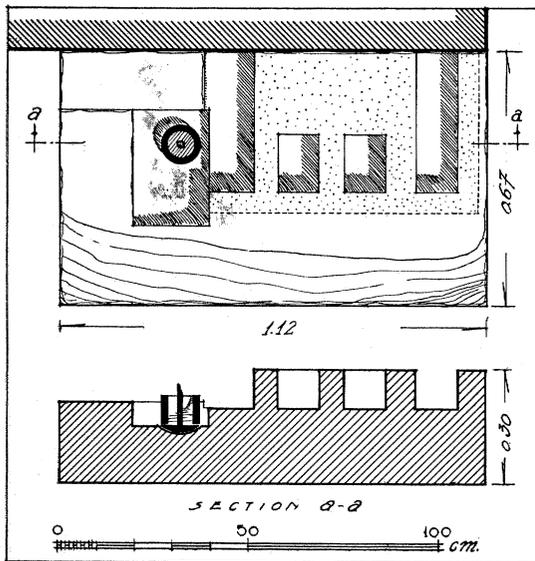


Fig. 55. Foundation for Door Jamb of White Poros Gate in the Dipyloii, Plan and Section

jamb would naturally have been raised a little above the actual traffic surface. The jamb might then have been faced with planks to prevent water seeping underneath and causing decay, and the tenons of the beam sunk into the cuttings of the stone would have kept the timbers from shifting under stress. The fifth, inmost, cutting probably held a plate of hardwood holding the pivot firm; if the pivot had been sunk in the soft stone alone, repeated openings of the door would have enlarged the opening and the door would have fallen out of plumb. It is unlikely that the plate was of metal, for in that case its disappearance, in view of the preservation of the pivot, would be inexplicable.⁷⁷

⁷⁷ There does not seem to have been a proper sill block, as in temples and other large buildings, but only the base for the door jamb as described and a block to support a stop in the center of the passage. Thus our cuttings differ from those in normal monumental buildings, as well as in the fact that the jamb seems to have been entirely of timbers rather than of stone faced with wood

and adjoins a fifth cutting sunk 0.065 m. below the general surface of the stone, measuring 0.304 m. by 0.195 m. In the inner corner of this cutting is a smoothly curved hollow *ca.* 0.10 m. in diameter and *ca.* 0.02 m. deep, in which we found the iron pivot, standing erect.

We are probably to assume that the raised surface was intended to receive the lower ends of two vertical timbers, mortised into the first four cuttings described. It is possible, of course, that one timber only was employed for the jamb, but this would have been enormous, 0.70 by 0.43 m., and it is perhaps more likely that two timbers, each 0.35 by 0.43 m., were used for the purpose; one towards the city, the other towards the country. (Even four timbers might have been used.) The foot of the

The pivot itself (Figs. 56 and 57) consists of a vertical pin preserved to a height of about 0.10 m. (it was probably at least a little longer), with a horizontal disc at the bottom 0.10 m. in diameter, its underside rounded to afford an easy resting surface. Around the pin was found an iron collar about 0.068 m. in height and 0.10 m. in diameter, with an inner diameter of 0.07 m. Apparently, then, the door was hung on a vertical timber 0.10 m. in thickness, into which the pin was fitted at the bottom, reinforced at the end by an iron collar to prevent splitting (presumably a similar pin

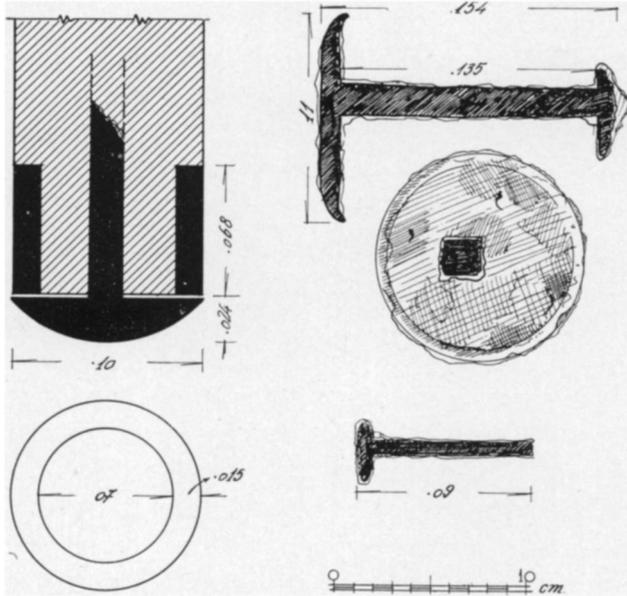


Fig. 56. Iron Fittings from Gate in Dipylon of White Poros Period: the Pivot, a Stud, and a Nail



Fig. 57. Iron Door Pivot from the Dipylon

was attached at the top).⁷⁸ The door itself was apparently made of planks held together with nails and studs (Figs. 56 and 58). The studs are bar-like pieces of iron 0.135 m. in length, with discs at each end. The disc at one end is relatively large, about 0.11 m. in diameter, and not always affixed symmetrically to the bar; the other disc is smaller, about 0.05 m. in diameter. Possibly these studs were arranged closely over the door, with the larger disc outside to receive the blows of missiles or rams, protecting the wood. They may, on the other hand, have been arranged in battens

or bronze. Contrast, for example, the sill of the tholos at Delphi (J. Charbonneaux, *Fouilles de Delphes*, Tome II, Fasc. 4, *Topographie et architecture, Le sanctuaire d'Athèna Pronaia*, fasc. 2, *La Tholos* [Paris, 1925], pp. 14 ff., and pl. xx). House doors at Priene (T. Wiegand, H. Schrader, *Priene* [Berlin, 1904], pp. 304 ff., fig. 323) and Delos (J. Chamonard, *Délos*, VIII, 2, *Le quartier du theatre* [Paris, 1924], pp. 261-286, fig. 152) also seem to involve sheathing rather than solid construction.

⁷⁸ For door pivots and sockets see *Priene*, fig. 324; *Délos*, VIII, 2, fig. 157.

fixed crosswise to the planks of the door, as in house doors. The thickness of the planks with the batten, or the double plank, would be 0.135 m., of which the planks would be probably half, or 0.0675 m. The nails, 0.09 m. in length, would be appropriate for such a thickness. The planks of house doors at Olynthos were 0.03 m. thick. The studs would probably have been made in two pieces, one a pin with a small knob or disc, the other, a large disc with a hole. The pin would be inserted through drilled holes, the disc affixed on the opposite end, and the end hammered to fill the hole in the disc tightly, and to mushroom out over the surface of the disc, thus making an almost inseparable union. The metal was hammered cold.⁷⁹

A final point in regard to the construction of this door may be noted. It must have opened inward, toward the city. This follows from the position of the pivot, which is well inside and behind the jamb. This may perhaps excite some surprise, as it might have seemed more reasonable to have the door open out in order to be more easily closed in the face of surprise attackers, and possibly to be more resistant against assault. But in fact it may well have been considered desirable to have the door open inward in order to make possible rapid ingress and egress for sally parties, and with proper disposition of bars and inner props the door would be as firm against forcing one way as the other.⁸⁰

A packing 0.65 m. in width, consisting largely of poros chips, was found along the face of the tower on the entrance side (Fig. 54). The shallow footing trench above this contained quantities of chips of Hymettian marble. Similar chips were also found in the destruction debris of the spur and gate walls. It seems probable, therefore, that at this time, or thereabouts, a marble bench may have been placed against the side of the gate tower, as at Halae a bench was constructed along one side of the court.⁸¹

The conclusions to be drawn from these circumstances are that the essential features of the gate were left unchanged, excepting that an outer gateway was built between the outer towers. This was evidently a thoroughgoing work of modernization, for there is no reason to believe that the earlier gate complex had suffered any catastrophe.

⁷⁹ For the construction of house doors, compare those from Olynthos (D. M. Robinson, W. Graham, *Excavations at Olynthus*, VIII, *The Hellenic House* [Baltimore, 1938], pp. 249 ff.). Studs for the doors were also found there, but apparently with the boss on one end only (*ibid.*, p. 257), indicating that they were driven as nails rather than riveted, as ours were. For other details of construction of house doors see Wiegand, *Priene*, and Chamonard, *Délos.*, *loc. cit.* Mr. Keene Richards, Chief Engineer at Vassar College, suggested the method of making the studs.

⁸⁰ Aeneas Tacticus (XXXIX) suggests a stratagem whereby trenches and barricades are built inside the gates, and a sally party leads the enemy inside the gate into this trap. Aeneas regards a portcullis as useful, but in the absence of a portcullis, as here, gates closing from within would be even more necessary.

⁸¹ H. Goldman, *Hesperia*, IX, 1940, p. 394.

WHITE POROS REPAIRS ON THE MUSEUM HILL

Although blocks of white poros, small quantities of poros chips, and other minor considerations indicate that the stretch of wall from the Dipylon to the top of the Museum Hill was repaired by the Poros Wall builders, there are no signs of very extensive work on this line. But, on the western brow of the summit are the remains of a tower of some size; its present construction seems to date from a period no earlier than that of the White Poros Wall itself, although there probably had been a Compartment Wall tower here also (C7). Several blocks of conglomerate are re-used in it, but the proponderant material is white poros. It has been much weathered so



Fig. 58. Iron Door Studs from the Dipylon

that the style of treatment cannot be determined. The significant point about this tower is that there is no bonding with the Themistoclean wall to the west, the course of which it crosses (Fig. 59). Thus the Themistoclean wall, which encloses the foot hills of the Pnyx range to the west, together with the Long Walls, must have been abandoned at this time. From this period on, the circuit of the Asty crossed the Pnyx range, and the city no longer included the hills to the west.

Finally, the presence of white-poros blocks in a reconstruction of the central tower of the Macedonian fort may be taken to mean that the fort was repaired at this time. It is possible, of course, that the poros blocks were re-used for this work from other points in the wall, by Roman or later builders, but we have no reason to suppose that this fort was used in Roman or Christian times, and if there had been an early Christian or mediaeval castle on the spot, we should expect to find more substantial remains of mortared work. In general, it seems most probable that the

fortress was repaired in the White Poros period, and that it continued to be used, perhaps by the ephebes, as late as or later than that period.

THE DATE OF THE WHITE POROS WALL

The date of this period can be closely determined by a combination of ceramic with literary evidence. The pottery, although abundant, comes from only two places.



Fig. 59. Southwest Face of Tower C7, from the West. A, White Poros. B, Conglomerate Blocks Re-used in Mortared Repair. C, Bedding for Themistoclean Wall

A cistern over which the curved tower (W2) on the Pnyx proper was built was evidently filled about the time of the construction of the Compartment Wall, and contained only relatively early pottery. More useful material comes from the destroyed houses near the tower west of the East Stoa (W6), and at the northernmost tower (W1). From both house sites quantities of household pottery of the better sort were removed; lamps, plates, pitchers, and many other types. Some pieces approach closely those of the Agora groups of the early second century and the material from the filling of the Stoa of Attalos, although they are not so developed and are probably a little earlier (Fig. 60).

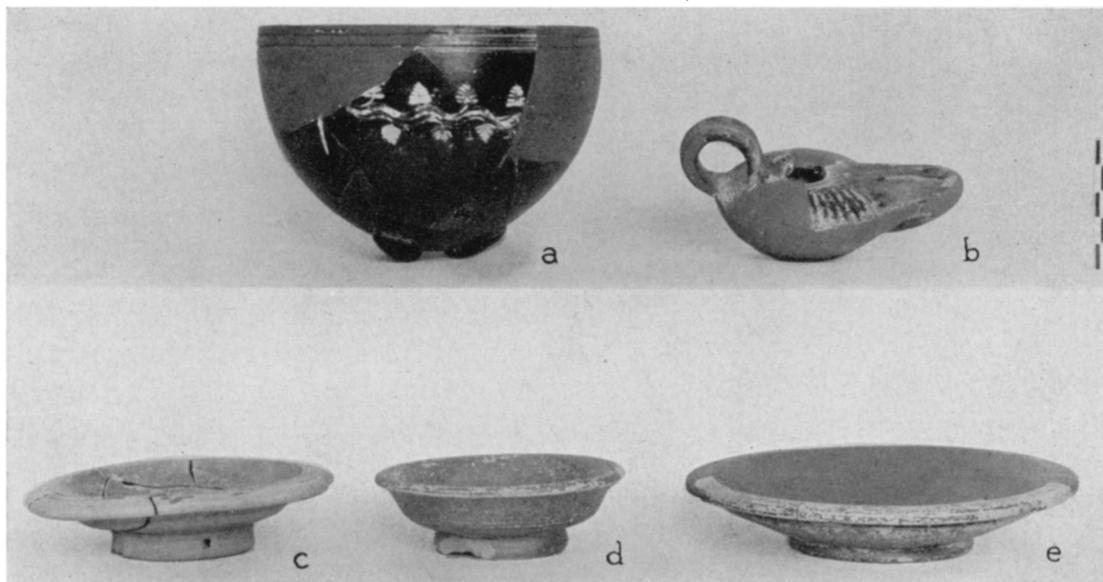


Fig. 60. Pottery Associated with the White Poros Wall

POTTERY FOR DATING THE WHITE POROS WALL

The following vases were all found among the debris of the houses demolished by the wall builders; (a), (d), and (e) from behind the angle tower (W6) west of the East Stoa; (b) and (c) from near the tower (W1) at the northwest end of the Pnyx Hill.

a. Hemispherical Bowl.

Height, 0.093 m.; diameter, 0.135 m. Fragments missing from wall. The bowl rests on three plastic mussel shells. On the wall, below the lip, are two shallow grooves from which the glaze has been scratched. Around the wall, on one side, a necklace with pendants; on the other side a garland of ivy with lesser garlands of grape between. Above the necklace: ΔΩ-ΡΟΘ---. Lettering and decoration in clay slip with white paint for the stems and berries of the ivy. Glossy black glaze.

It is tempting to restore the inscription as Δῶρον which would neatly fill out one panel and would make good sense. On the practice of giving and labeling drinking cups as gifts, cf. Wolters in *Ath. Mitt.*, XXXVIII, 1913, p. 199, footnote. But the surviving traces are almost conclusive in favor of a theta after the omicron; hence Δωροθέου or Δωροθέας. On the floor of a flagon from the Athenian Agora (P10806) is stamped ΔΩΡΟΘΕ[ΟΥ]. The lengthier inscrip-

tions on these ἐκπώματα γραμματικά occasionally extend over more than one panel. On the general practice, cf. above, p. 334, note 56.

b. Terracotta Lamp.

Height, 0.03 m.; width, 0.07 m.; length, 0.095 m. Fragments missing from wall. Watch-shaped body; nozzle flat on top; strap handle; plastic tongues on shoulder. Mould made; covered with dull black glaze.

c. Saucer.

Height, 0.03 m.; diameter, 0.125 m. Flat rim, slightly down-turned, with three grooves on its top. The floor is covered with thin brown glaze.

d. Black-glazed Bowl.

Height, 0.033 m.; diameter, 0.102 m. Angular profile. Covered inside and outside with thin glaze, mottled black and brown. Traces of stacking on its floor.

e. Black-glazed Bowl.

Height, 0.03 m.; diameter, 0.157 m. Shallow bowl, flat, plain rim. Thin black glaze, much flaked.

The above vases, both individually and collectively, find adequate parallels among well and cistern groups from the Athenian Agora, which may be dated from external evidence in

the late third century B.C. Of published specimens, one may compare Hellenistic Group C in *Hesperia*, III, 1934, pp. 345 ff.

The pottery, therefore, suggests a date late in the third century B.C. for the construction of the wall. This might be correlated with evidence for the work of reconstruction of the walls of the Asty and the Peiraeus by Eurykleides and Mikion. The inscription *I.G.*, II², 834, honors these men for their activities; although the exact date of the inscription is unknown, there are historical reasons for placing it after 229 B.C. At this time⁸² the Athenians had just freed themselves from the rule of Macedon. They began striking new coinage, refortifying their frontiers, and reorganizing the administration of their city. It may be that this is the period of the White Poros Wall, but as the pottery suggests a date somewhat later, towards the end of the century, we must either suppose that the actual fortification took place late in this program, or that other associations must be found. For this we may turn to the very end of the century, the involved period of uncertainty, preparations against Philip in 201 B.C. and following, and the negotiations with Egypt, Pergamum, and Rome in turn. Any one of these conditions might have motivated a reconstruction and improvement of the walls, although there is no direct evidence to this effect.⁸³ In any case, we may perhaps see evidence that the White Poros Wall was finished and in use in 200 B.C. in the evidence of Livy⁸⁴ that the Long Walls were abandoned by this year, an alteration in the scheme of defense that we have already (*supra*, p. 357) associated with the construction of the White Poros Wall.

We have noted that the Themistoclean wall to the west of the *diateichisma* and the Long Walls were abandoned at this period. This must mean that the extended line of the walls of Pericles' day was too great to be defended by the resources of the Hellenistic city; the fears of Cleon and the statesmen of 307 B.C. were finally realized. With the constriction of the city circuit, the area on the western slopes of the Pnyx range was abandoned to the raids of passing armies, which may mean that the extensive settlements which once existed there had disappeared. These settlements, known only from the rock cuttings for the foundations of houses and buildings which once were scattered in thick profusion over the entire area, included the important deme of Melite and many sanctuaries and places of note.⁸⁵ Although Curtius' notion that it was the "Kraanaan city," or prehistoric Athens, is definitely to be dismissed,⁸⁶ we do know that in earlier historic times at least until the fourth century B.C., it was an important and distinguished quarter.

⁸² Ferguson, *Hellenistic Athens*, p. 206; cf. Plutarch, *Arat.*, XXXIV; Pausanias, II, viii, 6. Dinsmoor, *Athenian Archon List in the Light of Recent Discoveries*, pp. 78 ff., would date Eurykleides somewhat earlier.

⁸³ Ferguson, *Hellenistic Athens*, pp. 269-277.

⁸⁵ Judeich, *op. cit.*, pp. 389 ff.; above, pp. 307, 313-316.

⁸⁶ Judeich, *op. cit.*, p. 54.

