

ARCHITECTURAL STUDIES

I. THE ROYAL STOA

Plate IV

GENERAL DESCRIPTION

Between the area excavated by Professor Wilhelm Doerpfeld in 1896–97 east of the Theseum,¹ and the line of the electric railway to Piraeus, a sector was excavated in the campaigns of 1931 and 1932 in which were laid bare the foundations of a large stoa with a rectangular building behind it to the west (Figs. 1 and 2). This may be identified as the Stoa Basileios mentioned by Pausanias at the beginning of his description of the Ancient Agora of Athens.² Only about forty metres of the southern part of the stoa have been uncovered. There remain unexplored the northern part of the building, cut through by the railway, and a return projecting east from the south end of the stoa, lying under a sector that is to be included in the coming campaign.

The remains, which will be described in detail below, consist of the foundations of the back wall of the building, the piers for the interior colonnade, and part of the foundations of the exterior or front colonnade with the cuttings in the rock for the same wherever they have been ripped out. A single course of five marble blocks remains to show the location and level of the first step of the crepis at the south end of the building.

The building behind the stoa, dating from the third century before Christ, is a rectangle measuring 12.50 m. by 16.50 m., divided into two equal parts by an east-west wall. It is clearly an addition to the stoa, and apparently communicated with it, for there is no possible approach to the lower level of the smaller building save through the larger.

THE STOA

The only significant dimension of the stoa that can be ascertained at present is its depth, which was very nearly 11.50 m. measuring from the socle of the back wall to the presumed face of the lowest step of the crepis. The spacing of the interior columns works out at very nearly 6.00 m. on centres, and consequently gives a submultiple of that distance for the exterior supports. The usual restoration would be to have two exterior supports for one in the interior, but certain difficulties that arise when a restored plan is attempted make it quite possible that the ratio was three to one. Sufficient fragments have been found to show that the outer order was Doric, the inner,

¹ *Ath. Mitt.* XXI, 1896, pp. 107 ff.; XXII, 1897, p. 225. *Ant. Denkm.* II, T. 37.

² 1, III, 1.

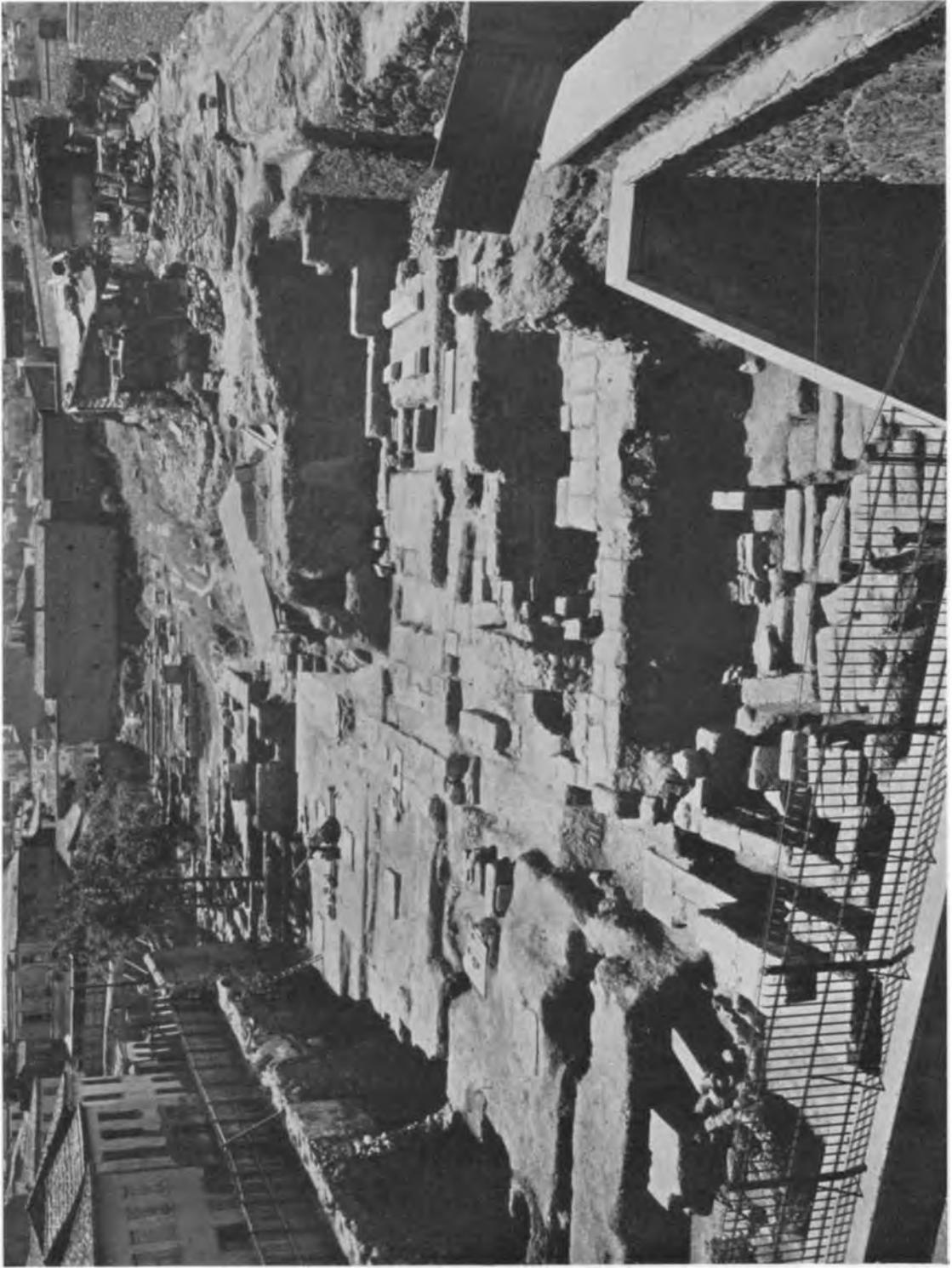


Fig. 1. View of the Royal Stoa from the North

as might be expected, Ionic. On the other hand there are not enough data to make a complete restoration of the orders, and consequently this will not be attempted until further research furnishes additional indications, or shows that no more information is to be expected.

One interesting fact that may be noted from the plan is that the spacing of the interior supports is greater than half the depth of the building, and as a consequence



Fig. 2. Hellenistic Building behind Royal Stoa. View from the East

this spacing is reduced to a distance that is consonant with the problem of turning the corner when the south end of the interior colonnade is reached. The piers next to the interior southwest corner one are drawn in to an approximate distance of 4.80 m. on centres from it.¹ This fact, together with the fortunate find of a cornice block which forms an interior angle, points conclusively to the presence of an eastward projection at the south end of the stoa, and, by inference of symmetry, to a similar projection at

¹ A variation of a few centimetres in the spacing of the foundation piers and the absence of definite setting lines make accurate measurement of these spaces difficult.

the north end. There is a building of a considerably later period than that in which the present stoa must be dated which has just such characteristics, namely the Stoa of Antigonos at Delos.¹ Possibly the Athenian building furnished an example for the Delian.

A noticeable irregularity occurs in the line of the foundation for the rear wall, which is not straight but bends to the west as it runs southward from the railway. The actual point of the bend is unfortunately not preserved, having been torn away in the con-

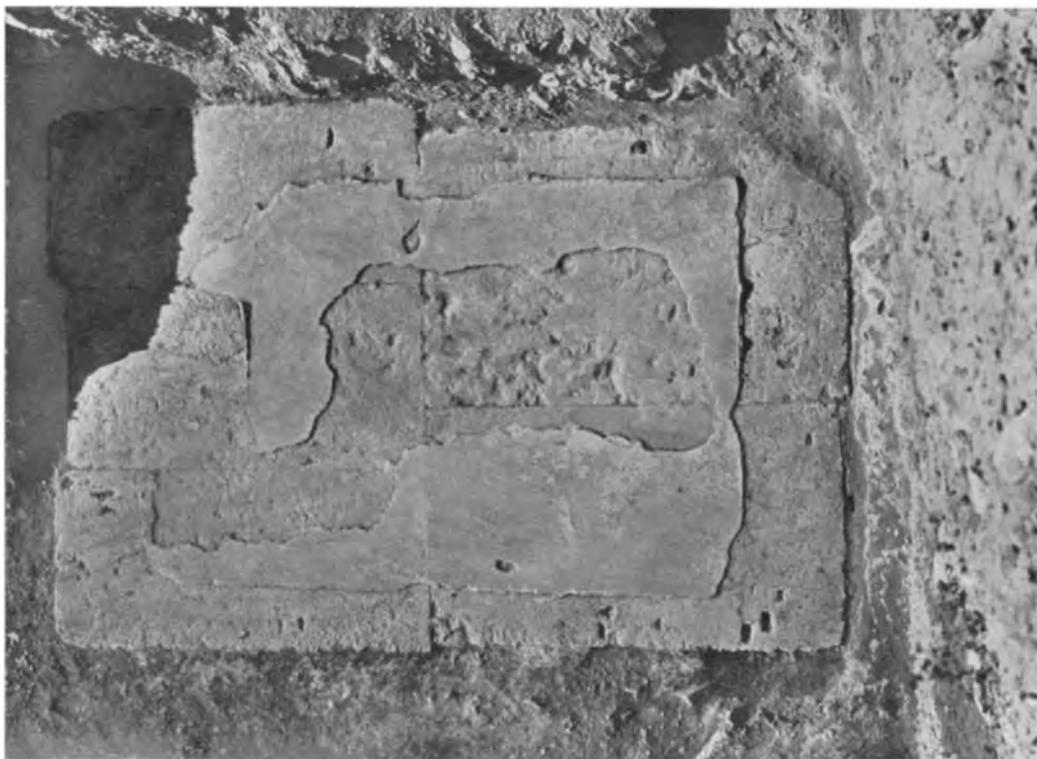


Fig. 3. Water Basin at South End of Royal Stoa

struction of a mediaeval well. The explanation of this peculiarity is not apparent, unless one supposes that part of the foundation is of an earlier date, and that the bend was the result of an addition or alteration. That the back wall was straight, however, is shown conclusively by the setting line which can be traced along the top of the foundation. There is no evidence that the building ever ran further to the south, for the level of the rock rises shortly beyond the south steps. On the other hand no cutting exists to show that the stoa formerly terminated where the bend in the foundation seems to come. The angle may be the result of a slight change in orientation after the

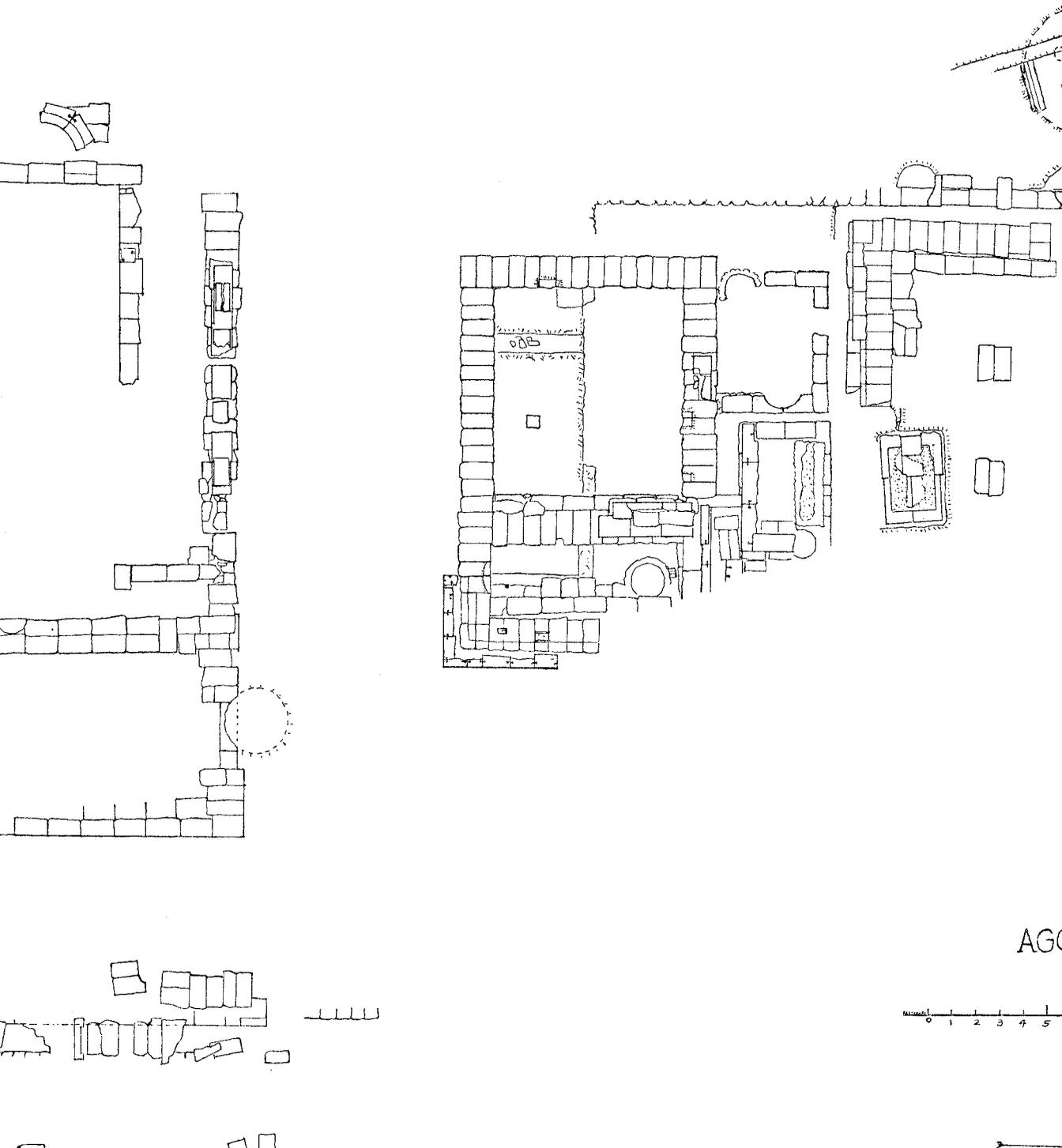
¹ *Delos. La Portique d'Antigone.* Cf. also the Great Stoa in the Sanctuary of Athena at Lindos in Rhodes.

