

# NEW FRAGMENTS OF THE PARTHENON IN THE ATHENIAN AGORA

(PLATES 20-24)

DURING the 1970 excavations at the Athenian Agora various marble fragments dating from the Periclean period were found built into a wall of late Roman date in the area north of the Piraeus-Athens railroad cut and east of the Hadrian Street gate.<sup>1</sup> These fragments are from coffered ceilings, columns, an epicranitis course and a Doric frieze. During the same season another fragment, from one of the same coffered ceiling series, was found built into the wall of a house dating to the 1840's in the area east of the Stoa of Attalos and between the Greek and Roman Agoras, on the south side of Poikile Street. In 1972 two more column drum fragments of the series were found, again in the area between the Greek and Roman Agoras, incorporated into a wall and a base of late Roman date.

Study of the fragments in the winter of 1970-71 proved beyond doubt that three of the series of coffered ceilings came from the Parthenon.<sup>2</sup> Because of its close association with the other marbles, it was easy to determine that the exterior frieze fragment again came from the same building. Perhaps the greatest interest in the finds comes, however, from the fragments of columns. They are of Pentelic marble and are from a two-tiered colonnade of the Doric order, with sixteen flutes. The restorable diameters of the drums work very neatly with the known lower diameter of the original interior order in the cella of the Parthenon.<sup>3</sup> Sixteen-fluted Doric columns in the Periclean age are rather rare.<sup>4</sup> Superimposed orders were then limited, as far as we know, to temple design. Since our fragments meet the specifications of being from the Periclean period, of being Pentelic marble, of having sixteen flutes, of being from a two-tiered colonnade, of being the correct size, and of having been found together

<sup>1</sup> I wish to acknowledge my thanks to Professor T. Leslie Shear, Jr., Director of the Athenian Agora excavations, for his permission and encouragement to publish the Parthenon fragments found in the Agora, and to Dr. G. Dontas, Ephor of the Acropolis, for his permission to draw and publish some of the Parthenon fragments on the Acropolis and in the Acropolis storeroom. I also gratefully wish to thank A. Norre Dinsmoor for all her help and suggestions. Much of the material at the end of this article comes from her observations and findings.

<sup>2</sup> W. B. Dinsmoor, Jr., "New Parthenon Finds in the Agora," *Ἀρχαιολογικά Ἀνάλεκτα ἐξ Ἀθηνῶν (AAA)*, IV, 1971, pp. 264-268.

<sup>3</sup> The drums are restored from 0.790 m. to 1.054 m. in diameter (Catalogue **F1** to **F16**). The lower diameter of the interior order was 1.114 m. (See note 13 below.)

<sup>4</sup> The second temple of Hera at Paestum, *ca.* 460 B.C., which used sixteen flutes only for the superimposed tier in the cella, and the temple of Poseidon at Sounion, *ca.* 444 B.C.

with many other fragments from the Parthenon, there can be little doubt that they are the first pieces which we have from the original Doric columns in the cella of the Parthenon.<sup>5</sup> As further evidence, they are in extremely fresh condition, indicating a protected interior provenience.

The majority of the fragments were re-used as rubble for the northern of two parallel late Roman walls in the area north of the Piraeus-Athens railroad cut already mentioned. This wall overlay certain Roman remains: a stoa of the 1st century after Christ at the west end of the excavation area, a 2nd century basilica adjoining it to the east, and a 2nd century house slightly further east. At this point the wall, some fifty-nine meters long, unfortunately is interrupted by the railway cut of 1891. Dr. Stephen G. Miller, who excavated the site, dates these walls A.D. 450-475.<sup>6</sup>

In the excavation between the Greek and Roman Agoras, the rebuilt back wall of the northern colonnade of the Library of Pantainos and a rectangular structure in Room 2 behind this wall, which contained the other two of our column fragments, are dated by the excavator, John McK. Camp II, A.D. 375-425.<sup>7</sup>

#### THE CEILING COFFERS (A1 to A13, B1 to B3, C1 to C3, D1; Figs. 1-5, Pls. 20, 21)

Penrose restored at a very small scale the ceiling coffers of the flanks and porches of the Parthenon from fragments found in the vicinity of the building.<sup>8</sup> He had to conjecture the coffer restoration of the east and west pteromata of the structure since no fragments from that part of the building had then come to light. Züchner, in 1936, published a restored drawing of a flank-coffer dome.<sup>9</sup> Comparison of the newly found coffer fragments at the Agora with the drawings made by Penrose, as well as with the many fragments of coffers still lying within the Parthenon and the Acropolis storeroom (Figs. 4-5), leaves no doubt but that the Agora fragments belong to the Parthenon, coming from the flanks, the porches, and *also* from the end pteromata (Fig. 6).

<sup>5</sup> Penrose, *The Principles of Athenian Architecture*, the Society of Dilettanti, London, 1888, p. 9, note 3, states that there was found a fragment of an interior colonnade column which he believed was from a lower drum with the flutes coinciding with the traces on the stylobate. This fragment is now lost.

<sup>6</sup> T. Leslie Shear, Jr., "The Athenian Agora; Excavations of 1970," *Hesperia*, XL, 1971, pp. 264-265, 275, 277 and pls. 46, 52, a, C-C. I owe many thanks to Dr. Miller whose gathering of all the fragments from his excavation and whose classification of them as belonging to a 5th-century B.C. building facilitated my study of them and, indeed, made this article possible.

<sup>7</sup> Mr. Camp brought these fragments to my attention, and, when I had ascertained that they were from the Parthenon, he very kindly had them extracted from the late Roman constructions.

<sup>8</sup> *Op. cit.*, pls. 15 and 16.

<sup>9</sup> *Arch. Anz.*, LI, 1936, pp. 311-314. He actually painted a blue background onto the two original marble fragments of coffer domes then existing. One of these fragments, 6142, still exists in the Acropolis storeroom.

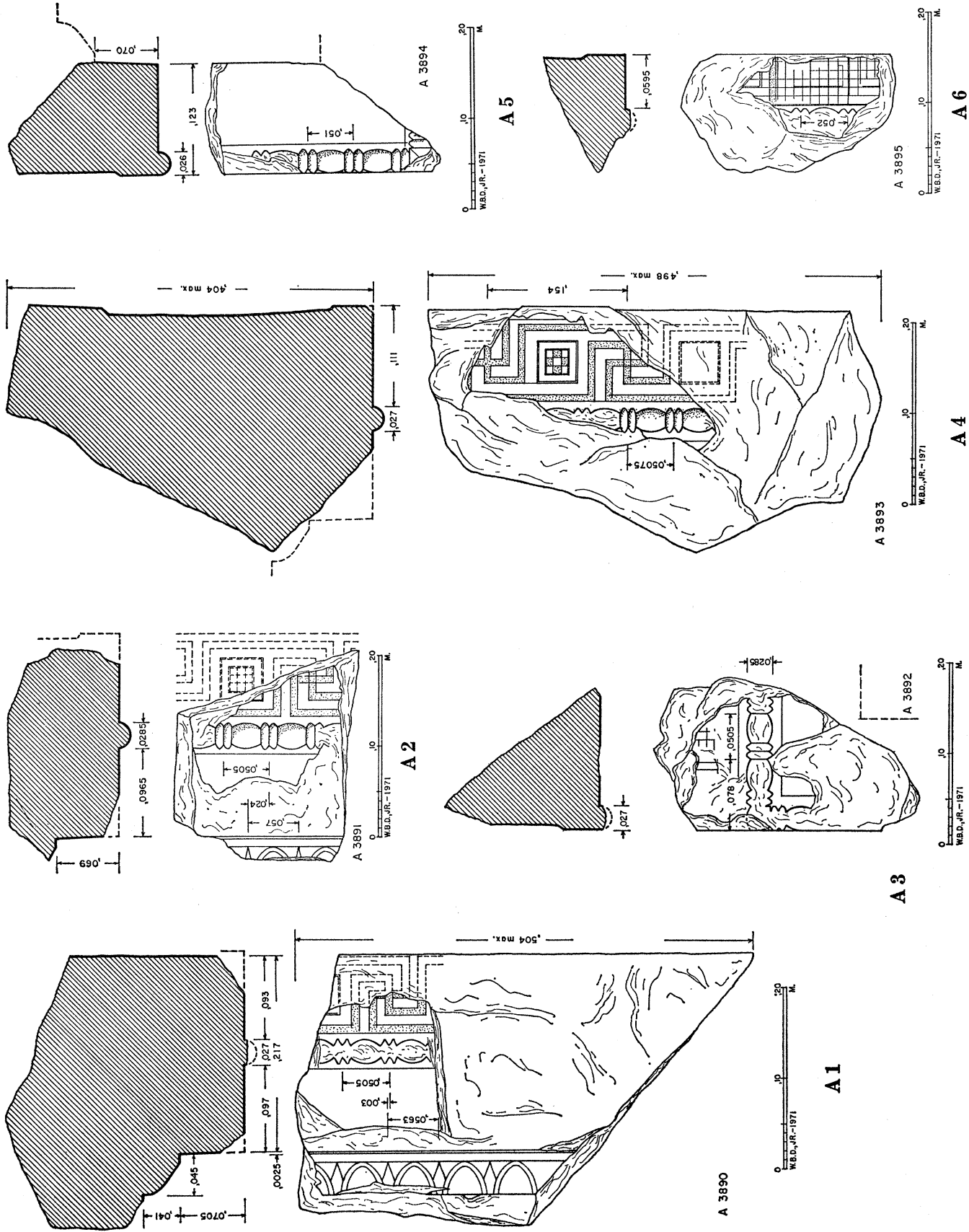


FIG. 1. Parthenon Coffer Fragments. Scale 1:6.