⁸⁴ XXXI, 26.

It is commonly assumed that the region had lost most of its early desirability by the middle of the fourth century B.C.⁸⁷ This assumption is based almost exclusively on a passage from Aeschines' speech against Timarchos (81 f.) and the scholiast thereto, in which the Pnyx is described as a place of ill repute, inhabited only by prostitutes living in wretched quarters, and visited only by men of inferior character. It is thus understood that when Xenophon (*De vectigalibus*, II, 6) speaks of uninhabited sections of the city, he is referring to this. On the other hand, there may have been other regions enclosed by the city walls which were not thickly populated, so that the only definite evidence concerning the Pnyx quarter is derived from Aeschines. We should not, however, take this author quite so seriously as is customary, for it is quite obvious that he is attempting to discredit Timarchos and may be guilty of exaggeration. It is true that his words must convey some truth, but they are not in themselves sufficient proof that the entire Pnyx had in his day degenerated into a repulsive slum. Indeed, we know that parts of Melite were desirable quarters in the time of Alexander and later, for Phocion and Epicurus evidently had mansions in the region.⁸⁸

In any case it is obvious from the results of our excavations that at the opening of the last quarter of the third century there were numerous houses, evidently of some quality, on the summits of the hills. The floors which were cut through by the builders of the White Poros Wall and the pottery which was discarded by the dispossessed owners are both indicative of comfortable surroundings. Thus the depopulation of the Pnyx, if it began in the fourth century, must have been gradual, beginning at the westernmost limits of the area and moving slowly eastward. By the middle of the third century it had not yet reached the summits of the hills.

It is perhaps probable that the mid-fourth century was a low point in the reputation of the quarter, and that afterward it recovered its fortunes and became popular again during the third century. But the period of Eurykleides does mark the end of its existence as an inhabited area. Ferguson notes a shift of interest and perhaps population in these years⁸⁹ to the eastern and northeastern sections of the city, and it is probable that with the construction of the White Poros Wall and the abandonment of the Long Walls, the extra-mural parts of the Pnyx were quickly forsaken.⁹⁰ Numerous graves have been found in the region, yielding objects of late Hellenistic and early Roman date,⁹¹ and there are also numbers of columnar grave monuments

⁸⁷ Judeich, *ibid.*, p. 86; Harrison, *Monuments and Mythology of Ancient Athens* (1890), p. 107.

⁸⁸ Plutarch, *Phocion*, XVIII, 6; Diog. Laert., XI, 7. Epicurus' house was visible in Cicero's time (*Ad fam.*, XIII, i, 3; *Ad Att.*, V, xix, 3). We do not know, of course, in what part of Melite these men lived. It may have been on the city slopes of the Pnyx.

⁸⁹ *Hellenistic Athens*, pp. 237 ff.

⁹⁰ Of course, the outer Pnyx region may have been abandoned earlier, suggesting a withdrawal of the fortified line.

⁹¹ Mr. Stavropoulos, who has supervised the excavation of some of the richer graves of the

of similar date to be seen scattered all over the district, particularly along the road to the Long Walls.

LATE HELLENISTIC AND EARLY ROMAN HISTORY

LATER HELLENISTIC REPAIRS

In the trench north of St. Demetrius two repairs may be detected in the Compartment Wall (Figs. 24, 25, 26). On the west (field) face of the wall three courses are preserved. The lowest of these is of the typical Compartment Wall style, from the original construction. The second is of re-used furrowed ashlar blocks, of which the faces are marked by short, parallel grooves arranged vertically. The third is of re-used tooled ashlar blocks, whose surfaces have been lightly roughened. A great mass of earth which was thrown up against the face of the wall in the first century after Christ (pp. 363-365) rests closely against the blocks of the second course, in their lower parts. A footing trench has been cut through this earth filling along the face of the wall for the insertion of the uppermost, third course of blocks. Thus it would appear that the furrowed ashlar blocks had been set in place before the deep filling of the first century after Christ had been heaped up, and that the third course was added afterwards. That the furrowed ashlar blocks are not from the original construction seems probable from the fact that re-used material was employed only for the foundations of the Compartment Wall, where observed. Thus they may represent a reconstruction of Hellenistic date, perhaps after the incursion of Sulla. That the walls were reconditioned after this time may be inferred from the fact that Caesar's legate Calenus was unable to take Athens, although he did take the Peiraeus and did much damage to the territory round about.⁹²

THE EARLY ROMAN PERIOD

Under Caesar and Augustus nothing of historical interest occurred in connection with the fortifications on the Pnyx, so far as we know from written record or the evidence of excavation. But at some time during the first half of the first century after Christ there took place an event which may well give us cause for speculation. The fine gateway in the saddle between the Pnyx and the Museum suffered some violent disaster, which marks the beginning of the decline which eventually resulted in the annihilation of the walls. The gates closing the outer entrance were destroyed. The ruins lay open for some time, during which the slighter remains largely disappeared, but the ensuing accumulation of gravel buried the iron studs which had been left, and the iron door pivot which had never moved from its socket. The wooden

vicinity and examined the objects found in the possession of grave robbers and confiscated by the police, confirms this statement so far as his experience goes. The results of our own investigation of graves appear below, p. 379.

⁹² Cass. Dio, XLII, xiv, 1.

leaves of the portal would seem to have been burned. The facings of the tower wall and the courtyard, and the poros buttress, were dismantled to their foundations. Traffic, however, continued uninterrupted through the gate, for the stripped foundations of the buttress bear the marks of wheels in the form of ruts (Fig. 54). The debris from the destruction of the gate which was found in the roadway and above the ruined foundations of the bastion, produced sherds of the early first century after Christ, packed hard in a much-worn roadbed. Among the glass fragments, lamps, and potsherds, were numerous bits of Arretine ware, including some with plantaform stamps; the latest lamps are of Broneer's Type XX,⁹³ with strap handles. The pottery of this deposit is uniform with that which is described below. This stratum lay directly on a lower road stratum which had been packed hard against the buttress and wall facing before the destruction. The lower road stratum contained Samian sherds and glass of the early first century after Christ. This evidence would suggest that the gate had been thrown down and ruined by violence such as one usually associates with war, and that at the height of the Roman Peace.

References to a storming of the walls of Athens in the period of Tiberius apparently do not exist. Were the histories of the wars about the succession of Nero less profuse, we might make bold to associate the incident with the movements of troops at that time. But all the armies seem to have been well occupied elsewhere. Only one mention of scenes of violence at this time comes to us out of literature. Germanicus, who had toured Greece on his way to his provinces, and had made a brilliant stay in Athens, was followed in A.D. 18 by the less popular Gnaeus Piso. Tacitus (*Ann.*, II, 55) leaves us in no doubt that his visit was unwelcome. He seems to have done nothing to make himself pleasing, but rather to have done all in his power to insult and terrify the citizens. Perhaps he was so incredibly arrogant as to enter the city with the atmosphere of the conquering besieger, burning the gates before him. That this could have been meant by Tacitus' "turbido incessu" may not be certain, but it is possible.

Yet another incident in the first century has already been mentioned in passing. In the trench north of the church of St. Demetrius (Figs. 24, 25, 26) we found an accumulation of earth 4.50 m. in depth (Strata IIa-VIIa, on the west side) that lay directly on the construction debris outside the wall and was heaped up against the outer face of the wall. A considerable quantity of pottery and lamps was found, consistent within itself and of types that occur commonly in association in the Athenian Agora, in contexts of the first half of the first century after Christ (Fig. 61).

POTTERY FROM THE DEEP FILLING OF EARTH AGAINST THE OUTER FACE OF THE CITY WALL
NORTH OF THE DIPYLON

- a. Terracotta Lamp of Broneer's Type XVIII. nozzle missing. Plastic rays on rim. A much
Height, 0.033 m.; width, 0.058 m. Tip of blurred unpierced knob on either shoulder

⁹³ *Corinth*, IV, ii, pp. 70 ff.

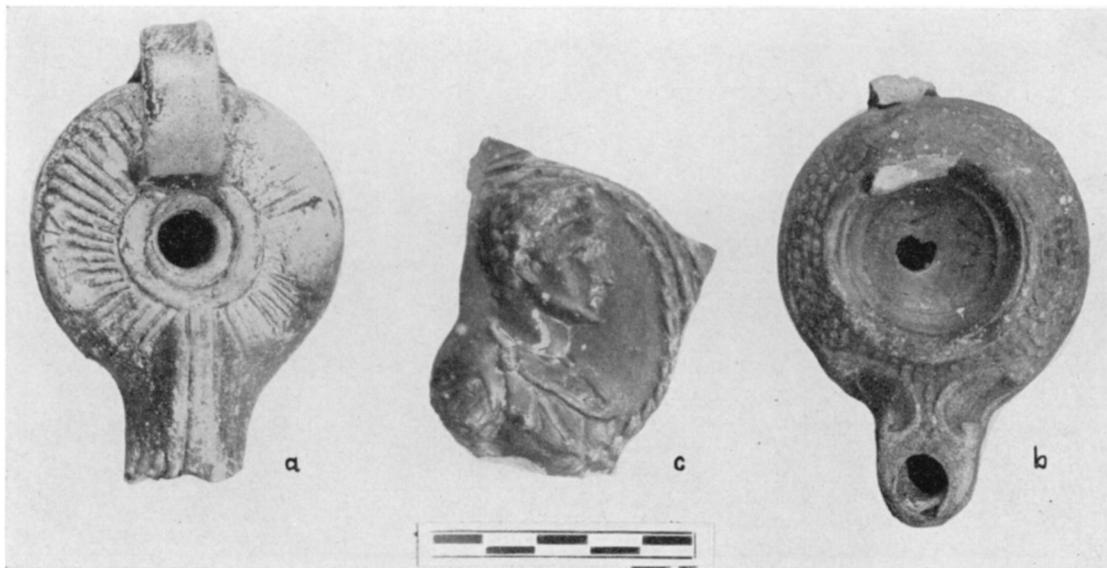


Fig. 61. Pottery from Deep Accumulation against the Face of the City Wall to the North of St. Demetrius

Vertical strap handle. Mould made. Thin metallic glaze.

b. Terracotta Lamp of Broneer's Type XX.

Height, 0.035 m.; width, 0.057 m.; length, 0.08 m. Handle missing. Nodules on shoulder and wall. On underside: A. Vertical strap handle. Thin metallic glaze.

c. Relief Medallion from a Plate.

Diameter of medallion, *ca.* 0.06 m. The bust of a general to right, clothed in cuirass and *paludamentum*, encircled by a wreath, all in high relief. The plate had a low base-ring. Fine buff clay covered top and bottom with thin brown glaze.

In addition to the pieces illustrated, mention should be made of two signed bases from Arretine plates. The one is stamped **AVIL** (= Avillius), for whom cf. Iliffe, *Quarterly of the Department of Antiquities in Palestine*, VI, 1936, p. 29. The other is signed, in *planta pedis*, **CN. A. A.**, i. e., Cn. Atei Mahetis, for whom cf. Iliffe, *loc. cit.*, p. 39. These were accompanied by numerous unsigned fragments

of Arretine and by much contemporary eastern terra sigillata.

In determining the date of this material we may note that the lamp (*a*) is a debased version of a type which had its beginning in the third century B.C. It was still in common use in the early first century B.C. (cf. *Hesperia*, III, 1934, p. 462), and continued to be made into the early first century after Christ, probably a little later. Among the most popular successors, or, rather, late developments, is the type represented by (*b*). The present example is an early specimen of its kind. Of the Arretine potter Avillius, Iliffe notes "Augusto-Tiberian," and of Cn. Ateius Mahes, "Augustan." The planta-form stamp employed on our plate is most probably post-Augustan; cf. Iliffe, *loc. cit.*, pp. 19 ff. The plastic medallion may well be a portrait of Augustus. It is one of a not uncommon class of relief decoration represented by recent finds elsewhere on the Pnyx, in the Athenian Agora, and at the Dipylon. A number of heads appear to be of Julio-Claudian princes. The developed bust form of our piece might appear to urge a much later date. This medallion,

however, is obviously in the tradition, not of monumental sculpture, but rather of the relief *emblemata* in clay and metal which are common from early Hellenistic times onward. Among them busts of the length of the present piece are found as early as the third century B.C. If coins may be adduced as safe parallels, they would suggest a date scarcely earlier than the

middle of the first century. The *paludamentum* over the cuirass appears first on coin busts of Nero. Nothing would argue a later date. (Mattingly, *Coins of the Roman Empire in the British Museum*, I, p. lxiv, observes that the *paludamentum* is first found under Galba. But cf. his pl. 41, 1.)

Mixed in with this earth, particularly near the bottom, were quantities of bones of animals, predominately of horses. The fill has every indication of having been heaped up against the wall in one operation, the perceptible divisions of earth in uneven strata being attributable to the different sources of supply utilized. Why it should have been piled there may well give cause for wonder. The common reason for raising mounds against fortification walls is to scale the wall or to bring up engines of warfare. But, in spite of the destruction of the gate in the dipylon below, there is still no reason to believe that Athens was besieged in the early empire. Moreover, although the presence of bones of horses in the fill might suggest that cavalry or draft animals had been killed in the assaults on the wall and had been thrown in a heap to raise the height more speedily, the complete absence of harness or weapons of any kind in this fill would be almost certain proof that it was a peaceful work. It is difficult to imagine that no arrows, no great stones, no sling-bullets, no implements of war at all, should have fallen into so great a heap of earth if it was brought in cartload by cartload under the very hands of defenders. No signs or records of war seem available to explain this work as an incident in an assault on the city.

It might seem possible that a supplementary wall was built in front of the old wall, and the intervening space filled with earth.⁹⁴ But there is still no very cogent evidence from other sources to account for so substantial a renovation of the Athenian fortifications at the time, and as we shall see in the following paragraph, there is actually contrary evidence.

Although we are not yet in a position to understand the situation fully, by coincidence evidence is being accumulated at various points along the city walls which may eventually clarify the problem. At the corner of Aristeides and Sophocles Streets in Athens, or *ca.* 1000 m. northeast of the Kerameikos, the excavations for the construction of a new building have laid bare a stretch of the city wall and the area in front of it.⁹⁵ Here the great ditch or moat in front of the walls was also filled up

⁹⁴ Cf. the construction of the walls at Pompeii: *Monumenti Antichi*, XXXIII, 1929, pp. 160-162; fig. 12; pl. II.

⁹⁵ This is contiguous to a section of the same wall illustrated by Judeich, *op. cit.*, pl. 4a; cf. his pp. 128, 134. It was examined by the Greek Archaeological Service represented by J. Travlos. A brief notice appears in the *Archaeologischer Anzeiger*, 1940, p. 165. The construction of a huge water basin in front of the walls in the Kerameikos itself (*Arch. Anz.*, 1940, p. 314) would have

during the early first century after Christ. The situation is not precisely comparable; the reasons for filling a moat may be, but are not necessarily, the same as those for raising a mound before a wall. One might suggest that the Roman Peace inspired (or perhaps enforced) a "disarmament movement" in Athens; that the fortifications were dismantled or otherwise rendered ineffective. The filling over the East Stoa, dating as it does from this same period, might then be part of the same program; and the destruction of the gate in the Dipylon above the Gates might also be associated, conceivably, with the same project, although one would have expected the workmen to collect such useful objects as the iron pivot and the studs. Nevertheless, the suggestion of siege is so strong that the possibility of such an event, however surprising at this time, cannot be ignored. Some of the phenomena noted above might have been associated directly with such hypothetical siege operations, others with the subsequent cleaning and reconstruction.

THE ROMAN REPAIR

During earlier investigations, evidence concerning work on the city walls about the end of the second century after Christ was found in such abundance that the original construction of the defenses was put in that period. We have seen reason for placing this construction at an earlier date, but the ceramic evidence still stands as proof of a fairly extensive reconditioning of the fortifications at this later time. In addition to this, we have further information. In the area along and behind the East Stoa, there seems to have been some reorganization, though how extensive is uncertain. In the inner gate that gave access to the area between the White Poros Wall and the wall along the Stoa, between the postern buttress of the Poros Wall and the Conglomerate bastion, a proper gateway was established at this time, whether there had been one before or not (Pl. XVI, Figs. 62, 47, 48). Foundations of re-used blocks of limestone and marble were set down through the Hellenistic ground level indicated by the stratum of white-poros working chips. On these foundations were erected an inner and an outer gateway, in line with the inner and outer faces, respectively, of the Poros Wall buttress. Of this gateway are still preserved the door jambs against the face of the bastion; those against the buttress have disappeared, but the space between would have been about 0.90 m. The re-used blocks of this foundation seem originally to have been sill blocks, but they were cut and broken in two, so that the cuttings in them cannot have been re-used by the repairers. They may have belonged to a White Poros period gate. The White Poros Wall below the East Stoa may have been completely abandoned at this time, although no definite evidence on this point is available.

blanked out the fortification, and resulted in a similar nullification of its value, but this is apparently dated in the second century or later.