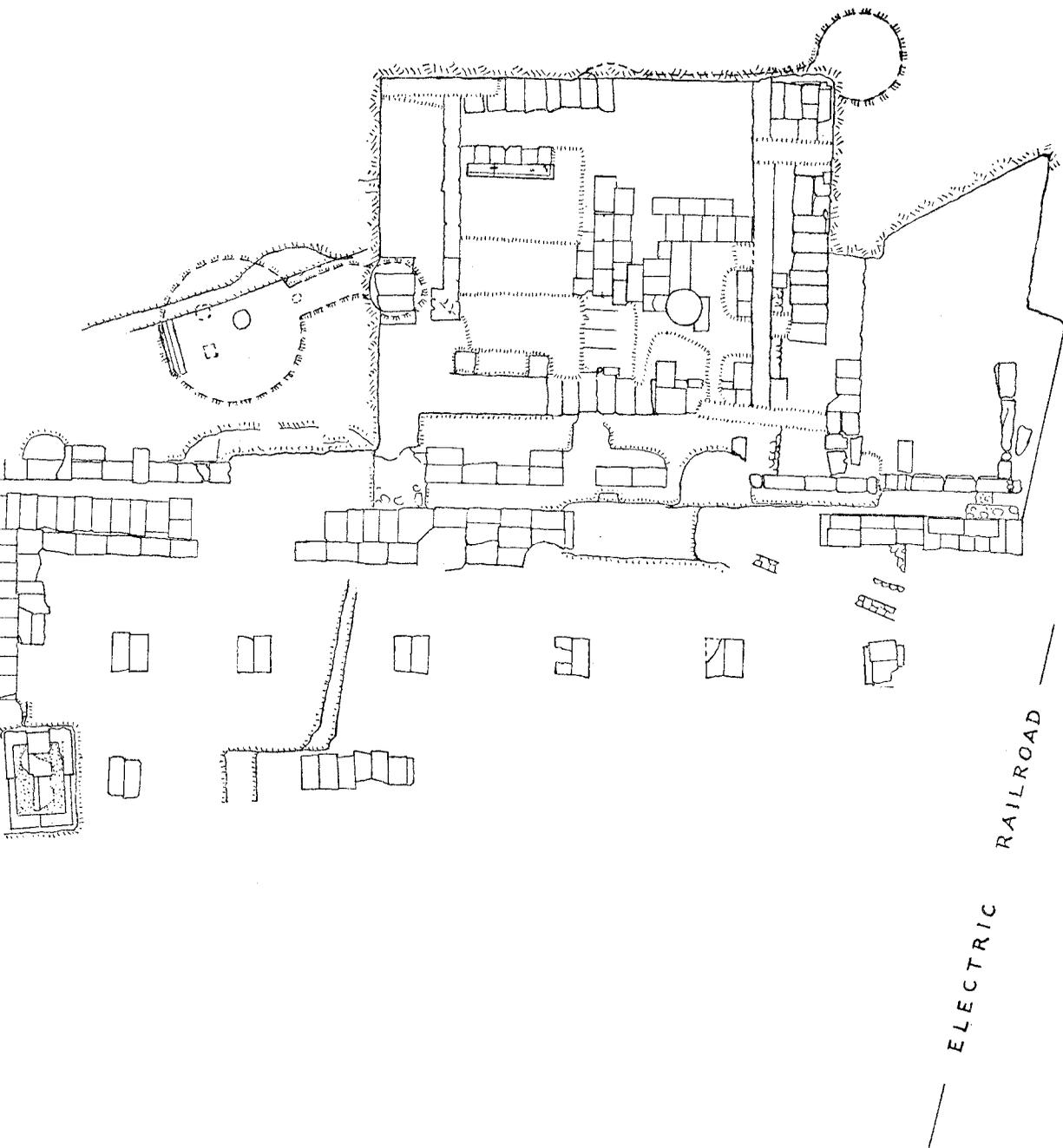
construction of the building had begun from the southern end. Inasmuch as the foundation blocks were to be covered at the southern extremity of the stoa there was no reason for relaying them. As will be noted under the discussion of the construction, the marble steps remaining *in situ* seem to have been let into the foundation in a rather unusual manner for anything but an alteration or change of plan.



Fig. 4. Retaining Wall at South End of Royal Stoa

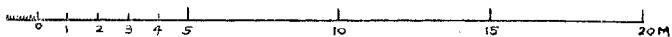
A large water basin (Fig. 3) measuring 1.80 m. \times 2.70 m. on the inside stood at one time immediately within the southern limit of the building. At present there are five large poros slabs on which the outlines of the basin may be traced by the presence of the hard waterproof stucco that originally lined it. At the west end of the basin the stucco turns up in such a way as to show the presence of a small pier against the centre of the end wall. This presumably was for a fountain. The floor of the tank is some 0.60 m. below the supposed floor level of the stoa, and if the tank remained open it would have been sunk in the floor. The line of the south stylobate cuts very close to the corner, and the orientation of the tank is not that of the stoa but is some degrees removed from it. It seems clear from the plan that the basin and the stoa were not contemporary,

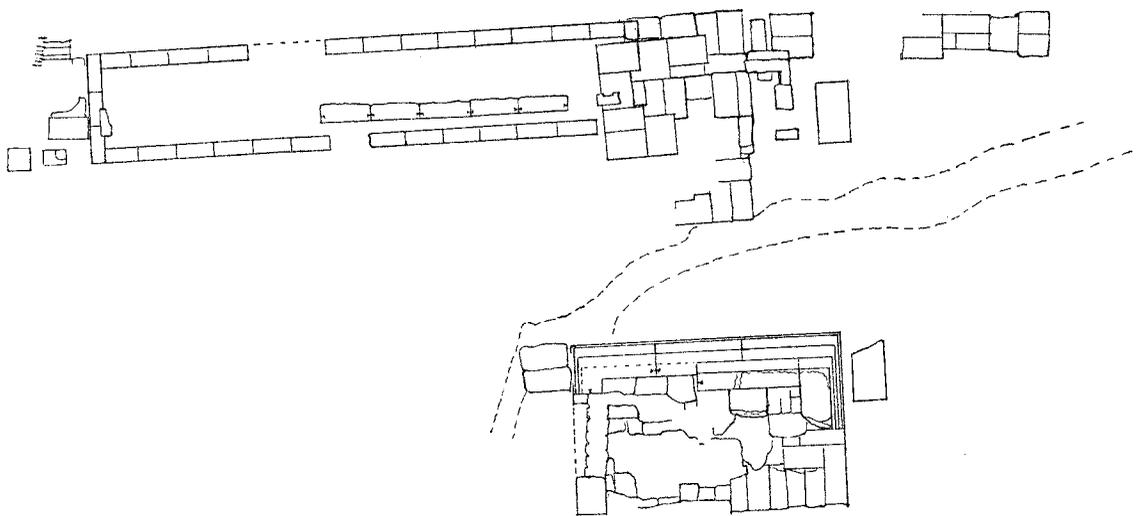
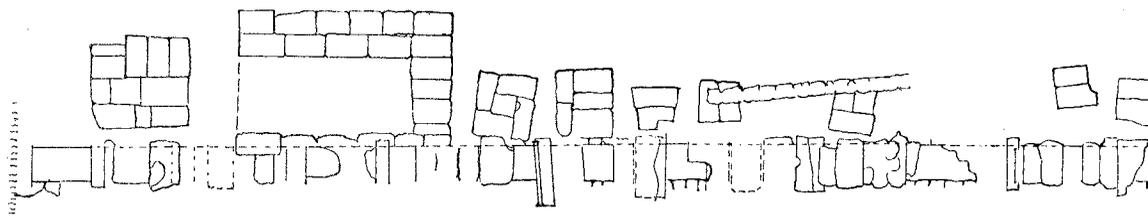
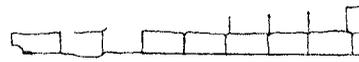
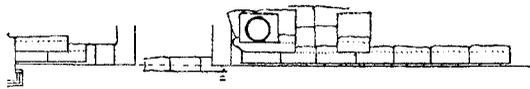
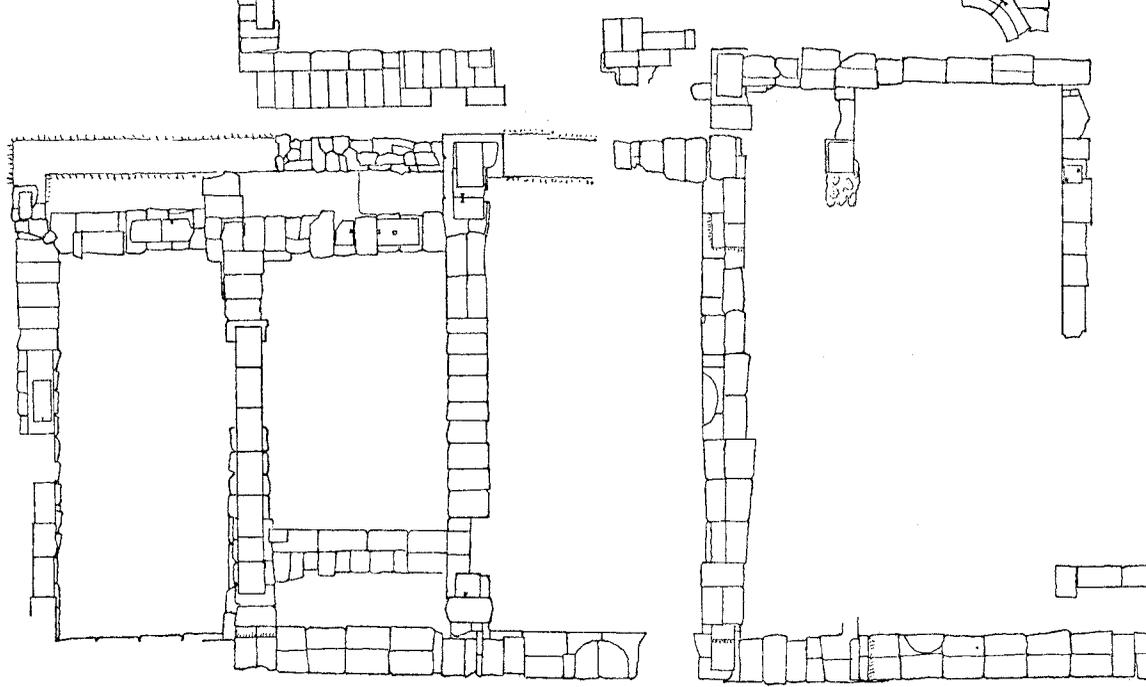


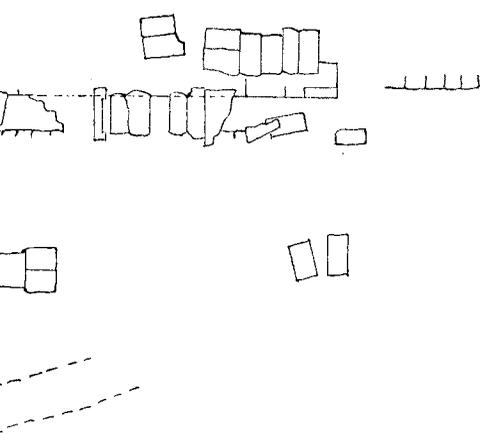
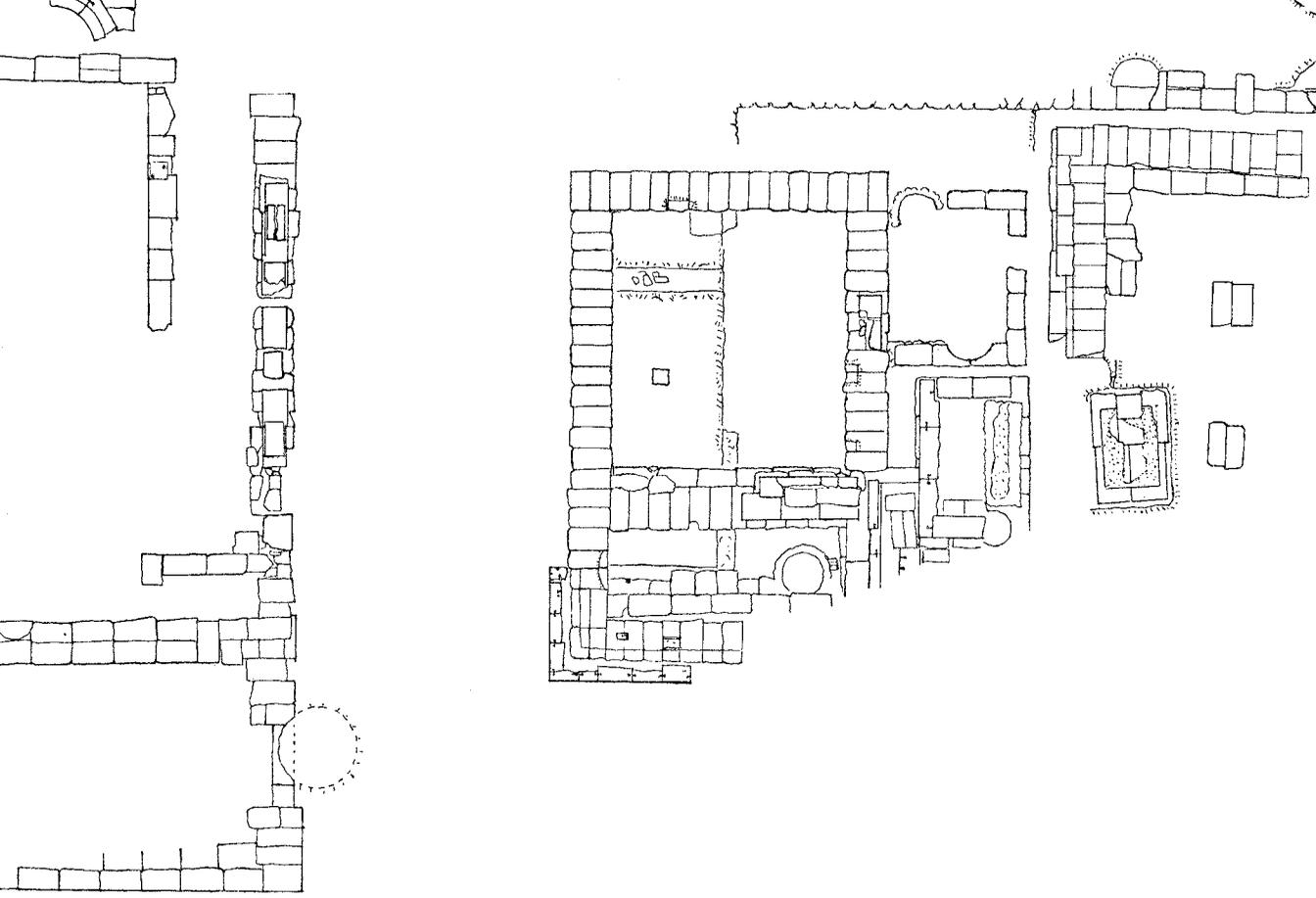


