## THE NORTHEAST CORNER OF THE PARTHENON

IIF WE bear in mind that the Propylaea of the Acropolis of Athens was at the west end of the Acropolis, that the main entrance of the Parthenon faced east, and that the axis of the Propylaea was considerably to the north of the axis of the Parthenon, we shall understand that the most direct route from the Propylaea to the main entrance of the Parthenon passed around the northeast corner of the temple (cf. Figs. 1 and 2). This is the route which the masses of the people would naturally take in going from the Propylaea to the most important shrine on the Acropolis. Moreover, visitors in almost the entire northern half of the Acropolis would pass around the same corner on their way to the east cella of the Parthenon (cf. Fig. 2). There can be no doubt, therefore, that many persons rounded the corner in question. As votive offerings are set up to be seen, the best sites for them are those places which large numbers of people are wont to pass. We would, then, expect to find such monuments clustered about the northeast corner of the Parthenon. As a matter of fact there is considerable evidence of one kind or another to show that this was so. For example, if we examine the numerous rock cuttings in the neighborhood of the northeast corner, we find that many of them are suitable for votive offerings (cf. Fig. 3). And the ancient literary


Fig. 1. Northeast Corner of the Parthenon: Restoration of the Latter Part of the First Century B. C. sources at our disposal are no less valuable for our study as we shall see. Certainly the area around the northeast corner of the Parthenon was an important section of the Acropolis.

Pausanias has left us the most valuable account of the Acropolis of Athens. When he made his visit in about the middle of the second century after Christ, he saw certain monuments the locations of which are now known. Of the various fixed points along his route only those of Ge and the east pediment of the Parthenon concern our special investigation, because Pausanias must have passed the northeast corner of the Parthenon in going from one to the other of these fixed points. The position of the monument to Ge is known from an inscription cut in the living rock


Fig. 2. Model of the Acropolis of Athens: Restoration of the latter Part of the First Century B. C.
of the Acropolis-the inscription and its accompanying rock cutting for the statue prove that the monument stood about 9.00 m . north of the approximate middle of the Parthenon (Fig. 3, 1). And when Pausanias is describing the eastern pediment of the Parthenon, he is surely standing in front of that temple; that is, he has rounded the northeast corner of the Parthenon. Our problem, then, in so far as Pausanias' description is concerned, is to ascertain if the positions of any of the monuments he saw while passing from the statue of Ge to the position in front of the east pediment. can be determined. In connection with this part of his route he says:

There is also an image of Earth praying Zeus to rain on her, either because the Athenians themselves needed rain, or because there was a drought all over Greece. Here also is a statue of Timotheus, son of Conon, and a statue of Conon himself. A group representing Procne and Itys, at the time when Procne has taken her resolution against the boy, was dedicated by Alcamenes; and Athena is represented exhibiting the olive plant, and Poseidon exhibiting the wave. There is also an image of Zeus made by Leochares, and another of Zeus surnamed Polieus ('urban'). I will describe the customary mode of sacrificing to the latter, but without giving the reason assigned for it. They set barley mixed with wheat on the altar of Zeus Polieus, and keep no watch; and the ox which they keep in readiness for the sacrifice goes up to the altar and eats of the grain. . . . All the figures in the gable over the entrance to the temple called the Parthenon relate to the birth of Athena. ${ }^{1}$
${ }^{1}$ Pausanias, I, xxiv, 3, 4, 5 (Frazer's translation).


Fig. 3. Plan, Actual State in the Neighborhood of the Northeast Corner of the Parthenon

In the foregoing passage the list of the monuments is as follows: (1) Earth (Ge) praying for rain (location certain). (2) Statues of Conon and Timotheus. (3) Group of Procne and Itys. (4) Group of Athena and Poseidon. (5) Zeus Polieus (two statues and an altar). (6) Birth of Athena in the east gable of the Parthenon (location certain).

1) Earth (Ge, Gaia) praying for rain. This monument has been discussed by a number of scholars. ${ }^{2}$ We venture, however, to remind the reader that the upper half of the goddess was very probably represented as rising out of the rock of the Acropolis, with her hands raised in supplication, an attitude in which she is often depicted on vases (Fig. 4). ${ }^{3}$ It is to be remarked that Pausanias approached the statue by way of the terrace of the Parthenon. ${ }^{4}$ The statue, however, was not on the terrace itself; the inscription and statue were $c a$. 2.00 m . to the north of the terrace wall and lay 1.45 m . below the terrace. And the inscription faced the northwest. Pausanias therefore could hardly have been standing on the terrace when he was looking at the statue. There was probably a small staircase to the west of Ge leading down from the terrace to the route bordering the terrace on the north. The natural place for such a staircase is on the axis of the propylon which led into the area south of the Erechtheum (cf. Figs. 2 and 3). The propylon was standing in 485 b.c. (cf. note 16) and thus antedated the Parthenon (begun in 447 в.с. and practically finished in 433 в.с.). Pausanias


Fig. 4. Ge, a Restoration I.G., $\mathrm{HI}^{2}, 4758$ may have taken the staircase to the west of Ge in order to make a careful examination of the statue. There is no proof on the site that there was such a staircase, but its usefulness at this place cannot be denied.

Our information concerning the statue to Ge is meager, but some day, if not the original, perhaps a copy of it will be found.
2) Statues of Conon and Timotheus: ${ }^{5}$ Three blocks of Pentelic marble be-

[^0]longing to the Conon-Timotheus pedestal are now lying 2.70 m . south of the inscription of Ge (Figs. 5 and 6) : they are not in situ. At 2, Fig. 3, there is a set of rock cuttings for a curved monument which was backed up against the terrace wall of the Parthenon. The easterly extremity of the cuttings is only 5.30 m . from the inscription of Ge. Moreover, there are no other cuttings for a curved monument anywhere in the vicinity. Remembering that the three preserved blocks of the Conon-


Fig. 5. Blocks from the Conon-Timotheus Pedestal: Tops


Fig. 6. Inscription on the Conon-Timotheus Pedestal: Development
Timotheus pedestal are curved and that Pausanias mentions the Conon-Timotheus monument immediately after that of Ge, we are strongly tempted to place the CononTimotheus pedestal over the cuttings in question (cf. Fig. 3, 2).