The Dipylon above the Gates was radically remodelled (Pl. XVII, Fig. 63). The buttresses of the White Poros builders had, as noted above, disappeared in the first century after Christ. The walls of the court on the city side may have been partially dismantled in the years after the catastrophe of that time, but the evidence for the date of their demolition is not clear. We may perhaps surmise that the inner



Fig. 62. Area of Tower M2, from the Southeast. A, Southeast Inner Corner of Tower M2. B, South Face of Bastion. C, Buttress of White Poros Wall. D, Bedding-Blocks for Door Jambs of Roman Repair. E, Graves of 4-5th Centuries after Christ

gateway did not figure in the late Roman disposition of the defenses at this point, because the outer gate was so heavily protected. An excavation was made in the space between the two outer towers, cutting across the road whose bed had been formed during the first and second centuries. No masonry is preserved in the pit, but the dressed bedding can be identified opposite the face of the south tower, 2.35 m. distant. Here was built, apparently, a small tower narrowing the entrance between itself and the old south tower. The new passage may have been as narrow as 2.35 m., as suggested on Figure 63, but it may have been more if the masonry above the lowest

foundation course, and particularly that of the superstructure, was contracted within the outer boundary of the foundation. In fact, we may suspect that the actual opening at ground level was about 3.00 m. This may be inferred from a fragment of a large marble sill, 1.45 m. in width, and preserved to a length of *ca.* 1.50 m., re-used in a still later period of the Dipylon (Fig. 64). Originally, this sill was probably 3.00 m. in length, if a cutting at the present broken end may be taken to mark the original centre. This sill is approximately the width of a cutting in the earth which extends between

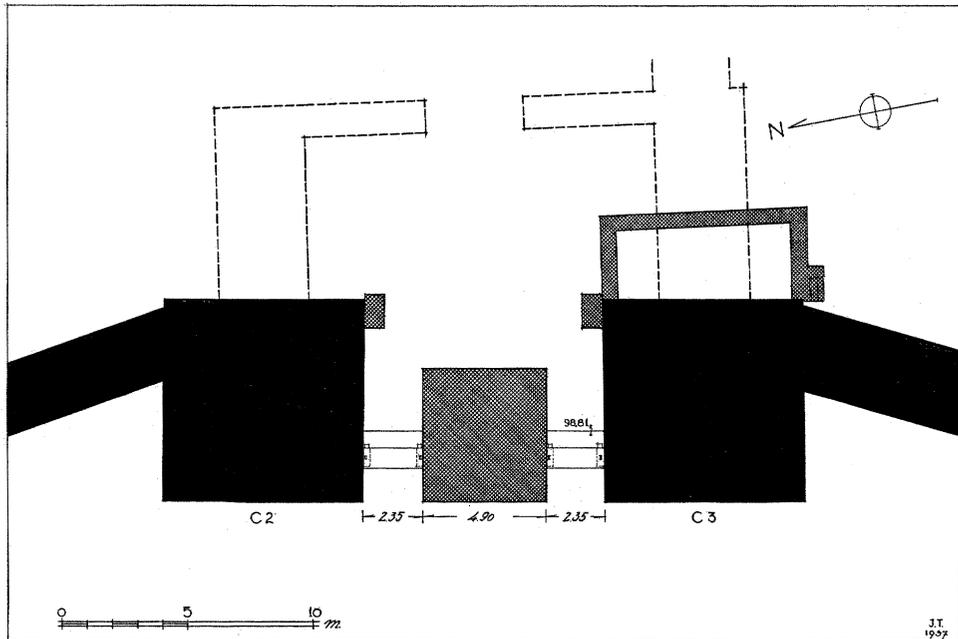


Fig. 63. Plan of the Dipylon in the Roman and Mediaeval Periods

the original south tower and the tower in the centre, about 1.35 m. behind the outer face of the south tower. The bottom of the cutting in the earth is *ca.* 1.40 m. below the top of the road level which goes with this reconstruction and the period of use of the Roman gate. The cutting in the earth most probably was made for the reception of a threshold, resting on an underpinning of blocks since removed and replaced by earth in mediaeval times. As the half-threshold described above would fit the cutting in the earth perfectly, it may well have been the threshold of the period we are now considering. Hence the passageway would have been about 3.00 m. in width, and the superstructure of the centre tower would have been withdrawn some 0.65 m. from the extreme edge of the bedding for the foundation.

The dimensions of the new tower cannot be fixed without excavation in the churchyard to the north. Presumably, however, its western face was either in line

with those of the earlier flanking towers, or drawn back within that line, but in any case did not project outward. If the superstructure of the inner face of the tower was withdrawn from the edge of the foundation by the same distance as that along the side, then the tower would have measured between *ca.* 4.50 m. east and west, if flush with the flanking towers, and *ca.* 3.10 m., if flush with the outer edge of the lintel. In width, north and south, it may have continued to join the north flanking tower solidly, or more plausibly, perhaps, have stood exactly in the centre with openings on two sides. If so, its width would have been *ca.* 3.60 m. In this case it may have been exactly square, for the face of the tower would surely have projected *ca.* 0.50 m. beyond the outer edge of the threshold; or, of course, it may have measured *ca.* 3.60 m. in width to as much as *ca.* 4.50 m. in length.⁹⁶

We found no road bed to be associated exclusively with this construction period, a fact which must be counted as extraordinary. The gravel which had gathered on top of the debris following the destruction of the gate in the first century after Christ represents a gradual accumulation, and was cut through, apparently on the construction of the new tower. The surface was not modified or repaved, but without change in level continued as the road bed for many centuries. That the road was little used at this time is suggested by the narrowing of the passageway.

Along the curtain there are numerous repairs which may be attributed to the same period. The most radical of the changes made in the older walls took place at the first tower north of the southwest corner of the White Poros Wall (W5). Here the Hellenistic construction seems to have completely disappeared, for the line of wall was re-established not more than

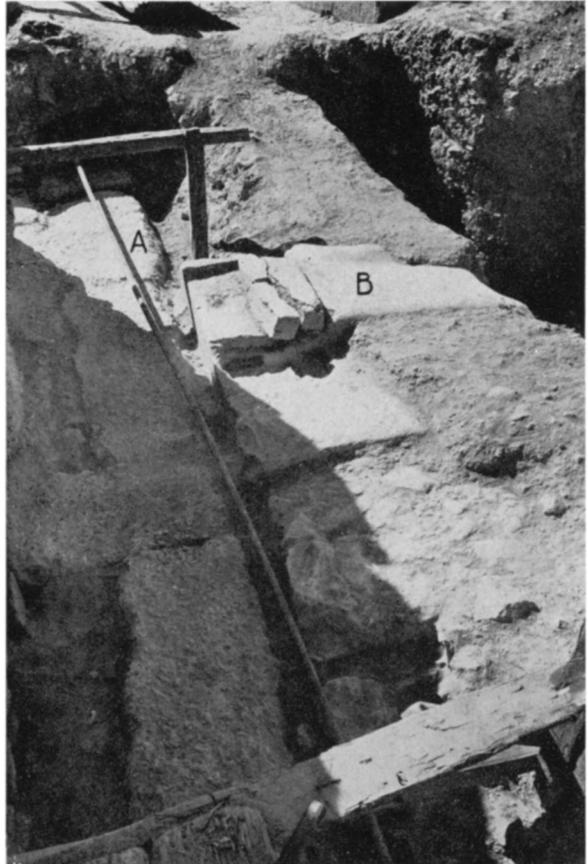


Fig. 64. Threshold of Byzantine Gate in Dipylon, from the East. A, North Face of South Gate Tower (C3). B, Broken Threshold as Found

⁹⁶ Conceivably the structure was originally not a tower, but a large monument like those in the Dipylon at the Kerameikos. (Judeich, *op. cit.*, p. 136, plan, fig. 10). But the proximity in date to the Roman Repair renders it probable that it was a tower, and part of the new fortifications.

1.00 m. in front of the old. A curtain approximately 3.00 m. in width was constructed in front of the earlier wall. The only remains of the reconstruction *in situ* are re-used blocks of white poros. The width is determined only by traces of mortar, which belong probably to the later reconstruction of the wall to be described below (p. 374).

For the dating of this repair we have little evidence more precise than the pottery from the previous excavations.⁹⁷ Some sherds from the ruins of houses, apparently demolished during the work on this repair, were found in the trench north of St. Demetrius (Fig. 26, III b-V b); this pottery may belong to the first half of the second century after Christ. From the new gate tower at the Dipylon, however, we have a few sherds from a place that may be counted as significant. Between the eastern, inner face of this tower and the underpinning of the White Poros outer gate buttress (Pl. XVII) was a deposit of firm earth about 0.70 m. in width and some 0.75 m. in depth. This earth would seem certainly to have been filled into the footing trench dug for the new tower. From it came a few sherds whose date must be set at least as late as the middle of the second century after Christ. Some of the pottery is of the variety that is also common in the early third-century deposits of the Agora, but has a fairly long period of use without much development.⁹⁸ Thus this small deposit contemporary with the Roman repair may be dated, so far as present knowledge goes, from the middle of the second century to the middle of the third century after Christ.

On the other hand, an enormous mass of pottery was found spread out over the pillaged footings of the walls of the court of the Dipylon, and heaped on the ruins of the south gate tower (C3) itself. The stratification did not indicate clearly whether the filling over the spur walls was contemporary with their destruction or not; and the deposits over the gate tower must certainly have been disturbed, since it is known that this tower was at least partly cleared once before in modern times. The stratification of the deposit over the tower was extremely confused and anomalous, as though the earth and the potsherds had been dumped in by cartloads. Under these circumstances the interpretation of the indications is quite difficult, especially since it is known for other reasons that the tower was reconstructed at least once later than this Roman period. In spite of all this, however, the overwhelming amount of pottery from the deposit was perfectly consistent in date, and many pieces in excellent preservation and of fine quality were discovered. The typical pieces find perfect parallels in groups of pottery found in the Athenian Agora in accumulations which would seem to have gathered after the Herulian sack of A.D. 267 and which are accompanied by coins of the second half of the third century after Christ (Fig. 65).

⁹⁷ *Hesperia*, V, 1936, p. 196, figs. 28, 29.

⁹⁸ Mr. Arthur Parsons, of the Agora Staff, has kindly lent his experience to the consideration of this pottery.

POTTERY FROM THE LOOSE FILLING ABOVE THE RUINED FOUNDATIONS OF THE DIPYLON

a. Bowl of Late Roman A Ware.

Height, 0.042 m.; diameter, 0.118 m. A hemispherical bowl with low base-ring and broad flat rim. Hard, fine red clay, with polished red surface, both inside and outside. On this ware, cf. Waage in *Hesperia*, II, 1933, pp. 293 ff.

b. Pitcher.

Preserved height, 0.09 m.; diameter, 0.078

m. The mouth is broken away. High base, piriform body. Pale yellow clay covered with thin black paint on which is drawn in white a band of spirals above a floral wreath.

c. Lamp of Broneer's Type XXVII.

Height, 0.026 m.; width, 0.066 m.; length, 0.075 m. Rays on discus; underside, within two circular grooves, the signature: ΠΡΕΙ|ΜΟΥ. Pale yellow clay, unglazed, much flaked.

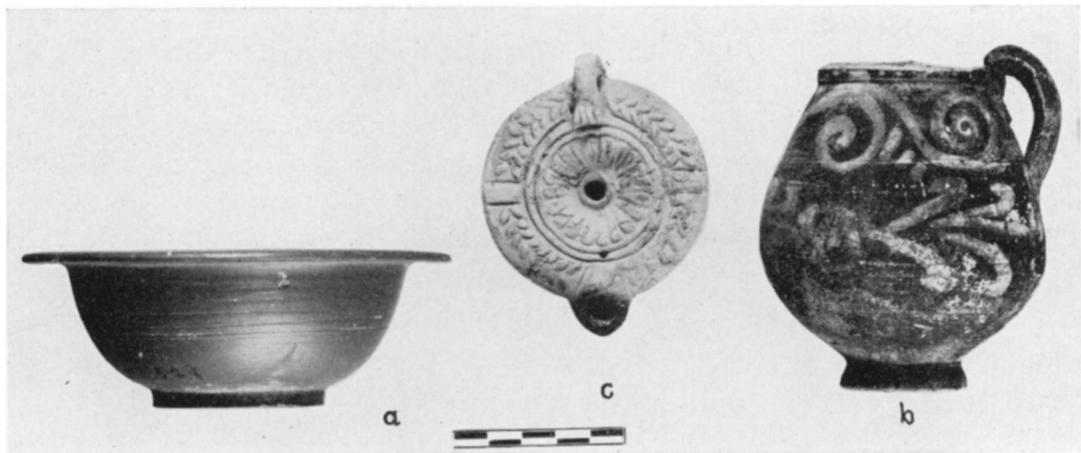


Fig. 65. Specimens of Pottery from Loose Filling above Foundations of South Tower of Dipylon

According to the tentative conclusions which we have drawn concerning the relation of this deposit to the history of the Dipylon above the Gates, the spur walls surrounding the court were probably dismantled in the course of the Roman repair; this is indicated by the fact that the gate was advanced to a position between the new tower and the outer gate towers. The outer towers themselves, then, must have been demolished at a later date, possibly damaged by the Herulians, and the whole area became the site for a refuse dump, during which time quantities of the pottery just discussed were deposited (*infra*, p. 372, note 101).

As to the absolute date of the Roman repair, we are not much nearer a definite answer than we were before. Then it was found impossible to choose between an hypothetical restoration of the walls after the invasion of the Costoboci in A.D. 170 and the recorded reconstruction under Valerian, in A.D. 253. If anything, the new pottery at hand would seem to be later in date than the group recovered from the original excavations, but knowledge of Roman pottery of this era will not as yet

permit us to date our present small groups definitely on one side or the other of the period around A.D. 170. So far as the ceramic evidence goes, then, we are at liberty to choose between the two dates.

There are several considerations which lead us to prefer the later period for the reconstruction of the wall. In the first place, as pointed out before, our authors state definitely that from the time of Sulla to that of Valerian, the walls had lain disregarded and unkept under the Roman Peace.⁹⁹ Of these authors, Zosimus at least was writing within a relatively short time of the events concerned, early in the fifth century. It is not probable, although of course it is possible, that he ignored a repair of the late second century. But if we choose the period after the Costoboci for our repair, we postulate a reconstruction unnoticed by the ancient authors, and on the other hand can produce no candidate for the repair under Valerian which is definitely reported by them. This argument gains weight from the fact that the much-disputed "Valerian Wall" north of the Acropolis and in the Agora is now dated shortly after the Herulian invasion of A.D. 267.¹⁰⁰ On the whole, although our evidence will still not permit us to assert definitely, we suggest that the Roman repair of the Compartment Wall on the Pnyx took place under Valerian, or *ca.* A.D. 253-260. This system of defense must have been dismantled in part, as at the Dipylon, a few years later, perhaps as a result of the Herulian invasion.¹⁰¹

THE LATER PERIODS

Perhaps the walls were stormed by the Herulians in A.D. 267; perhaps they were not even defended; certainly by the opening of the fourth century they were not in use. In front of the postern gate between the White Poros Wall and the bastion of the Compartment Wall there was established a small family cemetery which during the passing years was filled with burials layer on layer (Figs. 47, 62). Over twenty graves were opened; others doubtless exist in the area untouched. Another plot was dedicated to the dead in the corner between the south outer tower (C3) of the Dipylon and the adjoining curtain (Fig. 33). Poor people they must have been, whose remains were interred so modestly along and even in the path of occasional carts and infrequent pedestrians, but the position of the graves surely indicates that few people passed, and fewer lived in the vicinity. In the meantime the fortifications must have greatly decayed, and shortly after A.D. 267 the line of principal defense was moved back to the wall in the Agora and around the Acropolis, formerly called the Valerian Wall (see above). Yet numerous habitations must have lain outside this inner wall, with

⁹⁹ Zosimus, I, 29; Zonaras, XII, 23; Syncellus, p. 381; cf. Wachsmuth, *Stadt Athen*, I, pp. 705 ff.

¹⁰⁰ *Hesperia*, IV, 1935, pp. 329 f., 334.

¹⁰¹ The blocks from the Dipylon and other parts of our Valerian wall may have been used in the construction of the post-Herulian wall in the Agora and around the Acropolis, and the dump described above deposited in the resultant pits.

the old outer circuit, however imperfect, as their only defense, if Alaric in A.D. 396 could have had the latter in mind as the fortification of Athens.¹⁰²

EARLY CHRISTIAN REPAIR

At a later date we find the entire system of fortifications completely rebuilt and renovated. The curtain at all points was restored according to its needs, the towers were strengthened, and new towers were built where the situation required.

The remains of the Compartment Wall on the northwest slope of the Hill of the Nymphs show traces of mortared construction, indicating that the curtain was repaired in this stretch. A tower (M1) was built against the wall, at the point where the wall makes a slight bend. At all points along the White Poros Wall the destruction debris included many fragments of mortar, and masses of rubble held in cement, while bits of mortared construction are actually preserved *in situ* at various places. The second line of wall established by our Valerian repair in front of the White Poros curtain at the tower west of the southwest corner of the West Stoa (W5, p. 369) was restored in mortared work, and all of the original White Poros towers along the west front were repaired. The round tower on the Museum must have been nearly razed by this time; some of the blocks which still remained were brought into line to form a square tower near the southern edge of the old structure. Mortar in the destruction debris of the other towers indicates that they too were rebuilt.

Probably the most elaborate structure of this period which we have examined is a sort of tower-keep at the postern gate in the White Poros Wall, in the angle between the bastion and the masonry over the propylon bedding (Pl. XVI; Figs. 47, 62). This tower (M2) was erected on the site of the cemetery mentioned above; it was partially cleared in the earlier excavation,¹⁰³ but some supplementary facts are now available. The course of the wall now, as in the Valerian period, ran across the bastion from the White Poros Wall to the Compartment Wall on the Stoa. The gateway at the end of the bastion was filled with a double wall of rubble and mortar, and a wall about 1.00 m. in width was built eastward along the line of the White Poros Wall, covering the postern, for a distance of about 4.50 m. This was joined to the wall over the propylon bedding by another wall *ca.* 8.80 m. in length. The room thus formed was divided by a cross-wall¹⁰⁴ running eastward from a square buttress at the end of the bastion; another buttress was built in the angle between the bastion and the face of the upper wall. The cross-wall was probably of wood, for there are no traces of masonry, nor is the footing trench of a depth comparable to those of the other walls. The buttress at the end of the bastion may have supported the end of the wooden

¹⁰² *Hesperia*, V, 1936, p. 200; Zosimus, V, 5.

¹⁰³ *Hesperia*, V, 1936, p. 195.

¹⁰⁴ Omitted from the new plan to avoid obscuring the earlier situations.

beam on which the wall was erected. This structure is not simply a tower, for it flanks only the curtain to the east. It is, moreover, larger in over-all ground plan than the other towers of the period. It would seem to have been a sort of donjon or keep, perhaps for storage.