AGORA EXCAVATIONS

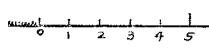
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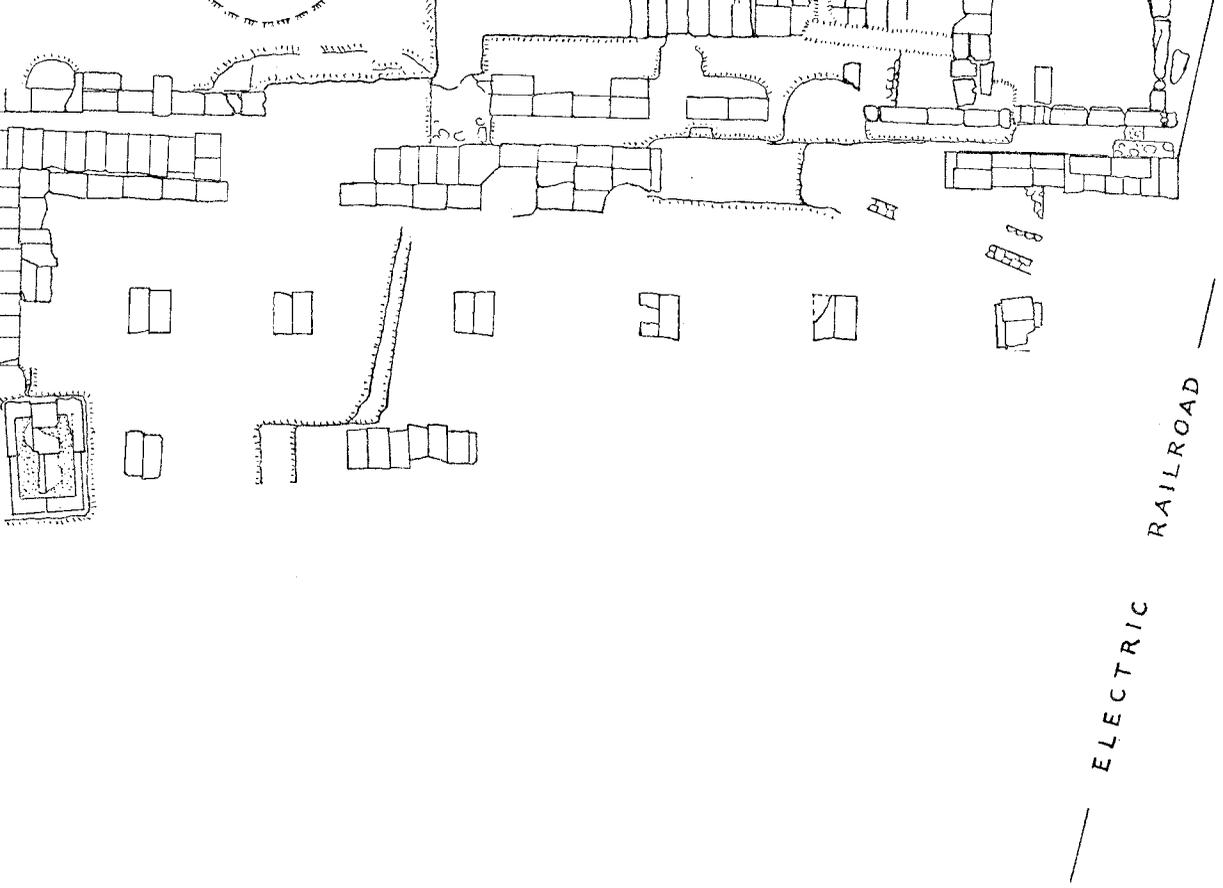






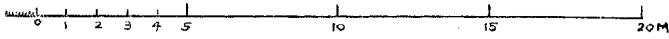
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AGORA EXCAVATIONS

SECTORS A & E



the former being the earlier, but it also appears that the basin was respected by the builders of the stoa, and that it remained in use.

Parallel with the rear wall of the stoa, and about a metre further west, runs a retaining wall of squared but not faced poros and conglomerate blocks (Fig. 4). The wall begins just north of the south corner of the stoa, and is the continuation of a lighter wall, built of uncoursed pieces of Acropolis limestone. The conglomerate retaining wall is preserved four courses high at the south end, and breaks down as it extends north. For a distance of twenty-five metres it consisted of courses of headers and double stretchers, but the alternation of these in succeeding courses was not observed, that is, the same course will contain headers and stretchers, all save the lowest course which consists solely of stretchers. Where the wall crosses the front of the Hellenistic building some of the blocks have been removed, five from the west face of the wall, and one from the east. The two remaining blocks on the west side of the wall seem to have been left for some purpose in connection with the Hellenistic building, and it may not be purely a coincidence that they would serve to give foundations for an opening made from the stoa into the southern chamber of the addition. The northern part of the retaining wall has been much overbuilt by later construction. A section, four blocks long and two high, remains where the wall passes beyond the line of the Hellenistic structure. The west face of the upper stones has been cut down leaving a projecting lip at the bottom, and the blocks retain traces of red stucco. A cutting in a block that forms a corner indicates that at some time a small, very poor building was made here.

CONSTRUCTION

At the south end of the building (Fig. 5) the poros foundation blocks, coursing with the marble step-euthynteria, were originally laid 1.25 m. wide. A rabbet 0.20 m. wide was then hacked in their upper front face, and an additional course of poros, 0.50 m. in width, was laid south of the main course so as to provide a foundation for the marble step. This rather haphazard form of construction is a little startling in a building of the date to which we must assign the Royal Stoa. The marble step was then laid, the first four blocks counting from the west being of blue Hymettus marble, and the fifth of white Pentelic. Again the discrepancy is disturbing. The steps were not dowelled to their foundation, nor clamped against it, but evidently it was thought that the double dowelling of the next marble course would afford sufficient bond. One dowel of the next course occurs in the marble step and is matched by another in the poros foundation. The faces of the steps were never finished. They still retain their lifting bosses, and all but one of the steps show merely a roughly picked protecting surface, with a slight smoothing around the edges done with the chisel. The remaining block, the third from the west, is better finished and shows a drafting on its lower edge, 0.055 m. high and 0.005 m. deep. The lower corners of several of the blocks are chipped in such a way as to make a satisfactory finish impossible, but inasmuch as it seems to have been the intention to cover the face of this course, it presumably did not matter. That this course

was never entirely covered, but that the ground level came up very nearly to the upper edge of the blocks, is shown by the wear that can be distinctly seen on the upper surface, and the rounding down of the actual front edge of the course. The fill which was densely packed against the face of the blocks contained pottery that could not date later than the second half of the fifth century B.C.

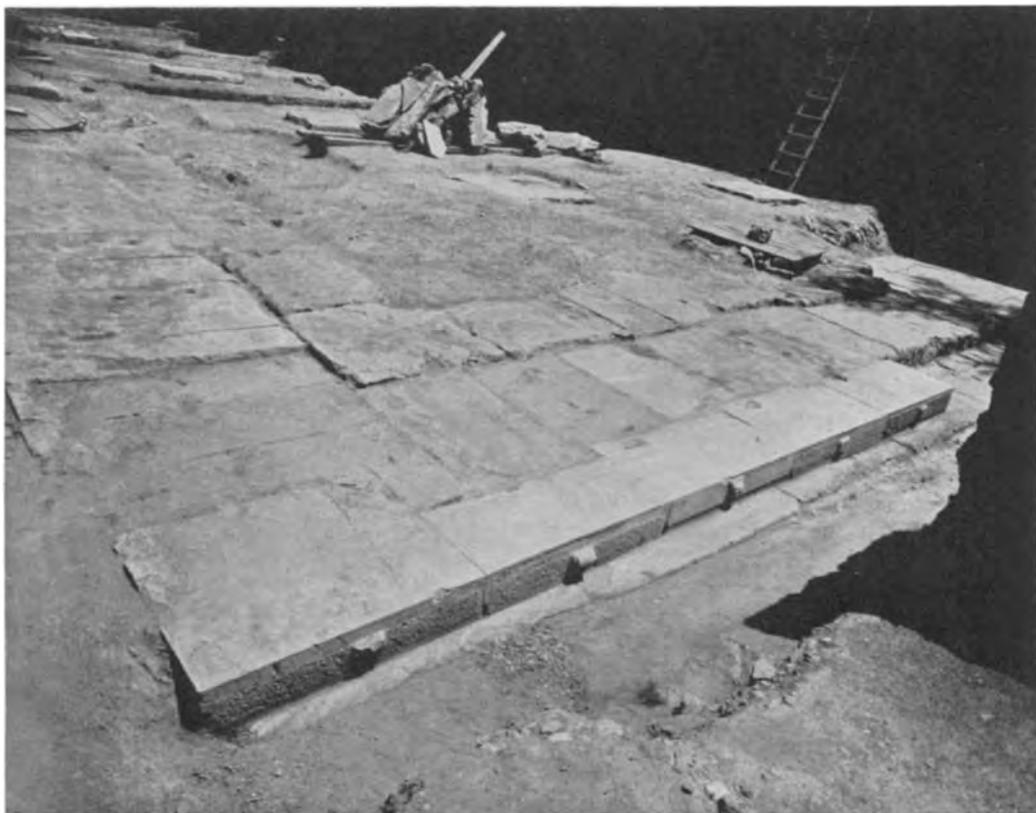


Fig. 5. View of Step at South End of Royal Stoa

The dowels were 0.01 m. by 0.06 m. in section. The upper surface of the marble was dressed with a toothed chisel, with three teeth to the centimetre. Only one clamp appears in this course. It holds the north side of the marble block at the corner to the poros behind. It is a double T clamp, 0.23 m. long, still in place, and well leaded in. Since the block which lay above this corner projected some fifteen centimetres to the west of the joint in the lower course, it was impossible to prevent the corner step block from slipping forward by the usual method of dowelling, and the clamp had to be used. The end of the fifth block where it is exposed shows well cut anathyrosis with a picked joint surface, 0.06 m. to 0.065 m. wide. A well marked setting line shows the continuation of the step to the east as far as the course below is preserved.

Rear Wall

Running north from the corner the foundations of the rear wall are made of soft poros blocks ranging from 0.48 m. to 0.84 m. wide and 1.17 m. to 1.34 m. long, laid as headers. They are well jointed, but neither their inner nor outer edges are lined up. No clamps were used. These blocks bear on their upper surfaces pairs of dowels, with a single pryhole between, for blocks which varied in length from 1.11 m. to 0.97 m.



Fig. 6. The Rear Wall of the Royal Stoa near the North End of the Area

This next course, to judge from the setting line, the position of the dowels, and the pryholes, must have been very nearly 0.80 m. in width, and was presumably either of marble, or of hard poros. The poros foundation at the south end was two courses deep, save at the extreme southwest point where a single course rests on the rock.

Opposite the third inner column, from the south, the construction changes and the headers give way to stretchers and backers. The general thickness of the wall is maintained. The distance between the joints is 1.20 m. to 1.30 m., and at each joint the stones are drafted, to the right of the joint. The field of each block is left quite rough. The setting line for the course above is set 0.08 m. behind the drafted edges of the blocks.

Behind the fifth interior column the foundation becomes deeper (Fig. 6). From two courses it changes to four, and later to five, and it is bedded on the friable rock that underlies this area. Two blocks which belong to the upper course of the foundation remain in place at the north end of the area. The level is maintained very accurately, there being a difference of less than one centimetre in the whole length. As might be expected, the underlying courses are laid alternately as headers and stretchers and show anathyrosis throughout. No clamps or dowels occur save in the top course. The close fitting joints of courses three and four below the top are distinguished by being roughly bevelled, generally on one side of the joint only, and the faces of the blocks have been picked roughly to a plane surface, not always perpendicular. The top of course III (counting down) shows a setting line less than five centimetres behind the average face of the blocks. To this line are set the headers of course II, the southern corner of whose blocks has been drafted so as to give a surface for alignment. The upper and lower edges of this course have been worked so as to produce an approximately straight line 0.02 m. outside of the setting line. This is not a drafting but rather a bevelled cut, done with a chisel.

The upper surface of course II has had the same treatment as the one below. Course I, the top course, has its blocks drafted on both sides of the joint, and a drafting as well along the lower edge. The upper edge was not drafted, nor even bevelled, if we may judge by the remaining two blocks. Their faces are picked off roughly, and are not plumb.

The deepening of the foundation to five courses occurs behind interior column number six. The bottom course here is laid with fairly tight joints, but it is not faced in any way. Course IV increases 0.06 m. at one point, making course III correspondingly shallower. The height of the courses is as follows:

Course I (top)	0.47 m.
Course II	0.47 m.
Course III	0.51 m. to 0.53 m. (0.46 m.)
Course IV	0.42 m. to 0.40 m. (0.47 m.)
Course V	0.45 m. ca.

The east side, (inside), of the foundation is quite rough, and the stones project unevenly.

It is evident from the dowels preserved in the top of Course I at the north end of the area that the joints of the socle, or of the succeeding course, were not placed with any regard to the top foundation course. At this point the length of two blocks seems to have been respectively 1.015 m. and 1.035 m., and a dowel falls across one of the joints in the foundation.

The stones that faced the wall seem on the whole to be of a slightly harder porous than those used as backers or levellers at the bottom of the foundation. The joints of the backers fall within a few centimetres of the stretchers', and the stretchers themselves are not of a uniform thickness but vary as much as ten centimetres.

The cut for the electric railroad to the Piraeus broke through the stoa, and many of its blocks found their way into the modern retaining wall built by the railroad company.

The Piers for the Inner Colonnade

These foundations are roughly 1.30 m. square, and are built up in courses, more or less in number depending on the depth of the rock. Each course consists of two blocks, twice as long as wide, set side by side, and the direction of the joints changes ninety degrees for each course. The only pier of which more than the top course shows has lost the final foundation course, but shows below that three courses respectively 0.45 m., 0.42 m., and 0.44 m. high. The blocks are dressed generally with a broad chisel, save where the upper surface of the last or highest course has been dressed with toothed chisels to receive the next course, probably a plinth for the column. A faintly discernible weather line, or rather pressure line, indicates that this plinth was about 1.15 m. square. In general the upper surface of the top course of the piers lies 0.05 m. above the upper surface of the back wall foundation. The spacing of the piers is not accurate, but they are large enough to allow the plinths to have been set accurately on them without the danger of projecting over at one side or the other. No trace of setting lines can be found and for the spacing of the interior columns we must work by averages. These piers were sunk in square holes cut for them down to bedrock, through the earlier fill, and especially through the layer of burning that seems to date from the Persian invasion.

The floor of the stoa was of packed earth, and has left few traces. The excavation revealed the fragments from the destruction of the building coming as low as the general level of the rock surface within the stoa. If we restore one additional step above the one preserved at the south end of the building we will have very nearly the level of the stoa floor. Two steps above the preserved steps bring the floor so high that there is no possible explanation for the lack of a well-defined stosis some twenty centimetres above the rock at its highest point.