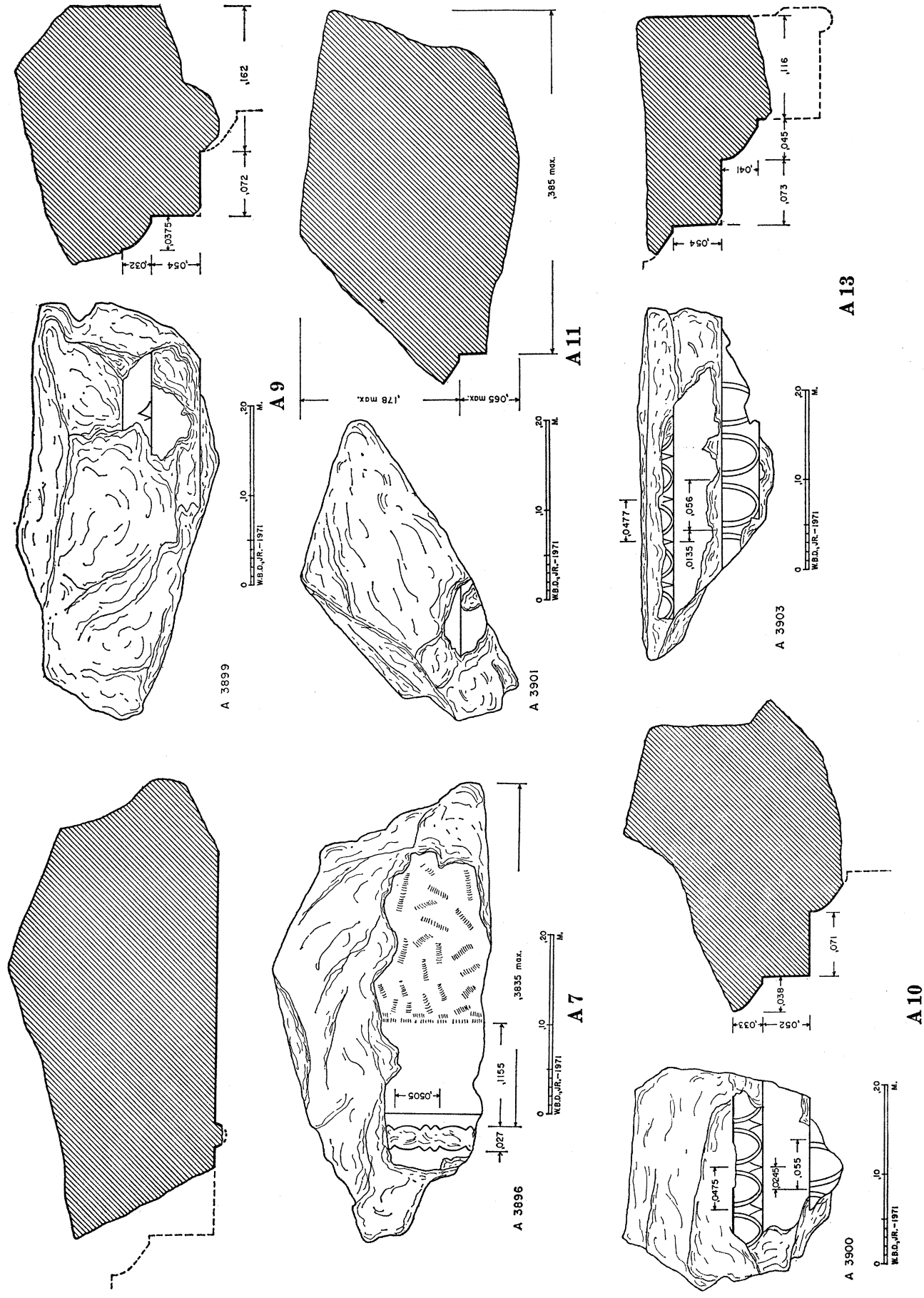


FIG. 2. Parthenon Coffers Fragments. Scale 1:6.

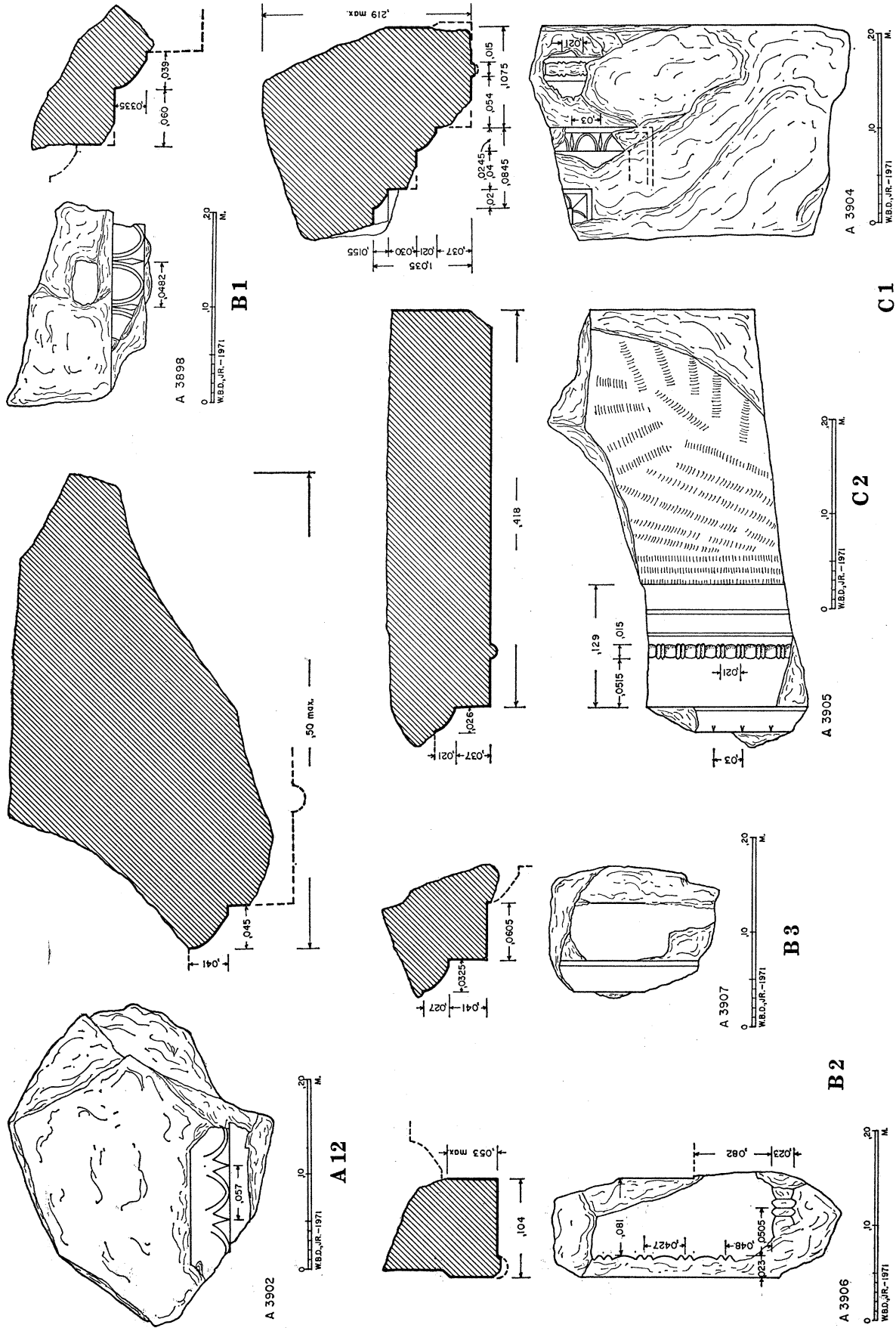
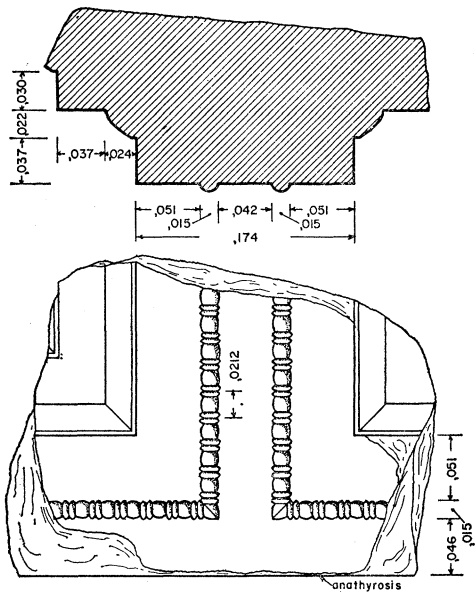


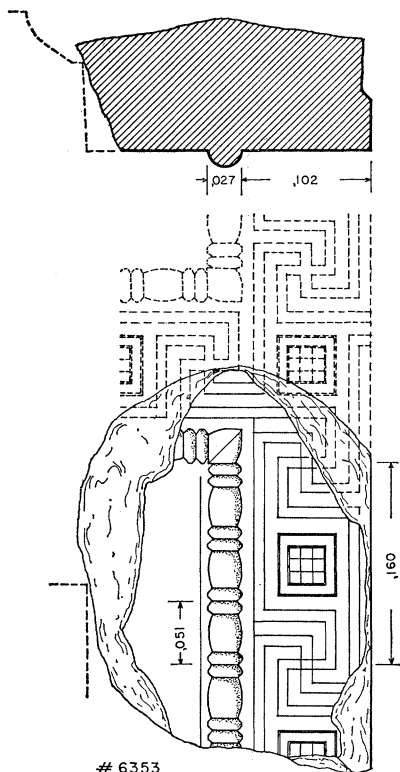
Fig. 3. Parthenon offer Fragments. Scale 1:6.



