## THE EARLIER TEMPLE OF ARTEMIS AT EPHESUS.

## The Sculpture.

The most remarkable characteristic of the temple built in the sixth century was the figure sculpture which surrounded the lower drums of the columns on one or both of the fronts. This feature was certainly not an architectural freak, and the band of figures must either have been thought of as a sculptured dado or derived from Egyptian prototypes such as the sculptured columns of Medinet Abou. Both antecedents may have influenced the choice, but the former was a sufficient and the more probable source. The sculptured dado was the first form of sculptured 'frieze'; in 'Mycenaean' palaces dadoes of plain or sculptured slabs faced and protected the lower parts of crude brick walls. The two fragments of slabs with reliefs of oxen from Mycenae in the Elgin collection formed part of such a dado. The great Assyrian and Persian slabs followed the same traditions of structure and decoration, and recent explorations of Hittite sites have shown that the sculptured dado was a fundamental tradition in the arts of Asia Minor. Not only did the sculptured bands of the Nereid Monument, the tomb at Trysa, and the Mausoleum fall in with this rule of the dado, but we find in it the first cause of the sculptured pedestals of the Hellenistic temple at Ephesus and of the podium of the Altar of Per-gamon-the king of all dadoes.

At the Croesus temple at Ephesus the sculptured band appeared on parts of the walls at the antae as well as on the columns. In the basement of the British Museum are some fragments of bulls carved in relief on large walling blocks (B.M. Excavations at Ephesus, Pl. L in text vol.). The heads of the beasts projected from a return at right angles to the


Fig. 1. direction of their bodies, and they must have been a good deal like the Assyrian portal guardians on a smaller scale (Fig. 1). A hoof also shows that it was at an angle;
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there are parts of two companion bulls, and this is further proof that they came from the antae. There was a bed joint directly below the hoof which probably rested on a projecting plinth course as did the later pedestal sculptures. The beasts may have been carved on three courses of the walling stones, but without further examination I cannot say so with certainty, and I should say that my sketches are rough approximations. Probably there was a similar beast on each face of the antac, and they would have corresponded with the sculptured drums of the columns.

A fragment (Fig. 2) of a man standing at an angle with a slightly inclined masonry 'face' at his back and a bed joint through his thighs (No. 32) must have belonged to some feature other than the drums but ranging with them. The position of the bed-joint would be suitable for a figure carved on three courses of masonry, so that it seems probable that the figure was on the same level as the oxen. The best hypothesis to explain the 'face' slightly inclined from the upright and the figure at an angle seems to be that it formed the


Fic. 2. left-hand jamb of the great doorway. The external jambs of the doorway are broken away and, as far as can be judged, the conditions are entirely suitable for what is here suggested. Another fragment (No. 31), a thigh of a figure facing to the right with a bed-joint at the top, seems as if it might be part of a companion figure from the other doorjamb. The plinth of the walls was about 15 inches high, with a projection of nearly 2 inches, and the two lowest courses of walling stones were about 20 inches high. The rest of the courses are shown of similar height, and Wood speaks of having found four in all. Three courses of 20 inches each, above the plinth, appear to suit the evidence given by the fragments of oxen and men.

The restorations of the sculptured drums offered in the official publication are not happy; their general cylindrical form has been lost and the evidence is against the deep, hollow moulding above the heads of the figures which undermines the background from the general size of the upper part of the column. An examination of the stones at the British Museum shows that the projecting parts of the sculpture conformed closely to a cylindrical mass; the relief was only about 3 inches at the feet and increased to 8 or 9 inches at the heads and shoulders of the figures. The background of these reliefs, therefore, slanted back more quickly than the general diminution of the columns. ${ }^{1}$

Some years ago, Mr. Pinker of the Museum was showing me the stones in the Basement, when he saw that two curved fragments fitted together at a fracture, and formed about a third of the diameter at the upper edge of a sculptured drum. This has since been put into the gallery; it has a fillet of about one-eighth of an inch projection. Another fragment from the top

[^0]edge of a drum (Atlas, xvii. 47) also shows that there was no deep cavetto above the reliefs. 'On the top bed is a setting line showing that the fragment belonged to one of the sculptured columns;' the sculpture rose to the full height of the stone of this drum. A diagram of the scheme is given in Fig. 3. B is the base, $C$ the column, $D$ the bottom drum with the sculpture S .

The far projecting cavetto, it seems, must only have been imagined in the first place so that pieces of a large band of leaf-moulding might be set above the sculptured drum at the Museum. In the volume of text it is said-' that the [leaf] member crowned the sculptures is an inference from the radius which is exactly appropriate.' Even now, notwithstanding the large increase of the radius given by the fictitious cavetto, the pieces of leaf band are segments of too great a diameter. On the Plate XVI. it may be seen that the curve is in fact too flat for the position given to it. It is suitable for a base, and it has been taken for a base in Mr. Henderson's restorations, although the cavetto around the top of the drum has been retained by him to the undermining of the shaft; as said above. Probably


Fig. 3. the bottoms of the shafts resting on the drums had an ordinary moulding of one or two beads, much like the other columns. (I do not know any evidence for the cavettos restored above the later drums.)