ARCHITECTURAL FRAGMENTS

There remained in the area of the stoa after its destruction only a very few blocks, but many fragments and splinters of its marble architecture. Chief among these is one most important piece, a cornice block from an interior angle. It is of excellent profile, with a bedmold consisting of a cyma reversa, and a strongly accented drip below the edge of the corona. The bedmold is of the usual fifth century type (Fig. 7). It is interesting to observe that the fascia above the bedmold, and the intervias, which are on the same plane, recede slightly from the perpendicular, but the face of the corona seems to have been quite perpendicular. The upper side of the block shows two lifting holes, for tongs, about 0.305 m. apart. The back of the block has been cut into roughly to receive ceiling beams. All this part as well as the upper side of the block is roughly picked, and there is absolutely no indication that there was any higher construction save the roof tiles, which, judging from the absence of any marble

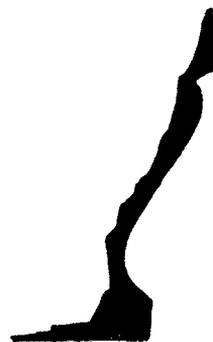


Fig. 7. Bedmold of
Cornice

fragments, were probably of terracotta. The most interesting feature in the way of decoration is the painting of the viae, which are adorned with palmettes of the flame

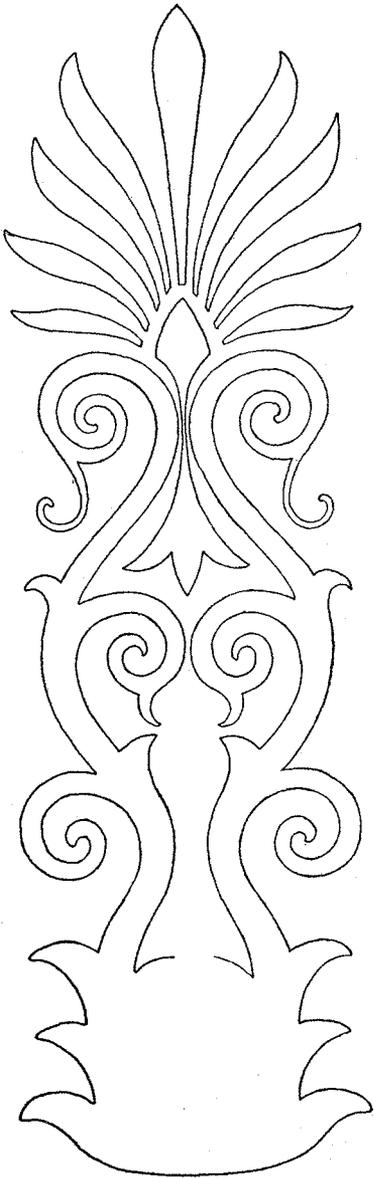


Fig. 8. Palmette from Via

type, issuing from scrolls which in turn spring from an acanthus leaf. The design, somewhat restored on the basis of other fragments found nearby and belonging to the same order, is illustrated in Fig. 8. These palmettes were scratched in outline on the marble and the background was painted red. Whether the ornament itself was colored does not appear. It is clear that the design was applied before the block was hoisted into place, for the via on one side of the block has been worked down nearly a centimetre in order to make the block fit, and the anathyrosis has been recut. This entailed the slicing off of the sides of the scrolls. The band behind the viae was painted red, the mutules show traces of blue color, and the bedmold¹ is decorated with a leaf and tongue done in red, green, and presumably gold. Although no trace of the actual gilt remains, the marble where it was applied has been stained a blackish color, not to be confused with the traces left by black paint. The character of the stain is that which would be left by metal. The soffit of the bedmold where it projected slightly over the metopes was red. The guttae were probably also colored, for each gutta bears an incised circle on its lower face, some three millimetres from the edge. What color was applied here does not appear.

Three other cornice blocks were also found, although none of these retains the overhang of the cornice. One is preserved to its full length, 1.007 m. Another seems to have measured originally 1.008 m. The average width of the mutules was 0.401 m. and that of the viae 0.10 m. with very slight variations.

The cornice blocks were fastened by H clamps, and dowelled at one end to the frieze by dowels of the same dimension as those used for the steps, namely 0.06 m. by 0.01 m. in section. The clamps were 0.23 m. long, and correspond therefore in size with that used in the step course. Lifting holes similar to those on the corner

block are seen on one of the other cornice blocks. This block also shows clearly that no stone ever rested on it, and the difference in the working of the level part

¹ The closest analogy to the profile of this molding is found in the Periclean buildings on the Acropolis.

of the top and of the wash above the overhang can be clearly seen. A rough cutting at the back of the block seems to be for a beam.

Frieze (Fig. 9)

Numerous but very small fragments of poros triglyphs, retaining a great deal of their bright blue coloring, were found among the marble chips dating from the destruction of

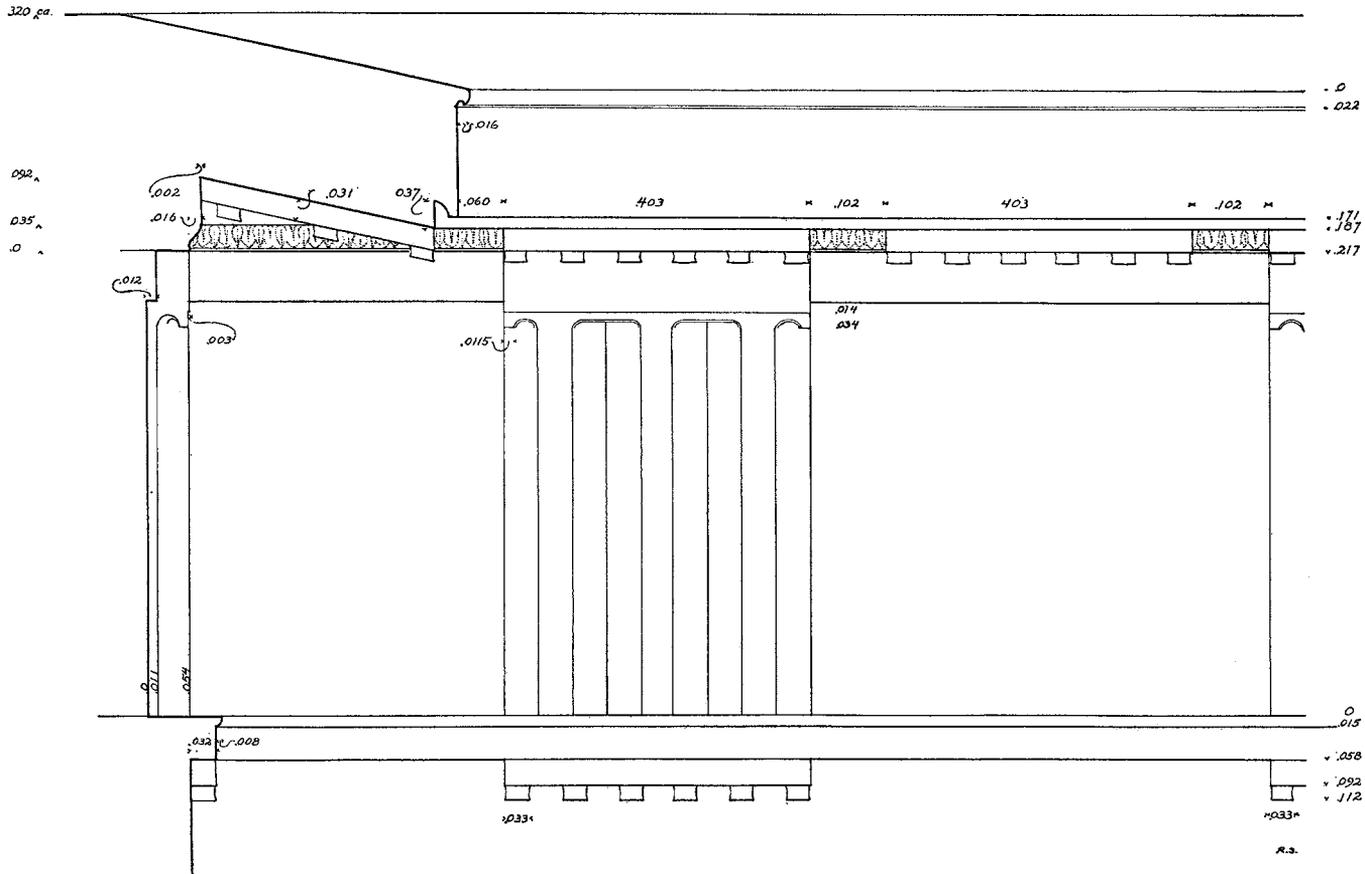


Fig. 9. Restoration of Entablature

the building. The stone is the typical granular Aiginetan poros. These can be restored to make a triglyph ca. 0.40 m. wide, which corresponds to the width of the mutule. The treatment of the corner bevel of the triglyphs is shown in the cut, as are the details of the cutting for the metope slabs. It is not possible at present to recover the height of the frieze.

The metopes may have been, and probably were, of marble. A small fragment was found in this area that may belong, but the actual top of the slab is not preserved, and it must be attributed only with reservations. Still, nothing else has come to light that will fill the requirements.

The Architrave

One fragment of a regula, having a length to the joint of 0.205 m., may safely be attributed to this stoa. If the joint fell in the centre, the regula would measure, accordingly, 0.41 m. in length. The height of the fillet of the taenia and the face of the regula are almost equal, 0.043 m. The guttae are a little less than half the regula, but the taenia is augmented with a delicate ovolo that brings its height to 0.058 m. It will be observed that the sides of the guttae sway in slightly, a peculiarity noticeable in the Periclean buildings on the Acropolis. The under sides of the guttae have an incised circle and a centre point as do those of the mutules. Traces of red paint appear on the face and under surface of the taenia. The workmanship of all the above fragments is of the best quality.

Again we are at a loss to complete the dimensions of the architrave, and must look to future excavations, and the lucky finding of some transported fragments to complete our restorations.

No surely recognisable fragment of the Doric capitals of the outer colonnade remains. Several chips of fluting from the columns were found, and if we restore the drums as having the usual twenty flutes the lower diameter of the columns would have measured from 0.75 m. to 0.80 m. Stylobate blocks are as rare as capitals.

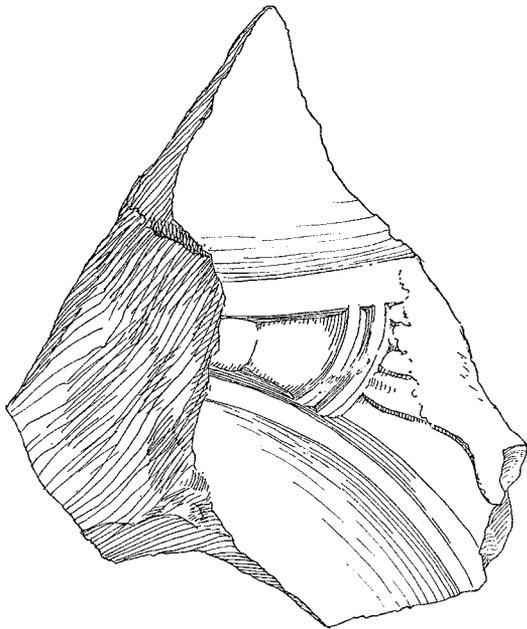


Fig. 10. Fragment of Volute

Interior Order

It might be presumed that the interior order of this stoa was Ionic, and the finding of three chips of an Ionic capital and some bits of fluted column with flat arrisses confirms this supposition. The first piece (Fig. 10) is from the angle formed by the horizontal part of the volute band and the curve of the volute. Here is a delicately carved palmette springing from a calyx with a double rim. The height of the capital is not obtainable. The echinus, where a small corner shows, seems to have been plain and not carved. This is borne out by the second fragment (Fig. 11) that clearly comes from the echinus, and has painted on it a tongue-shaped leaf with a double border and a central spine. The leaf has a double border, the inner one plain, and the outer painted

so as to give the effect of the carved border of V section that appears in the carved examples elsewhere. The tongues are diamond-shaped, with a central spine, and have

a narrow exterior border, widening toward the bottom, of some other color, which was carried as well into the space left between the tongue and the outer border of the leaf. The under surface or bed of the cap is visible on this fragment, and has been worked down smoothly with a toothed chisel. The height of the echinus is not available.

A third fragment, which does not actually fit the first, but is the continuation of the joint between the horizontal and the curved volute band, seems to show a flare out which when taken with that noticeable on the first fragment indicates a corner capital. The only place that this could be used would be on the column of the interior order at the southwest corner of the building, i. e., where the interior colonnade turned to the east.

A piece of the upper part of a column with an astragal may go with this interior order, although the workmanship is apparently not quite as good. Still, on account of

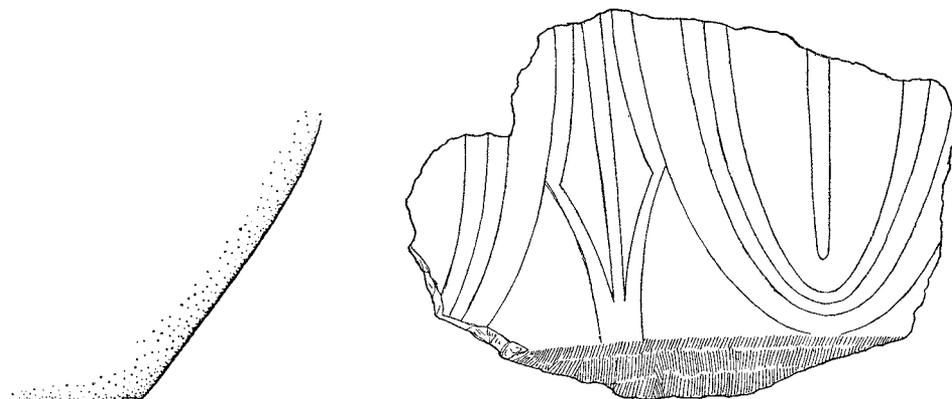


Fig. 11. Fragment of Echinus of interior Order

the rather bad weathering of the piece it is difficult to tell. This gives us the information that the columns were fluted, at least in part, and that the astragal measured 0.02 m. and the fillet below it 0.013 m. in height. The upper diameter, exclusive of the fillet and astragal, would be about 0.60 m.

Several chips of unfluted column drums, the diameter of which may be about 0.60 m. or a little over, were also found, and these may with all probability be assigned to the interior order. The outer surface of the drum is worked very finely with a toothed chisel, save at the joint, where a finer finish has been applied. The bed, where one drum rested on another, is rubbed smooth. Inside of this resting surface, which is about 0.12 m. wide, the core of the drum shows again tooth chisel work.

No fragment of base for these columns has appeared, nor has any part of the plinth on which these bases may have rested been found.

Date of the Building

Certain evidence of the date of the stoa is lacking, but from the style of the fragments preserved we can place it on the one hand as not earlier than the Parthenon, and even from the analogy of the flame palmette to other examples, as late as the first part of the fourth century. The evidence from the fill against the step at the south, and from trial trenches cut through the filling thrown in to form the floor, points to the fifth century, and we may tentatively assign it to the latter half of the fifth century before Christ. A closer dating is of course to be desired, and may well be ascertained on the completion of the excavation. The building lasted through Roman times and apparently was entirely destroyed by the fifth century A.D.