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W.B.D., JR. - 1971  
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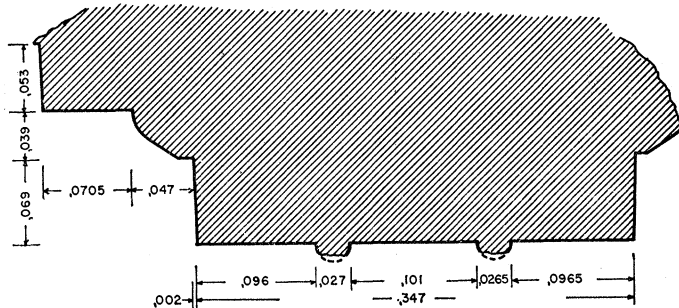
C3



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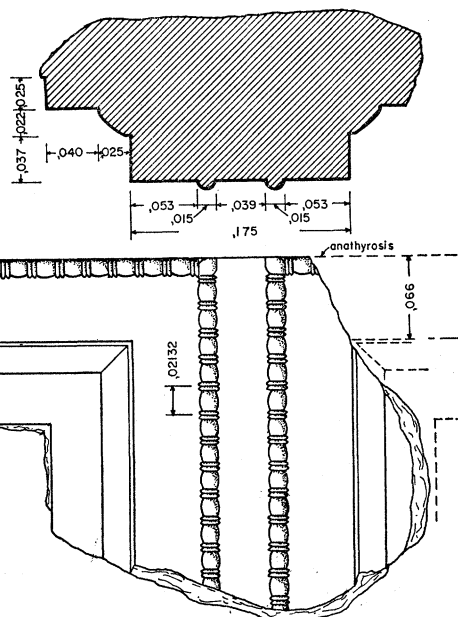
Acropolis Storeroom



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Acropolis Storeroom



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FIG. 4. Parthenon Coffer Fragments. Scale 1:6.

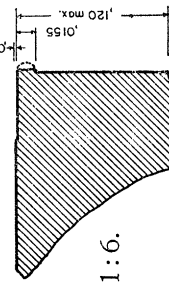
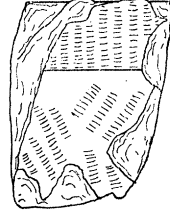
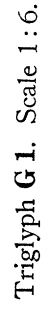
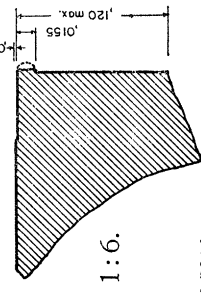
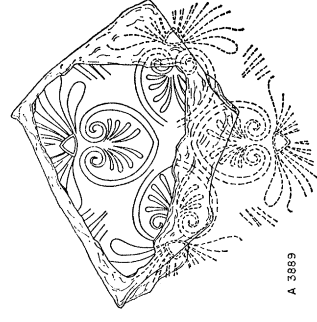
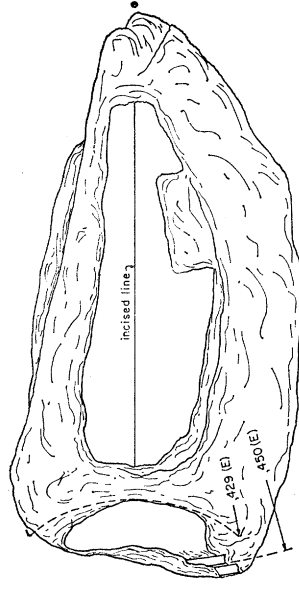
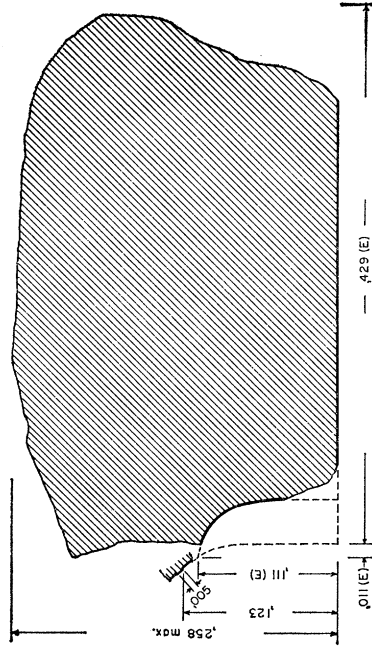
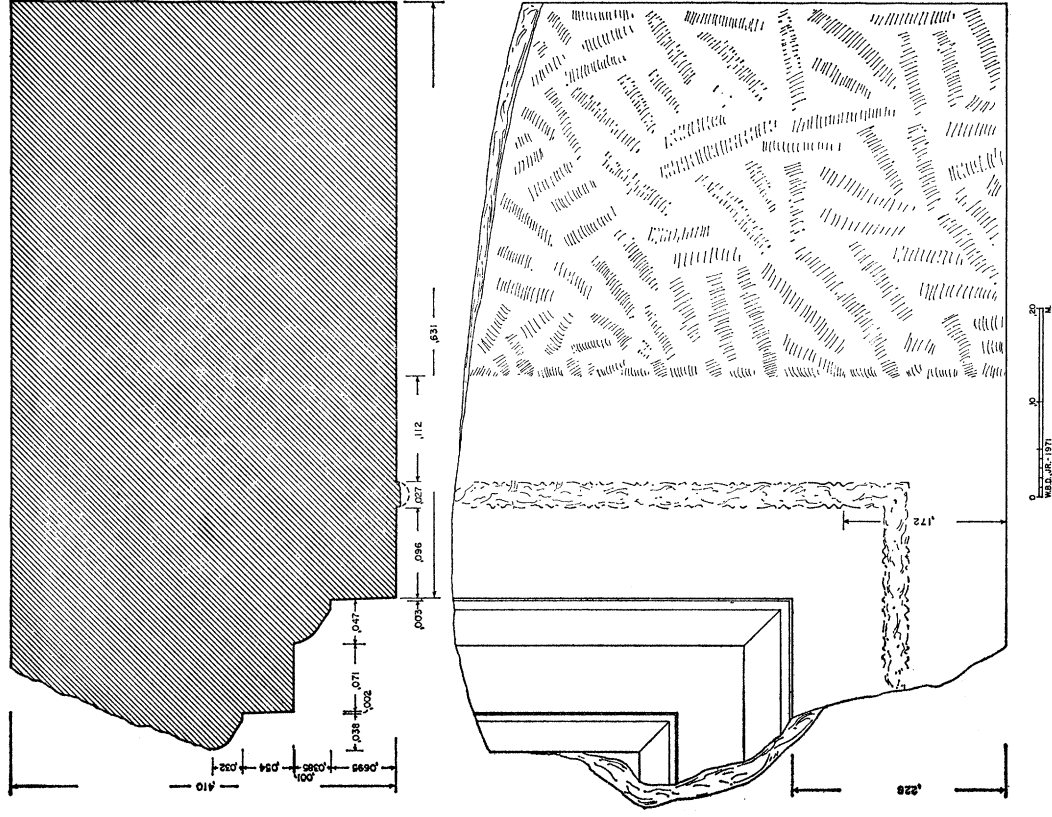


FIG. 5. Parthenon Fragments.