Most of the figures appear to have been arranged processionally. One (No. 47) was walking to the right, supporting a basket or other offering with a raised right hand. The suggestion that this was a caryatid-like figure facing to the front, and that the hand belonged to another figure, does not seem necessary.

One of the heads of these figures is in a fairly good condition, and could be easily restored on a plaster cast. Another face (Atlas, xvi. 6) is nearly perfect. The riches of the British Museum will not be adequately brought out until a History of Greek Sculpture is written, illustrated by our own collections instead of by inaccessible examples.

The entablature had no frieze, but a deep gutter front, which I shall call a parapet, was covered with delicately wrought figure sculpture. This parapet was about 2 feet $10 \frac{1}{2}$ inches (or 3 Greek feet) high; and supposing that there were three gutter stones to a columniation-as at the later temple-each of the stones would have been about 5 feet 9 inches long, having a fine lion's head spout in the middle. The profile was not curved, but it was slightly inclined forward. It was a developed copy of tile prototypes, several of which had moulded reliefs on their front surfaces, ${ }^{2}$ and it marks a stage of transition between the all-tile roof and the all-marble roof.

[^1]In this case the gutter-front was made especially high to hide the tiled roof as much as possible.

There must of course have been a vertical joint in the middle of each or some of the spaces between the several lions' heads. Many of the existing fragments show the joints, and these, it is evident, in several cases passed through a figure or a group.

By uniting two or three fragments Dr. Murray was able to reconstruct one group, and he set up 'an attempted restoration of a combat between a Lapith and a Centaur.' The general idea of this restoration will hardly be questioned, but the opponent of the Centaur need not have been one of the Lapiths, for they were not usually armed. The most popular of all the Centaur subjects, Baur tells us, was the combat of Herakles and Nessos, at least in the archaic period. A great number of examples are found on black-figured vases. A good example is in the British Museum (Walters B. 537) of which Baur says 'the Centaur is in the usual stumbling attitude and looks back'-words which might equally apply to the Ephesus group. In several of these representations Herakles is clothed ${ }^{3}$ and fights with a sword; in some he grasps the arm of the Centaur. As Herakles was such an important personage in the later sculptures, it may be accepted that this group represented Herakles and the Centaur. From the greaves worn by Herakles in the Ephesus group we may infer that he was represented as fighting with a sword. A group of Herakles and Nessos by Bathycles of Magnesia appeared on the throne of Apollo at Amyclae with others of the cycle of his adventures.

As no vertical joint passes through the largest fragment from which the British Museum group is restored, I had doubts whether the subject could have been in the centre, between two lions' heads. If it was not, I should shift the Centaur further to the left, leaving room for one figure to the right of the group-this would be Dejanira. Mr. Arthur Smith tells me, however, that there is a watershed at the back ; this suggests that the joints were in the alternate spaces.

If one subject from the Herakles stories has been identified it is probable that others were also represented, and this becomes all the more likely when we remember that the adventures of Herakles were also sculptured at the later Temple. Amongst the early fragments are the feet of an ox and the head of a lion, both of which may have belonged to the Herakles subjects.

The larger part of the figures were warriors fighting on foot or from chariots, several were prostrate, and one of these was trodden on by a horse's hoof. They had helmets, greaves, and cuirasses with shoulder straps and pendant flaps; they were armed with spears, swords, and shields. Probably in some cases a group was made up of two warriors fighting over a prostrate body. At the back of the warrior turned towards the left who is mounting

[^2]was identified as Herakles by Furtwängler wears armour.
a chariot there is a vertical joint; it is evident that there would not have been room between this joint and the lion's head on the left for the completion of the group, and we must suppose that in this case and others the sculpture was carved almost irrespective of the lions' heads as was done in the Lycian monuments in the British Museum (Fig. 4). It is a mistake to think of the composition as entirely broken up into ' metope-like' groups ; continuity was aimed at so far as possible. Some of the horses were rearing, and these might more easily have been carried over the lions' heads. Traces of sculpture appear close at the


Fig. 4. sides of some of the lions' heads.