An examination of the dowels and pry holes on the tops of the blocks of Figure 5 shows that the course above was reset-this is clear from the double set of dowels and especially from the double set of pry holes. As there is no difference in the sizes of the dowel cuttings or in the manner in which they are cut, we may infer that the resetting took place soon after the pedestal was erecter The double sets of dowels and pry holes indicate, also, that the second set of blocks was laid in an opposite direction to that of the first set of blocks; but which set was laid first cannot be determined. The bottoms of the blocks of Figure 5 show no signs of resetting-this
means, almost certainly, that in Greek times the blocks always occupied the positions for which they were originally intended.

The inscription also displays two periods of work of about the same date. The character of the letters is consistent for the entire inscription, but the letters of KON $\Omega N T I M O \Theta E O$ are spaced 0.0603 m . on centers, while those of TIMOOEO乏 $\mathrm{KON} \Omega[\mathrm{NO} \Sigma$ ] are only 0.0511 m . on centers. The crowding of the latter letters shows that there were only four blocks across the face of the pedestal, for, if there had been a greater number of blocks, there would have been no need of spacing the letters nearer together (cf. Fig. 6). And with four blocks the vertical joints are symmetrically placed in the pedestal-this


Fig. 7. Dowels and Inclined Pour Channels of Block A, Fig. 5 is as it should be. The KON $\Omega$ NTIMO$\Theta E O$ is fairly well centered on the four blocks, but the TIMOOEOE KON $\Omega[N O \Sigma$ ] makes the inscription as a whole decidedly off center, and, if the letters of the TIMOOEOEKONS[NOE[ had been given the same axial unit as that of the KON $2 N T I M O O E O$, the inscription as a whole would have ended 0.129 m . farther to the right, and its centering on the four blocks would have been even worse. It is evident, therefore, that, when the pedestal was set up, there was no thought of cutting the TIMOOEOIKON $\Omega$ [NOL].

The weather lines on the top of block " B," Fig. 5, indicate that the course above had a setback of 0.078 m . on both the front and the back of the pedestal. And block " A," Fig. 5, gives the information that the same setback was carried across the end of the pedestal, for molten lead could not have been poured through the inclined channel shown in Figure 7 if there had been no setback. As the bottom of block " A " has its pressure relieved and as the same is true of both front and back edges of the bottom of block "B," it follows that the course below " A " and "B" projected beyond "A" and "B" (cf. Figs. 7 and 8) : just how much the projection was we cannot say definitely. But, if all the courses of the pedestal had the same height, the projection below "A" and " B" was very probably the same as the setback above these blocks: this is what happens in a fairly common type of Greek pedestal. We can make a shrewd guess that all three courses had the same height, for the inscription would then be suitably placed halfway up the pedestal, and the statues would be at an appropriate height above the ground.


Fig. 8. Block A, Fig. 5: Isometric


Fig. 9. Conon-Timotheus Monument, Two Periods: Restorations
With the foregoing facts at our disposal, we may attempt a restoration of the monument. There were two periods. At first, there can be little doubt that the monument was planned to look as shown in Figure 9 at "A." But why so much space on either side of the statue? The spaces are excellent platforms for the exhibition of some of the trophies won in battle by Conon. Afterwards, when the Athenians decided to set up a statue of Timotheus at the side of the statue of his father, the readjustment shown in Figure 9 at " B " was made.

The fact that the top course of our pedestal was reset indicates that the statue of Conon was countersunk in the top of that course; for, if the statue had a plinth beneath it, statue and plinth could have been easily slipped along the pedestal into a
new position without a resetting of the course beneath the plinth. If the statue was countersunk, it was probably of bronze: but there are some cases of marble statues, especially of early date, in which statue and plinth are of one piece, and in which the plinth is countersunk in the pedestal.

Pausanias tells us (I, iii, 2) that there was another group of Conon and Timotheus in the Agora of Athens; as this is confirmed by Isocrates (ix, 57), Aeschines (iii, 243), Nepos (Timotheus, 2) and Philostratus (Vit. Apollon. iv, 20), there is no doubt that there were two monuments representing father and son, one of which was on the Acropolis, the other in the Agora.

Why was the monument curved in plan? The reason is an aesthetic one. The center of the curve lies about in the middle of the path along which passing visitors walked (cf. Fig. 3, 2) ; that is, the monument had its center at that place where people would be most likely to stop to admire the memorial ; from that point the admirer had all parts of the monument equally distant from him. And why was the monument not placed squarely in front of the terrace wall behind it (cf. Fig. 3, 2) ? Again the reason is an aesthetic one. The monument was turned toward visitors coming from the Propylaea, so that they might begin to see it from a distance. The revolving of the monument gave importance to it. The treatment is similar in the well-known family tomb of Dexileos at the Kerameikos (which probably antedates our monument by only a few years). The pedestal is quadrant shaped and is turned to face pedestrians advancing along the route from Athens. And let us remember that the inscription to Ge faced in almost the same direction as did the Conon-Timotheus base (cf. Fig. 3, 1 and 2, and Fig. 4). The reasons for the turning seem to be the same in both cases. Thus the artist who was responsible for the Conon-Timotheus monument made good use of the site.

Because it seems natural for Pausanias to be gazing at the fronts, not the backs, of Conon and Timotheus, we are lead to think that he was on the route north of the Parthenon terrace, just as in the case of the statue of Ge. Thus our belief in a small staircase to the east of Ge, from the terrace to the route, is strengthened.