The masonry of the Hellenistic wall around the bastion had by this time become



Fig. 66. Masonry of the Mortar Repair in Tower M5

much weathered, with gaping holes at some of the joints; these were filled with rubble and concrete, which was finished off with a coat of plaster. Probably at this time the curtain of the Compartment Wall over the eastern foundations of the East Stoa was filled with rubble concrete, which still remains. The tower midway along the face of the East Stoa (M3) has been described in the earlier article, as well as that in the angle to the east (M4). The present excavations have determined the plan of still another tower (M5), 6.60 m. in width, built in the angle of the wall beside the Compartment Wall tower southeast of the Stoa; a peculiarity of the new tower is the unusual thickness of the side walls: *ca.* 1.40 m. The curtain at this point fell on the line of the Compartment Wall, but was completely rebuilt with re-used material of all sorts, including unfinished column drums, all set in a strong mortar (Fig. 66). In the trench north of St. Demetrius we found quantities of mortar and rubble masonry in the destruction debris.

The Valerian tower in the Dypylon (Pl. XVII, Fig. 63) was completely rebuilt; there is mortar of the later period adhering to the bed-rock in the bottom of the foundation pit, and a heavy buttress was built against the northeastern corner of the south gate tower. The gate must have been made defensible, but there is a surprising lack of other indications of mortared construction on the gate towers. Along the rear face of the south tower there is an irregular room surrounded by a wall of small stones and mortar, but this wall is only 0.60 m. thick (in places 0.50 m.) and probably dates from a still later period (*infra*, p. 378).

The Valerian tower in the Dypylon (Pl. XVII, Fig. 63) was completely

At numerous points on the stretch up the Museum Hill were indications of mortar repairs, consisting as before of bits of mortared construction and particles of mortar in the destruction debris. Each of the original towers was rebuilt, and a late tower (M6-9) was inserted halfway between each pair of original towers, so that the system as restored had towers at intervals of 35 to 40 metres.¹⁰⁵ These towers are uniform in plan and construction. They project *ca.* 5.00 m. from the curtain, are *ca.* 6.00 m. wide, and their walls are *ca.* 1.00 m. thick (Fig. 67). The great corner tower above the Dipylon (C4) seems to have been repaired without change of plan; a hard-beaten layer of mortar around the edges of the original walls indicates that

these were restored in their original form. The round tower (C5), like that on the white-poros section, was reorganized and a square tower was erected on its foundations. Above this point, rubble concrete was poured between the stone facings of the Compartment Wall; the concrete is still to be seen, although the facing blocks have disappeared. The rectangular tower (C6) of the earlier circuit which follows next above the round tower must have been almost invisible at the time. Although its southern wall is still preserved in part to a height of two or three courses, this masonry must have been underground, for it was not used as a foundation for the later structure. The new south wall was built slightly inside the older, of re-used material, including an inscription used as a corner block. This inscription is cut on a statue base, now broken, but designed to support two standing bronze figures. The letters are well cut, and of late Hellenistic date.¹⁰⁶

No traces of mortared repair were noticed on the Macedonian fort, but along the line of the circuit wall on the peak of the hill are numerous such remains. East of the monument of Philopappos the wall was strengthened by a tower placed not on the crag formerly occupied by the classical tower, but in a hollow just to the west. On the crag itself there are traces of mortar only on the edge of the cliff where the descent to the lower slopes begins. This is sufficient indication that the classical works on the crag were in good condition and that they were used as a castle by the mortar



Fig. 67. Tower M7, from the North. Vertical Arrows Mark Corners of Tower. C, Compartment Wall

¹⁰⁵ We have noted above (pp. 309-324) the possibility that the original towers were also only 35.00-40.00 m. apart. In that case the later towers would simply have replaced the earlier in all cases, but this closer spacing for the early towers has not been proven, and the late towers were oblivious of the plan of the hypothetical early towers.

¹⁰⁶ *Hesperia*, Supplement VII, p. 3, no. 4.

builders who added a point of vantage to the only unoccupied spot they could find. Some forty metres below the crag we were able in the time at our disposal to uncover some of the remains of still another late mortar-repair tower, built against a badly destroyed section of the Themistoclean circuit. Finally, some thirty-five metres below this, we found slight remains of what was possibly another such tower, although we were unable to examine it.

The evidence for the dating of the Mortar Repair consists chiefly of material from the burial plots mentioned above. The burial plot by the postern in the White Poros Wall is certainly earlier than the Mortar Repair tower which was built over it. The walls of the tower are set down through the strata in which the graves occur, and the lowest edge of that part of the wall intended to be seen lies level with the top of the stratum covering the highest graves (Figs. 47, 62). The burial jars in which the children were buried, the vases and coins found in the larger graves, indicate that the graveyard was in use during the fourth and fifth centuries after Christ. The pottery in the fill covering the burials is similar. From the deep trench north of St. Demetrius (Figs. 24, 25, 26) we were able to clear the footing trench for the late repair, and from its filling of black chips came sherds similar to those found in the Athenian Agora in deposits of the early sixth century after Christ. Thus we feel no hesitation in referring the work to the period of Justinian, A.D. 527-565, whose activities in fortifying the Greek cities south of Thermopylae are attested by Procopius.¹⁰⁷

MEDIAEVAL REPAIR

Nor is this the end. The Dipylon above the Gates gives evidence of having been repaired as late as the twelfth century after Christ. Above the road stratum which produced sherds of the first and second centuries after Christ, and which has been supposed to have continued in use during the Valerian and Justinian periods, there was a filling of loose earth containing sherds of the eleventh and early twelfth centuries.¹⁰⁸ The decorated pottery consisted almost exclusively of plates and bowls executed in a fairly painstaking sgraffito technique, and of bowls with designs painted in green and manganese (Fig. 68).

POTTERY FOR DATING THE BYZANTINE REPAIR

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <p>a. Fragmentary Plate with Sgraffito Decoration.
Maximum Dimension, 0.109 m. Heavy basing; floor rising gently toward rim. On the floor, an eagle to right with spirals in the field. Gritty, pale yellow clay; white sizing on inside and outside; the inside covered with yellowish</p> | <p>transparent glaze. (Cf. Frantz, <i>Hesperia</i>, VII, 1938, pp. 429 ff., 441, fig. 8, A 50.)</p> |
| <p>b. Fragmentary Bowl with Sgraffito Decoration.
Maximum Dimension, 0.107 m. Low basing; shallow bowl. On the floor, an eagle</p> | |

¹⁰⁷ *De aedific.*, IV, 2 (B 272).

¹⁰⁸ Miss Alison Frantz of the Agora Staff, and Professor Charles H. Morgan II, then Director of the American School, examined the pottery and kindly offered this opinion.

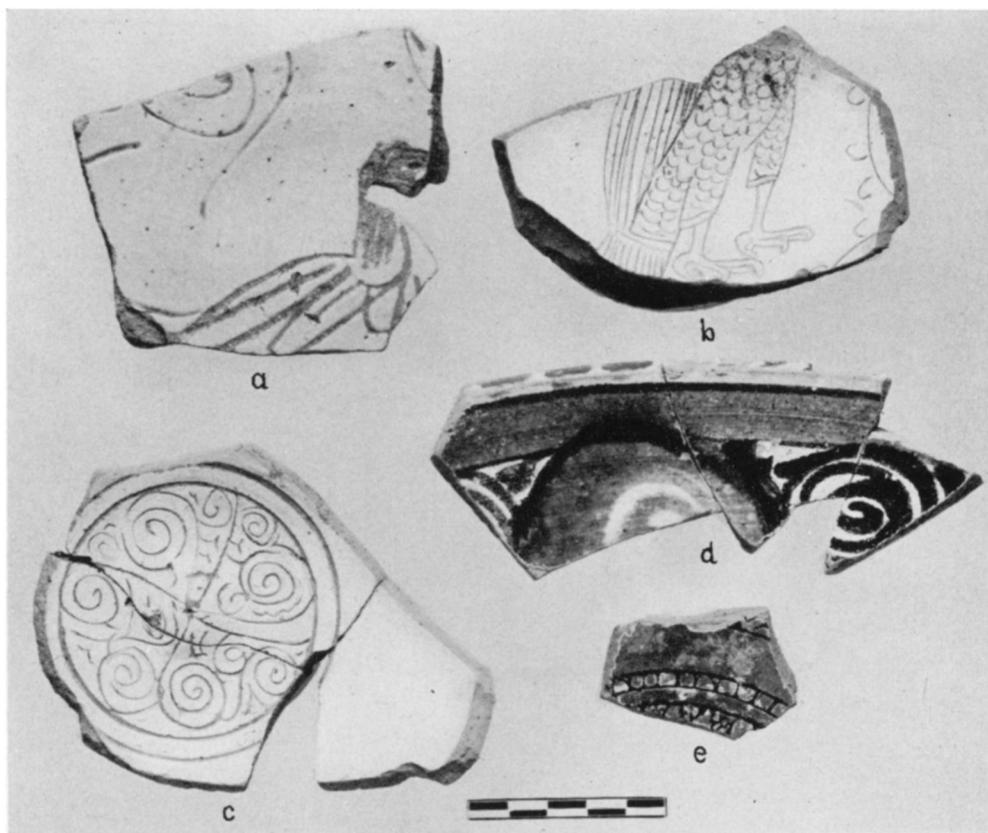


Fig. 68. Specimens of Pottery Associated with the Byzantine Repair of the Dipylon

standing to right, with scrolls in the field. Gritty red clay covered with white sizing on inside and outside; the inside covered with yellowish transparent glaze. (Cf. Frantz, *loc. cit.*, pp. 429 ff., 441, fig. 8, A 54.)

c. Fragmentary Bowl with Sgraffito Decoration.

Maximum Dimension, 0.12 m. Heavy basering with steep wall bent in toward the (missing) rim. The floor medallion is filled with an arabesque design. Gritty buff clay covered with a white sizing on the inside and the upper part of the outside. Transparent yellowish glaze on inside only. (Cf. Frantz, *loc. cit.*, pp. 429 ff., 440, fig. 2, A 9.)

d. Fragmentary Bowl with Painted Decoration.
Diameter, 0.28 m. A rim fragment from a

hemispherical bowl with square lip. On the inside, a spiral design; on the rim, crossbars. Gritty, pale yellow clay covered with white sizing on the inside and on the upper part of the outside. The design painted in green and manganese overlaid with transparent yellowish glaze.

e. Fragmentary Plate with Sgraffito Decoration.

Maximum Dimension, 0.05 m. A fragment from the floor. The medallion was filled with an arabesque design, and surrounded by at least two bands of geometric design. Gritty buff clay covered with white sizing inside and outside; green glaze on the inside. (Cf. Frantz, *loc. cit.*, pp. 429 ff., 445, fig. 7, A 31.)

A similar filling was found in the cutting in the earth which had been made for the threshold of the Valerian gate. Thus that threshold, with its foundations,

must have been uprooted at this time. Some 0.40 m. above the Roman road level was a hard-packed road bed which is the top of the mediaeval filling. This road crossed the broken marble threshold (Figs. 28, 64), which for this period was lying on the late filling without foundations. Whether or not the sill in question was used by the earlier builders, it was certainly employed as a sill in the twelfth century.

At the northeastern corner of the outer south gate tower (C3) is a small buttress 1.30 m. in length and 0.80 m. in width, built of rubble and mortar (see Plate XVII and Figs. 28, 54, 63). It was set down in a footing trench which produced again sherds of the eleventh and early twelfth centuries. At this period, too, was probably built the room to the east of the tower. It is irregular in shape: the north wall is 3.20 m. long; the south wall, 3.60 m.; the east wall, 8.30 m., measuring about 0.50 m. in thickness. The walls are of small stones set in mortar similar to that of the buttress.

These repairs, from the evidence of the pottery, must have taken place about or after the middle of the twelfth century after Christ. Although no positive indications of repairs of such a date were found elsewhere along the circuit, it would seem strange that the gate alone should have been made defensible, if the circuit was not. It is, of course, possible that the gate was rebuilt as an outwork or toll post, but the presence of the sill suggests a more elaborate structure. No historical events of the mid-twelfth century are known to suggest a background for this reconstruction. The defense of Athens by Akominatos in the period about the end of the twelfth century seems to have been confined to the Acropolis, although it is possible that on his advent to the city he took steps to recondition the outer circuit.¹⁰⁹ A theory in many respects more attractive would suggest that the repairs in question date from the early thirteenth century. Shortly after A.D. 1207 the Frankish duke, de la Roche, whose principal seat was at Thebes, established a sub-residence in Athens. It might well seem plausible,¹¹⁰ at least, that he desired to strengthen and expand the fortifications of his new fief, the ancient city.¹¹¹

¹⁰⁹ Miller, *Latins in the Levant*, 1908, p. 32.

¹¹⁰ Unfortunately for this interpretation, the pottery, in the opinion of the experts, cannot be later than *ca.* A.D. 1150. The mass of pottery, though very consistent in types, is small, and may conceivably have been gathered from a dump of 50 years before. But this is improbable, and it must be admitted that the available evidence does not allow a precise dating of the repair.

¹¹¹ A final phase of the history of the walls brings us to a structure still in use. In the preceding pages we have had frequent occasion to refer to the church of St. Demetrius, which, with its churchyard, is built approximately on the ruins of the northern half of the Dipyron gate in the wall (Plate XVII). The full name of the saint to whom this church is dedicated is Hagios Demetrios Loumbardieris, a name of such peculiarity that no one has pretended to understand it fully. The date of the construction of the original part of the church is uncertain; it is commonly supposed to go back a fair distance into the Middle Ages, and, of course, there may have been a modest church on the spot even before the construction of the earliest part of which remains are now visible. Mommsen (*Athenae Christianae*, 1868, p. 52, no. 51.) has suggested a possible earlier form of the present name of the saint, St. Demetrius Bombardiaris, and suggests that its earliest associations include a mediaeval military officer who lent his profession to the saint. A second

APPENDIX A: THE BURIALS

Mention has been made in the text of late Roman burials found among the fortifications, particularly in the areas to the south of the Propylon bedding and to the south of the Dipylon above the Gates (pp. 372, 376). In addition to these, we exposed several graves of other periods in our exploratory trenches, and had occasion to open still others elsewhere on the Pnyx hills. Most of these graves had been robbed or otherwise disturbed; only two produced objects of any intrinsic interest. We shall content ourselves, therefore, with giving a brief account of their location and their dates, as closely as can be determined.

The earliest was also one of the best furnished graves. This lay just outside the circular tower (W2) of the White Poros Wall on the central Pnyx Hill. It lay within a metre of the southern curve of the front of the tower, and beside the mouth of the cistern (p. 358). It was a simple trench burial, about 0.40 m. below the surface, measuring approximately 0.50 m. by 1.50 m. The earthen sides were only partially preserved; two trees had been planted in modern times in such a way as to break down the edges. Only a few fragile bits of bone remained. From the finds, which included two lamps (Broneer, Type VII), two small undecorated black-glazed saucers, fragments of several fusiform unguentaria, and two other undecorated vases of unclassified shape, the interment may be dated in the fourth century before Christ. A deposit of a dozen or more fusiform unguentaria, both fragmentary and intact, was found in the footing trench of the tower, and indicates that graves of the same period existed in the neighborhood prior to the construction of the Hellenistic wall.¹¹²

thought, however, will bring to mind Demetrius Poliorcetes, whose name is an approximate equivalent to that of the saint. It will then be recalled that the Athenians did indeed establish a sanctuary in honor of the Hellenistic general, giving him the appellation Kataibates (Plut., *Demetrius*, X, 10; Judeich, *op. cit.*, p. 412.). This word is sometimes thought to refer to the fact that the sanctuary was located where he first descended from his chariot on arriving in Athens; otherwise it might refer more figuratively to the god-like thunderous destruction with which he descended on his enemies. In either case it would seem possible that the sanctuary was established at the Dipylon between the Pnyx and the Museum, ultimately evolving into the church of Demetrios Bombardiaris. But whether this is true or not, Demetrius Poliorcetes was associated with the wall because of his memorable garrison on the Museum, perhaps also because he had had a hand in finishing it. Whatever the explanation, it would seem pressing coincidence too far to deny some connection between the church of St. Demetrius Bombardiaris on the tower with the historical associations of the spot.

Even in quite modern times, the military desirabilities of positions along our line of wall have been realized and used, for cartridges have been found along the line of wall on the Museum, evidently from shots fired by Greek soldiers resisting the assault of the French landing party in 1917. Anti-aircraft guns were mounted on the central Pnyx hill during the first World War, and the mounts were used for the same purpose, again, during the present conflict.

¹¹² These graves should not be regarded as certain evidence of the depopulation of the region; they may well have been surreptitious burials, made in back yards. Instances of such, dating from the sixth, fifth, and fourth centuries B.C., have been found in the thickly inhabited environs of the Athenian Agora.

The next burials, chronologically speaking, were of the Augustan period. Of these the richer appeared about 100 m. south of the grave just described, on the slopes of the western spur of the central Pnyx Hill, above the road to the Long Walls. This entombment consisted of a cist lined with soft poros slabs and covered with a single slab. Inside, it measured 0.50 m. by 1.75 m. The skeleton was well preserved, with the head to the north; it was evidently that of a woman. The finds included the bronze disk of a mirror, fragments of a bronze bracelet; bits of bronze that may have decorated or held together the slippers, and two fusiform unguentaria of early Roman type.

About 5.00 m. to the north of the southwestern corner tower (W6) of the White Poros Wall we found several burials. These had been demolished apparently on the destruction of the wall. Scattered bones of one skeleton were found, and indications of a second. A third, fairly well preserved, was that of an adult male. Beside the head was a lamp (Broneer, Type XX). Mixed in with the earth and bones were some nails, possibly from a wooden coffin. In the neighborhood we observed traces of other such graves. The heads seem to have been toward the northeast.

Just outside Judeich's Melitean gates we opened a grave of uncertain date. It was sunk in earth, the skeleton being covered with two terracotta grave covers 0.63 m. in length, and 0.57 m. in height. The covers have straight sides and a curved top. The ends of the grave were closed with slabs of sun-baked mud. The skeleton was that of a young woman lying slightly on the left side, with knees partially bent. We were told by inhabitants of the neighborhood that other such graves had been found or were known to exist near by.