Of the Agora fragments, thirteen belong to the large series of the flanks, three to the intermediate series of the end pteromata, and three to the small series of the porches (Catalogue **A 1** to **A 13**, **B 1** to **B 3** and **C 1** to **C 3**). There exists also one fragment of a coffer dome, probably from the porch series (Catalogue **D 1**). In addition to these fragments from the wall, there were also found two Periclean coffer pieces from another building, not from the Parthenon. These are similar, but do not belong, to the series in the Propylaia. There were also two Periclean fragments

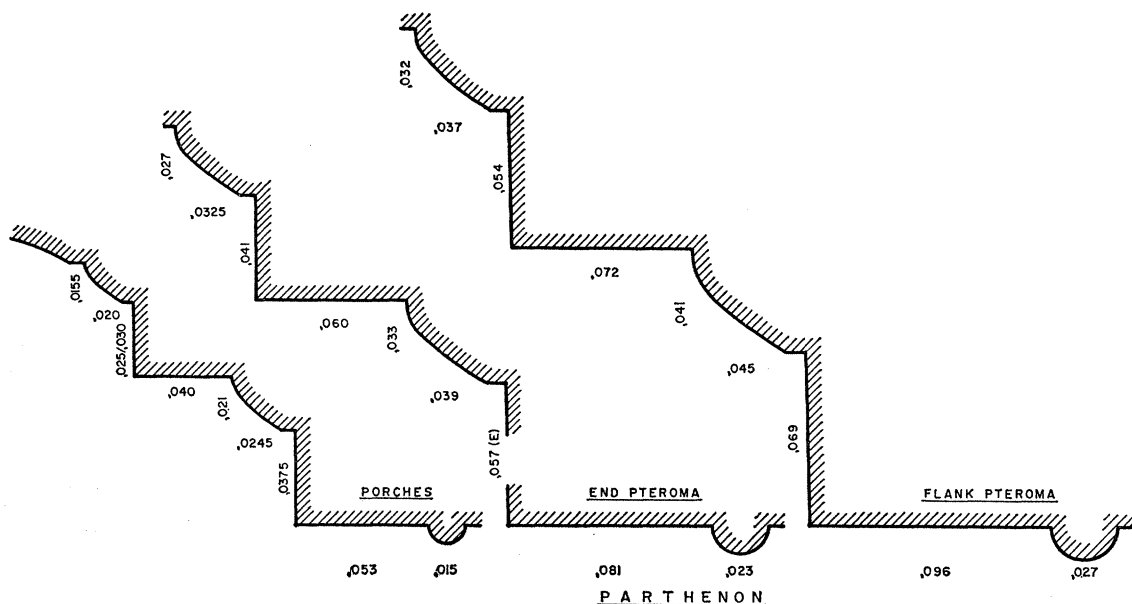


FIG. 6. Profiles of Ceiling Coffers. Scale 1:3.

from an epicranitis course, decorated with a double meander pattern, which again are not from the Parthenon.

The proportions of the various parts of all three series of the Parthenon coffers are quite similar. The ratio of vertical to horizontal dimensions for the lower and upper steps averages, for all series, 2.9 : 4, varying from 2.73 : 4 to 3 : 4.<sup>10</sup> Similarly, for the lower ovolo the average ratio is 3.5 : 4 and for the upper ovolo 3.26 : 4 (Fig. 6). The vertical faces of the steps normally batter out very slightly. The ovolos surmounting each step have a horizontal fillet at the bottom. The profile of the ovolo proper starts as an almost straight line which then curves back rapidly at the top. The curved dome, above the upper ovolo, again starts with a horizontal fillet which acts as a frame for its decorative floral field. An incised and painted egg-and-dart design was employed on the ovolo moldings, while the coffer domes had various floral

<sup>10</sup> One variant from this is the upper step of the Acropolis fragment 8832, of the small series, which is 2.5 : 4.



decorations: lotus-and-palmette emanating from a central star motif, and lotus-and-palmette with a central quatrafoil of smaller, reversed palmettes (Fig. 5, Pl. 24).

The soffits of the coffer dividers have, in all cases, two rows of bead-and-reel patterns in high relief, with elongated beads. In the case of the large flank series only, there is an additional incised and painted meander pattern between the bead-and-reel designs.

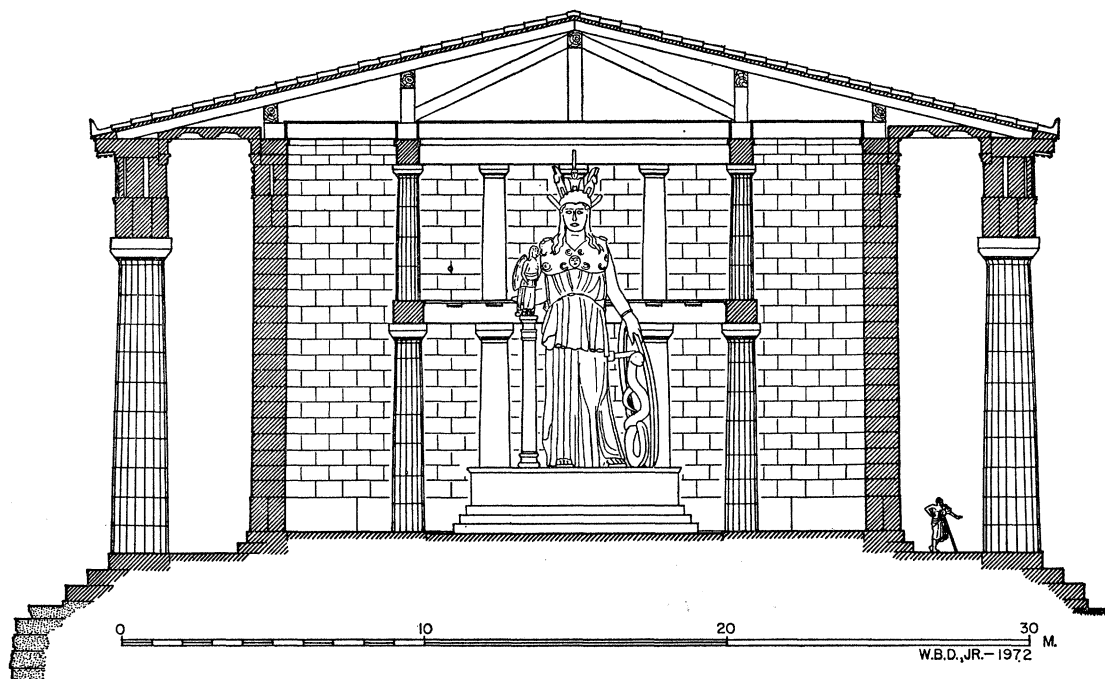


FIG. 7. Restored Section through Cella.

Although the coffers of the porches and end pteromata rested in a conventional manner on marble beams, the enormous flank coffer slabs acted as beams in their own right, without additional support, spanning from the colonnade entablature to the cella walls (Fig. 7, Pl. 24). These slabs, each containing two coffers, originally measured  $1.236 \times 3.387 \times 0.41$  m. and weighed *ca.* 8,000 pounds each, after deducting the cut-outs for the coffers. Ictinus got into trouble with his roof rafters, as did the Hephaisteion architect, since he placed his ceiling inordinately high. The problem must have been resolved in the Parthenon by chamfering the outer top edge of the coffer slabs to allow the rafters to pass over and rest on them (Fig. 7, Pl. 24). The slabs were so massive that no harm was done structurally.<sup>11</sup>

<sup>11</sup> A number of new flank coffers were made in the 1950's as part of a restoration project, but because of the weakened condition of the building they were never erected and now lie to the

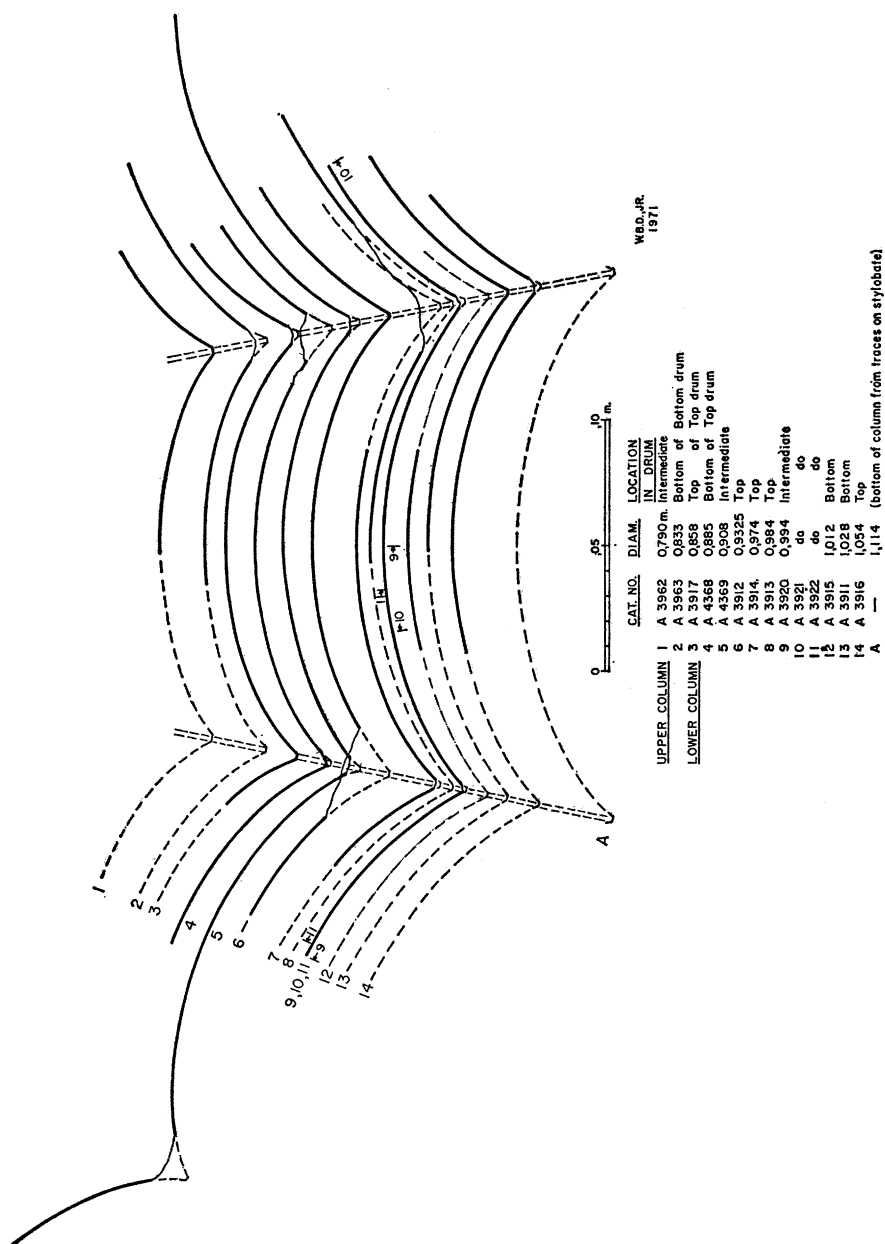


Fig. 8. Plan of Extant Column Flutes in Their Proper Relative Positions.