Conon died about 390 в.c. and his son either in 355 or 352 b.c. As a statue is generally set up soon after the death of the person it commemorates, we may assign the monument of Conon to the first quarter of the fourth century b.c., and the alterations to about the middle of the same century.

Before leaving the Conon-Timotheus pedestal, we wish to discuss two constructional features connected with it. The first is this: There is an unusual series of pry holes in block " A," Fig. 5, on its vertical face of contact with block " B" (cf. Fig. 8). We may explain the pry holes in the following way. In doweling block "A" to the block below it, first the dowels were firmly fastened with lead in the bottom of block " A," and dowel cuttings, with inclined pour channels, prepared in the block below to receive the protruding dowels of block "A" (cf. Fig. 10). Then
block " A " was lowered into place and molten lead run in through the inclined pour channels to secure the dowels to the block below. We may suppose that the block was lowered into place by means of tongs which caught under bosses on the front and rear of the block (the bosses, of course, would be removed after the block was set). The lowering operation required great nicety of adjustment, and it was precisely here that the peculiar pry holes were useful (cf. Figs. 7 and 10).

The second constructional feature is this. An examination of Figure 5 will show that the dowels and pry holes on the tops of blocks " B " and "C" are not placed as they would be in a straight wall. In a straight wall of the thickness of our curved wall the dowels are located symmetrically about the axis of the wall, and the pry holes come on the axis itself. In the case of


Fig. 10. Method of Setting Block A, Fig. 5 our curved wall the front dowels are farther from the front face of the block than the back dowels are from the back face of the block; and the pry holes are farther from the front face than from the back face. Why is this? The shifting of the dowels and pry holes from their normal positions in a straight wall is due to the fact that our wall is curved. The shifting we explain in the following way. In Figure 11, 1 is the horizontal projection upon the top of block " C " of the center of gravity of the block above


Fig. 11. Peculiar Position of the Dowels and Pry Holes in the Tops of Blocks B and C, Fig. 5
the joint between blocks "A" and " B" (1 to 2 is slightly greater than 1 to 3 ). Line 4-5 gives the direction in which the block in the course above is being pushed. If this be granted, then the pry holes are best placed on or near the line of shift passing through 1 ; that is, at 4 and 5 , and not at the center of the wall. The explanation of the location of the dowels is somewhat similar. The broken line 6-4-5-7 corresponds to the axis of the straight wall, and, consequently, the dowels should be placed symmetrically about 6-4-5-7, if the block above is to be most effectively prevented from sliding. ${ }^{6}$


Fig. 12. Procne and Itys; with Restored Base


Fig. 13. Slaying of Itys; from a Vase in the Munich Museum
(Harrison and Verrall, Myth. and Mon. of Ancient Athens, fig. 17, p. xciii)
3) Group of Procne and Itys. A group, in Pentelic marble, of Procne and Itys is preserved in the Acropolis Museum (Fig. 12). Procne is represented " as resolved upon the murder " of her son, in agreement with what Pausanias says, not as in the act of killing him, as, for example, she is depicted on a Munich-Museum vase (Fig. 13). The workmanship of the group in the Acropolis Museum is decidedly poor. One striking defect is that the boy is carved out of the right leg of Procne. According to Pausanias the monument was dedicated by Alcamenes. It is difficult, however, to believe that the great sculptor of that name was responsible for such an indifferent

[^1]work of art. We may suppose that he made a Procne and Itys, and that the group was either destroyed or carried off. In such case it is possible that a replica by an inferior artist took its place. It is also admissible that the Alcamenes who dedicated the statue was not the well-known sculptor, but some other individual of the same name. The group in the museum has a plinth beneath it. Plinth and figures are cut out of the same piece of marble. The plinth measures a little more across the face than it does from front to back. The base under the plinth would, then, also be slightly rectangular in plan. There is a rock cutting for a pedestal at 3, Figure 3. The east-west measurement of the cutting is preserved in the rock itself, and the north-south measurement can be estimated by supposing that the group was placed on the axis of the five ancient wells, 4, 5, 6, 7, 8, Figure 3 (cf. Fig. 19). Figure 12 shows how the group, its base and the rock cuttings may have gone together. ${ }^{7}$ In both location and size the cutting is thus suitable for the group of Procne and Itys (cf. Fig. 1).
4) Group of Athena and Poseidon. The contest between Athena and Poseidon for the possession of Attica is represented in ancient art in two distinct ways: either the deities are in actual strife, as in the western pediment of the Parthenon, or they are standing in apparently friendly discussion while the winner is being decided by a vote of the twelve gods, or by a vote of the Athenians themselves as another version puts it. Pausanias clearly indicates that the group he saw was of the second type-the scene was a colloquy, not a violent dispute. The type is represented on Athenian coins--possibly the group Pausanias saw inspired the design for the coins (Fig. 14). There are three requirements for such a group, namely :


Fig. 14. Coin of Athens, Athena and Poseidon
Imhoof-Blumer and Gardner, Numismatic Commentary on Pausanias

1) As Pausanias mentions the Athena and Poseidon immediately after speaking of Procne and Itys, we should expect to find that the former stood to the east of, but near, the latter.
2) Two figures facing each other need a base considerably longer than it is deep, and, if the tokens as well as the deities are represented, as Pausanias says they were. the base becomes not far from a double square in plan (Fig. 15).
3) Statues of important gods placed in the open should be somewhat over life size, or they will look dwarfed.