Burials dating on stratigraphic grounds probably later than the fifth century after Christ were found at numerous points along the walls excavated. Along the southeastern side of the Mortar Repair tower northwest of the Hill of the Nymphs (M1) was a grave of normal size, i. e., *ca.* 0.60 m. by 1.50 m., cut in earth and covered with tiles laid gablewise. It contained parts of a skeleton in unusual condition, for although only the skull and the legs were preserved, there was reason to believe that no more of the body than this had been interred. The legs were complete, from the top of the femur to the toes, and were evenly and naturally laid out. They occupied the northern half of the grave, with the feet to the east. Evidently the man to whom they once belonged was of unusual size, for the legs measured over a metre in length. The skull, in fair condition, lay at the upper end of the right femur.

In the lower earth along the north side of the curved tower of the White Poros Wall (W2) were several burials, of which we were able to open one. No offerings were found. They were covered with tiles laid gablewise. In the earth above these were other graves, similar, but inferior in quality. No offerings were found. To the southeast of the next rectangular tower to the east (W3), inside the wall, was another, similar grave of good construction. Here the trench dug for the interment was easily

followed, and the two tiles covering the northern end were *in situ*. The grave was found empty. Traces of four or five similar burials were found elsewhere around the tower. Over the ruined west wall of the Mortar Repair tower at the east end of the East Stoa (M4) was a badly disturbed burial of similar construction. Unfortunately nothing was preserved by which even an approximation to the date could be reached.

In the trench north of St. Demetrius we found a grave in the earth over the construction debris of the Justinianian period. It consisted of a broken jar about a metre long, lying east and west. The jar was quite empty, but probably once contained the bones of an infant. At a slightly higher level was found the badly decomposed skeleton of a woman lying with her head to the west. At her feet were remains of the skeleton of an infant. The woman had evidently been scantily covered with tiles laid gable-wise; over the child was a small broken amphora.

The graves in the area of the Early Christian keep (M2) and beside the south gate tower of the Dipylon (C3) have already been described (*supra*, pp. 372, 376).

We opened several rock-cut graves on the westward spur of the central Pnyx Hill, in all cases to find that we had been anticipated by periods ranging from twenty to two thousand years. This rocky spur is liberally dotted with such grave cuttings, some of which even today are found to contain objects of considerable value, but our efforts were fruitless. We also made explorations in the vicinity of various columnar grave monuments, possibly *in situ* along the road to the Long Walls, but again the graves which we found had been robbed.¹¹³

APPENDIX B: THE SMALL SANCTUARY ON THE HILL OF THE NYMPHS

On the northwest spur of the Hill of the Nymphs, in front of the wall, we uncovered the bedrock over a small area of the southern slope of the hill. A ledge on the rock still preserves a series of stele cuttings. About a metre below this ledge is another 0.75 m.-1.00 m. in width, with some signs of foot wear. In the vicinity we found an appreciable number of miniature votive cups of the fourth century B.C. From these remains we know that on the spot must have been a small local sanctuary, but no clue has yet been found to the identification of the divinity. It is of interest primarily as exemplifying the kind of wayside shrine, or tiny cult place, known only locally and important only to a small neighborhood; such may have existed more commonly than we sometimes think.

APPENDIX C: MISCELLANEOUS BUILDING BLOCKS

In the course of our examination of the city walls along the Pnyx, we found a number of re-used blocks of various sorts, employed in various periods of the construction. Most of these probably found their way into the fortifications during the

¹¹³ For the historical significance of these burials, cf. above, p. 361.

Roman period, although it was not always possible to be certain on this point. Some of these have been mentioned in passing, but it seems desirable to give a summary of these finds, and a description of the more important.

At several points along the walls we found uninscribed monument bases and simple building blocks, but of these we need make no further mention. The only important pieces which were certainly re-used in the pre-Roman construction were two cornice blocks of poros, one of which was built into the foundations for the gate

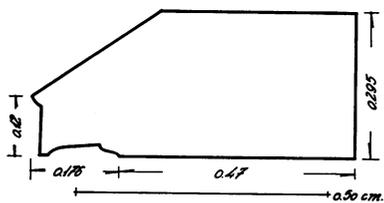


Fig. 69. Limestone Cornice Block Found in Compartment Wall on Museum

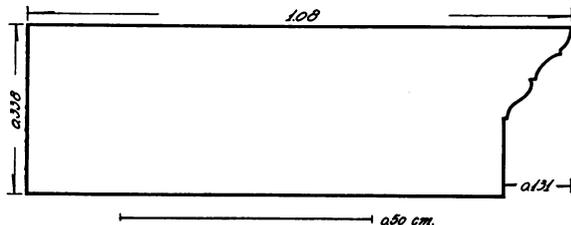


Fig. 71. Marble Wall Crown from Slopes of Museum



Fig. 70. Marble Wall Crown Found on Southern Slope of Museum

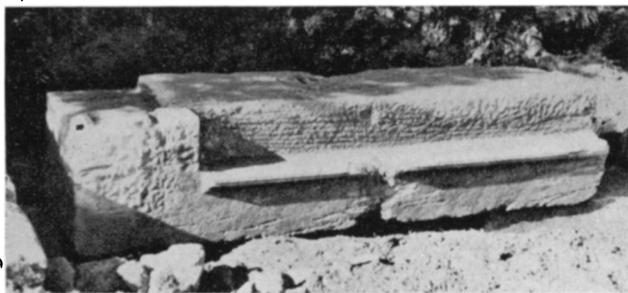


Fig. 72. Marble Epistyle Found on Northern Slope of Museum

buttress of the White Poros Wall in the Dipylon above the Gates (Fig. 54), of which no drawing is available. The other was discovered in the Compartment Wall as rebuilt at the base of the tower (C6) below the juncture of the Macedonian fort with the Compartment Wall itself (Figs. 39, 69). It is possible that these blocks had been used as wall crowns in the more monumental parts of the Compartment Wall. Especially is this possible at the Dipylon, where the court may well have been so finished, and the second block may have been used in the postern by the tower. On the other hand, it seems unlikely that the entire length of the wall was thus treated, and it may indeed be questioned whether the blocks go with the wall at all. They may well have come from monuments or buildings in the vicinity.

We may also call attention here to the column drum of poros found built into the Justinianian repair south of the East Stoa (Fig. 66). This unfluted drum, 1.40 m.

in diameter, must have been intended for a monumental structure of some size, but there is no evidence to suggest its site. Interesting is the fact that another similar drum, now disappeared, has left its clear impression in the mortar of the wall at the same place.

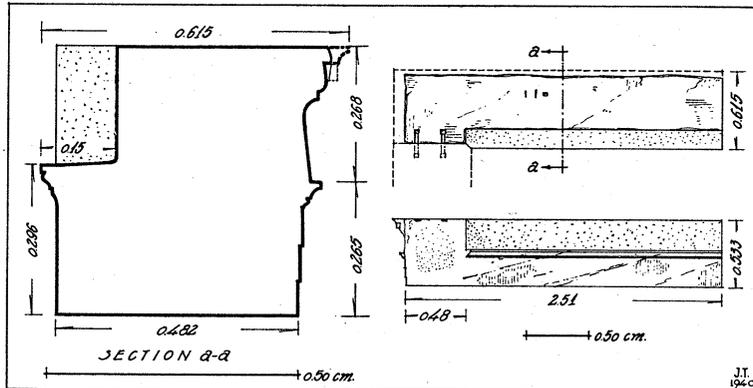


Fig. 73. Marble Architrave Found in the Walls

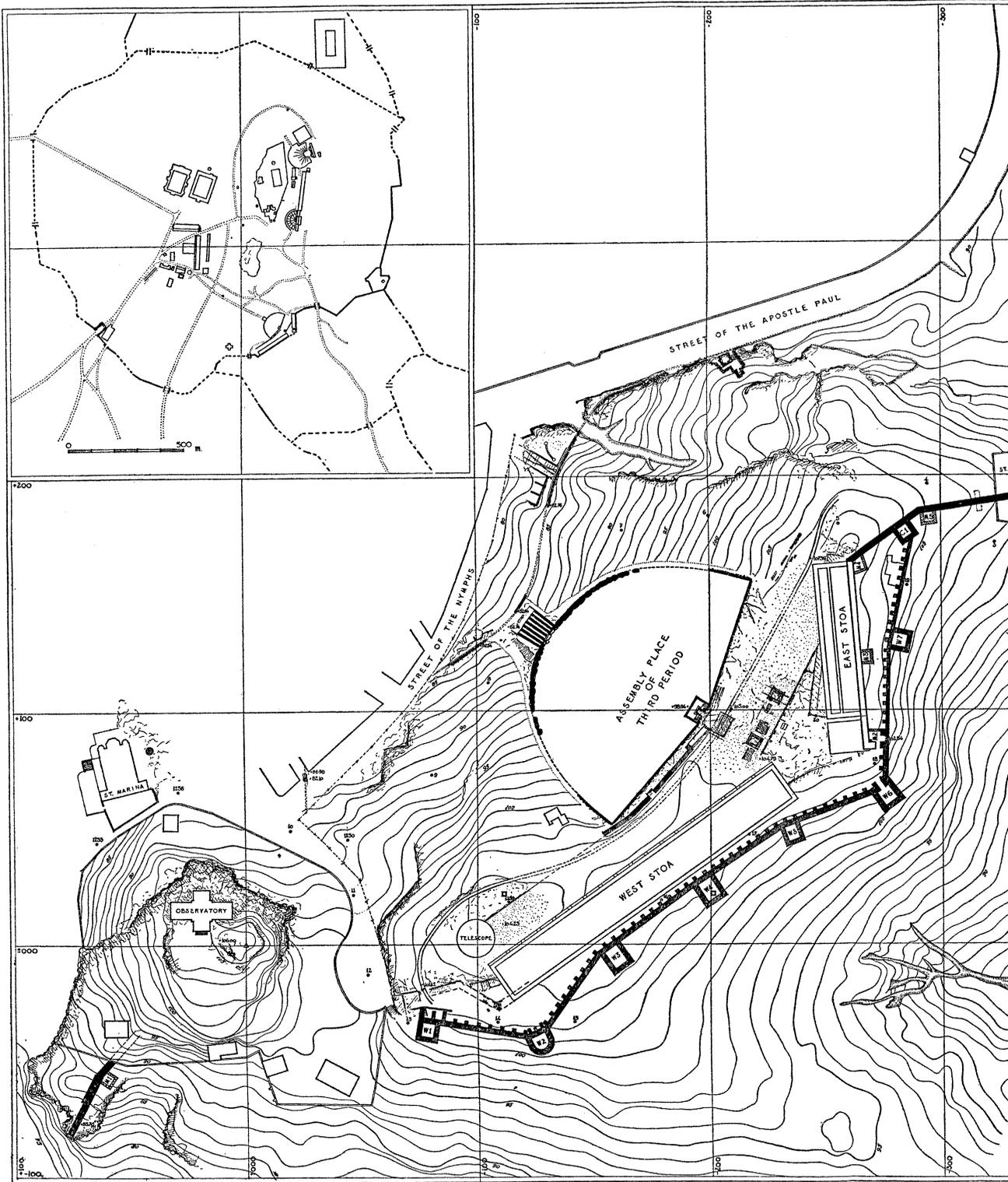
From the Roman period, as the workmanship indicates, comes a marble wall crown (Figs. 70, 71) and a corner epistyle (Figs. 72, 73) also found on the upper slopes of the Museum. These definitely were used in the wall no earlier than the period of Valerian, and possibly later, and we have no clue as to their original provenience. They may safely be attributed, however, to some of the many monuments along the roads flanking the Museum.

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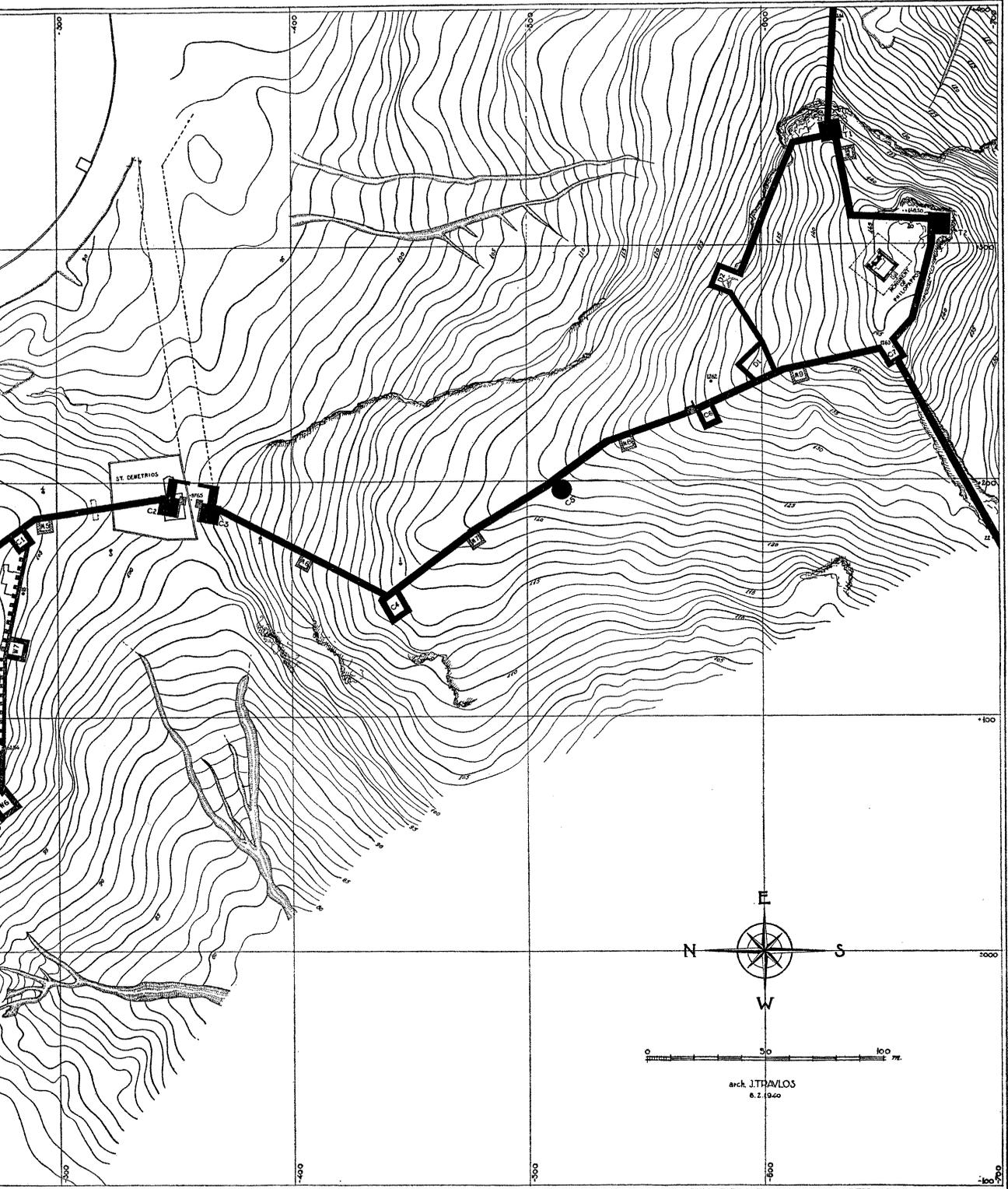
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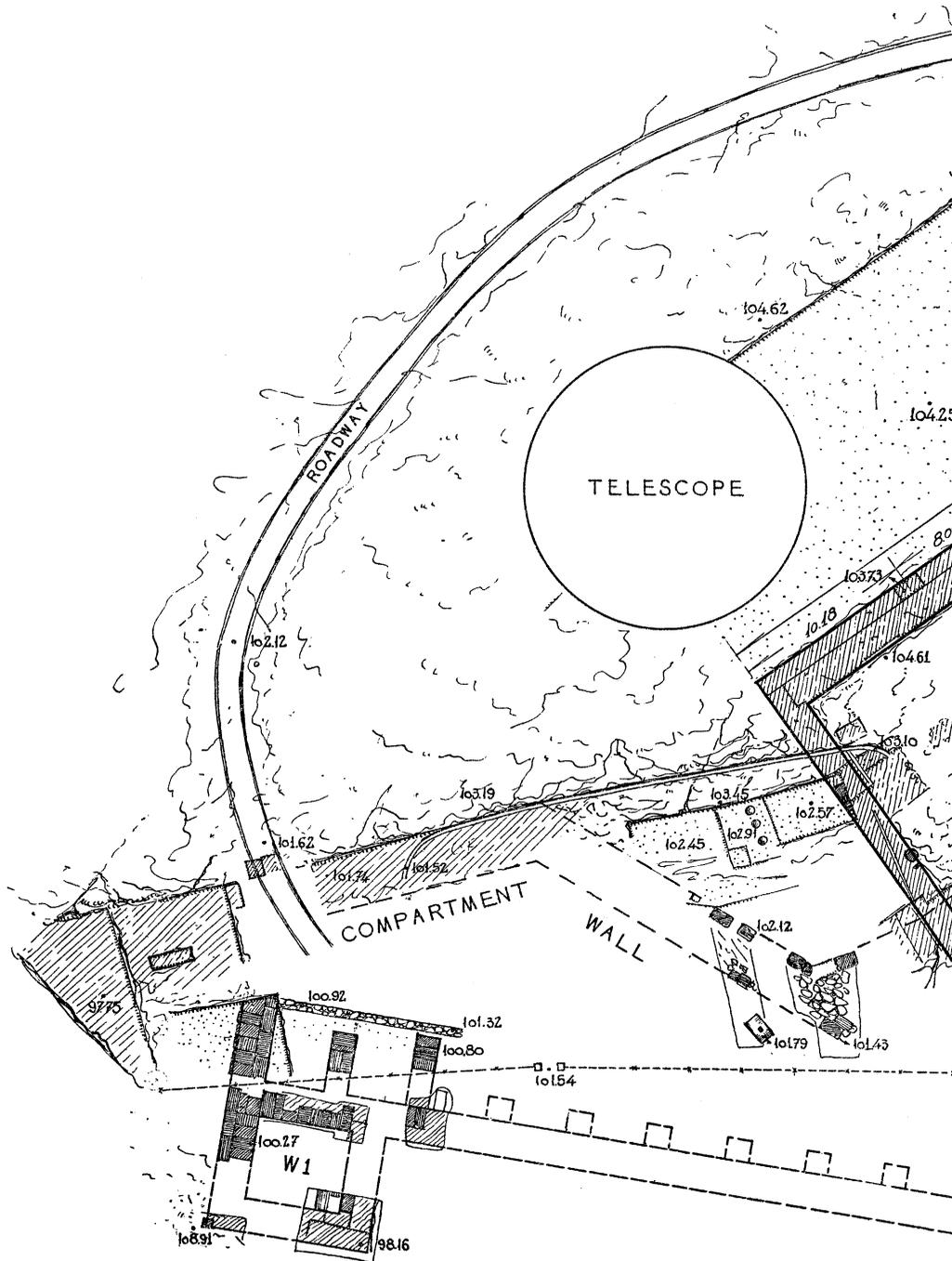
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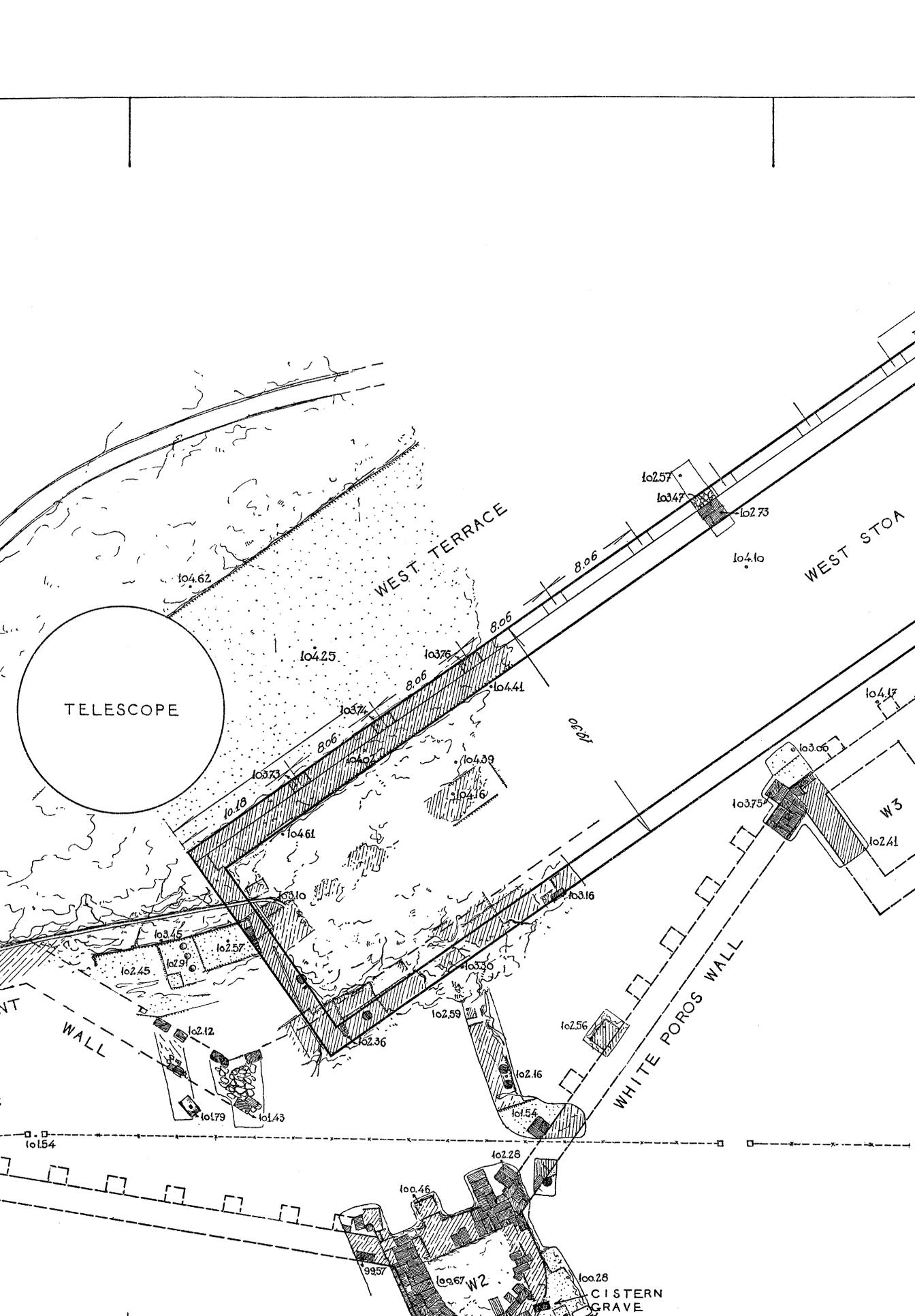