I have associated two fragments together in Fig. 5, and thus obtain the key to a restoration of a warrior who fought in one of the typical attitudes which were so frequently repeated, as for instance on the frieze of the 'Treasury of the Cnidians,' ${ }^{4}$ at Delphi and in the pediment at Aegina : compare also the figure on a vase illustrated in A Companion to Greek Studies, Fig. 67. The warrior leaned forward with right hand raised, thrusting with a spear; on the lowered and extended left arm would have been the shield. Even the long locks of hair appear again on these examples; at Aegina they were of lead separately attached; the flaps pendant from the cuirass occur again at Aegina. In the basement at the British Museum is the hand of a spearman who faces the other way (Fig. 6).
The date of the Aegina sculptures was about 480, of the painted vase about 500, and of the Delphi frieze about 520. It has been remarked by Mr. Arthur Smith that the Delphi frieze seems earlier than the Ephesus parapet, which it would appear can hardly be earlier than 520 b.c.

There were several chairs or thrones and seated figures, some of whom were females. These enthroned figures suggest an assembly of the gods watching a battle as at Delphi, the Theseum, and the Temple of Nike Apteros. A small fragment which is catalogued as probably a thunderbolt (Atlas, xviii. 2) seems rather to be the trident of Poseidon-compare a sixth century silver coin of Poseidonia. In the basement is a delicately sculptured left foot which was probably that of a seated


Fig. 6. figure, as it seems large in scale compared to the others.

Considering the resemblance of these sculptures to those of the frieze at Delphi, it becomes highly probable that the battle subject at Ephesus was the War of Troy in one case as the other. This subject was represented also

[^3]in the pediment at Aegina, at Trysa in Asia Minor, and probably on the Nereid Monument. Subjects from the Iliad were frequently figured on the sixth century painted sarcophagi of Clazomenae.

The horses of the chariot groups were very well done, and the general type could be easily restored (Pl. 21, 24; Pl. XVIII. 55, 67, 71, and compare an early relief at Athens ${ }^{5}$ ). These chariots with warriors stepping into them again recall the frieze at Delphi (Fig. 5), on which the gods prepare to join the battle. Mr. Arthur Smith has already observed of our sculptured parapet: ' In many respects as to composition and detail its nearest parallel is the frieze of the Treasury of the Cnidians at Delphi. It has the same kind of subjects and similarities of treatment.' There were several female figures clothed in full soft draperies, some wearing shoes. One interesting fragment (Fig. 7) is of a female head covered by a sort of bonnet through which the hair was brought out to fall like a horse-tail (Atlas, xvii. 6). A similar fashion seems to be followed for the head-dress of one of the


Fig. 7. sphinxes in the tympanum of a Lycian tomb in the British Museum. This is much decayed, but small reliefs of sphinxes found at the Artemision have 'pigtails,' and similar tails appear on some Minoan works. Hair falling in a tail is found again on a beautiful grave stele from Thasos which can hardly be earlier than the fifth century (Collignon, i. Fig. 136). A pointed bonnet bordered with a similar wreath, but without the hair being brought through the crown, is worn by the Amazon Antiope, in a well-known vase of fine early work, and as the pointed bonnet is such a common characteristic of Amazonian dress the Ephesus head was probably that of an Amazon.

Several fragments are catalogued as parts of Winged figures or Harpies (Nos. 39-44) ; and others (36-38) which were formerly described with this group, have now been separated as they 'appear to belong to a figure of Athene.' If we compare all these fragments with a sculptured block from the angle of a 'frieze' found at Didyma (Pontremoli and Haussoullier, PI. XX.) on which is a Gorgon, it becomes evident that the relief figures at Ephesus including the supposed Athene, must have been similar. One of these figures either wore a snake-fringed aegis, or she had a collar and girdle of snakes. The head, hair, and earring of this supposed 'Athene' are exactly like those of the Didyma Gorgon. The fragment of the 'right arm of a figure with a looped and studded sleeve, and the feathers of a large wing spreading from the shoulders' (Atlas, Pl. XVII. 11), also closely resembles the corresponding part of the Didyma figure. Both figures, indeed, must have been so much alike as to suggest that they must have been carved by the same hand, and this raises the possibility that the Ephesus parapet was the work of a Milesian sculptor. When a full account of the excavations on the site of the temple at Miletus is published, we may find other parallels;
in a short note I find mentioned ' fragments of painted tiles, with reliefs of Gorgons, heads of lions, lotus flowers, voluted acroteria, marble gutters, and much early pottery, filling the interval between Minoan and Archaic Greek Art ' (Sixth statement of the excavations).