II. THE HELLENISTIC BUILDING

Plate V

At the time when the stoa was constructed, the rock of the Theseum hill came forward to the line of the retaining wall for a length of some thirty or more metres north of the southern end of the structure. The addition of a rectangular building measuring some seventeen by twelve and a half metres necessitated quarrying the rock away and cutting through two earlier cisterns which lay in the area. Actually the back wall of the new building lies more than sixteen metres from the rear wall of the stoa, and there was a space of some three and a half metres between the earlier and the later buildings. How this space was treated is impossible to say. Probably it was unroofed, although no trace of provision for draining the open areas remains.

The foundations of the later building are of squared conglomerate blocks, sunk in a trench cut in the soft friable rock which underlies the area. In places where there is a harder vein of limestone, the foundation courses have not been sunk to so great a depth as is the case elsewhere. There were at least three courses of foundation until the euthynteria level of the new building was reached, which is higher than that of the stoa. The width of the foundations is about 1.30 m., and the height of the courses is generally 0.45 m. No part of the superstructure remains. The plan is bisected by an east-west wall, the eastern half of which rested on a foundation similar to the outer building foundations, some 1.30 m. broad, and the western part on a foundation only 0.85 m. wide, if we can judge by the single block that remains. On this foundation, one course high, rest three re-used blocks which show H clamps, excellent anathyrosis, and in one case a groove cut in the anathyrosis band in which lead was poured for waterproofing. It is probable from the dimensions of the blocks that they came from the back wall of the stoa when it was cut through to provide access to the new building. The blocks are of Aiginetan poros, identical with that used in the triglyphs of the stoa. To the south of these blocks, which formed a wall 0.70 m. thick, are four blocks, less care-

fully laid, with their tops nearly at the same level. They rest partly on earth, partly on the projection of the broad foundation. A cutting on one of them may indicate a step to a sill in a door between the two chambers. On the north of the median wall five blocks remain, also resting partly on the foundation and partly on dirt. These are much better joined, and are brought to a level surface some 0.06 m. below the top of the

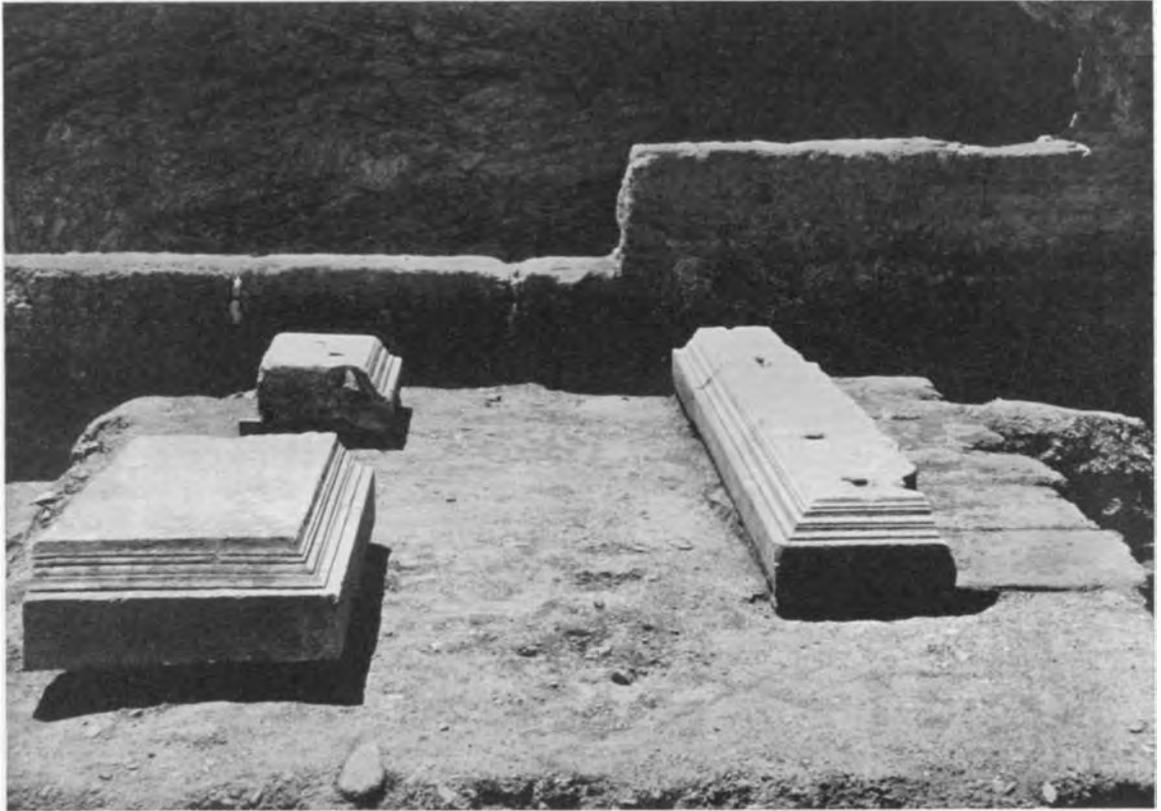


Fig. 12. Marble Base Blocks in Hellenistic Building

central course. Presumably these two flanking rows of blocks represent the foundations of seats that ran around, or at least partly around, the two chambers. From the eastern wall of the northern chamber two poros blocks 0.70 m. wide project one metre into the room. They course with the euthynteria of the building and are only 0.27 m. high. Like the blocks that flank the median wall they rest partly on the foundation and partly on earth or rock. From their position, spaced centrally on the end of the chamber and 2.15 m. apart, they may be supposed to be foundations for some objects set against the wall, though the nature of the objects is not revealed by any cutting on the upper surface of the stones. They could hardly have been very heavy, or the blocks would have had more of a foundation than they were given. Possibly a narrow gallery or balcony ran

across the end of the chamber and was supported by light construction. Cuttings in the rock for two similar foundations appear in the southern chamber.

The excavation revealed a heavy layer of marble chips extending over the whole area of the building save where the walls had been removed. Over this was laid at some time in the Roman period a floor of marble slabs, fifteen of which remain *in situ*. They are preserved only in the northern chamber. The southern chamber has at its east end two marble blocks that formed the base of some construction resembling an altar (Fig. 12). The northeast corner is preserved, and if we restore the length so as to place it symmetrically in the room, we get a dimension of 3.20 m. The depth is not ascertainable. The poros foundation which supported the construction has completely disappeared except for those blocks that remain *in situ*.

Final Period. Late walls

This structure can be dated in the third century before our era on the evidence of the sherds found in the well at the southeast corner and in the two cisterns. All of these were filled when the building was erected. Trial pits in other locations confirm this dating.

After the destruction of the building, presumably towards the end of the Roman period, two walls consisting partly of re-used materials were erected inside of the limits of the north and south boundaries of the building. A cross wall of rubble masonry was built across the northeast corner but there are no indications to show for what purpose this rebuilding served.

III. CISTERNS IN SECTION A

In clearing the slopes of the Kolonos Agoraios three double cisterns were found cut down into the living rock and intended for the storage of rain water. All three are alike in their general features, consisting of two bell-shaped chambers opening above in bottle-neck mouths and connected at their floor levels by underground passages. In the bottom of each chamber, directly below the mouth, there is a shallow circular depression towards which the floor slopes gently from all sides in an arrangement which was doubtless designed to facilitate the cleaning of the cistern. Walls and floors alike are covered by a single coat of stucco made principally from sand, fine gravel and lime. This plaster has survived in firm and well preserved condition save where the rock has broken away behind it.

One of these double cisterns lies in the angle between the back wall of the stoa and the south wall of its late annex. Of the two chambers the southern is the larger, having a maximum depth of 6.37 m. and a lower diameter of ca. 5.34 m. This chamber was too large to be safe because of the faulty nature of the rock, and, therefore, it was found necessary to strengthen the ceiling by a lintel carried on a round column and a square

pier, built up, in part, of re-used materials (Fig. 13). Notwithstanding these precautions, a great mass of the eastern wall, facing towards the stoa, has fallen in. A short surviving section of a *poros* water channel leading into the cistern's mouth from the direction of



Fig. 13. Cistern in Sector A. View of the Interior

the stoa suggests that the reservoir drew its water from the roof of that building. Its mouth opened in a room floored with pebble mosaic and enclosed by walls of *poros* masonry.

A rock-cut passage, some 2.44 m. long and 2.15 m. high, supported at its southern end by a single column, connected this chamber with its northern counterpart (Fig. 14). The latter is of the same height but of smaller diameter, measuring only 2.40 m. across the bottom. The greater part of its neck and mouth was cut away to make room for

the annex to the stoa. The lower part was then filled in with broken stone and earth to carry the southern foundation of the new building.

If one may judge from the pottery found in the filling overlying the bottoms of these two chambers, they must both have gone out of use as water reservoirs towards the close of the fourth century B.C. The lowest filling of the southern chamber was especially interesting. It consisted largely of ashes and charcoal, freely intermingled with miniature

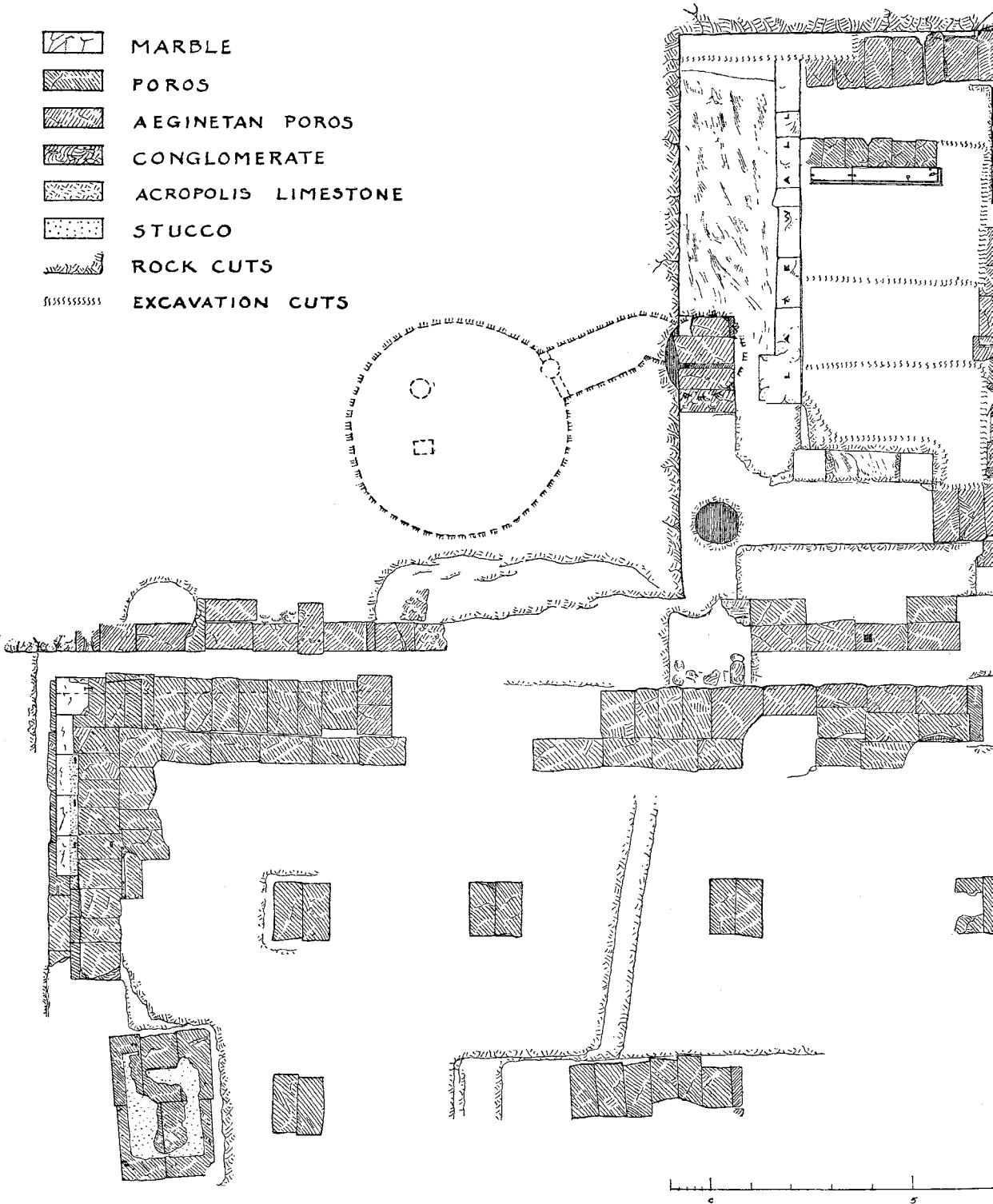


Fig. 14. Cistern in Sector A. Entrance to Side Passage

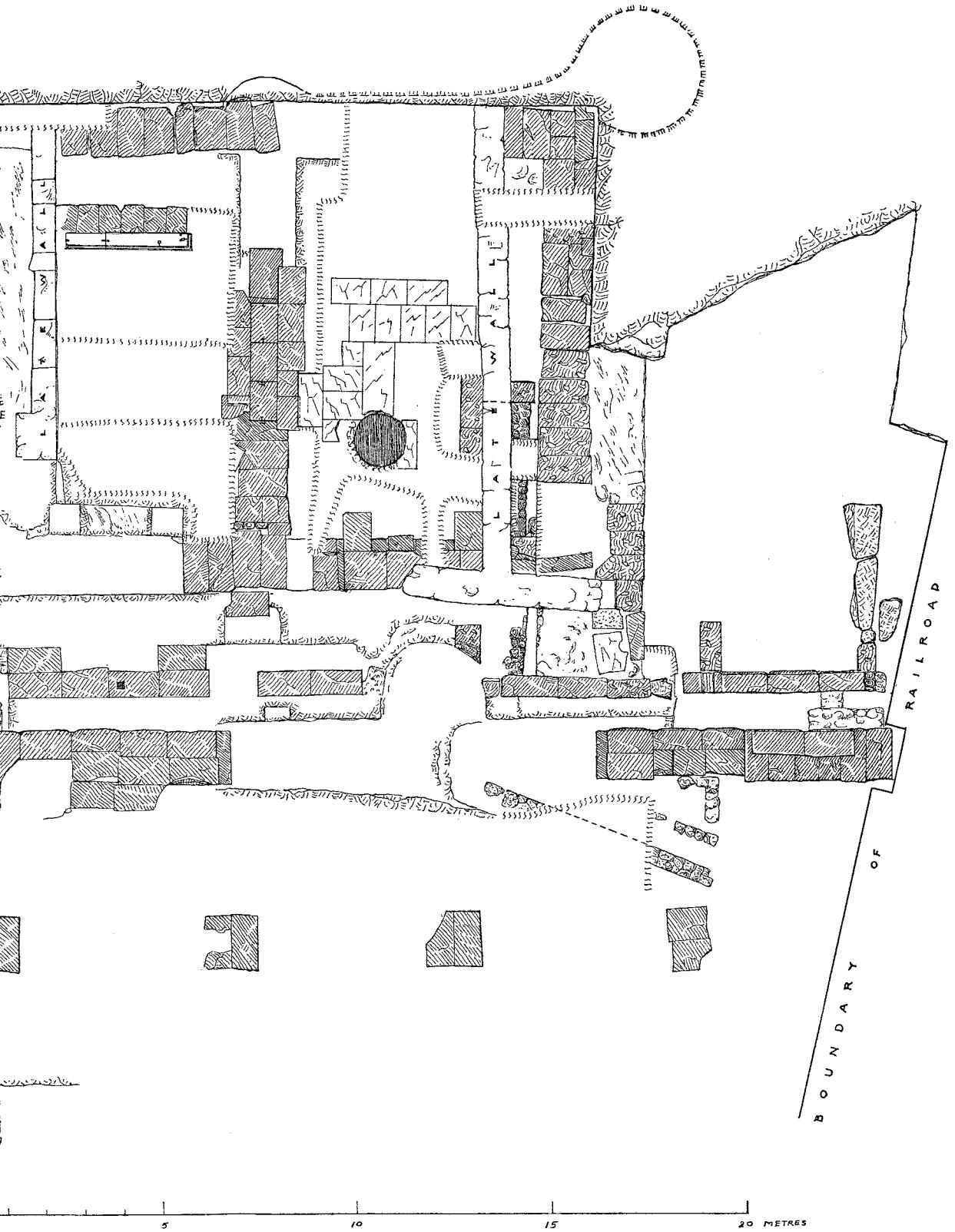
unpainted kraters, kantharoi, and open bowls. In clearing out slightly more than one half of the filling more than five thousand of these vessels were secured. The combination of miniature vases in such numbers with traces of burning suggests that, after the chamber had ceased to be used for the storage of water, it became a refuse dump for some neighbouring sanctuary or altar. The northern chamber yielded no miniature vases or ashes and this circumstance suggests the possibility that the material was brought from the southwest, which is the direction in which the Theseum is located.