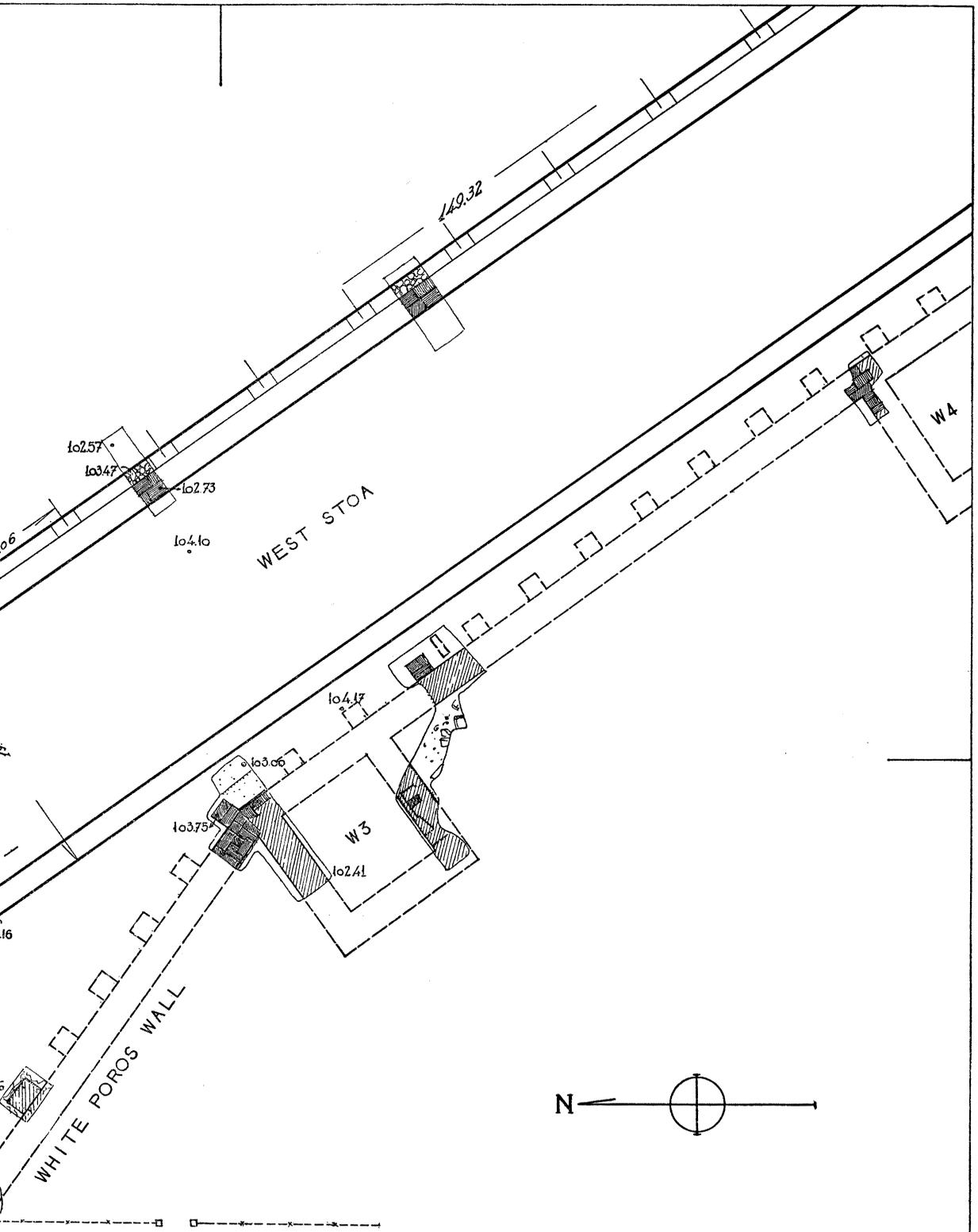
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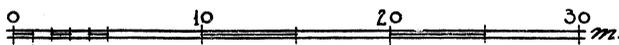
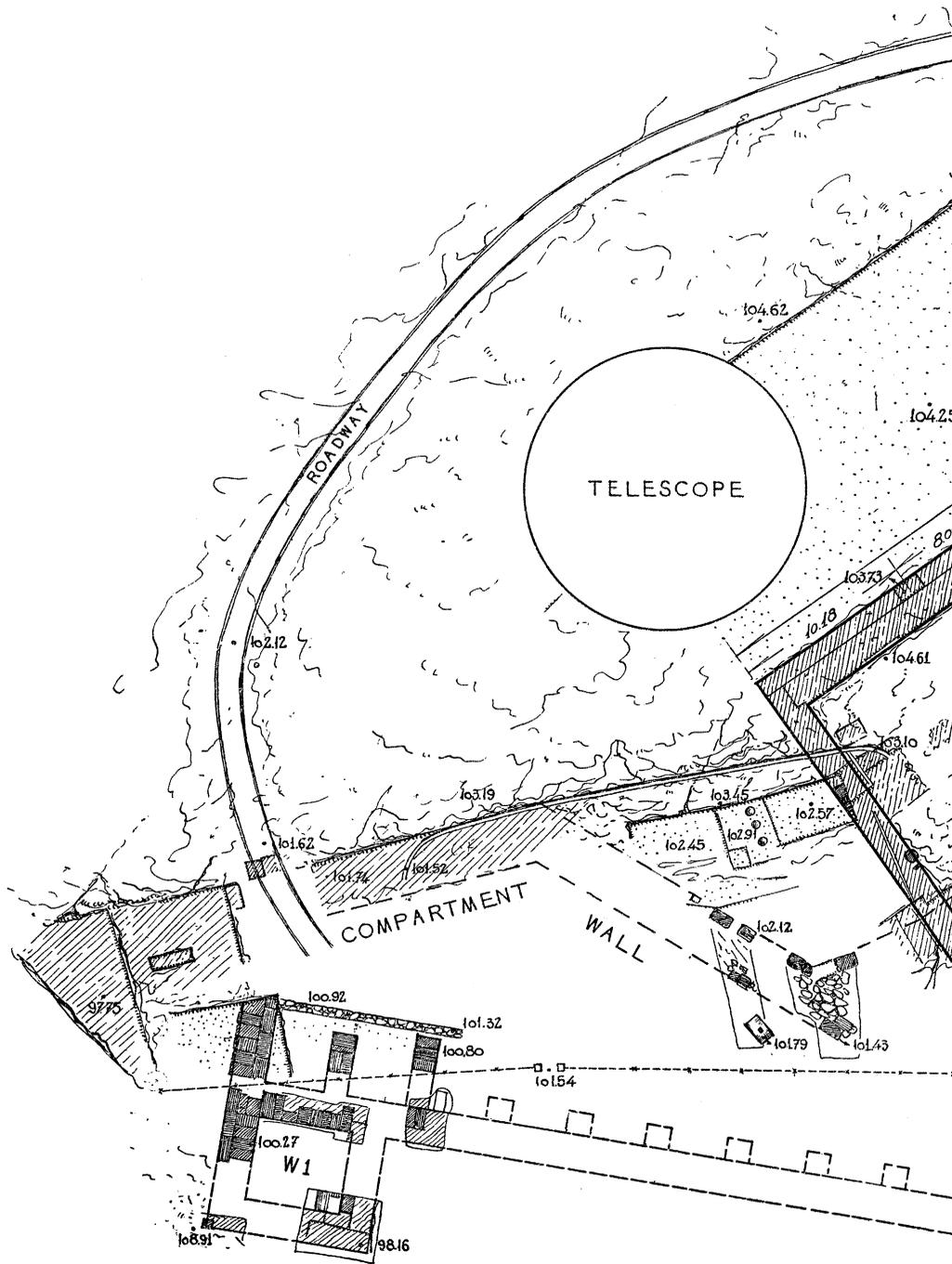






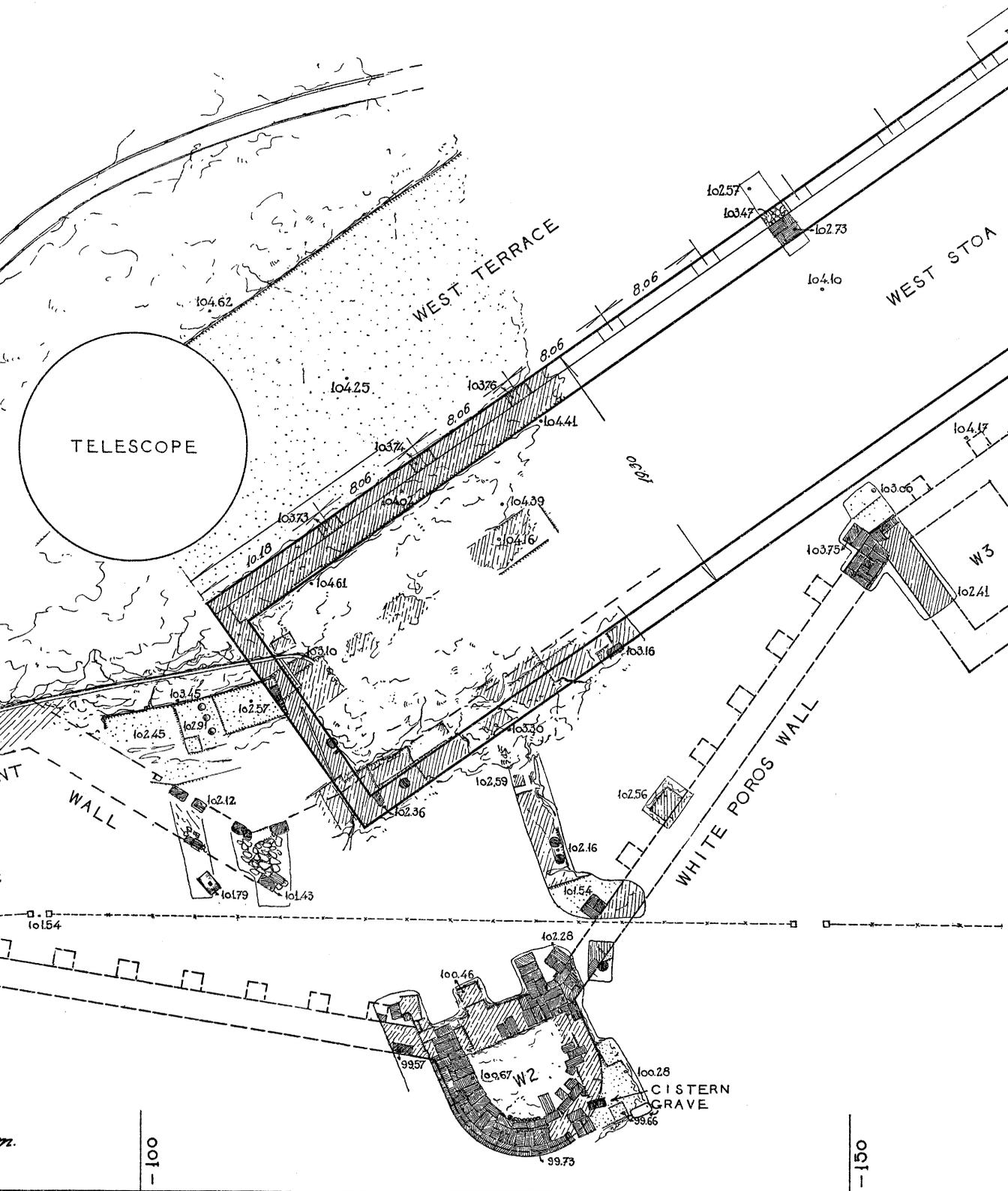
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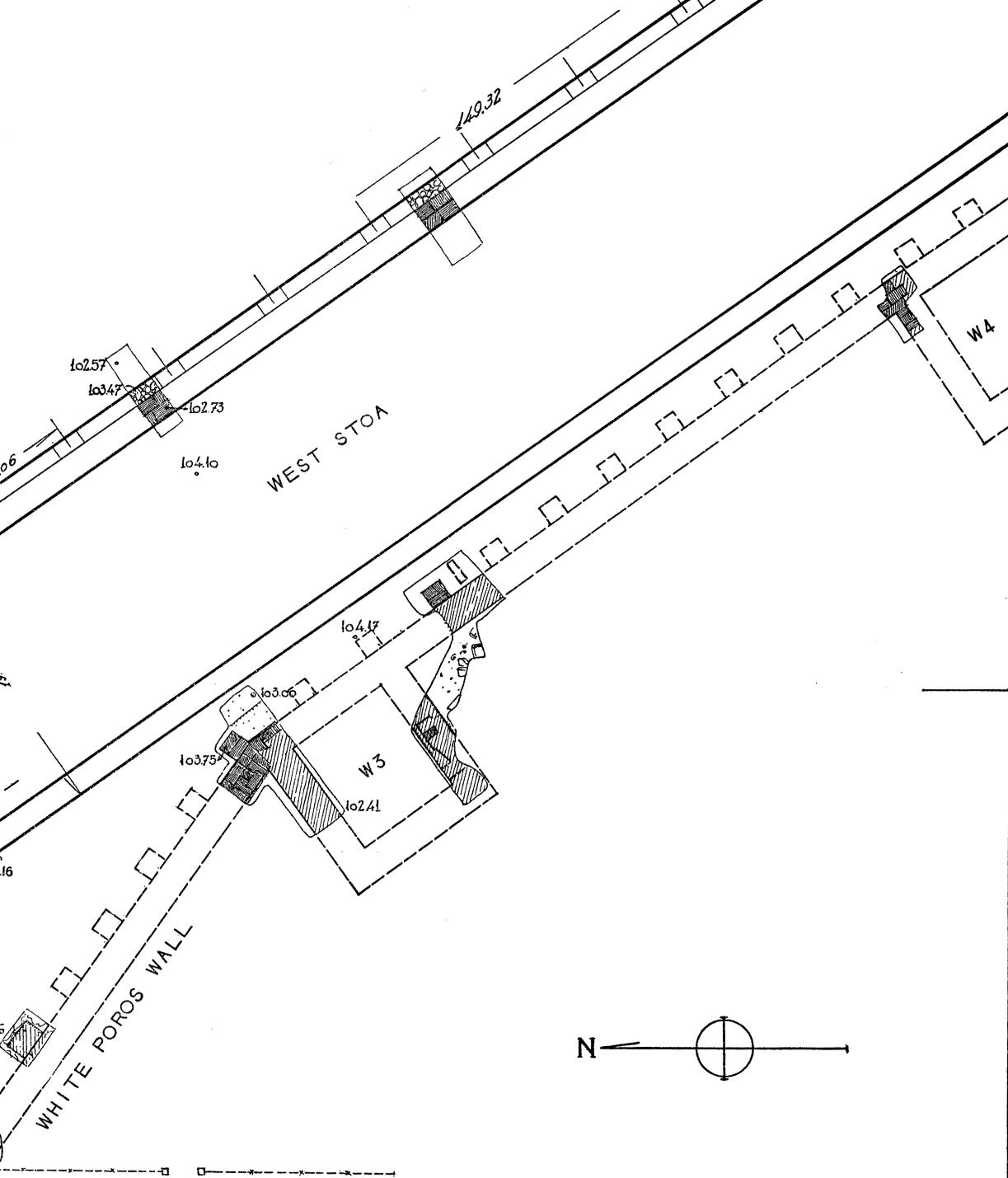