Another of the British Museum fragments from the supposed Athene is described as 'a hand which seems to be holding up a large fold of the skirt; two snakes are seen and parts of a pendant wing.' Another piece is 'from a figure half kneeling to the left' ('as in the usual early scheme for the Gorgon' was noted in the old catalogue). This was in the gliding attitude of the Didyma figure, and, like that, the Ephesus Gorgons had four wings, as may be seen by the small fragment, Pl. XVIII. 47. The Athenelike figure was turned to the left, while the arm and wing above described belonged to a figure turned to the right. It is clear that there were at least two of these winged creatures, and as the Didyma Gorgon was at an angle, it is probable that in both cases there were four more or less similar creatures guarding every comer of the buildings to which they belonged. Those at Ephesus must have been at the ends of the parapet next the angles. The recently discovered sculptures of the pediment of the archaic temple at Corfu show that a similar guardian Gorgon occupied the centre. Another served as the acroterion of the earlier temple on the Athenian Acropolis, and the Nike of Delos is again very similar. As we go backwards in time, Gorgon, Nike, and Winged Artemis all seem to merge in one, and winged figures of Artemis were used as antefixes on some of the early Etruscan temples. ${ }^{6}$ Eris seems to be another of the same brood (Gerhard, Atlas, x. Fig. 5) and Phobós also (see a coin of Cyzicus).

The War of Troy might well have occupied the whole of one side of the parapet, but the adventures of Herakles can hardly have been drawn out to a similar length; possibly they were supplemented by those of Theseus, as was the case at the later Temple, or there may have been a battle of Gods and giants as at the Treasury at Delphi.

The lions' heads of the parapet were very fine; two of the best preserved are brought into the restored length of parapet at the Museum; the rendering of the teeth set into the jaws is most accomplished. Amongst the other smaller fragments are some muzzles, and one of these in the basement is the tongue of a lion gargoyle. A fine lion's head found at Himera (Duruy, vol. iii. p. 327) is of much the same type, and a complete restoration of one


Fig. 8. of the Ephesus heads should be made in plaster (Fig. 8). As has been shown above, fairly accurate drawn restorations of three or four divisions of the parapet could be made; one of Herakles and

[^4][^5]the Centaur Nessos, another of warriors fighting, a chariot group, gods seated on thrones like those at Delphi, flying Gorgons in the short spaces between the angles and the first of the lions' heads.

The style of the sculpture, as has been said, is in close relation to that of the 'Cnidian' treasury at Delphi. The Gorgons' heads and the scheme of the parapet resemble details of the little temple of Dictaean Zeus in Crete, which was of wood or mud-brick and terracotta casings. ${ }^{7}$ The Gorgons so nearly resemble others at Miletus that they seem as if both sets were by the same artist. Some tiles found at Miletus orramented with lotus flowers are so similar to the lotus decoration around the necking of the columns at Naucratis that it is clear that the latter had no special character, but was a normal example of early Ionic art. This art was almost wholly oriental in origin, having elements drawn from Crete, Egypt, and Mesopotamia.

## The Architecture.

The restoration of the temple by Mr. Henderson in the British Museum publication is too visionary. An adequate record of what was actually found would have been far more valuable if kept apart from mere conjecture. Before all memory of the facts observed on the site is lost it would, moreover, be useful if some parts of the evidence, especially in regard to the Primitive Structures, could be made clearer by diagrams, isolating special points from other intricate details.

Many years since, Fergusson pointed out that the seven widely-spaced columniations of the façade occupied a space equal to eight columniations of normal dimensions, and he suggested that the back of the temple had nine columns. The recent discovery of such an arrangement at the Great Temple of Samos raises this hypothesis to a high degree of probability. ${ }^{8}$

That the interior of the temple was known as the Naos, appears from the name Pronaos, used for the great pillared fore-hall in the inscriptions given by Wood. If, as I have before suggested, the naos of the later temple was not covered by a roof, this would have been the case with the earlier temple also. In the open area the cult statue would have occupied a covered shrine upon the great basis. This was the arrangement at the brother temple of Apollo at Didyma, the naos of which was 'an open court surrounded by pilasters [on the walls]. The statue of the god, the archaic work of Kanachos, was probably placed here in a special shrine; here also had been the olive tree under which Zeus and Leto had sat, and a sacred spring.'

The cult statue at Ephesus remained an archaic work in the latest temple. According to Pliny it was very ancient, and Vitruvius says it was of cedar wood. In the book of 'Acts' it is reported that it was said to have fallen from heaven. . An imitation set up by Xenophon in Laconia is said to have been of wood instead of gold, therefore the Ephesian statue was covered with gold plates. It was a tall, rude figure standing between two

[^6]animals. The story of the fall of the statue from heaven is a point in favour of the temple remaining open to the sky, as we know by analogous cases. If the naos were open there would not have been interior columns, at least not such as are shown on the restored plan. Certain foundations under the pavement of the naos were interpreted as supports to some of these internal columns: 'These foundations we conjecture to have been inserted to carry an inner order surrounding the central basis.' The large number of internal columns which are shown on the restored plan are not merely around the basis, but two long rows are suggested from end to end of the naos. But the foundations in question were considerably less than half the length required, occupying only the middle part of the interior of the Croesus temple, like the foundations of the more primitive structures; further it seems to be admitted that they were in part primitive. In the pronaos and the posticum there were other columns almost in the lines of these supposititious internal colonnades, but they had no such foundation walls. Whatever, then, these foundations were, they cannot be taken as evidence for internal ranks of columns; probably they represent the walls of one of the primitive temples, and possibly portions of them were taken out and rebuilt as part of the pavement platform of the Croesus temple. As will be shown, it is probable that the primitive temples had their great altars close in front of the basis, and such altars must have been in the open air. It is likely that this 'hypaethral' type would be carried forward in the later temples, and as the foundations of the great altar have been carefully but fruitlessly sought for outside their limits it seems just possible that, even in the later temples, the fire altar was in the uncovered internal courts.