The proportions of the three series of coffers to each other (based on the sizes of moldings) should theoretically have been 1 : 1.53 : 1.8. Actually they appear to have been 1 : 1.7 : 1.8. For the large flank series, on the basis of the modular inter-relationship of the egg-and-dart design on the ovolos and of the carved bead-and-reel and the meander design on the soffit of the beam dividers, the dimensions of the coffers can easily be restored as 0.889 m. square at the bottom and 0.570 m. square at the dome, between ovolos. Aside from the spacings of the beams, the only evidence for the dimensions of the other two series is the egg-and-dart of the lower ovolo and the bead-and-reel design on the soffit of the beam dividers. The intermediate coffers seem to have been *ca.* 0.836 m. square at the bottom and *ca.* 0.567 m. square at the dome, while the small coffers can be restored as 0.496 m. square at the bottom and 0.323 m. square at the dome, between ovolos.

#### TRIGLYPH FRAGMENT (**G 1**; Fig. 5, Pl. 23)

The frieze fragment, found with the coffer fragments in the wall of A.D. 450-475, is identical in workmanship, material, and, insofar as the design is preserved, in dimensions to the exterior frieze of the Parthenon. The unusual astragal molding, 0.016 m. high, at the top of the Doric frieze of the Parthenon is represented in this fragment by a broken astragal 0.0155 m. high. The relieving edge at the top of the fragment, 0.001 m. deep and extending 0.055 m. back from the fascia below, is again identical. The preserved height of the fragment's fascia, 0.12 m., seems to identify it as coming from a triglyph rather than a metope.

#### INTERIOR COLUMNS OF THE CELLA (**F 1** to **F 16**, **E 1**; Figs. 8-10, Pls. 22, 23)

The original columns of the cella are represented by sixteen fragments of drums and one fragment of a capital. It is helpful that nine of the drum fragments come from tops and bottoms, preserving part of the resting surfaces and, in some cases, part of the core of the anathyrosis.

The arrises between flutes do not form a sharp point but are flattened with a fillet, measuring 0.002 m., in much the same way as are those of the exterior columns of the Parthenon and of the slightly later Stoa of Zeus Eleutherios in the Athenian Agora. The curves of the flutes are also formed in good Classical manner with three centers so that the gentle curve of the center swings out more abruptly at the cusp ends, terminating at the arrises (Fig. 10).

west of the Parthenon. The coffer cut-outs are slightly rectangular on these new coffers, 0.040 to 0.045 m. out of square. The slabs vary in dimension, measuring on an average only  $1.048 \times 3.164 \times 0.410$  m. Some have an extra-wide partial coffer divider on one side, increasing the width to 1.293 m. The component parts and the size of the coffer cut-outs are also too small: i.e. the lower step height 0.058 *vs.* 0.070 m., upper step height 0.045 *vs.* 0.054 m., bead-and-reel width 0.020/0.024 *vs.* 0.026/0.0285 m., coffer cut-out  $0.791 \times 0.746/0.751$  m. *vs.* 0.889 m. square.

There can be no question but that these pieces come from sixteen-fluted columns. Trigonometrically it is easy to determine the diameter of a shaft provided that one can measure the distance between two adjacent arrises and that one knows how many flutes the drum had.<sup>12</sup> In the case of **F 3**, it is shown graphically that the fragment

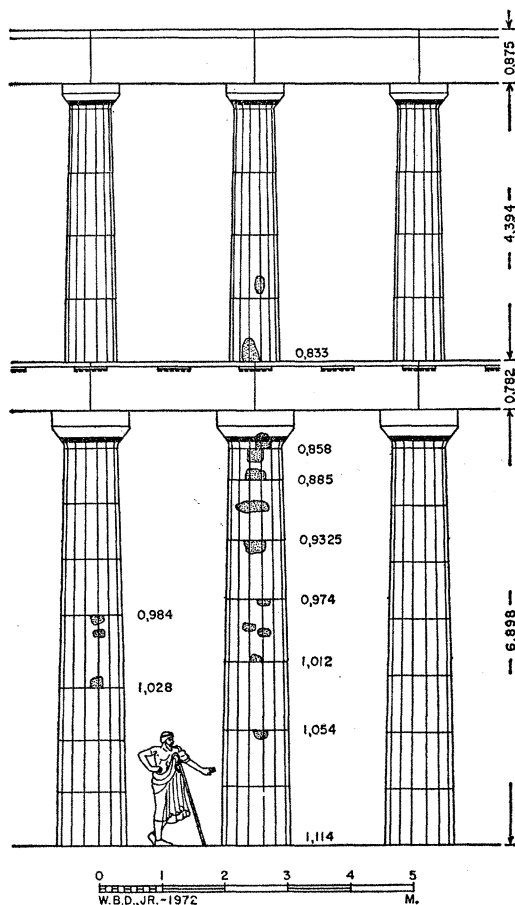


FIG. 9. Restored Interior Orders with Location of the Column Fragments.

is from a sixteen-fluted drum (Fig. 10). Sixteen flutes would give a diameter of 0.858 m. and twenty flutes would give 1.071 m., based on the chord between arrises of 0.1675 m. As can be seen on the drawing, the smaller diameter works admirably, giving a constant of 0.037 m. from the flute to the inscribed outer circle. The larger diameter must be excluded since it gives less than 0.037 m. at one flute and more than 0.037 m. at the next flute. **F 4** and **F 6** present the evidence more clearly since they

<sup>12</sup> If "x" is the distance between arrises, the diameter of a sixteen-fluted column would be "x"  $\div$  sin 11° 15', while the diameter of a twenty-fluted column would be "x"  $\div$  sin 9°.

are large enough to contain more than one flute each and also have the arc of the inner band of anathyrosis preserved. The diameter of the inner band is readily calculable, and to this is added double the thickness of the polished band out to the arris to give the column diameter. In both cases, this calculation yields the same diameter as that computed from the chord between arrises for a sixteen-fluted column.

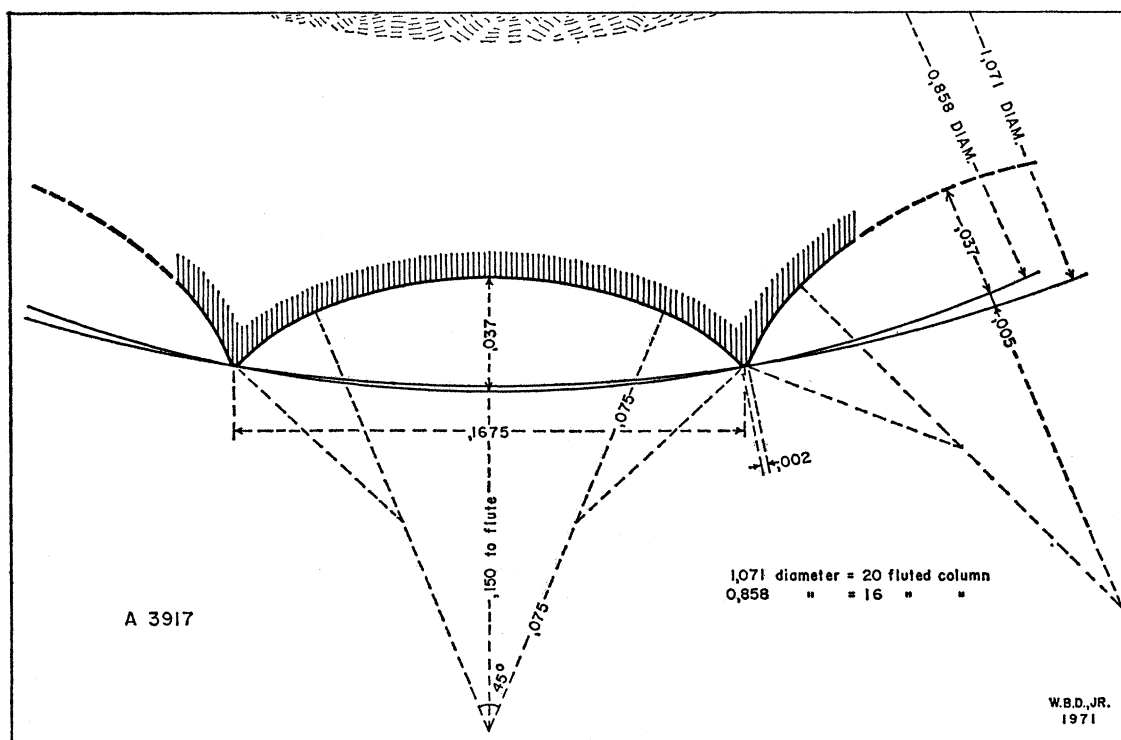


FIG. 10. Column Fragment **F 3**.