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North End of West Stoa and Environs



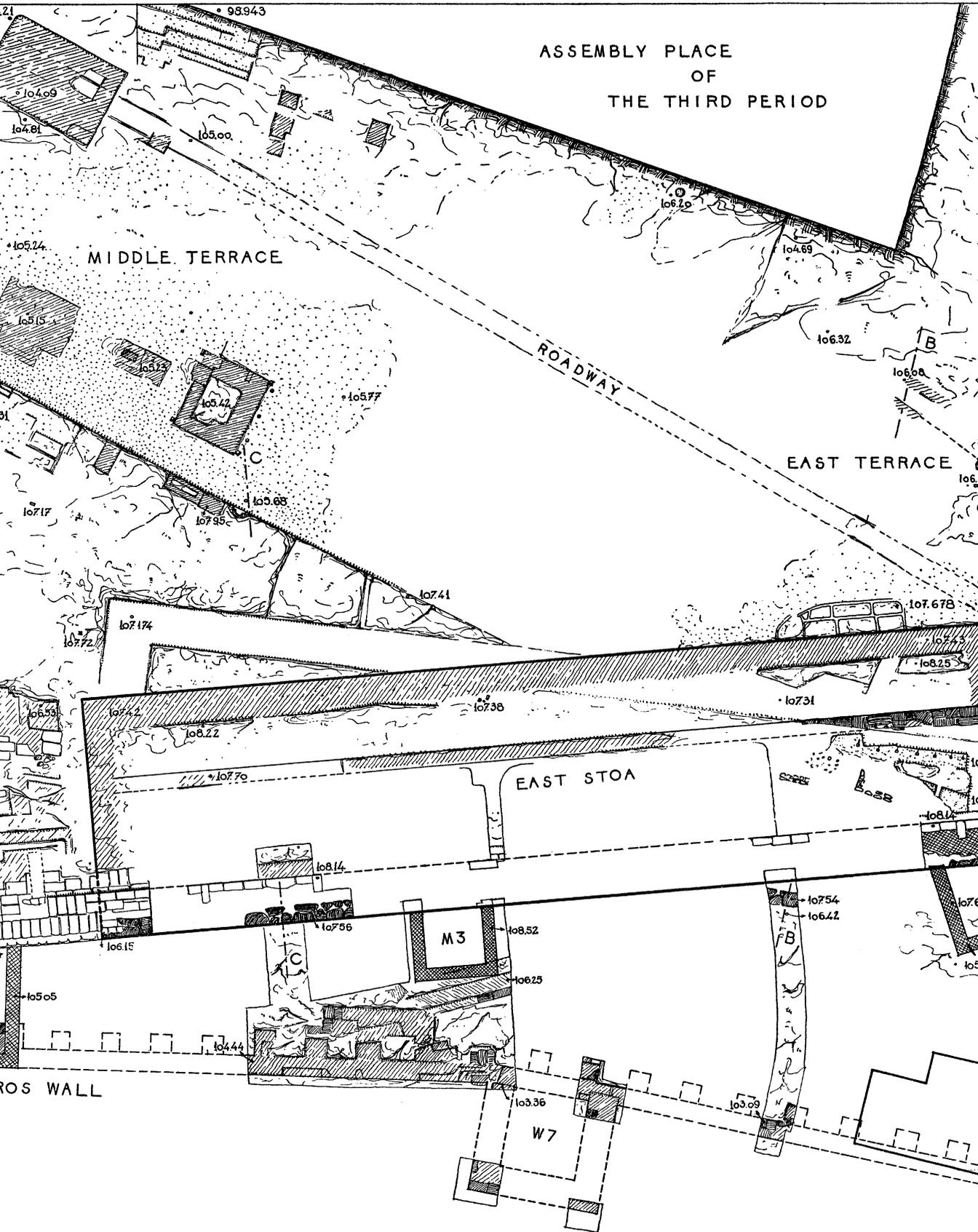
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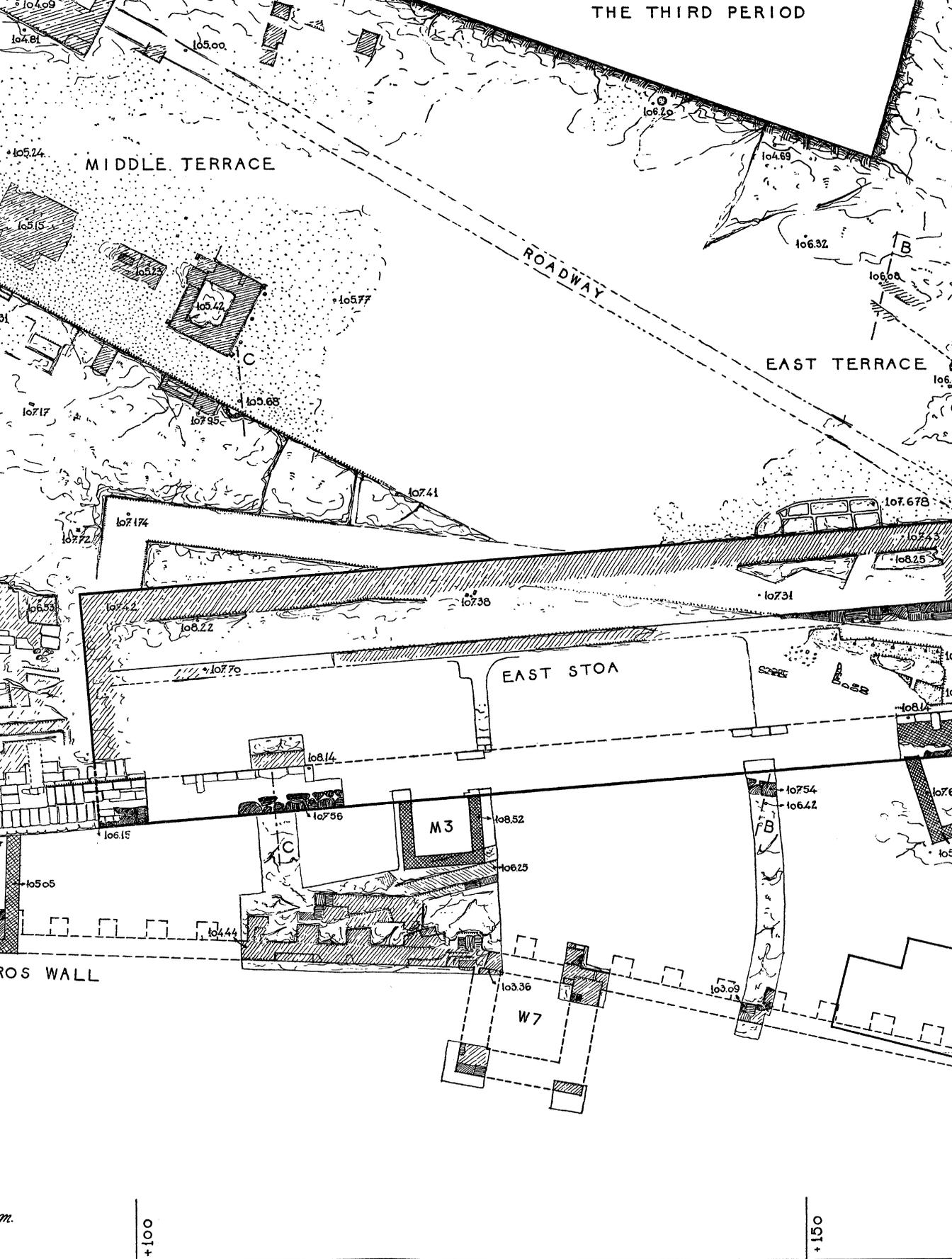
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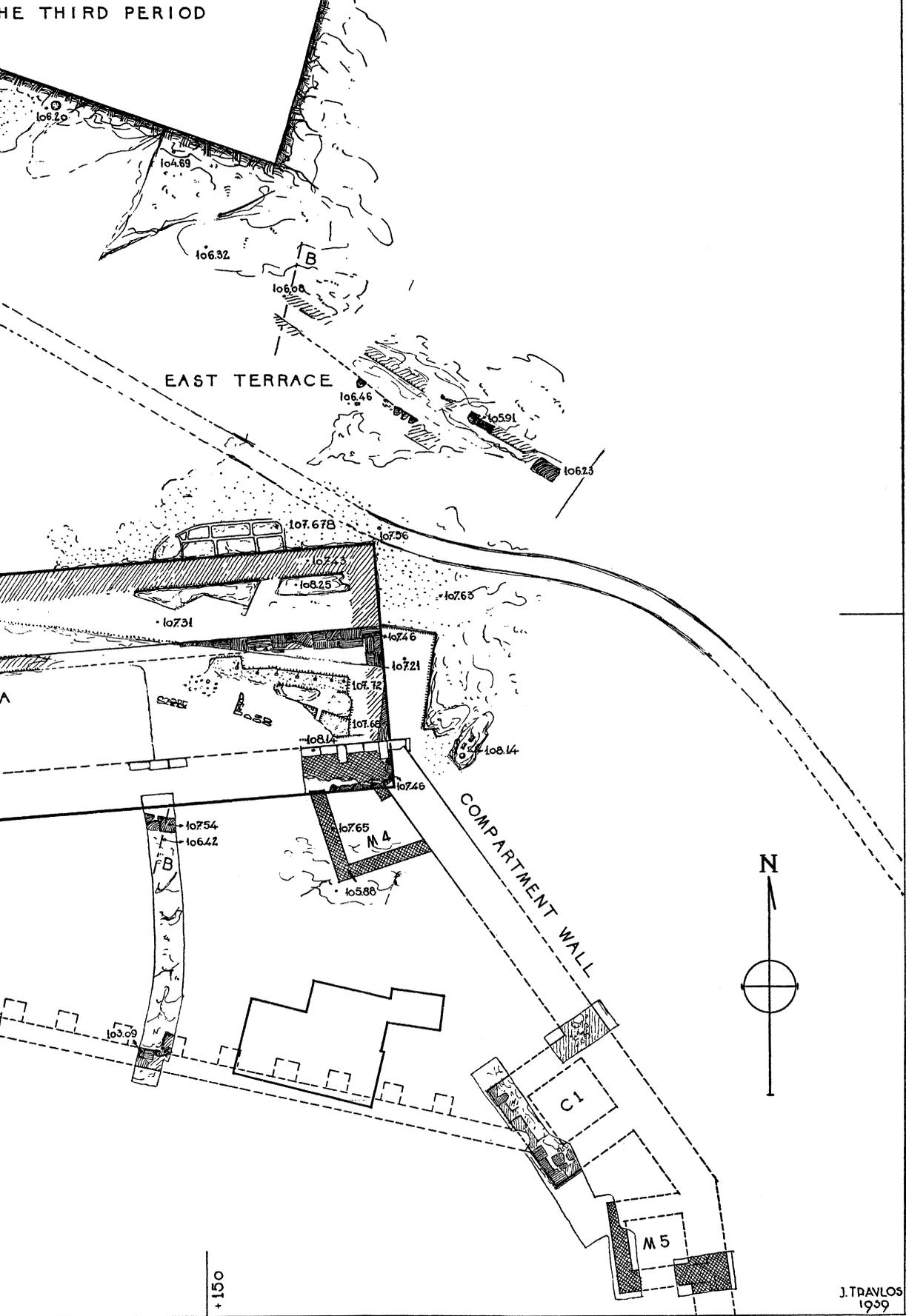
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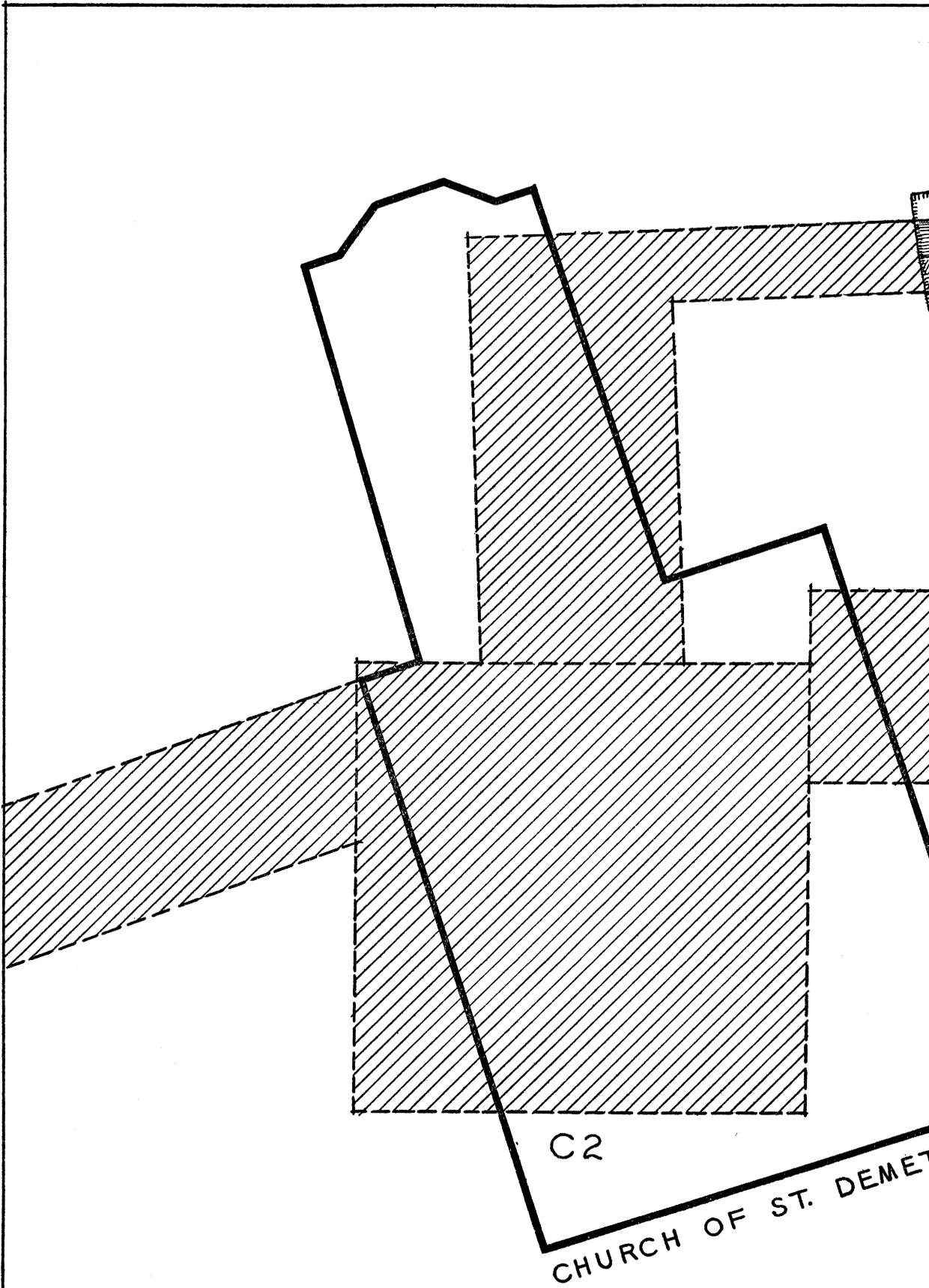
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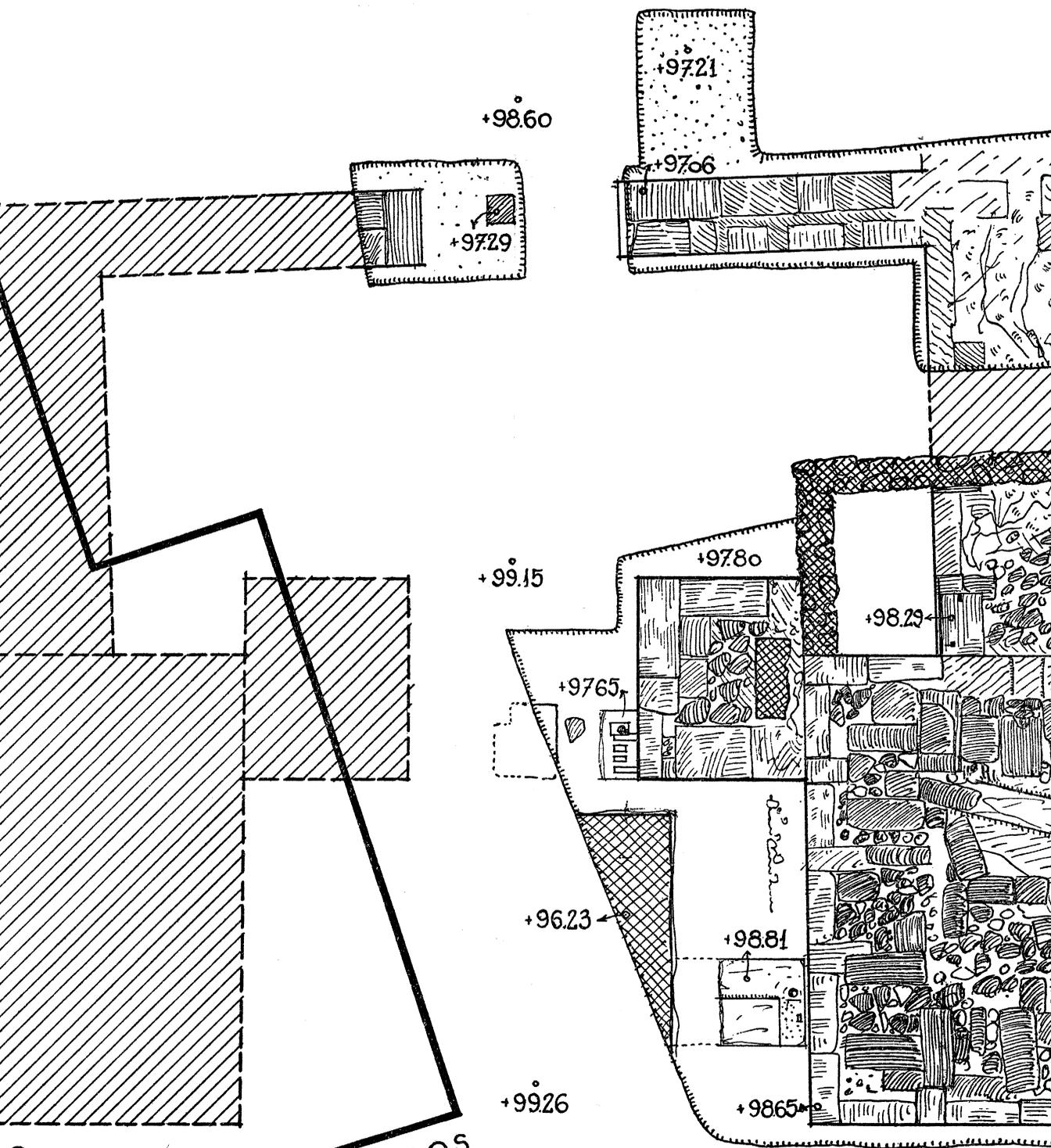
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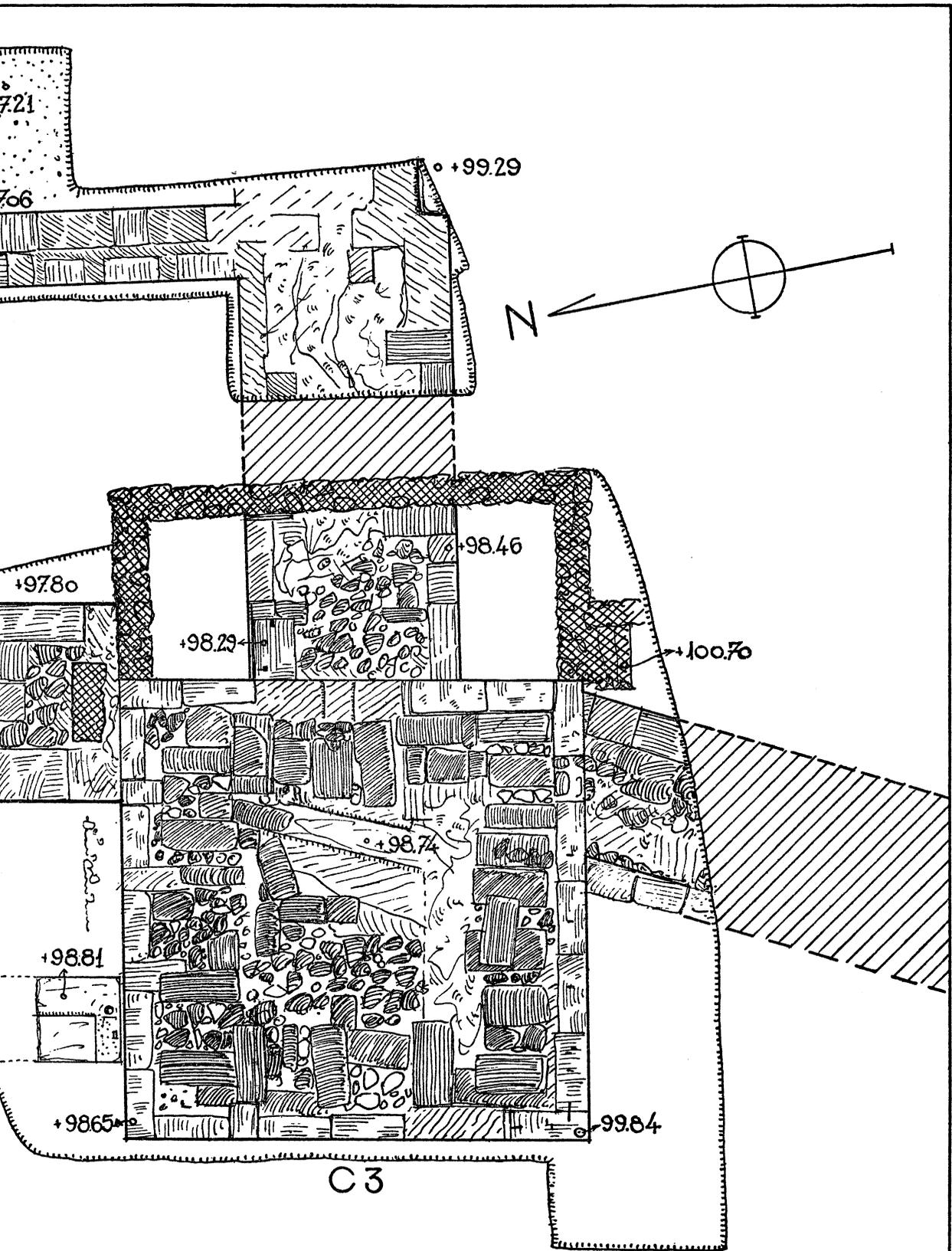
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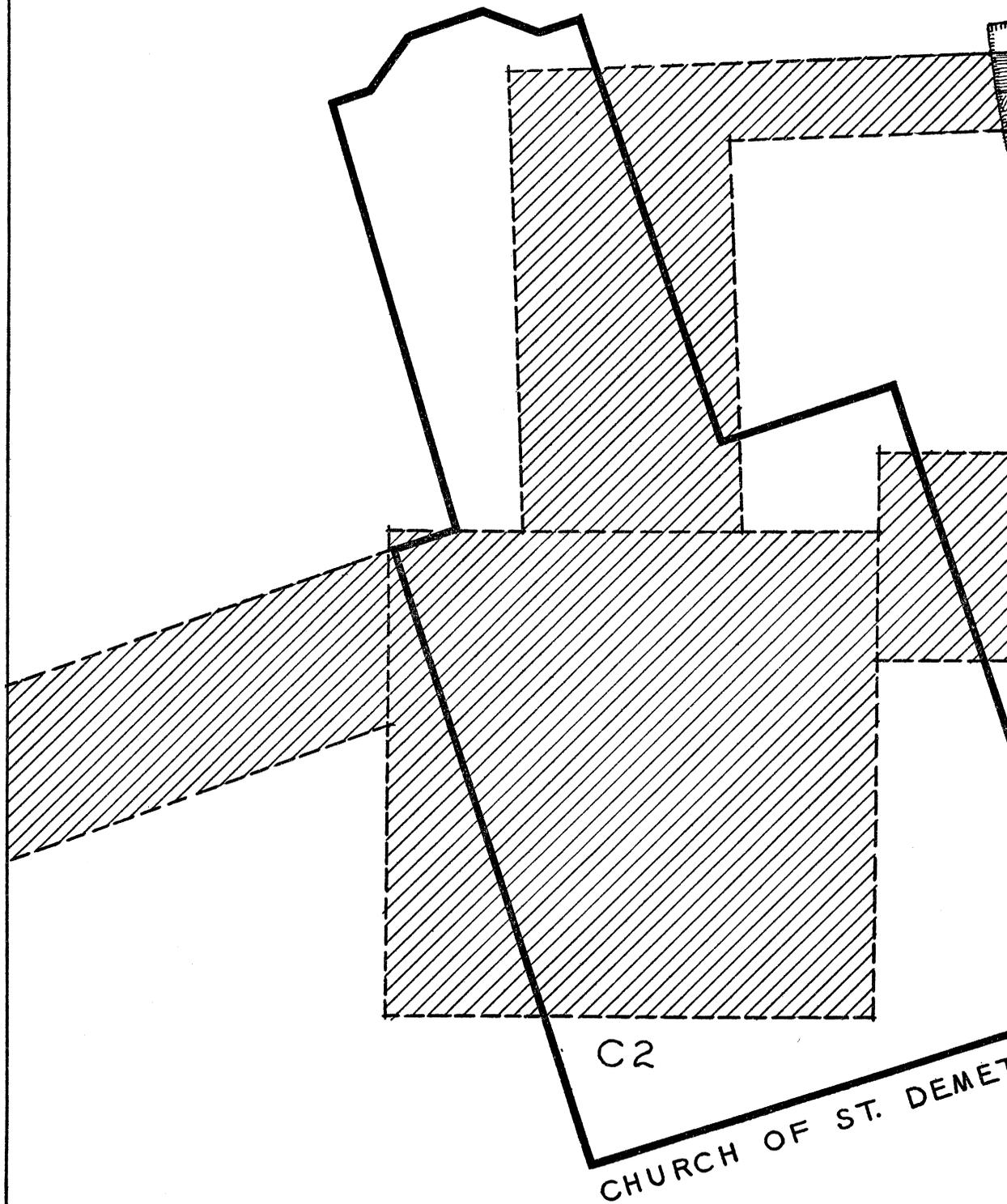
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CHURCH OF ST. DEMETRIOS