Another pair of similar chambers was so situated that the architect of the annex to the stoa, in cutting the western scarp for the accommodation of that building, sliced away the eastern half of the southern chamber and likewise of the underground channel which connected it with the northern. The latter basin was left almost intact just beyond

-  MARBLE
-  POROS
-  AEGINETAN POROS
-  CONGLOMERATE
-  ACROPOLIS LIMESTONE
-  STUCCO
-  ROCK CUTS
-  EXCAVATION CUTS



Plan of the Royal Stoa and of the Heliaea



Royal Stoa and of the Hellenistic Building

the northwest corner of the new building. The southern of the two chambers was very slender, having a lower diameter of only 1.35 m. compared with a depth of 5.30 m. Its lower 0.45 m. was filled in and the western foundation of the annex was carried unbroken across it. The connecting passage-way is ca. 7.70 m. long and 1.75 m. high. The northern chamber is larger, measuring 4.30 m. in depth and 3.30 m. in its lower diameter. A well was cut through its floor in later times and both well and cistern yielded Byzantine pottery. None of the few sherds found in the filling of the southern chamber need be later than the third century B.C.

In clearing the bedrock just to the west of the southwest corner of the annex to the stoa the mouth of another bell-shaped reservoir was found which has a depth of 3.17 m. and a lower diameter 2.70 m. A winding passage, 9.20 m. long and 1.20 m. high, led westward to another larger storage chamber (depth 5.68 m., lower diameter 4.20 m.). This room is an excellent specimen of rock-cutting and plastering and has survived in almost perfect condition. Overlying the floor of each of these chambers was a cone-shaped deposit (0.80–1.00 m. high in the middle) of viscous red earth in which was found a quantity of pottery of the third and second centuries B.C. The upper filling was of late Byzantine times.

The regularly double nature of these cisterns is probably due to the faulty nature of the rock in which it would be safer to cut two or more small chambers rather than one large cavity of equal capacity. This argument is borne out by the excavations of 1932 which have revealed in the still more treacherous bedrock at the northern foot of the Areopagos water storage systems comprising more numerous and smaller chambers connected by underground channels. That one mouth was reserved for the ingress and the other for the drawing of water is disproved by the fact that in the case of the southern chamber of the first cistern in Section A, the inlet in no way interfered with the draw mouth. Indeed, the separate mouths of these cisterns may well have opened in different properties.

The close similarity in plan and in stucco suggests that the three cisterns are not far apart in the date of their construction. We cannot, to be sure, fix that date with certainty. It is probable, however, that the first was cut shortly after the building of the stoa from which it drew its water. As we have seen, it appears to have gone out of use as a cistern towards the end of the fourth century B.C. Of the second cistern we can only say that it was rendered useless by the construction of the stoa annex, probably in the third century B.C. The third cistern was in use in the early Hellenistic period but scarcely later.¹

¹ The above paragraphs on the cisterns were written by Dr. Homer A. Thompson who was in charge of their excavation.

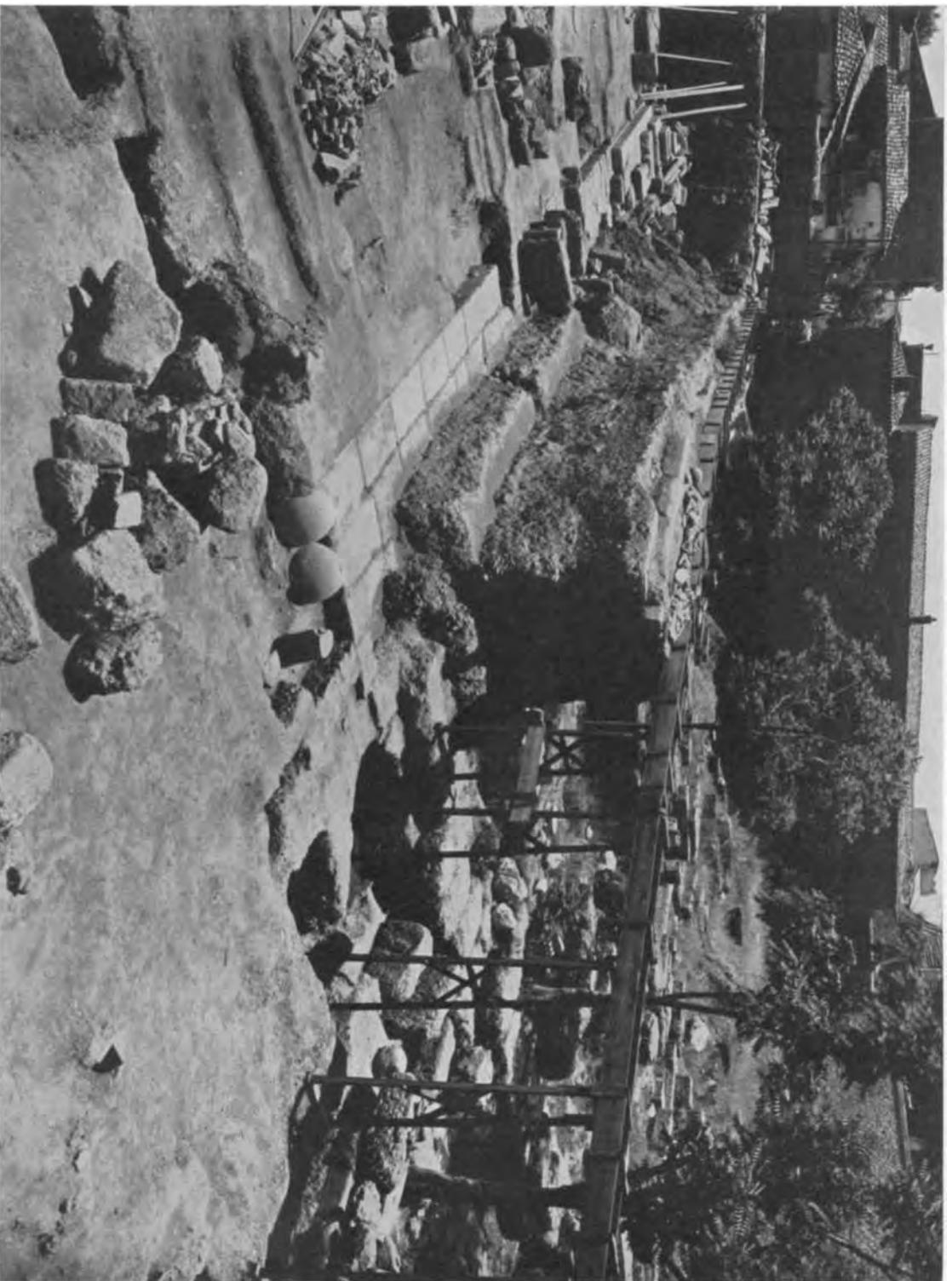


Fig. 15. View of Sector E from the North showing the East Side of the Zeus Stoa

IV. THE ZEUS STOA

The first campaign in 1931 revealed at the southwestern edge of Sector Epsilon, the presence of a colonnade or stoa running parallel with the general line of foundations forming the eastern limit of the buildings in the area excavated previously partly by Doerpfeld and in part by the Greek Archaeological Society¹ (Fig. 15). The second campaign followed this stoa to its northern limit. The southern end of the stoa appears at the extreme southern limit of the excavation, but until further exploration can be made very little can be said about it. The present report, therefore, will be confined to a discussion of the remains *in situ*, but their relation with the complex of buildings to the west must wait for explanation until the entire section can be uncovered.

No architectural fragments have come to light that determine whether the stoa was Ionic or Corinthian, although the former is more probably the case. One base of Pentelic marble remains *in situ* above a stylobate and two steps of Hymettus marble. These in turn are based on a euthynteria course of Piraeus stone, which towards the northern end of the stoa rests on a lower course of the same material. The subfoundation, increasing in depth to the north with the slope of the land, is of conglomerate, as are the filling courses behind euthynteria and steps.

Altogether, a length of nearly forty metres of this stoa has come to light. It is broken from time to time by late pits which were sunk through the structure and, save at the south end, has been stripped down to the subfoundations, or to the course lying below the euthynteria. Many of the blocks of the latter were turned up on end and built into a late wall that ran along the course of the colonnade. Some of these have since been restored to their places, as has also one block of the lower step which was found lying nearby.

Construction

A careful examination of the construction and technique of the building gives the following characteristics. The conglomerate blocks of the subfoundation were laid on rock or hard-pan, and are only roughly squared. Their upper surfaces are carefully levelled off to receive the euthynteria, which consists of blocks of Piraeus stone, laid as headers and carefully jointed with anathyrosis on the edges adjacent to the face of the stones, from which the square lifting bosses have not been removed. The euthynteria blocks are roughly 1.40 m. long and 0.65 m. wide. The height of the course is about 0.35 m., varying slightly with the inequality of the foundations. As has been already stated, there is a well finished course below the euthynteria which runs from the north end of the stoa to a point some 9.50 m. south. It consists of a series of stretchers varying from 1.35 m. to 1.41 m. in length, 0.65 m. to 0.70 m. in width, and 0.475 m. high. Backers of conglomerate lie behind these. This course also shows lifting bosses. The joints are bevelled on one edge with the toothed chisel, and the remainder of the surface is picked.

¹ W. Judeich, *Topographie von Athen*, 2nd Ed., p. 331.

The effect is not that of a carefully finished course, and it is doubtful whether it was ever meant to be seen. If it was, then the lowest marble step must, at the north end, have been raised too far above the ground level to be of any use (Fig. 16). Probably the finishing of this lower course was intended as a safeguard against a possible shift in the level of the Agora, or it may merely have provided for temporary visibility while



Fig. 16. North End of the Zeus Stoa

the finished level of the grade was being determined. In Roman times, at any rate, this course was visible at the north end of the stoa, where it returns for 2.10 m. to the west and then turns south against the end wall foundation. No setting line can be traced, but from the weathering it seems that the euthynteria was set back some 0.07 m. from the face of the course below it.

The face of the euthynteria course is carefully dressed with flush joints. No clamps or dowels are to be found until the first step is reached. This consisted of blocks of Hymettus marble, ranging from 1.21 m. to 1.30 m. long, and varying in depth. The backs are quite roughly cut and have the conglomerate backers fitted to them (Fig. 17). The height of the step was 0.275 m., the tread 0.329 m. to the setting line for the second

step. Each block was dowelled to the euthynteria with square dowels, and clamped at each end to the neighbouring step block with one, and to the conglomerate backer with two hook clamps, set in a slightly dovetailed cutting. Well defined anathyrosis, with a joint surface about 0.06 m. to 0.08 m. wide, occurs at the ends of each block. The face of the step, which is not drafted at the base, is finished in its lower half with a toothed



Fig. 17. Zeus Stoa. View of Base *in situ* from the West

chisel and is picked above. There is no projection of one surface beyond the other but the difference in working is clearly visible (Fig. 18).

Only four blocks of the second step remain, but the setting lines on the lower step show that their lengths ranged from 1.195 m. to 1.372 m. This step was only 0.279 m. high and had a tread of 0.335 m. to the setting line for the stylobate. The blocks were fastened to the lower step by two square dowels. Those at the southern end of each block come at the joint and were leaded from the end of the stone before the next block was set. The other dowels occur as much as 0.15 m. from the north end of the blocks and are equipped with pour channels, leaded from the face of the step. This rather unusual arrangement might suggest that the steps had been reset, as does also

the fact that some of the setting lines for the blocks have been struck twice. The clamps on the other hand show no clear trace of a second use, though they may belong to the resetting of the blocks. It seems hardly likely, however, that so large and important a colonnade could have been moved. A restoration would be unlikely to affect the lower part of the building, and there are no other signs of this having been



Fig. 18. Zeus Stoa. View of Base from the East

done. The finish of the blocks of the second step is in every way similar to that of the blocks of the first, save that there is a drafting along the lower edge, some 0.04 m. high and 0.005 m. deep, the upper edge of the drafting being very slightly bevelled. It may be noted here that the setting lines that governed the face of each succeeding course agree with the foremost face of the blocks and not with the drafting which was cut afterward.

A serious discrepancy occurs in the case of the only block of the stylobate that survives. Here, although the block is still dowelled in its place, the face of the block lies about one centimetre behind the setting line. It is probable that the protecting surface of the stylobate was worked back relatively further than was the case with the

second step. The length of the stylobate block is 1.29 m., the height 0.25 m., and the depth about 0.89 m. The back is only roughly squared, being concealed by the floor of the stoa, and only the upper edge is brought to a line. It shows some wear, as though the floor of the stoa, consisting of hard packed dirt, and not pavement, were, as might



Fig. 19. South End of Zeus Stoa

be expected, a trifle lower. The base was fastened to the stylobate with two dowels, presumably square. The ends of the pour channels may be seen. On the top of the base are two dowels, 0.06 m. by 0.05 m. and 0.04 m. deep, for securing the column. Fragments of fluted columns which agree in diameter with the base have been found, but no complete drum exists. Of the capitals and entablature there is no sure trace.