Penrose was able to measure the diameter of the original sixteen-fluted columns from traces on the interior stylobate as 1.114 m.<sup>13</sup> These traces have now vanished, rubbed out by the footwear of the twentieth-century barbarian hordes. No fragments of bottom drums with diameters corresponding to that measured by Penrose are

<sup>13</sup> Penrose, *op. cit.* He measured the diameter as 3.656' (1.114 m.) and stated that there were sixteen flutes. He is also the source for Woods' measurement of the southwest corner column at 3' 9" and Cockerell's measurement of the same column traces, but certainly of the flute diameter rather than the arris diameter, of 3' 3 $\frac{2}{3}$ " (*ibid.*, note 4). W. B. Dinsmoor, "The Internal Colonnade of the Hephaisteion," *Hesperia*, XXXVII, 1968, p. 173, note 49 and p. 175, gives 1.115 m. as the normal column diameter. W. M. Leake, *The Topography of Athens*, London, 1821, p. 210, mentions Cockerell's seeing the column traces. E. Beulé, *L'Acropole d'Athènes*, Paris, 1854, II, 33, says Paccard saw traces of fluting on the cella floor, the column diameter being 1.03 m. and the column spacings 2.60 m.

known at this time. The Agora fragment with the largest diameter of est. 1.054 m., **F 14**, comes from the top of a second drum from the bottom, or sixth from the top (Fig. 9).

By far the most important fragment found was **F 2**. It is from the bottom of a drum and has a relieving surface of about one quarter of a millimeter, extending back 0.014 m. from the flute. Only the bottommost drum of a column was treated in this manner. Since the estimated diameter of our drum is only 0.833 m., based on the curve of the relieving surface and the restored flute, the piece necessarily comes from the bottom of a superimposed order and indicates a double tier of columns.

This fragment then leads us to **F 3** whose estimated diameter is only slightly greater, 0.858 m. Being from the top of a drum, it must therefore come from the top of the lower order, directly under the capital. Our single fragment of a capital (**E 1**) bears this out. Although sketchily preserved, it retains part of two annulets, the upper part of a flute, and an incised guide line on the lower resting surface which gives the center of the flute. The diameter at the bottom of this capital can be calculated again as 0.858 m., so that it would fit on top of **F 3** (Fig. 5, Pl. 22).

The original heights of the lower and upper interior columns of the Parthenon are slightly problematical. As Dinsmoor points out, the columns, both lower and upper, must have had their capitals level with horizontal joints in the cella wall so that the epistyle blocks would rest at the east wall on anta capitals coursed with the modular construction. He places the top of the capital of the upper order level with the top of the Panathenaic frieze course, i.e. 12.074 m. above the floor (Figs. 7 and 9).<sup>14</sup> The top of the capital of the lower order he places level with the top of the eleventh course above the orthostates, i.e. 6.898 m. above the floor.<sup>15</sup> The epistyle course over the lower colonnade certainly had the canonical taenia and regulae (as preserved in the temples of Aphaia at Aegina and Hera II at Paestum) and the height of the course can be figured from the prevalent proportions of the Periclean age, based on the column spacings, as 0.782 m.<sup>16</sup> The upper tier of columns can now be

<sup>14</sup> *Hesperia*, XXXVII, 1968, p. 173, note 49. See also Penrose, *op. cit.*, pl. 16, who gives  $33.076' + 3.424' + 3.324' = 39.824'$  (12.138 m.), and Balanos, *Les Monuments de l'Acropole, Relèvement et Conservation*, Paris, 1936, drawing pl. 1bis, whose individual course dimensions at the west doorway add up to 12.123 m.

<sup>15</sup> Dinsmoor, *loc. cit.* See also Balanos, *loc. cit.*, whose individual course dimensions at the west doorway add up to 6.924 m.

<sup>16</sup> The column spacings are variously given as 2.603 m., 2.604 m. and 2.607 m. If a non-existent metope frieze had existed, the frieze would have been  $2.603/2.607 \text{ m.} \div 3\frac{1}{3} = 0.782 \text{ m.}$  In this period the epistyle and frieze maintained the same height. On this same basis, the temple of Aphaia on Aegina would have had a theoretical frieze height of  $2.28 \text{ m.} \div 3\frac{1}{3} = 0.685 \text{ m.}$ , but the actual epistyle height is only 0.66 m., slightly less than would be expected (A. Furtwängler, *Aegina, Das Heiligtum der Aphaia*, Munich, 1906, pls. 32 and 41). For the Parthenon, Dinsmoor, *loc. cit.*, allows 0.879 m. (12.074 m. less the two columns with his aggregate height of 11.195 m.). This epistyle seems too heavy.

computed as having been 4.394 m. high.<sup>17</sup> The epistyle over the upper colonnade would have had the same height as the two courses over the Panathenaic frieze, 0.875 m., so that the total height of the ceiling would have been  $12.074 + 0.875 = 12.949$  m.

With this arrangement of column heights the lower order, with its lower diameter of 1.114 m., would have had a height of 6.192 lower diameters while the upper order, with its lower diameter of 0.833 m., would have had a height of 5.275 lower diameters.<sup>18</sup> These compare to a height of 5.48 lower diameters for the exterior columns of the building. The reason for having sixteen flutes on the interior columns instead of the normal twenty may have been to minimize visually the slenderness of the shafts. This same desire probably suggested the use of sixteen flutes for the temple of Poseidon at Sounion.

To judge from the exterior columns of the Parthenon and Hephaisteion, the overall height of the capital of the lower order, including the beginning of the fluted shaft, would have been about 0.60 m. This leaves 6.298 m. for the height of the shaft. Again on the basis of the exterior columns of these two temples, the maximum entasis would have been *ca.* 0.01025 m., or an increase of 0.0205 m. in column diameter beyond a straight line of diminution at a point *ca.* 58% up the shaft. These guides permit the profile of the column to be determined and the drum fragments from the Agora, based on their diameters, can be set in their proper locations in the shaft (Figs. 8-9). The result gives seven drums, of which the lower six average 0.969 m. in height (from 0.927 to 1.087 m.) while the top one is to be restored at only 0.482 m.<sup>19</sup>

#### CAUSE AND DATE OF DESTRUCTION

A difficult question which arises from the finding of these fragments in the Agora excavations is that of the cause and date for what seems to have been a fairly extensive destruction of the Parthenon in Roman times. Although the fragments of ceiling coffers could theoretically all have come from a catastrophe to only one corner of the building, this corner would involve a flank, an end pteroma and a porch, which is a considerable area. The implication by the fragments of interior columns of both lower and upper orders, however, is that of a much more general devastation. These pieces come from a minimum of, and quite conceivably from more than, three columns. Since the size of some of the fragments precludes their having been broken from columns which were still functioning, these members must have collapsed, bringing down with them the ceiling and roof beams and the marble roof tiles supported by

<sup>17</sup> 12.074 m. (total height to top of upper column) less 6.898 m. (lower column) less 0.782 m. (epistyle).

<sup>18</sup> See Dinsmoor, *loc. cit.*, for discussion of relative heights of two-tiered columns.

<sup>19</sup> Compare with the Hephaisteion exterior columns which are 17% shorter and whose drums average 0.745 m. in height, again employing seven drums to the shaft.

them, or, more likely, the wooden rafters and beams probably collapsed with the consequent deluge of roof slabs and falling heavy wood timbers unbalancing the cella colonnade and causing it to crash down as well. This destruction must have affected the ceiling coffers and even the cornice blocks, for it seems hard to picture a top central piece breaking off an exterior triglyph block (**G 1**), protected as it was under the cornice, unless the course above it was also damaged or shifted.<sup>20</sup>

The dating of the destruction has been given as anywhere from the middle of the 2nd century B.C.<sup>21</sup> to the explosion of A.D. 1687.<sup>22</sup> The latest publication on the subject attributes the destruction to the Herulians in A.D. 267.<sup>23</sup> Common opinion, however, holds that the Herulians did not breach the Acropolis.<sup>24</sup> Moreover, the pristine freshness of many of the coffer and column fragments, brought down from the Acropolis and re-used in the late Roman constructions of the end of the 4th century and middle of the 5th century, belies their having lain around for a century and a half. Some pieces of the columns preserve part of their delicate arris-fillets and their polished flutings, with no traces of weathering. It would seem that a destruction date in the 4th century, probably the second half, would be more in keeping with the condition of the fragments and with their being found together in such profusion.<sup>25</sup>

After the death of Valentinian I (i.e. after A.D. 375) Nestorius saw Achilles in a dream and set up an image of the hero in a naiskos which he put under the Statue of Athena in the Parthenon so that the hero shared the veneration of the goddess.<sup>26</sup> Although this event might have taken place after the late Roman reconstruction of the building, it would seem to fit in better with a time just preceding the destruction.