These requirements are met by the rock cuttings at 9 , Figure 3 . We may, therefore,

[^2]claim, with some plausibility, that the group of Athena and Poseidon occupied this site (cf. Fig. 1). ${ }^{8}$
5) Zeus Polieus (two statues and an altar). ${ }^{9}$ From Pausanias we gather, (1) that there were two statues of Zeus Polieus, one of which was archaic in type while the other was more modern (both types are probably represented on the coins of Athens, see Figure 16), and (2) that there was an altar around which a goodly number of worshippers gathered for the purpose of sacrificing an ox. From other sources we know that several oxen, not one, were allowed to wander freely around


M 1


Fig. 15. Athena and Poseidon: Restoration the altar. The nature of the ceremonies required a precinct of some size; and the precinct would probably be walled in to prevent the escape of the oxen. There can be no doubt from Pausanias' account that the ancient Precinct of Zeus Polieus was near the northeast corner of the Parthenon, where, it should be remarked, the Acropolis rock reaches its highest level ( 156.63 m . above the sea), a site suitable for the worship of Zeus, the god of thunder and lightning. The writer believes that he has identified the site; it was probably at 10 , Figure 3, with the two statues and the altar somewhere within the precinct. ${ }^{10}$

In the fifth century b.c. the Acropolis rock to the south and east of the Precinct of Zeus Polieus was cut down to form a large platform; in the operation, however, the precinct was carefully respected, probably on account of its ancient sanctity. Immediately south of the precinct two periods in the rock cutting can be discerned---there is a distinct line at 11-12, Figure 3, in the dressing of the Acropolis rock, to the north of the line the rock being raised $c a .0 .05 \mathrm{~m}$. In the first period the precinct was a true rectangle-11, 12, 13, 14. In the second period the wall 11-12 was revolved about 12 as a center until the position $15-12$ was reached. Why were there two periods? A study of the northeast corner of the Parthenon and its immediate neighborhood throws light on the question. The location of the northeast corner of the Older Parthenon is given at 16, Figure 3. ${ }^{11}$ When the Periclean Parthenon was built, the free space between the precinct and the temple was maintained, that is, the

[^3]distance 11-16 was the same as the distance 11-17. By moving the façade of the temple westward the area in front of the temple was considerably increased-the enlarged area was probably required by the increase in the population of Athens after the Persian wars. But an important monument, namely, that at 18, Figure 3, was placed at the northeast corner of the Parthenon. The monument considerably overlapped the steps of the Parthenon in a northerly direction, probably because a pre-existing monument stood at 19, Figure 3. The monument at 18 was so large, that it would have more than half blocked the access to the area in front of the Parthenon (cf. Fig. 3). Such a choking of the access would hardly have been permitted. To solve the difficulty as well as possible, the south wall of the Precinct of Zeus Polieus was shifted, the southwest corner of the precinct going from 11 to 15 , as suggested above, thus enlarging the access to the area in front of the Parthenon. Hence it seems possible that the second dressing of the Acropolis rock south of the Precinct of Zeus Polieus, namely that of the triangle 11-15-12, Figure 3, took place when the projecting monument was installed at 18 .

The great amount of the rock cutting in the vicinity of 21-23, Fig. 3, indicates that here was the main entrance to the Precinct of Zeus Polieus. Examination of the cuttings reveals the fact that there


Fig. 16. Coins of Athens:
Zeus Polieus (?) were three building periods, namely:

First period: The entrance was in the wall 11-12, with the axis 21.
Second period: The entrance of the first period was moved backward. Its new position was in the wall 15-12, with the axis 22.
Third period: A new and larger entrance was built in the wall 15-12, with the axis at 23. Note that this entrance is set back $c a .0 .65 \mathrm{~m}$. from the south wall of the precinct, thus increasing for a second time the distance between the southwest corner of the precinct and the monument at 18. A restoration of this entrance is attempted in Figure 17 (cf. also Fig. 1).

East of the portion of the Precinct of Zeus Polieus just discussed, are the interesting rock cuttings for a small shrine-a shrine which was intimately connected with the worship of the god (Fig. 3, 24). ${ }^{12}$ In the center of the cella is a rectangular rock-cut pit, into which sacred ashes may have been thrown. The lower portion of the shrine was of stone- probably poros-the upper portion perhaps of wood. ${ }^{13}$ At 25 are more rock cuttings and a poros block, in situ, filling a hole in the Acropolis rock.

[^4]

Fig. 17. Precinct of Zeus Polieus, Plan and South Elevation: Restoration

Here, perhaps, was the foundation for a platform upon which was the ceremonial table about which the participants in the religious rites gathered to partake of the ox they had slain and cooked (cf. Figs. 17 and 18). ${ }^{14}$

That oxen connected with the worship of Zeus Polieus were housed on the Acropolis in the time of Pericles is uncertain: they may have been brought from the city when needed. ${ }^{15}$ On the other hand, if they were kept on the Acropolis in Pericles’ day, they may have been housed in a structure, or structures, located to the north of the precinct, where there is considerable space which might have been used for such a purpose. And the inscription prohibiting the throwing of dung in the area to the west of the precinct helps to support a theory that oxen were housed on the


Fig. 18. Shrine in the Precinct of Zeus Polieus, Elevation and Section: Restoration
Acropolis after the Persian invasions. ${ }^{16}$ Unfortunately there are no Periclean remains which can be definitely connected with the sheltering of oxen on the Acropolis.
6) The Birth of Athena: Pausanias next mentions the pedimental group in the east gable of the Parthenon, representing the birth of Athena. This masterpiece of Greek sculpture has been so thoroughly discussed by scholars that no attempt will be made here to add to what they have written. ${ }^{17}$

As Pausanias emerges from the Parthenon he says: ". . . and at the entrance there is a statue of Iphicrates, who did many marvellous deeds. Over against the temple is a bronze Apollo: they say the image was made by Phidias. They call it Locust Apollo, because. . . ." ${ }^{18}$ The statue of Iphicrates very probably stood in a cutting at 26, Fig. 3, or at 27 (a position symmetrical to that of 26). From other sources we learn that the statue was made of bronze and was set up in $372 / 1$ b.c. The honors bestowed on Iphicrates were a reward for his services in cutting to pieces a Spartan regiment in 392 b.c. ${ }^{19}$ If we accept Pausanias' statement about the Locust
${ }^{14}$ Harrison and Verrall, op. cit., p. 425.
${ }^{15}$ Ibid., p. 428.
${ }^{16}$ G. P. Stevens, op. cit., notes 24 and 65.
${ }^{17}$ J. G. Frazer, op. cit., Vol. II, pp. 308-311.
${ }^{19}$ For a more detailed discussion of the east façade of the Parthenon, see G. P. Stevens, op. cit., pp. 52-55.