The Croesus temple had a large drain which ran westward on the central axis; according to Wood it began at the central basis-‘The existence of this large conduit issuing from within the cella of temple D , and perhaps also from within the enclosure of temple C, argues that the spaces which it drained were to some extent open to the sky' (B.M. text, p. 263).

This idea of there being a central opening depends on the imagined inner rows of columns. That the naos was an open court is to my mind proved by the fact that its enclosing wall was exactly alike both inside and outside. The pavement was at the same level in the naos as in the peristyle; in fact it formed a continuous platform on which the walls were erected, and this pavement was throughout of slabs of irregular forms. On it was set a plinth alike on both sides; a deeper course above the plinth had draughted margins and picked surfaces, large rough bosses being left projecting in the middle of the surface of each block. It seems impossible to suppose that such masonry could be used in the interior of a cella; the fact that the great temple of Apollo at Didyma had an open naos is sufficient to make us consider a similar arrangement at the Artemision. ${ }^{9}$ There may have been

[^7][^8]some sacred tree or other mythical objects in the interior, and of course there would have been many statues other than the cultus image. The famous four Amazons which learned Germans have so carefully ascribed to as many authors, seem to me to be variations of one type. Instead of four competing designs by Pheidias, Polycleitos and the others, I would see in them a group of Amazon attendants on Artemis from one workshop. The 'competition' was a myth of explanation by which it was possible to bring in the desirable name of Pheidias.

Wood found about half the pavement of the naos in place; the great doorway was about 14 feet 9 inches wide and the doors opened on quadrants; the pronaos was enclosed in line with the antae by a strong metal screen.

The variety of detail in the order of the peristyle is a remarkable characteristic of the Croesus temple, and in this it agreed with the early temple at Naucratis. Such variety must have been general in early Ionic works; the fragments found at Neandria seem to suggest similar changes of details. One of the strangest forms at Ephesus is the capital which has large rosettes in place of volutes. As restored in the publication these rosettes are given pointed petals, but Dr. Murray's restoration at the Museum with rounded forms is according to the evidence, for pointed leaves, where they occur in other places, all have midribs, which these petals have not. The leaf moulding of the 'echinus' assigned to this


Fig. 9. same capital (PI. VII.) seems doubtful. One of the fragments shows the design Fig. 9.

What may have been the form of the angle capitals is problematical ; certainly they cannot have been as drawn in the publication (Pl. XIV.), for the centre of gravity of the suggested capital is hardly over the supporting shaft, and it may be doubted whether such a capital could have rested in its place before it was weighted by the entablature. A third volute member of the normal size projecting in the diagonal direction is a possibility, or there may have been four volutes forming a cross on plan. This solution would have been the best balanced construction, and it may be suggested that we can find in such an arrangement a reason for the narrowness and great length of the volute members. The curious capitals at Persepolis (c. 485 b.c.) have volutes in the four directions, and the columns to which they belong rest on bases ornamented with leafage, an idea which seems to be borrowed from the Croesus temple. ${ }^{10}$

A fragment at the Museum which appears to be part of a capital (Pl. X.) is difficult to explain : Mr. Pinker, the able foreman, told me that he thought it formed part of a capital, like the Egyptian palm capitals, and this is much more probable than the suggestion in the publication that it

[^9]came from the upper part of a shaft. Another fragment (Fig. 78c in text) seems to be of similar character.

The remnants of the ordinary columns seem to suggest that as the shaft rose from the base it slanted back in a long curve or line almost straight, and thus conformed closely to the line of the background of the reliefs on the sculptured columns (Fig. 3). At the top the shaft was formed into a large circular 'tenon' which filled a socket 3 inches deep in the capital. The capitals of Naucratis were set on the shaft in a similar way which thus may be considered normal for early Ionic columns (Fig. 10). In these 'tenons' I would see one of several facts which suggest that the Ionic column was first developed as a free-standing column-such as the column of the Naxians-before it was adopted for temple archi-


Fig. 10. tecture; the spreading and piled-up base also seems specially suited for isolated columns. It thus had an origin in common with the stele which tended to the same type. The column of the Naxians resembled some of the columns at Ephesus in having many narrow flutes and in other particulars.