<sup>20</sup> The possibility of a methodical dismemberment of the ceiling coffers in the late Roman period cannot be considered seriously. Such depredations were not carried out in the Propylaea or Erechtheion. Equally improbable is the possibility of a similar dismantling of the cella colonnade, with the temporary use of scaffolding to hold up the roof members, in order to replace, in the pre-church period, the Classical columns with the smaller re-used Hellenistic columns.

<sup>21</sup> Dinsmoor, "The Repair of the Athena Parthenos: A Story of Five Dowels," *A.J.A.*, XXXVIII, 1934, p. 102 (this date has since been retracted).

<sup>22</sup> Beulé, *Acropole*, II, pp. 37-40.

<sup>23</sup> J. Travlos, *Pictorial Dictionary of Ancient Athens*, London, 1971, p. 444.

<sup>24</sup> Publius Herennius Dexippus, a historian, archon and priest of this period, might have supplied the answer to this question, but we shall probably never know whether he did or not. He caused to be carved on the west pier of the Propylaea's Southwest Wing an inscription (*I.G.*, II<sup>2</sup>, 3198) concerning the Panathenaic Procession of either 262/3 or 266/7 after Christ, just before the invasion. He also published a Chronological History terminating with the year 269/70, after the Herulian invasion, but this has unfortunately been lost. He is mentioned as having defeated the Herulians (*Hist. Aug. Gallien.*, xiii, 8).

<sup>25</sup> Although the date of Alaric and his Gothic invaders in A.D. 395/6 is tempting, it is commonly believed that he never attacked Athens (Zosimus, iv, 18; v, 5). Destruction under the edict of Theodosius II in A.D. 435 is ruled out since fragments from the destruction had by this time already been rebuilt into the late Roman reconstruction of the Street Stoa in Area PP.

<sup>26</sup> Zosimus, iv, 18, 2.



The cause of the collapse of the roof, ceilings and interior colonnade may have been due to fire. Fires were common in Greek temples where an oil lamp, carelessly handled, would ignite a hanging drapery which in turn would cause a conflagration of the centuries-old, tinder-dry wooden ceilings and beams. In fact there are evidences of ancient fires within the Parthenon. Such a disastrous fire would readily account for an overall collapse as described above. Our column fragments, however, show no sign of fire (the coffer fragments would most likely show no burning since they rested on marble and were under the wooden rafters). In intense conflagrations, marble building members are readily reduced to lime. Although it is possible that all of our pieces came from the sides of columns protected from the fire, it is also possible that the destruction could have been caused by the decay and fatigue of the rafters and beams, of which any original ones then remaining would have been more than 800 years old. This disintegration would have taken a longer span of time than a fire, but would eventually be as effective a cause of destruction during a period of low ebb in Athenian building construction and workmanship.

#### RECONSTRUCTION

The reason for and the date of the later reconstruction of the building are as nebulous as are those of its destruction. Emperor Julian (the Apostate) has been mentioned as the stimulator, in A.D. 361-363, of the rebuilding,<sup>27</sup> and although he would seem to be the last of the Roman emperors to have supported the rehabilitation of a pagan temple, his date seems to be too early.

The restoration of the Parthenon must have been done in the 5th century, shortly after the destruction, in connection with its function as the 'temple' rather than the 'Christian church' of the late 5th or, more probably, of the 6th century. That it was not done for the church is indicated by two points. The first is the addition of a makeshift barrier between the columns. This barrier, indicated by several traces on the stylobate, was added after the erection of the later colonnade (since otherwise this later colonnade would more canonically have been set on a continuous raised stylobate of bench height). The addition of the barrier should be understood in an early Christian context. The second point is the insertion of a central column in the lower tier of the west colonnade, following the general arrangement of the original supports. This central column did not implement the church plan, being directly in front of the central door which, for the church, was cut through the dividing wall between the Parthenon room and cella (or narthex and nave). Although this column remained in place during part of the Christian era, as evidenced by cuttings for candelabra (?) on the stylobate behind it, the column was eventually removed and an arch took its place. That the building was still the pagan Parthenon in the latter part of the 5th

<sup>27</sup> Travlos, *loc. cit.*

century, after the reconstruction, can also be surmised from Marinus. In his work on the life of his teacher, the neo-Platonist Proclus (A.D. 410-485), Marinus wrote that the philosopher saw a dream in which a woman appeared to him at the time when the Statue of Athena was being moved from the Parthenon by "those who move the immovables."<sup>28</sup>

The dowel cuttings and pour channels in the stylobate for the later columns are crudely cut and the placing of the columns themselves is quite irregular, averaging 2.491 m. on the north and 2.497 m. on the south, but with variations from 2.418 to 2.554 m. The Hellenistic Doric columns, only 0.645 m. in diameter and with lower

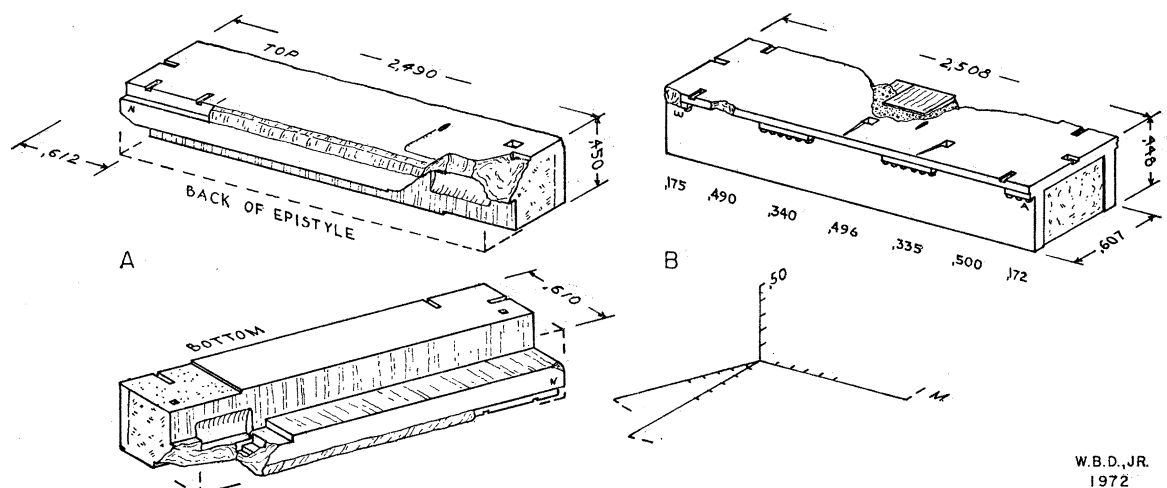


FIG. 11. Hellenistic Epistyle Blocks Re-used in the Later Parthenon.

faceted flutes, and the entablature above them seem to have come originally from a stoa in the lower city which escaped the ravages of the Herulians.<sup>29</sup> However, these entablature blocks had been through various uses before they finally reposed in the reconstructed interior of the Parthenon.<sup>30</sup>

Block B (Fig. 11) is an easily recognizable epistyle block of the Hellenistic period. It retains the original II-clamp, pry and dowel cuttings on the top surface and the original dowel cuttings on the lower surface. From the later Roman setting letters  $\Theta$  and  $\Lambda$  carved on its front surface, along with letters on others of the blocks, some of which have an ivy leaf below and to the left of the setting letters for a second cycle

<sup>28</sup> Marinus, *Vita Procli*, 30.

<sup>29</sup> Travlos, *op. cit.*, p. 281.

<sup>30</sup> Cf. Penrose, *op. cit.*, pl. 9A, and F. Versakis, 'Εφ. Ἀρχ., 1909, pp. 213-218 and *Das Brau- und die Chalkothek*, Athen, 1910, pp. 25-30, figs. 25-29. Penrose shows double T-clamps rather than II-clamps and overlooks some cuttings as does also Versakis.

of the alphabet, it is clear that the block had been taken down in Roman times and re-used. Again on block B there are four later II-clamp cuttings on the top surface, two at the front and two at the back, for connecting the block to adjoining ones in such a way as to obviate its use as an epistyle block during a third phase. The web cuttings for these II-clamps are very shallow in comparison to the others. It would seem that the block during this period formed part of a monument base or of some related structure. Finally it was taken, for a fourth use, to the Acropolis for the reconstruction of the Parthenon.