Apollo,-and there seems no reason not to,-then the site of the statue was somewhere on the extreme eastern portion of the Parthenon terrace, either north or south of the Temple of Rome and Augustus (Fig. 3, 35). North of this temple the terrace is rock cut and shows no traces for statues. But south of the temple the terrace was made by filling, and monuments could have been placed there and still leave no traces. For these reasons a site south of the temple may be assigned with some certainty to the Locust Apollo.

We have now concluded our discussion of what from Pausanias' account we know that he actually saw between Ge and the east façade of the Parthenon.

We next wish to speak of certain things not mentioned by Pausanias, but which we are sure he might have seen as he walked from the statue of Ge to the entrance of the Parthenon. Pausanias would hardly have time to mention all the buildings, monuments and statues on the Acropolis. He himself says, when he obtained his first view of the Entrance Court of the Acropolis, as though he were overwhelmed by the number of monuments before him, ". . . I do not wish to mention the obscurer statues." ${ }^{20}$ The study of Pausanias shows that, if he had said " buildings, monuments and statues " instead of "statues" alone, the statement would still be true.

Pausanias made no record of having seen either the metopes, or the Panathenaic frieze of the Parthenon, probably because they formed an integral part of the temple (Fig. 3, 28). It would have been difficult to speak of these and to say nothing about the columns, for example, which were majestic in their proportions and beautiful in detail-they were more conspicuous than either the metopes or the frieze. True, he did speak of the monumental group in the gable over the east entrance, but there the figures were cut in the round and formed a fitting climax to all the external decoration of the temple.

If Pausanias turned his eyes toward the north, he must have seen two important monuments, namely, the Erechtheum (Fig. 3, 29) and the great altar of Athena (Fig. 3, 30). The former he described in detail on his way back to the Propylaea. But he said nothing about the great altar: this is strange, for on his way to the Erechtheum he must have passed near it.

Among the objects too inconspicuous for Pausanias to mention were the stelae. For these there are numerous rock cuttings (cf. Fig. 3, 31, 32, 33, 34). It is possible, of course, that some of the stelae had disappeared before the time of Pausanias, and that others had not yet been erected. And he would be even less likely to mention the utilitarian rock-cut wells, 3 m . deep, at 4, 5, 6, 7 and 8, Figure 3, in which rain water was collected. The wellhead of number 8 alone is preserved, but, as the dimensions of all the wells are the same, their wellheads were probably alike (Fig. 19).

[^5]The innermost leaves on each side, after rising nearly to the full height of the central leaf, bend over and run horizontally for some distance so that the outline of the whole palmette, instead of curving gradually from a wide base to a more or less pointed apex, is suggestive rather of a rectangle; in fact the width is even greater across the top than at the base. The heart from which the leaves spring is, in three cases out of the four on the Reading example, not a simple curve but a curve with a wobble near the middle as though the painter was undecided whether to draw one arc or two side by side. The palmettes of the Tanagra chevron group are all with one exception (no.18) of this same general type, ${ }^{4}$ sometimes with a single arc for the heart, sometimes with two side by side, and sometimes compromising with the wobbly curve that we see on the Reading cup. In the apotheke of the National Museum at Athens there are seven further examples of this group, all of the same characteristic shape and with palmettes of the type described above and all from Tanagra. The tendril with wide, sweeping curve seen between the palmettes of the Reading cup is found on nos. $17,26,29,30$ and 33 of my Tanagra list, and also on one of the cups in the Athens apotheke. In this group the decoration under the handles consists usually of three or four chevrons placed one inside the other, but ivy leaves take the place of chevrons on the Reading cup, on nos. 16 and 26 (in each case under one handle only) of the Tanagra list, and on two of the cups in the Athens apotheke. The Copenhagen cup has the normal chevrons, and so also has an unpublished cup of this group in the Berlin University collection. ${ }^{5}$

Not all the cups of the chevron class are decorated with palmettes and chevrons. On nos. 34 and 35 of the Tanagra list, which from their shape undoubtedly go with the main mass of the chevron cups, and nos. 36 and 37 , which are not far removed from them, we have wreaths or spirals. In Nauplia Museum there is another example of the wreath (Plate II 2), ${ }^{6}$ this time of laurel, the leaves drawn in outline, the outer edge heavy, the inner often lighter, with a faint line to mark the centre and with a row of dots following the outer edge of the leaves. The shape of foot and bowl and the deep well put this in the same class as the chevron cups.

With this distinctive cup group can now be associated a couple of vases of different shapes. The first is a pyxis in Koenigsberg published by Lullies, Antike Kleinkunst in Koenigsberg, pl. 17, no. 99 (Plate II 1). It has a body of a fortunately uncommon shape, rather top-heavy, with clumsy rim and pinched waist, and the lid is peculiar in having for a knob a diminutive pyxis of the same shape as the parent vase. The main decoration of the body consists of two zones of palmettes with the quasi-rectangular outline noted on the Reading and Tanagra cups. The smaller
${ }^{4}$ Ibid., pl. III, 16, 19, 21, pl. IV, 28.
${ }^{5}$ Similar to no. 19 of the Tanagra list, ibid., p. 60 and pl. III.
${ }^{6}$ No. 539, Nikandros collection. For the dancing woman beneath one of the handles just visible on the right in Plate II 2, see ibid., p. 61, fig, 5.