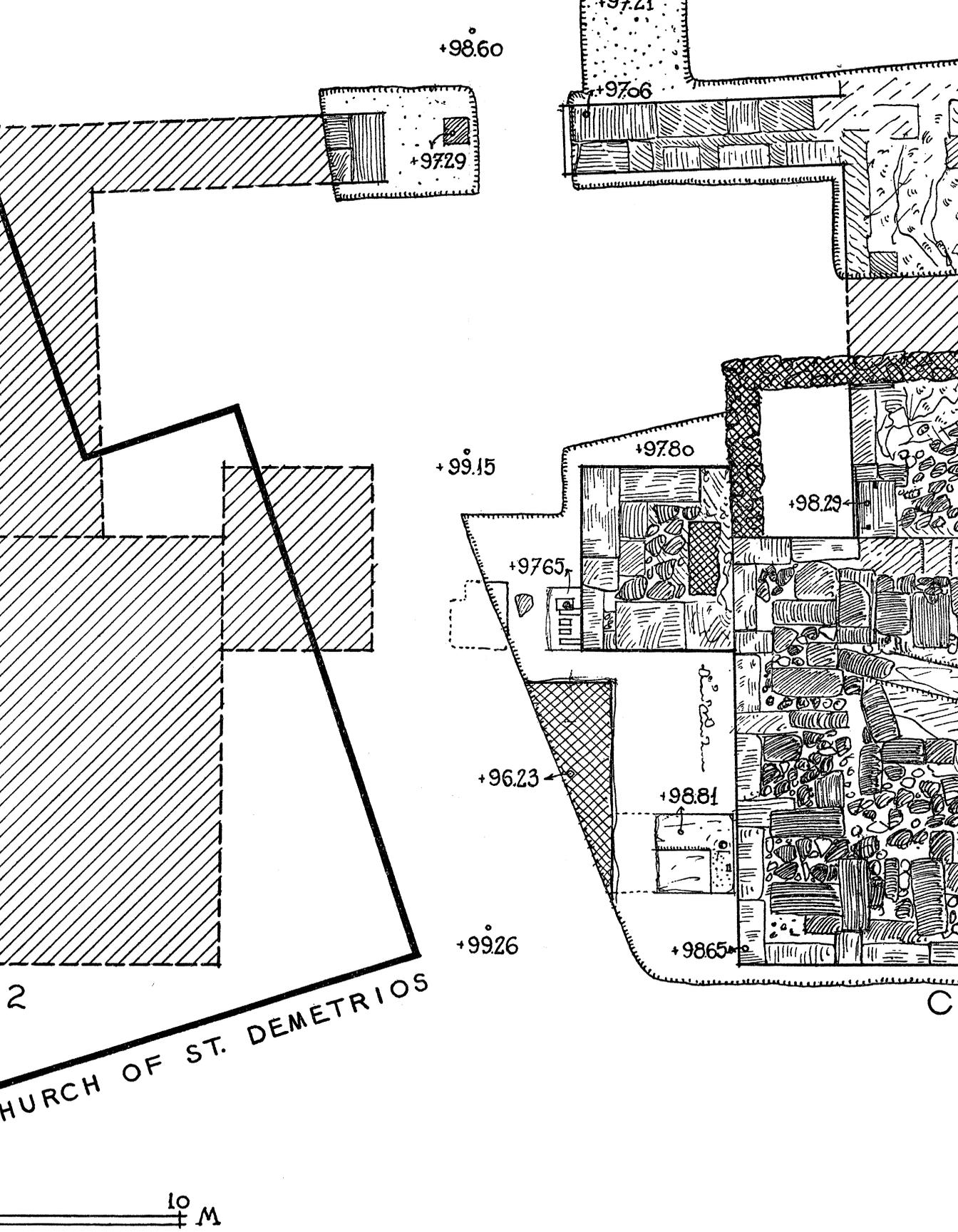
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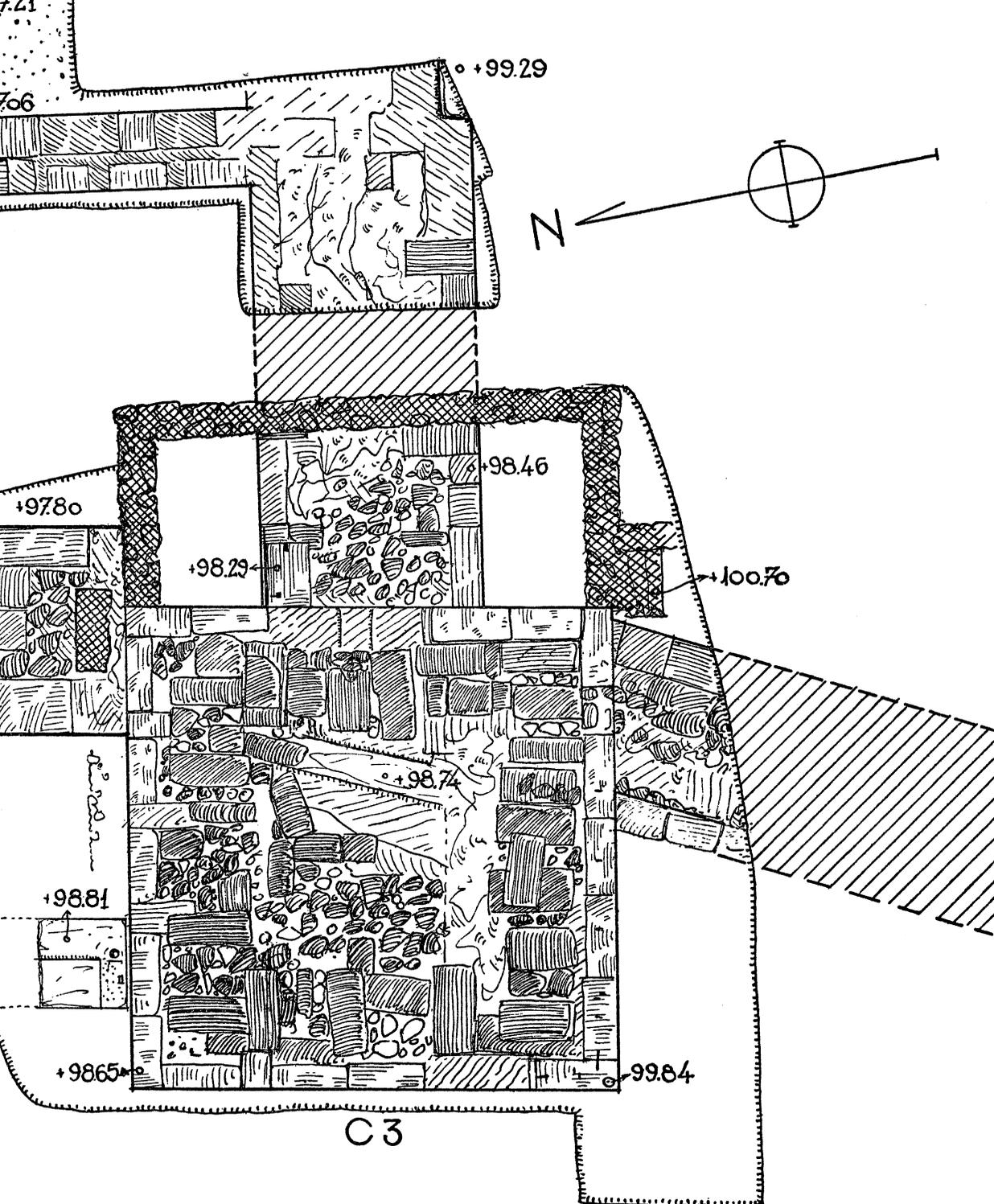
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Plan of the Dipylon by St. Demetrios as Excavated



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Excavated