It is clear from an inspection of the plan that this colonnade served as an ornamental façade for the complex of chambers to the west. If we take the length (1.29 m.) of the remaining stylobate block for the interaxial spacing of the columns, we can restore a façade of sixteen columns. Whether the break caused by the base for a monument that seems to form the southern limit of the colonnade is actually the end of the structure does not yet appear (Fig. 19).



Fig. 20. View of Sector E from the South with the Fenced Area in the Centre

The date of the colonnade is likewise not fixed by any factual evidence save technique, and a close inspection seems to indicate that it may belong to the late third, but more probably to the early second century B.C. The setting of the step blocks and the clamps which hold them to their backers, as well as the deeply grooved setting lines, resemble the work on the stoa of Attalus, which is dated in the second century. The actual workmanship and stone-cutting are, however, superior.

V. THE "PERIPHLAGMA"

Midway between the Altar of the Twelve Gods (?) and the Pisistratid drain, that runs through the excavations, lies a construction the purpose of which is at the same time clear and yet most mystifying (Fig. 20). A foundation ca. 18.40 m. long and 3.68 m. wide with marks of post holes, and with the stumps of two marble posts still *in situ*, surrounds an area in which was a long narrow foundation, part of which is still preserved (Fig. 21). The blocks which form the foundation average 1.27 m. long by 0.47 m. wide. Their depth varies from 0.50 m. to 0.32 m., the deeper blocks being generally nearer the north end of the foundation, which is bedded in or on the hard fill that formed the level of the agora at this point. Only at the extreme north end of the structure did the blocks rest on masonry, and here it is only a question of their having been laid over part of an earlier foundation. The length of the blocks gives the spacing of the posts of the fence (1.27 m.), and originally there were fifteen posts on the sides and four on the ends, the corner posts being counted twice. Each post was fastened by two oblong dowels, and the upper surface of the foundation or sill was in a few cases dressed off slightly to accommodate the post, but generally the trace of the post on the masonry is very slight. The dowels measure 0.055 m. by 0.012 m. The posts, from the

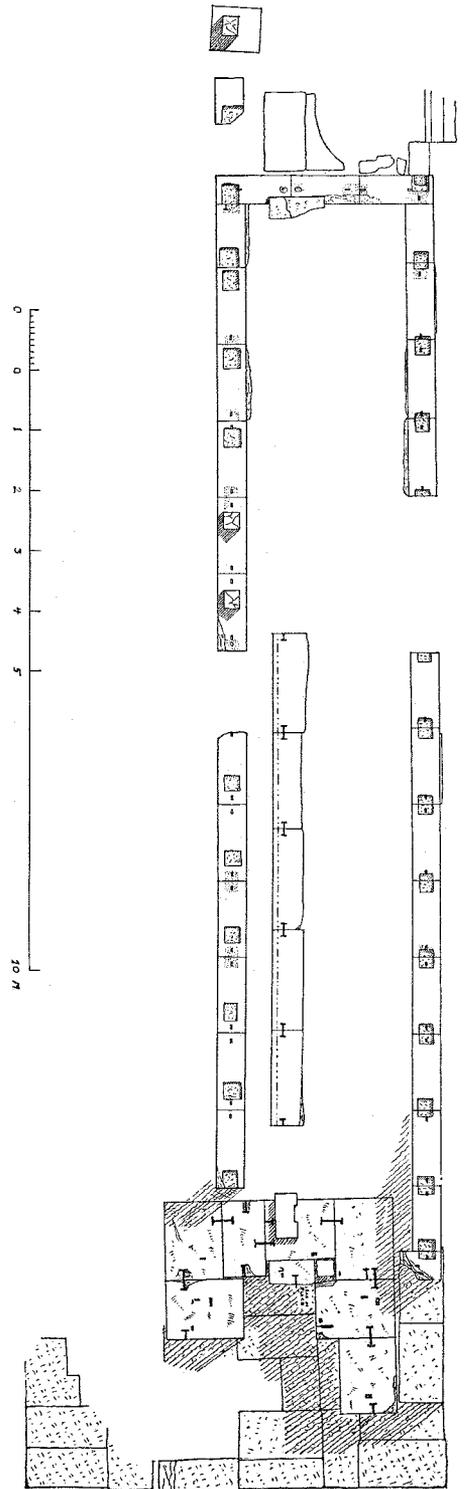


Fig. 21. Plan of "Periphragma"

traces on the foundation, were about 0.33 m. by 0.25 m. in section at the foot. The corner posts were presumably square and had the larger dimension. Both within and without the boundary of the fence the foundation is dressed down smooth for a portion of the total height of the blocks. On the outside this dressing does not maintain an even height but is deeper at the north end, extending down 0.28 m. from the top of the course. At the south end the depth is less, being only 0.18 m. The difference in level occurs about one third of the way from the north corner, on the west side.

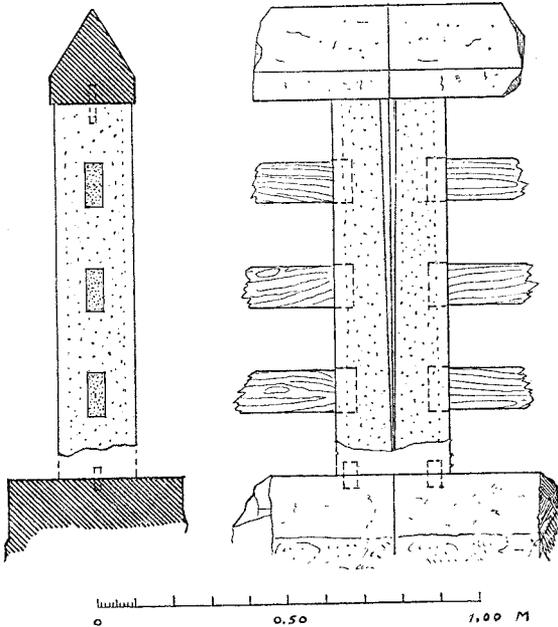


Fig. 22. Limestone Post and Capping Stone

On the east the break occurs nearer the north end and is almost exactly opposite the extension of the south side of the altar steps. On the inside of the circuit the dressing is only about 0.10 m. deep. At some period in the history of this foundation there was an alteration. The original posts were removed and were replaced by a new series with about the same spacing, although considerably more irregular. The new uprights were not dowelled to the base, but were set in holes cut in the foundation to a depth of 0.12 m. to 0.05 m. and were leaded in. Two stumps of these remain *in situ*. The enclosure was at the same time lengthened towards the south by two more uprights, making the total length about 21.00 m. The extra posts were set in separate blocks, one a re-used statue base with an inscription.

The southeast corner post of the new series still remains in place. It is of marble which is rather a poor quality of Pentelic, and it shows holes for wooden rails 0.09 m. by 0.03 m. On the east side there is evidence for two rails on the post that remains *in situ*, set about a foot apart, with the bottom rail a foot above the foundation. Neither the height nor the spacing of the rails was uniform. This can be seen on two other posts remaining *in situ*. One almost complete post, of Hymettus marble, has three rail holes preserved on each side.

A post lying near the foundation, made of limestone, shows very much better workmanship, and may belong to the earlier series, although its section does not correspond with that indicated on the foundation. Since the foot is broken away it is possible to restore a base of large enough section to fit the tooling on the foundation, but there is no certain evidence. A drawing of this post is given in Fig. 22. The workmanship is very good, the corners being finished smooth and the field of the four sides being picked. There is, however, no perceptible line of demarcation between the

surfaces. The rail holes are slightly larger than in the marble posts, and measure 0.047 m. by 0.115 m.

As will be noted, the face of the post shows a V-shaped cutting which divides the upright into two jambs. An iron dowel is still preserved and a part of the capping stone, quite possibly the one that fitted this actual post, has been found. It is triangular in section, with the lower edges of the triangle chamfered off so as to give a vertical fascia about 0.07 m. high. At the end, where a joint came over the centre of the upright, is a dowel cutting, and on one of the sloping faces, presumably the one that originally was turned towards the inside of the fence, is a hook clamp.¹

A capping stone, of similar section, but lacking any clamps or dowels, made of marble, was also found built into a mediaeval cistern not far off. Presumably it should be assigned to the marble series, but it is difficult to see how it could have been held in place.

What the structure was that this carefully built fence surrounded is not clear. Five limestone blocks remain *in situ* on the east side. They are held together by H clamps, and the face of each block has been dressed down smooth for a distance of about 0.16 m. from the top which lies about 0.10 m. higher than the top of the foundation for the fence. A well marked weather line, set back 0.09 m. from the face of the course, gives the front line of the course above, but what this course was is not known. Inasmuch as the five blocks are laid directly on dirt, or rather hard fill, they could not have been intended to carry any great weight. The space between the inner foundation or euthynteria, and the inner edge of the fence course, about 0.41 m., seems never to have had anything save an earth floor. Unfortunately both ends of the original inner basis have disappeared. Probably they were spaced as far from the ends of the fence as were the sides. When the fence was lengthened the inner basis seems to have been carried out to the south, and a limestone slab, nearly but not quite on line with the face of the inner euthynteria, as well as some foundations to the south of the original fence, strengthen this hypothesis. The fence foundation at the south also shows evidence of having been trimmed to accommodate another slab similar to the one *in situ*, and adjacent to it on the west. The cutting ends at a distance nearly enough the same distance from the west fence to make the addition centre on the two lines of fence.

It should be noted that the enclosure does not have parallel sides. The divergence is about 0.12 m., the south end being the narrower.

¹ A second fragment of a capping stone was discovered in the old excavations. It is similar in section to the piece above mentioned, but is actually a corner piece.

VI. THE ALTAR

Near the eastern limit of Sector Epsilon is a rectangular structure of which are preserved, on the west side, four marble steps, rising above a euthynteria of Piraeus stone (Fig. 23). Although the eastern half of the monument was badly quarried away in mediaeval times, the foundations and the southeast corner block of the euthynteria



Fig. 23. View of Altar from the Southwest

remain, and make it possible to ascertain the original size of the building. It was a rectangle measuring, on the bottom step, 8.76 m. by 5.43 m. The setting lines for the southeast corner step can be seen on the course below, and the restoration of the original dimensions is certain.

The foundations are of conglomerate, the blocks squared but not very closely matched (Figs. 24, 25). They rest on the friable native rock that underlies this portion of the Agora. The euthynteria course is 0.495 m. high, built of carefully jointed blocks which are fastened together with H clamps. The outer face of the course is worked

down smooth for a distance of about 0.17 m. from the upper edge, and a smooth band 0.05 m. to 0.10 m. wide, in the same plane as this upper facing, is found on either side of the vertical joints. The remainder of the face of each stone is left rough but does not project more than about five centimetres. Only the outer blocks of this course were of Piraeus stone. The remainder, or filling blocks of the course, were of conglomerate or poros and so far as can be seen only the outer ring of blocks was clamped together.



Fig. 24. View of Altar from the Northeast

The steps, four in number, are found in two courses of marble, each the height of two steps (Figs. 26, 27). The treads, beginning at the bottom, average respectively 0.327 m., 0.3275 m., and 0.325 m. in width. The top step has no definite width, but formed a platform at the top of the structure. It will be noted that the treads measure practically one Attic foot. At either end of the building, to north and south, the steps are returned as a narrow ledge only 0.077 m. wide for the first two steps and even less (0.05 m.) for the third. A shallow drafting 0.042 m. high runs around the base of each step. The position of the setting line which is visible on the top of the first course shows that the steps were set in place before the drafting was cut. A very faint second setting line, slightly inside of the first, has a significance that will appear below. The height of the

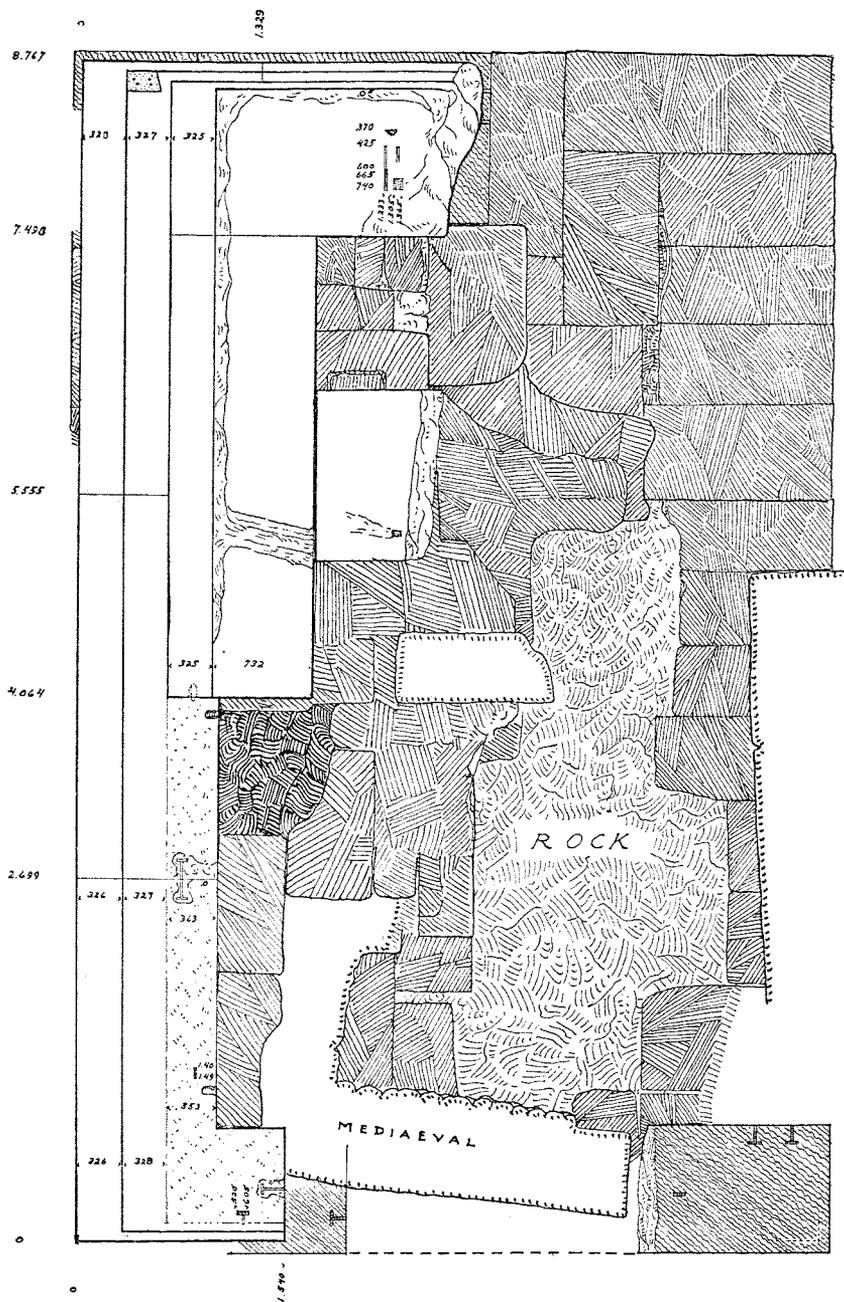


Fig. 25. Plan of Altar

steps varies from 0.288 m., for the top step at the west side to 0.32 m. for the bottom step. Inasmuch as the top step at the north end of the building, where it is least worn, gives a height of 0.30 m., this may be taken for very nearly the height of the step. The fortunate preservation of a fragment of one of the eastern corners of the upper pair of steps gives the valuable information that the narrow ledges were continued around the east side of the monument and that consequently the only approach was from the west. Given the dimensions of the structure, or rather of the platform which was left at the top of the steps, 8.35 m. by 4.247 m., and the fact that the approach lies on the west, it seems clear that the building was an altar.¹

At the south end of the west side the lower marble course is exposed and the clamps and dowels are clearly visible. The clamps are of the H type, from 0.34 m. to 0.36 m. long. The dowels are of the thin oblong type and measure about 0.02 m. by 0.09 m. in section. The blocks were dowelled in one end only. The dowel near the southwest

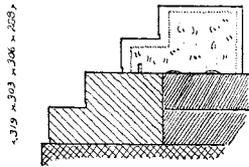


Fig. 26. Section of Steps

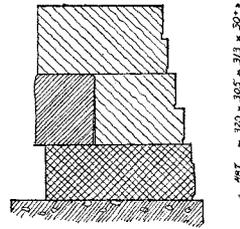


Fig. 27. Section of North End

corner is provided with a narrow rectangular pour channel showing that the block which it fastened was the last one of its course to be laid. Hence it follows, if we may restore only two blocks along the south face of the upper course, that the southeast block was the first to be put in place.