Fig. 20. Block from the Base of the Quadriga at 18, Fig. 3, and Isometric Views of Front and Rear of Same
the front and with three equal blocks along the side (remembering that the side is to be a little longer than the front). When we try to place such a plinth over the rock cuttings at 18, Figure 3, we find that this can be done, provided: (1) two steps, each with a tread of one Attic foot, be placed beneath the plinth; (2) the two front blocks be not quite the same in length; (3) the two restored blocks along the side be not quite equal in length to the block which exists (cf. Fig. 21). That the blocks across the front were not exactly equal in length is suggested by the position of the horses' hoofs on top of the existing block (cf. Fig. 20). The traces of the hoofs do not indicate that the horses were in violent action, for all four front feet were on the ground. If the two left-hand horses had quiet poses, it is not likely that either horse of the missing block was in violent action. Therefore the horses may be represented very approximately by their axis lines (cf. AB and CD, Fig. 20). And the axis lines of all four horses would be spaced almost equally apart (cf. Fig. 21). If the righthand side of the existing block were in the middle of the plinth, then AC (cf. Fig. 20) would be twice CE-it is considerably more than twice. To make the axial distances of the four horses even approximately equal, the block on the right hand must be longer than the existing block (cf. Fig. 21). The plinth of Figure 21 measures 3.118 m . by 3.598 m . If we compare this plinth with the plinth of the "Agrippa" quadriga, we find that the two plinths are remarkably alike, for the plinth of the "Agrippa" quadriga measures 3.095 m . by 3.580 m .; and the smaller measurement runs across the front. ${ }^{23}$

The hoofs of horse A, Figure 21, are unusually near the front of the monument, while those of horse B occupy a normal position. It is evident that horse A projected considerably beyond horse B. Furthermore, horse A probably projected beyond horses C and D , for otherwise horses C and D would hide horse A from people rounding the important corner E . The sculptor seems to have purposely projected horse A beyond all the others, so that his group would be as imposing as possible when seen by the great number of people streaming around the northeast corner of the Parthenon.

The inscription on the existing block tells us that the quadriga was set up by a certain Pronapes, to commemorate an unusual number of victories (at least three). As a matter of fact, it is the only four-horse chariot so far known which was dedicated by a victor and set up on the Acropolis. The Pronapes of the inscription is perhaps the cavalry commander of the same name, who was one of three commanders holding office, when, probably in 446 b.c., two groups were set up outside the Propylaea by the newly formed cavalry divisions of Athens. ${ }^{24}$ The letter forms of the inscription are of the fifth century b.c. Further, the monument was obviously set up after the stylobate of the Parthenon was laid. Perhaps the monument was in place
${ }^{23}$ R. Bohn, Die Propylaeen der Akropolis zu Athen, plate XXI.
${ }^{24}$ I.G., $\mathrm{I}^{2}, 400$; cf. Frazer, op. cit., Vol. II, pp. 255 f. For the inscription on the quadriga dedication: I.G., $\mathrm{II}^{2}$, 3123 ; Raubitschek, Hesperia, VIII, 1939, pp. 158 ff.


Fig. 21. Quadriga at 18, Fig. 3: Restoration
at the time the colossal gold and ivory statue of Athena within the Parthenon was dedicated in 438 b.c.-certainly the authorities would do all they could to make that ceremony as imposing as possible. The rock cuttings under the monument do not greatly help in dating the monument. There are no other cuttings on the Acropolis done with greater care. But good rock cutting, although naturally most abundant in
the best building periods, is not confined to those periods. The use of horizontal pour channels for the dowels which held the bottom course of the monument to the Acropolis rock is, at first sight, a stumbling block for a fifth-century dating of the monument, because horizontal pour channels were not commonly used in Athens until about the middle of the second century в.c. ${ }^{25}$ But there are exceptions to the rule. The ancient Greek architect was an ingenious builder, and he did not hesitate to employ horizontal pour channels as early as the fifth century in places where they were obviously desirable. Thus, everything considered, it seems both possible and likely that the Parthenon and the monument were erected at about the same time.

We have already seen that the monument at 18 , Figure 3, partially blocked access to the area in front of the Parthenon, and caused the removal of the southwest angle of the Precinct of Zeus Polieus from 11 to 15 (Figure 3). If the date assigned in the last paragraph to the quadriga is correct, then the rock-cut triangle 11-15-12 (Figure 3) probably has the same date as that of the quadriga; in other words, the rock-cut triangle is contemporary with the Parthenon. Furthermore, as the rock-cut area to the south of the triangle must antedate the triangle, we may infer that a rockcut area was prepared for the Older Parthenon.

If the quadriga was not removed before the time of Pausanias' visit to the Acropolis, then he surely walked along the north and east sides of the monument. Let us suppose that the monument was there at the time of his visit. He had a good reason for not mentioning it. From his description we gather that, as he rounded the northeast corner of the Parthenon, his attention was at once drawn to the group in the east pediment of the Parthenon. We cannot blame him for preferring to look at Phidias's overpowering chef-d'oeuvre rather than at the quadriga.

Pausanias does not mention the Temple of Rome and Augustus, although at the time of his visit it must have been standing there (cf. Fig. 3, 35, and Fig. 1). The temple was fairly conspicuous on account of its size, with columns 6.30 m . high; but in the carving of its architectural ornament it was " sloppy" beyond belief. Unless a building was remarkable either for its beauty or for some special historical association, Pausanias is almost sure to pass it by without comment. ${ }^{26}$

We believe that Pausanias saw to the right of, and somewhat beyond, the Temple of Rome and Augustus the entrance to a fairly important precinct, namely, that of Pandion (cf. Fig. 1). ${ }^{27}$ Now Pandion was the eponymous hero of the Pandia, the all-Zeus festival. And no less than five inscriptions tell us that he had a Heroön on the Acropolis. ${ }^{28}$

[^6]Jane E. Harrison as long ago as 1890 published a statement to the effect that this Heroön must have been near the Precinct of Zeus Polieus. ${ }^{29}$

About 56 m . to the east of the Parthenon and only 25 m . to the southeast of the Precinct of Zeus Polieus are the remains of what has generally been called the 'Epyactúpoov, or workshop, where, it was thought, much of the preliminary work which must have accompanied building operations on the Acropolis was carried on (Fig. 3, 36). ${ }^{30}$ The ruins show that the so-called 'Epractи́ $\rho \iota o \nu$ was composed of two portions, namely, " A" and " B," Figure 22.