It has been shown above that the antae rose above sculptured bulls. In the Basement of the Museum is a fragment of an immense egg-and-tongue member about 16 inches in height (PI. IX.). On the end return of this piece is a trace of a large volute, the outer curve of which coincided with the profile of the egg-and-tongue. This was an anta capital. The width of the


Fig. 11. egg-and-tongue units is given as 384 m . Five of these would fill a length of about 1.92 m ., and as the width of the wall is figured 1.93 m . there can be no doubt that this was the arrangement (Fig. 11). Several later capitals of this type have been found at Samos, ${ }^{11}$ Miletus, ${ }^{12}$ Priene, and Ephesus itself. Fig. 12 is from a fragment found at Samos.

The entablature of the Croesus temple certainly had no frieze. ${ }^{13}$ It may be doubted whether the epistyle was not of wood; the old story of the architect's difficulty in fixing the great stone beam seems to refer to this Croesus temple, but it is difficult to suppose that a marble beam nearly 30 feet long was fixed above capitals which were so narrow transversely. ${ }^{14}$ In any case the epistyle would not have been of the high section suggested or, at the most, higher than wide. The cornice has been restored as a corona resting on one


Fig. 12. course of egg-and-tongıe moulding. Two varieties of egg-and-tongue moulding were found; one is given with units 308 m . wide, and the other as 324 m ., and it is most probable that the cornice was like the

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normal later arrangements in having two egg-and-tongue members separated by a dentil course (compare the Treasury at Delphi, where a sculptured band took the place of the dentils ${ }^{15}$ ). The fact that no dentils have been recorded is of little consequence, for dentils most readily disappear; none are known which belonged to the later temple, or to the Nereid monument in the British Museum, and only slight traces of those of the Mausoleum exist (Fig. 13).

The parapet cannot have been applied to the pediment as shown, for a gable-cymatium was above the tile line, not below


Fig. 13. it. Mr. Henderson has himself modified this point in a drawing published later than the Atlas.

There is no evidence for the slope of the roof; the stone taken for this purpose in the publication belonged to the later temple, as is shown by the claw-tooling. Another stone catalogued as having belonged to a pediment is rather, I think, one of the irregularly shaped stones of the pavement of the Croesus temple. A fragment described as the horn of an altar (Fig. 79c) is more probably part of an acroterion, but even if it is, it hardly proves the existence of a pediment, for such finials might be put at the ends of the ridge of a hipped roof, and such a scheme of roofing at Ephesus would have lightened the work over the immense spans, andmoreover the beautifully sculptured parapet would not have been suppressed at the most important front. I cannot suggest this solution as more than a possibility, but it has recently been found that the back of the temple at Thermon had a hipped roof.

## Painting.

Both the structural members and the sculpture were fully decorated with colour. An illustration in Wood's volume shows that the leaf-mouldings ' of the bases had blue grounds and red margins to the leaves, and some of the fragments in the Museum show traces of colour on the capitals and the upper terminations of the flutes of the shafts. 'The colours were of rich cobalt and more frequently a rich red. Several fragments of leaf-mouldings show faded yellow and brown which may be decayed remnants of bright yellow and dark red.' A gilt fillet of lead was inserted in a groove of one of the volutes. The lions' heads of the parapet seem to have been dull red the jaws were vermilion with gleaming white teeth.

The sculptured figures on the drums of the columns had red hair and lips, and their draperies were decorated with fret-patterns and palmettes; doubtless details like the earrings were gilt.

[^12]The parapet had a bright red lower border and the ground of the reliefs was a fair blue, the figures being coloured like those on the columns. The general effect must have been like that of the better preserved frieze at Delphi. The whole must have been gay and glittering beyond imagination.

## Ephesus and Hittite Art.

In the text of the B.M. publication several points of resemblance are noticed between some of the smaller objects found on the site of the temple and examples of Hittite art, and generally it is remarked that 'the art of the primitive treasure came very little under direct Egyptian influence but more under that of Mesopotamia.' As the sculptured dado, which probably suggested the sculptured drums, seems to have been an essential part of Hittite architecture, and the bull-bases of the antae, reconstructed above, so closely resemble another feature in Hittite structures, we are led to the enquiry whether there was not a direct Hittite strain in the art of Ephesus. At the rebuilding of the Temple of Artemis in the sixth century Croesus gave 'golden heifers' as well as many of the great marble pillars, and Herodotus begins his history with an account of the royal donor, King of Lydia and sovereign of the nations on this side the Halys, and adds that Ephesus itself was Lydian. Now two or three centuries before the time of Croesus Lydia had formed part of the great Hittite empire. Ephesus was connected with the capital of Lydia, and the latter with the further East, by the great 'Royal Road' which linked Asia to Europe. Some Hittite monuments still exist on this road near Ephesus, which must have been controlled by the Hittites; indeed they probably held Ephesus too, as it was the chief coast terminus of the road which from the evidence of the rock-sculptures we may suppose they had made.
' It is not extravagant to suppose from the evidence of the excavations made in Asia Minor that the region [of Ephesus] had been in the hands of that great oriental power the Hittites' ${ }^{16}$ 'They were the founders of the Heraklid dynasty in Lydia, and Babylonian art was carried by them to the Greek seas. Greek religion and mythology owed much to them; even the Amazons of Greek legend prove to have been the warrior priestesses of the great Hittite goddess.' ${ }^{17}$ 'Cities like Ephesus . . . had received and retained the impress of Hittite civilization. ${ }^{18}$