Careful inspection of the dowel holes reveals the fact that the dowels seem to have been chiselled out with some care. A deep groove was cut on one side, or all around the dowel, which was then removed (Fig. 28). This fact might pass unnoticed were it not for the fact that the clamps show an entirely different state of affairs. Here the marble has been recklessly hacked away. Further inspection makes the removal of the metal of the dowel at the south end of the preserved second marble course a bit of magic, unless the block had been raised. Otherwise it would have been impossible to free the dowel without causing far more damage to the marble than is the case. It seems senseless to raise a very large block, as this was, for the purpose of removing a small piece of bronze, and then returning it to its place, or very nearly to its place, for there is a slight shift of the block to the west. The pry holes in the

¹ The great altar of Demeter at Pergamon has about the same dimensions, length 8.60 m., breadth 4.50 m. W. Doerpfeld, *Ath. Mitt.* XXXV, 1910, pp. 374 ff. Pauly-Wissowa, s.v. altar, I², p. 1655.

eastern edge of the block of the lower marble course seem rather strange, and there is no corresponding mark in the poros backer adjacent to one of these holes. A patch at the northwest corner of the lower step has two sets of pin holes for fastening it in place. Apparently the repair fell out once and was replaced. One is inclined to think that some alteration was made to the structure, or even that it was moved in antiquity from some other position.



Fig. 28. Detail of Holes for Clamps and Dowels

explain the presence of the letter *alpha* with a broken bar which occurs on the eastern face of the southwest corner block. It is not well cut, but is, rather, scratched on to the stone. The workmanship of the step blocks and all the technical indications point to a date much earlier than the letter would allow, and it is necessary to have the monument disassembled in order to have the letter placed where it is. There is, moreover, on the south end of the block that carries the third and fourth steps a sign, *gamma*, standing on a *pi*.¹ It seems then that when the building was re-erected the southwest corner

Further inspection confirms this hypothesis. There are a number of spalls in the marble along the lower edge of the bottom step, particularly along the north side. Inasmuch as the north and south ends of the step are absolutely level, with a rise of one centimetre at the centre, and since the second step is almost absolutely level for its whole length, one can hardly account for these breaks by settling. They seem rather to be the result of damage caused by prying up the block. The confirming piece of evidence is that, on the north side, the first joint from the corner of the lower marble course shows that the upper surface of the course was worked off rather roughly so as to make an even bed for the block above, but the ledge which corresponds to the first step is not worked off and here the upper surfaces have a difference in level of over a millimetre.

This evidence for the removal and re-erection of the monument allows us to

¹ These letters would have served for reassembling the structure as did the letters on the frieze surmounting the Beulé gate. Compare also the reconstruction of the altar in front of the temple at Delphi. *Fouilles de Delphes II*, pp. 124 ff.

blocks were the first to be laid, and that the work proceeded in a clockwise direction instead of the counter-clockwise direction that was the case in the former laying. The dowels were never replaced. The letters A N were scratched on the top of the east side of the long block of the second course.

The top northwest corner block bears on its upper surface two dowel holes. They are of different types, one the long narrow variety, the other square. Both have pour channels, but the oblong dowel has a much better cut channel than its neighbour.

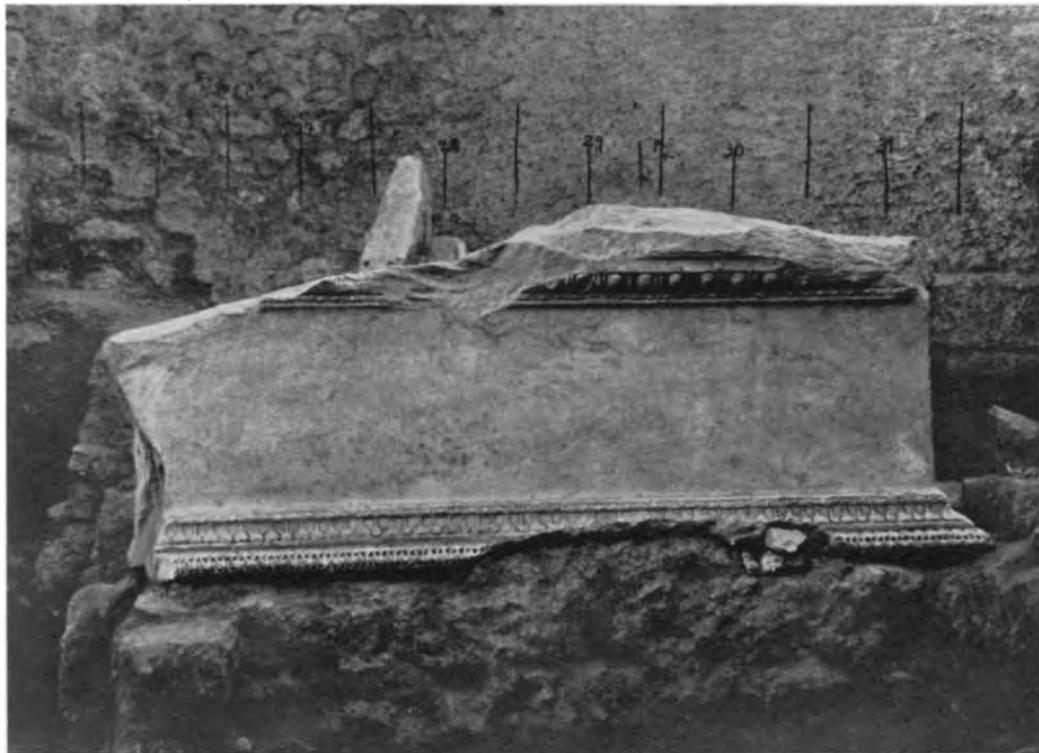


Fig. 29. Altar. Detail of Marble Orthostate

A pryhole also appears, in a place where it must have been visible after the block for which it served had been laid. Presumably it is to be associated with the square dowel, which is the later type. Surrounding these cuttings is a slightly roughened surface which has no well defined limits and does not aid materially in replacing or restoring what came above. The one block of the platform proper, partly cut away in mediaeval times, has a small square dowel, but the cutting is so shallow that it is hard to imagine that it ever served for a stone above.

Just east of the remains of the monument there came to light a very large marble podium block with richly carved moldings at the top and bottom (Fig. 29). It is not

preserved to its full length. The present length is about 2.90 m. As will be seen from the drawing (Fig. 30), which gives the principal dimensions, it was a corner piece. The

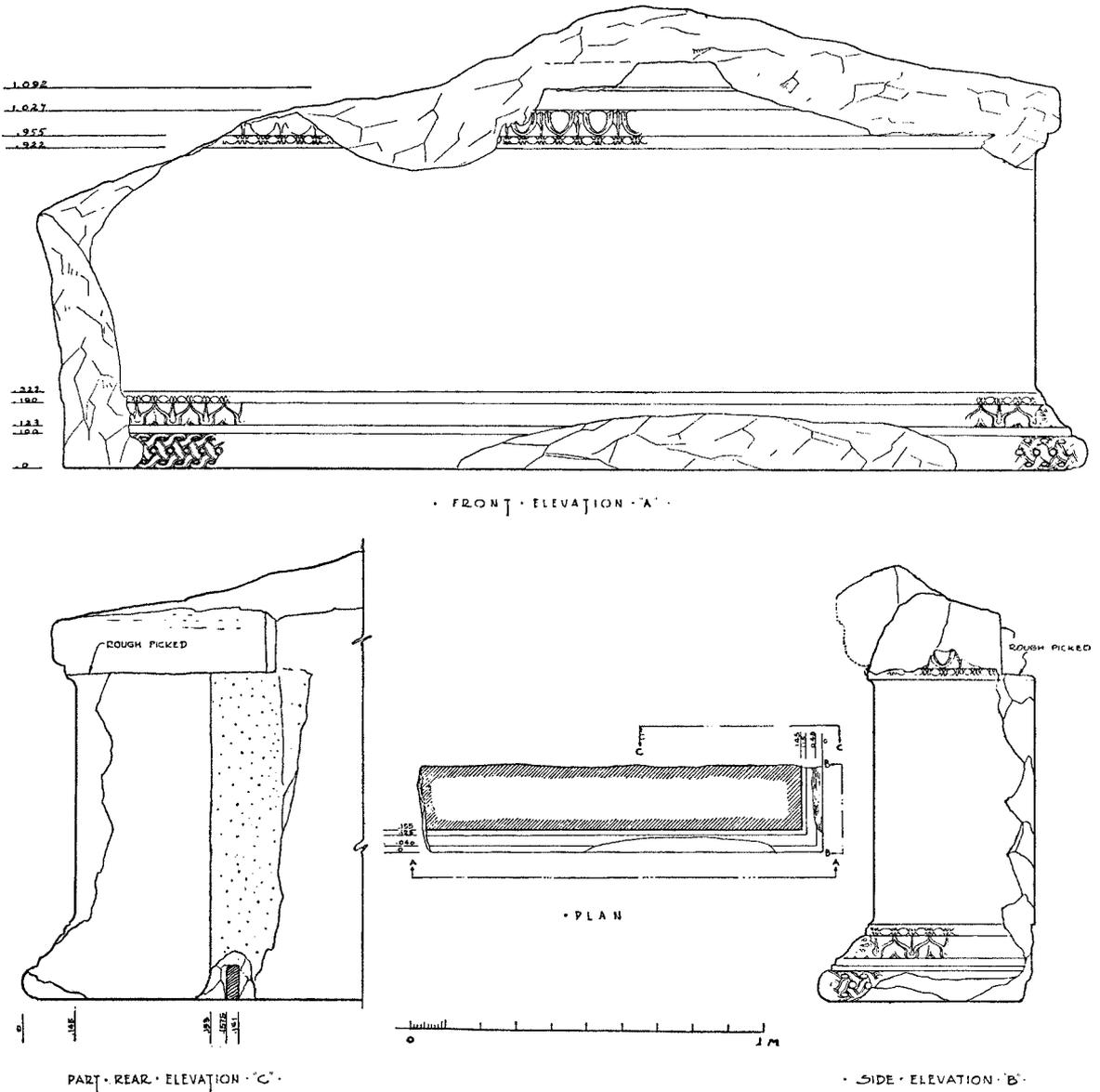


Fig. 30. Drawing of Orthostate from Altar

base consists of a torus carved with guilloche, surmounted by a cyma with a Lesbian leaf, which in turn is finished off with a delicate bead and reel. The cap carries an ovolo with egg and tongue above a bead and reel. Above the ovolo is a broad fascia

and above that the block is crowned with an inverted cavetto. Although from the mass of marble that extends some fifteen centimetres higher it is plain that there was some further treatment, it is impossible to say what form it took. On the narrow end of the block the ornament returned, but the upper moldings were partly on a separate piece and fitted in. A large dowel hole is preserved near the corner. The back is very roughly finished but anathyrosis for the adjacent block is quite apparent.

The quality of the decoration seems at first glance very good. Closer inspection shows that there is considerable irregularity in the spacing of the ornament, and the finish, even allowing for the considerable wear on the lower moldings, is not of the finest. The eggs do not reach down so far on the ovolo as in the Erechtheum work, and the tongues are not so finely cut. The execution of the guilloche ornament is likewise not as carefully done, and the whole effect is that of a copy of the ornamental work of an earlier period.

From the position which the block now occupies near the southeast corner of the foundation, and from the height at which it stands, which is approximately level with the top of the platform, it seems that in all probability it must be associated with the altar. Of the four corners from which it could have come, the northwest corner seems to be ruled out on account of the impossibility of fitting the dowel holes together. The fact that the lower moldings have been badly worn would indicate that originally the block faced the west, and stood at the southwest corner of the platform, where there was a broad landing for those making offerings.¹

With relatively so little material to work from, the simplest restoration is the safest until further evidence comes to light. It seems reasonable, therefore, to suggest that on the platform stood a rectangular altar, some 2.80 m. by 7.50 m., with a space around it on three sides about 0.42 m. wide, and on the front a broader platform measuring about a metre in width. A more elaborate restoration giving the altar wings that flanked additional steps on the west side is possible, but in the face of lack of evidence may be thought rather too hypothetical at the present time.² Whether anything stood on the altar itself, whether there were volute-like horns at the corners, and to whom the altar was actually dedicated, are questions that can at present not be answered.

The date of the structure, if we may judge from technique, should fall near the end of the fifth century, but this applies only to the steps. It seems more reasonable to place the first construction in the latter part of the fourth century before Christ, and to assign to the Hellenistic period, when there seems to have been a considerable rearrangement of this part of the Agora, the removal of the altar and its re-erection in another location, probably not far from where it originally stood. Trial pits around the

¹ Cf. Altar of Demeter at Pergamon. W. Doerpfeld, *Ath. Mitt.* XXXV, 1910, pp. 374 ff.

² The height of the orthostate, ca. 1.30 m., is perhaps an argument for assuming that it was not part of the altar proper, but came from a podium with steps on which the altar itself was supported.

foundations have not yielded conclusive evidence, and in any case they might be expected to show only the date of the reconstruction.

In mediaeval times much or most of the altar itself was removed, but a wall standing on top of the upper west step preserved this portion. From the position that it now occupies it is probable that the orthostate block remained *in situ* on the southwest corner while the eastern part of the structure was torn out. Later on, the level having again filled up, it was swung out of its place into that where it now stands.

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