Portion " A". A good deal of rock cutting was required in the north corner of " A," the greatest depth being 1.39 m . (cf. Fig. 22, 1). This amount of rock cutting is permissible for an important undertaking, but decidedly costly for a workshop. At 2 is a large rock cutting which has hitherto been overlooked. The cutting indicates a projecting portico, facing the center of the Acropolis. But the main approach to "A" was from the center of the Acropolis. Therefore the portico probably marked the chief entrance into "A." A portico of either wood or stone is too great a luxury for a workshop, and its columns would hinder the passage of large building materials. Furthermore, the rock cuttings at 3 and 4 show that the stone walls which rose above them were only one Attic foot ( 0.328 m .) thick. The walls could not have been more than one Attic foot, for their inside faces were flush with the rock cuttings below them, and, if the inside of the walls had been sheathed with stone work, thus making the walls thicker, the sheathing would have left its traces on the floor (where rock cut) of the structure and also probably against the vertical portions of the rock cuttings: there are no such traces. Walls as thin as one Attic foot are too light for a roofed structure of our span-a span of a little more than 16 m . One Attic foot, however, is the usual thickness for an Athenian precinct wall of stone. The Acropolis rock beneath walls 1-3 and 1-5, especially beneath the latter, is so full of holes, that rain water could not have been prevented from penetrating into the interior of a building at " A." Even the walls of a workshop are made waterproof. Walls 1-5 and 6-7 are not parallel to each other, the distance 1 to 6 being 0.24 m . greater than the distance 5 to 7 . A workshop is roofed, if work is to go on in rainy weather, and the roof is usually hipped to throw the rain water off quickly. In a structure roofed with a hip, one would expect to find the walls more nearly parallel than in the case of the walls in question. No traces of interior supports were found when the site was excavated: a covered workshop should have an economical type of roof, and, in the time of Pericles, the economical roofing of a span $c a .16 \mathrm{~m}$. wide called for interior supports. The level of the rock-cut floor in the north corner of " A" is 152.59 m .: this is 0.80 m . above the finished grade outside the south wall

[^7]

Fig. 22. Precinct of Pandion, Plan: Actual Condition
of area " A." ${ }^{31}$ In other words, if " A " were unroofed, rain falling in " A" would drain off properly. From the above data we feel justified in concluding that "A" was not roofed. It was an open precinct (near that of Zeus Polieus) with a dignified entrance which people within the Acropolis could plainly see and easily approach. Thus the precinct had considerable importance. In fact, it was, we believe, none other than the Heroön of Pandion.

Of walls 6-7 and 7-5 only the poros foundations remain. Almost all of wall 6-7 rests on the Acropolis rock, and its thickness is suitable for a wall one Attic foot thick above ground. On the other hand, the foundation wall at 7-5 does not rest on rock, but on earth; here the foundation was made twice as thick as the foundation at 6-7, so that the two walls might not settle unevenly. These well-designed foundations are suitable for the enclosing walls of a major sanctuary.

Portion " B". There is a section of the prehistoric circuit wall of the Acropolis on the northeast side of area " B " (Fig. 22, 8-5). The top of the wall is 1.54 m . below the rock-cut floor in the north corner of "A," and even 0.74 m . below the finished grade to the southwest of "A" and " B" (cf. Figs. 22 and 23). The wall could, therefore, have served as a foundation for the northeast wall above ground of area "B." The foundation wall 8-9 is built against the fifth-century circuit wall of the Acropolis: this means that wall 8-9 is later in date than the circuit wall of the fifth century. If Cimon built the fifth-century circuit wall in this part of the Acropolis, as seems likely, then area " B " is later than the circuit wall. Walls 8-9 and 9-7 (a foundation wall similar to 8-9) differ radically from those at 7-5 and 7-6 in that the former are neither carried down to the Acropolis rock nor two courses thick. The light foundations of 8-9 and 9-7 are due to the fact either that area "B "was less important than area " A," or that 8-9 and 9-7 had less weight to carry than 7-5 and 7-6. But, as there is little difference in the height and thickness of Athenian precinct walls, we are led to believe that the two types of foundations are due to the differing importance of the two areas.

When the fifth-century circuit walls of the Acropolis were built, the ground level in the southeast part of the Acropolis was greatly raised. It is possible, therefore, that an early precinct of Pandion was buried at that time. Kavvadias and Kawerau discovered early walls of service buildings in, and to the southeast of, area " B," but the excavators found no early walls beneath area " A." ${ }^{32}$ To explain these facts we may suppose that the building operations at the higher level repeated the early ones below to a certain extent; that is, when the Acropolis was restored after the Persian wars, area " A " with its well-built walls became the new sacred precinct of Pandion,

[^8]while area " B" with its poorer walls became a service court. At least one service court on the Acropolis was necessary for the storage of building blocks, tools,


Fig. 23. Precinct of Pandion, Plan and Two Elevations: Restoration ladders, and the like: even temporary sheds for masons to work under could be concealed behind the wall of such an area and might thus account for the great number of drips found here by Kavvadias and Kawerau.