On the site of the 'Croesus Temple' a series of foundations was exposed which showed that earlier temples had existed on the site. At Ephesus there was, Dr. Hogarth writes, ' a primaeval local cult of the Mother-Goddess in which a principal share was borne by Parthenoi.' Prof. Garstang speaks of 'the worship of the Mother-Goddess paramount through the Hittite lands, from Carchemish to Ephesus . . though general throughout western Asia, its introduction into Asia Minor is traceable to the Hittites. . . . It

[^13]became deeply rooted, and in certain localities took special forms like those of Artemis at Ephesus.'

It would seem to follow, if most of this is true, that the earliest sanctuary at Ephesus of the Mother-Goddess, Lady of Wild Things, may have been a Hittite foundation. Or fashions and features may have been borrowed from Sardis, another great centre of a Cybele-Artemis cult; at least it appears how easily some of the strange architectural features in the Croesus temple may have been in a Hittite tradition.

For lions as bases to antae see Prof. Garstang's Plates 78 to 81 : in his text he describes one pair of bases as bulls. The beasts in either case were treated exactly as at Ephesus: 'the body of the lion is carved in relief with the head and forepart in the round; upon his back is a squared surface for the reception of the upper stone.' Column bases were also treated as blocks, on each of which a pair of sphinxes were carved with their heads facing to the front. This I would suggest was similar to the antae bases at the Croesus temple. ${ }^{19}$ The tradition of guardian bulls further explains those projecting heads which are sculptured over the doorway of the tomb at Trysa in Lycia. To this deep-seated tradition of the door-guardians I would refer also the curious figures at Ephesus which I have suggested were bases to the jambs of the great door.

There is some evidence which suggests that even the Ionic order may have been developed by the Hittites before it was adopted by the Greeks, ${ }^{20}$ although I think it probable that it was known in the Minoan age. Some sculptured figures at Boghaz-Keui (Garstang, Pls. 68-69) carry little shrines having well-formed 'Ionic' columns (Fig. 14). It is difficult to be sure of the dates assigned to these Hittite monuments, but if this


Fig. 14. sculpture is earlier than even the sixth century it has some significance in regard to the Ionic order. The turned down leaves of the bases at Ephesus also seem to be oriental in origin.

A great erect eagle or hawk found at Yamoola (Garstang, Pl. 49) is curiously like many small offerings discovered at the Artemision which are explained as Hawks of Artemis. ${ }^{21}$ The watching Gorgons of the parapet seem to be of oriental origin, and it is suggested in Daremberg and Saglio's Dictionary that Gorgons are in fact Hittite. The angel-like creatures which became popular in the Hellenistic age--such as those on some square capitals found at Didyma-must be watchers derived from Gorgons. ${ }^{22}$ That these four winged genii, running sideways in a gliding, half-kneeling attitude, were Mesopotamian in origin may be seen from Perrot's illustration, vol. ii. p. 365.

[^14][^15]The boots with turned-up toes, worn by some of the figures sculptured on the parapet, resemble a most constant Hittite characteristic, and the tall hat through which the hair of a female figure is drawn (Fig. 7) may derive from the 'pig-tails' and conical hats of the Hittite sculptures. The horned helmet of one of the warriors on the parapet also recalls Hittite sculptures.

## The Primitive Structures and the Precinct.

Exactly at the middle of the naos of the Croesus temple was a great basis, and beneath it were discovered the foundations of earlier masses of masonry of the same type, the earliest of all being about $14 \times 9$ feet. It was better built than the foundation of another mass which stood some ten feet to the west, and the two were connected by narrower foundations (Fig. 15). It cannot be doubted that, as suggested in the B.M. publication, it supported a small covered building or shrine. If this shrine contained the sacred cultus object, the other mass to the west can hardly have been anything else than the great altar, and the connecting masonry must represent the steps to the altar. The great altar must have been in the open air, and it follows that the shrine before


Fig. 15. which it stood was also in the open. This reading of the evidence is confirmed by the fact that the next work in order of development was to build a raised platform over the area occupied by both the shrine and the altar. This platform would not have been carried so far to the west if it had not supported the altar. This platform was subsequently enlarged (I. and II. on Fig. 15).