About 12 m . north of the Precinct of Pandion are a series of rock cuttings (at C, Fig. 22). ${ }^{33}$ They are parallel to the circuit wall of the Acropolis and about 9 m . from the outside face of the circuit wall. We believe that the cuttings give the location of a stair which leads down from the eastern plateau of the Acropolis to a terrace on the north side of the Precinct of Pandion. The difference in levei between the plateau and the terrace was about 2.19 m . The terrace had the same level as the terrace along the south side of the Acropolis. From both terraces was a beautiful view over the countryside with mountains in the distance.

Figure 23 gives the reader an idea of what the Periclean Precinct of Pandion and the service area behind it may have looked like.

There is something else which Pausanias must have seen at least subconsciously as he rounded the northeast corner of the Parthenon. We refer to Mount Hymettos. This conspicuous ridge formed a distant background for everything in the southeast part of the Acropolis, just as it does today (cf. Fig. 1).

If we would complete the picture of the northeast corner of the Parthenon, to the things which Pausanias mentioned and to the things which we are convinced he saw either consciously or subconsciously but did not mention we must add certain

[^9]things which he may possibly have seen. For example, there are traces of pedestals for statues on the middle step of the Parthenon, in front of the columns-seven traces on the north side of the temple, eleven on the south side (but none on either the east or west ends). It is likely that the wear and tear of time has defaced some of the traces on the north and south sides, and that originally a statue stood in front of every column (cf. Fig. 1). ${ }^{34}$ Perhaps they were some of the "inconspicuous" statues referred to by Pausanias. ${ }^{35}$ Other examples of the objects which Pausanias possibly saw are indicated by the square cuttings at 37 and 38 , Figure 3 (measuring 0.20 m . $\times 0.20 \mathrm{~m} . \times 0.20 \mathrm{~m}$.) , which, judging by the depth of the cuttings, were probably intended for temporary wooden posts to support trophies, banners, or the like. Then, there are several cuttings such as those at 39 and 40 , Figure 3, which may be associated with small altars-no important religious site of ancient Greece could do without such altars. Finally, we may mention the cutting at 19, Figure 3. It is almost on the axis of the northern intercolumniation of the Parthenon. As in the case of the cutting for the Athena-Poseidon group, we have in 19 a cutting which is considerably longer than it is wide, and here, too, we believe that a group stood; but what it represented we have no idea. ${ }^{36}$

We close these remarks with the request that the reader look at Figure 1. There he will find an attempt to give the impression the Greeks of the time of Pausanias had as they rounded the northeast corner of the Parthenon.

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${ }^{34}$ G. P. Stevens, op. cit., pp. 62-64.
${ }^{35} \mathrm{Cf}$. note 20.
${ }^{36} \mathrm{Cf}$. note 19.


[^0]:    ${ }^{2}$ J. G. Frazer, Pausanias's Description of Greece, Vol. II, p. 299; Furtwängler, Meisterwerke d. griech. Plastik, pp. 257-263.
    ${ }^{3}$ Baumeister, Denkm., abb. 637 ; Roscher, Myth., Vol. I, p. 1578, p. 1582.
    ${ }^{4}$ G. P. Stevens, The Setting of the Periclean Parthenon (Hesperia, Supplement III), fig. 1.
    ${ }^{5}$ Frazer, op. cit., Vol. II, p. 299.

[^1]:    ${ }^{6}$ The clamp cuttings follow the rule for a straight wall-they are placed equally from the front and back faces of the blocks (cf. Fig. 5). Probably this was done to be sure that there would be no more tendency for a front vertical joint to open than for its corresponding back joint. Greece is subject to earthquakes, and a tremor of even moderate intensity might open a vertical joint of a curved wall if the blocks were not properly clamped together.

[^2]:    ${ }^{7}$ Frazer, op. cit., Vol. II, p. 300; Harrison and Verrall, Myth. and Mon. of Ancient Athens, lxxxii-lxxxiii, xciv, p. 414, p. 421.

[^3]:    ${ }^{8}$ Frazer, op. cit., Vol. II, pp. 300-302.
    ${ }^{9}$ The following paragraphs are a revision of a section in The Setting of the Periclean Parthenon, Hesperia, Supplement III, pp. 79-86. Consult, also, Harrison and Verrall, Myth. and Mon. of Ancient Athens, pp. 427-428.
    ${ }^{10}$ Harrison and Verrall, loc. cit.
    ${ }^{11}$ B. H. Hill, A.J.A., 1912, pl. IX.

[^4]:    ${ }^{12}$ G. P. Stevens, op. cit., pp. 83-85.
    ${ }^{13}$ G. P. Stevens, op. cit., p. 86 and fig. 63.

[^5]:    ${ }^{20}$ Pausanias, I, xxiii, 4.

[^6]:    ${ }^{25}$ See footnote 21 above.
    ${ }^{26}$ Antike Denkmaeler, 1884, Taf. 25 and 26.
    ${ }^{27}$ G. P. Stevens, The Periclean Entrance Court of the Acropolis of Athens, p. $69=$ Hesperia, V, 1936, p. 511, hesitantly tolerated another identification of the site.
    ${ }^{28}$ I.G., $\mathrm{II}^{2}, 1138,1140,1144,1148$ and 1152.

[^7]:    ${ }^{29}$ Harrison and Verrall, op. cit., p. 429.
    

[^8]:    ${ }^{31}$ The finished grade outside the southwest wall of area " A" was 151.79 m . (cf. G. P. Stevens, The Setting of the Periclean Parthenon, Hesperia, Suppl. III, figs. 36 and 66).
    ${ }^{32}$ Kavvadias and Kawerau, op. cit., חiva乡 $\mathbf{E}^{\prime}$.

[^9]:    ${ }^{33}$ Kavvadias and Kawerau, 'H 'Аvaбкаф̀̀ $\tau \hat{\eta} \mathrm{s}$ 'Акротó $\lambda \epsilon \omega \mathrm{s}$, Пíva $\xi \mathrm{E}$ '.