Foundations of walls which surrounded the shrine and the altar were discovered, and it seems that these must have been the walls of structures which had no roofs. The walls which in the publication are taken for the foundation of inner rows of columns in the Croesus temple, occupy much the same relation to the enlarged platform as other walls do to the smaller platform. The temple was surrounded by a large enclosed park forming a sanctuary. Following the analogy of other sanctuary sites, it is probable that there were many minor buildings, porticoes, statues, and memorials.

Note.
In my former account of the Hellenistic temple it was shown that a series of the subjects sculptured on the columns referred to the birth festival of Artemis. On one pedestal Victories were leading animals to sacrifice, around a column fillets were being hung to festoons, on another was an assemblage of citizens, on another men in Persian dress were advancing in procession as if with gifts. Of the last it was remarked that it might have
been the source in art for the representations of the Magi bringing their gifts. A curious further point arises on this. One of the earliest paintings of the Coming of the Wise Men in the Catacombs (third century) shows two on either hand approaching the Virgin, who is seated with the Infant Christ in the middle (Pératé, L'Archéol. Chrétienne, Fig. 77) ; along the background are festoons with fillets hanging from each loop. This too represented a birthday festival. The centre of interest at Ephesus must in a similar way have been a drum sculptured with Leto nursing Apollo and Artemis, and I would see in the well-known 'Tellus' relief at Rome more or less of a copy of the design. This is building a scheme very much in the air, but the existence of the drum of the Muses at Ephesus, considered in relation with the scheme at the Apollo temple at Delphi where Leto with Apollo and Artemis and attendant Muses were sculptured, gives substantial support to the theory. So does the analogy before pointed out with the Parthenon sculptures where the birth scene was the central idea of the whole. The Artemision at Ephesus was the Nativity Temple of Artemis. (For a possible relief from the great altar and the statues of the Amazons see Noack in Jalırb. Arch. Inst. xxx. p. 131.)
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[^0]:    1 This enlargement of the bottom of the shafts recalls a conical expansion of the columns found at Naucratis.

[^1]:    ${ }^{2}$ See one from Thasos, A.J.A. xix. p. 94 : Mitt. Arch. Inst. (Rome, 1906), Pl. II. p. 64.

[^2]:    ${ }^{3}$ See, for example, J.H.S. 1912, p. 373. The figure in the pediment at Aegina which

[^3]:    4 Usually so called. See Mr. Dinsmoor's article in Bull. Cor. Hellen. 1912, p. 449.

[^4]:    ${ }^{6} 1$ had written this before I found a similar statement in Radet's Cybébé, 1909, where the Asiatic queen of the beasts and her artistic

[^5]:    descendants are fully treated. See also on Gorgons found at Sparta (B.S.A. xiii. p. 105).

[^6]:    ${ }^{7}$ B.S.A. xi. pp. 298 ff.
    ${ }^{8}$ See Jour. R.I.B.A. Feb. 1915.

[^7]:    ${ }^{9}$ At Delphi there was a separate aedicula against the back wall of the cella (J.H.S. xxxiii. 1913). At Bassae a separate small chamber contained the statue. At Olympia

[^8]:    the temple of Zeus seems to have been open till the fifth century, and so, according to Vitruvius, was the temple of Zeus at Athens.

[^9]:    ${ }^{10}$ Cf. Anderson and Spiers, Architccture of Greece and Rome, p. 57.

[^10]:    ${ }^{11}$ Mitth. Arch. Inst. xxxvii.
    12 Pontremoli, Pl. XVIII.
    ${ }^{13}$ As I have before shown of the later temple also.

[^11]:    ${ }^{1+}$ The architect, we are told, wrote an account of the temple; is this likely of the sixth century?

[^12]:    ${ }^{15}$ Was this the first frieze proper

[^13]:    ${ }^{16}$ Sartiaux, Villes Mortes, p. 64.
    The Land of the Hittites.
    ${ }^{17}$ Prof. Sayce, pref. to Prof. Garstang's
    ${ }^{18}$ Prof. Garstang, The Land of the Hittites.

[^14]:    ${ }^{19}$ Maspero says of the Assyrian bulls that they were mystic guardians which warded off the attacks of evil men, spirits and maladies. The lions' heads on Greek gutters must originally have been apotropaic, and the early examples are much like Assyrian lions.

[^15]:    ${ }^{20}$ See an article in Klio, xiii. 1913.
    ${ }^{21}$ Similar erect birds have been found in Palestine and curiously at Zimbabwe.
    ${ }^{22}$ The four winged creatures of Ezekiel seem to have been guardians of the four quarters.