Block A (Fig. 11), which was originally the same size as block B, is even more confusing. The original II-clamp, pry and dowel cuttings appear on the top surface and the original dowel cuttings at the bottom. This block went through the second normal stage of use with the Roman setting letter N carved on its face, albeit on the back side of the block rather than the front. Then, when still right-side-up, and possibly during the period of the 'monument base,' the molding on the rear of the block was chiseled back for a distance of 0.612 m. at one end, the width of one of these blocks, to make an exterior corner, and two clamp cuttings were made to attach it to an adjacent corner block (these are not II-clamps but merely horizontal grooves, retaining, however, a bit of iron and lead at their ends to prove that they were used). During a fourth use, certainly again in the period of the 'monument base,' this block was turned upside down, two II-clamps were added at the original front edge of the block and one II-clamp at one end. At the other end of the original bottom surface a rectangular cutting, 0.02 m. deep and 0.485 m. wide, was made after the bottom II-clamp cuttings had been worked (the II-clamp within this cutting is only 0.02 m. deep now whereas the twin clamp cutting at the other end of the block is 0.04 m. deep). This provides a fifth use. Finally the block, still upside down, was cut to provide a continuous ledge 0.228 m. deep and 0.230 m. wide. This sixth use was probably for the Parthenon, to give support for wooden ceiling beams over the side aisles. This ledge, as well as one on another epistyle block (Penrose's Beam D and Versakis' fig. 25), contains a deeper cutting with stepped sides. Like the beam sockets of the Periclean Northeast Hall of the Athenian Propylaia which have a deeper cutting for every third roof rafter, these stepped cuttings were meant to hold firmly in place wooden cleats to which certain of the ceiling beams could be more securely attached. These epistyle beams are part of a series of entablature blocks assigned by Penrose, Dinsmoor, Travlos, and others to the later Parthenon for the very good reasons that they are the right size, that their lengths fit the column spacings, and that they were found in the environs of the building.<sup>31</sup>

<sup>31</sup> Only these two epistyle blocks are cited here. A complete study of the entablature blocks of the later Parthenon will be made in a forthcoming publication on the history of the building by A. Norre Dinsmoor.

The fact that these originally Hellenistic blocks went through three to five uses before they were incorporated into the Parthenon, where they presumably stayed until the bombardment by the Venetians in 1687 (because they were necessary to hold up the roof not only of the later Parthenon but also of the Christian church and of the still later Turkish mosque), indicates a late date for their final incorporation into the building. Certainly the 5th century is not an unreasonable period into which to put them for their final long-term resting place. This period, after all, was the great renaissance of building in pagan Athens when the city spread out beyond its enclosing walls of the third century and the philosophical schools, the great villas, and the monumental gymnasium in the Agora were being constructed. The Hellenistic blocks assuredly were erected after the 4th-century destruction and before the latter part of the 5th century when Proclus had his dream.

The length of time between the end of the 5th century, when the building went out of use as a temple, and its Christian consecration is unknown. The building presumably stood empty for a certain period before becoming a church. A. Norre Dinsmoor suggests an early conversion, at the very end of the 5th century.<sup>32</sup> Alison Frantz admits a possible date in the latter part of the 6th century, before the Slavic invasion of the 580's.<sup>33</sup> It is doubtful that any tangible proof of the date of conversion will be forthcoming. We do know, however, that the church is early because of some of the characteristics it displays through traces on the pavement, *viz.* the makeshift barrier between columns and the benches along the walls of the side aisles.<sup>34</sup>

## CATALOGUE

The provenience of all except three of the following Parthenon fragments was the 'green lime-mortar wall' of the 5th century after Christ in Section BΔ of the Athenian Agora in N 6, O 6 and P 6. The exceptions are **C 3** which came from the wall of a house built *ca.* 1840 in Section PP in T-U 13, and **F 4** and **F 5** which came from the late Roman remodeling of the Street Stoa in Section PP in S 13. All the fragments were found in the summer of 1970 with the exception of **F 4** and **F 5** which were found in 1971-1972.

<sup>32</sup> *Studies in the History of the Parthenon*, Diss. California, 1966, p. 3. Much of the argumentation for this earlier date depended on the connection of the second colonnade with the Christian Parthenon. She has now revised this date in view of findings during her further study of the building in the winter of 1966-67 (especially the traces of the makeshift screens between the columns); see above p. 148.

<sup>33</sup> "From Paganism to Christianity in the Temples of Athens," *Dumbarton Oaks Papers*, no. 19, 1965, p. 204.

<sup>34</sup> In 1966-67 A. Norre Dinsmoor found traces of the benches, especially along the south wall. Travlos, in his *Pictorial Dictionary of Ancient Athens*, London, 1971, p. 456, indicates benches on a plan and section drawing, but does not mention them.

## A. FLANK COFFER FRAGMENTS.

1. (A 3890). Fig. 1, Pl. 20. Bottom part of a wide abutting frame preserving the rough anathyrosis, the first step and lower ovolo. Width of frame soffit to the rough anathyrosis 0.217 m. Carved bead-and-reel design ( $2\frac{1}{2}$  beads preserved) 0.0505 m. o.c. Painted meander design *ca.* 0.152 m. o.c. First step 0.0705 m. high. Ovolo  $0.045 \times 0.041$  m. with painted egg-and-dart design ( $4\frac{1}{2}$  eggs preserved) 0.056 m. o.c.

P.W. 0.30 m., P.H. 0.262 m., P.L. 0.504 m.  
Drawing published in *AAA*, IV, 1971, p. 265.

2 (A 3891). Fig. 1, Pl. 20. Bottom part of a frame (indeterminate location) preserving the first step and part of the lower ovolo. P.W. of broken frame soffit 0.205 m. Carved bead-and-reel design (2 beads preserved) 0.0505 m. o.c. Painted meander design *ca.* 0.1535 m. o.c. First step 0.069 m. high. Egg-and-dart design painted on ovolo (part of 2 eggs preserved) 0.057 m. o.c.

P.W. 0.234 m., P.H. 0.124 m., P.L. 0.202 m.  
Photograph published in *AAA*, IV, 1971, p. 265.

3 (A 3892). Fig. 1, Pl. 20. Bottom part of a narrow abutting frame preserving anathyrosis. Coffers steps broken away. Carved bead-and-reel design ( $2\frac{1}{2}$  beads preserved) 0.0505 m. o.c., with corner return.

P.W. 0.168 m., P.H. 0.170 m., P.L. 0.290 m.

4 (A 3893). Fig. 1, Pl. 20. Bottom part of a wide abutting frame preserving anathyrosis top and bottom. Coffers steps broken away. Carved bead-and-reel design ( $3\frac{1}{2}$  beads preserved) 0.05075 m. o.c. Painted meander design 0.154 m. o.c. Full height of coffer preserved.

P.W. 0.270 m., H. 0.404 m., P.L. 0.498 m.

5 (A 3894). Fig. 1, Pl. 20. Bottom part of a narrow abutting frame preserving anathyrosis and the first step. Width of frame soffit 0.123 m. Carved bead-and-reel design (3 beads pre-

served) 0.051 m. o.c., with corner return. First step 0.070 m. high. Ovolo not preserved.

W. 0.123 m., P.H. 0.166 m., P.L. 0.258 m.

6 (A 3895). Fig. 1, Pl. 20. Bottom part of a wide abutting frame preserving anathyrosis. Coffers steps broken away. Carved bead-and-reel design (1 bead preserved) 0.052 m. o.c. Painted meander design width was not complete on this block, as normally occurs, but lapped over onto an adjoining block.

P.W. 0.130 m., P.H. 0.090 m., P.L. 0.235 m.

7 (A 3896). Fig. 2, Pl. 20. Bottom part of an end frame with chiseled resting surface starting 0.1155 m. back of bead-and-reel. Coffers steps broken away. Carved bead-and-reel design (2 beads preserved) 0.0505 m. o.c. Maximum P.D. of resting area 0.268 m.

P.W. 0.513 m., P.H. 0.232 m., P.L. 0.2415 m.

8 (A 3897). Pl. 20. Upper part of a frame (indeterminate location) preserving the fascia and part of the soffit of the second step, and the upper ovolo. Second step 0.054 m. high. Upper ovolo  $0.037 \times 0.0325$  m. with trace of design (1 egg).

P.W. 0.082 m., P.H. 0.112 m., P.L. 0.116 m.

9 (A 3899). Fig. 2, Pl. 20. Upper part of a narrow abutting frame preserving the rough anathyrosis, second step and upper ovolo. The lower ovolo and upper dome are broken away. Second step 0.072 m. wide and 0.054 m. high. Upper ovolo  $0.0375 \times 0.032$  m. with a trace of painted egg-and-dart design.

P.W. 0.289 m., P.H. 0.222 m., P.L. 0.464 m.

10 (A 3900). Fig. 2, Pl. 20. Upper part of a frame (indeterminate location) preserving part of the lower ovolo and the complete second step and upper ovolo. Lower ovolo: painted egg (and-dart?) design (1 egg and start of a 2nd preserved) 0.055 m. o.c. Second step 0.071 m. wide and 0.052 m. high. Upper ovolo  $0.038 \times 0.033$  m. with painted egg-and-dart design ( $3\frac{1}{2}$  eggs preserved) 0.0475 m. o.c.

P.W. 0.348 m., P.H. 0.243 m., P.L. 0.248 m.

**11** (A 3901). Fig. 2, Pl. 20. Upper part of an end frame preserving part of the second step and part of the upper ovolo.

P.W. 0.417 m., P.H. 0.243 m., P.L. 0.335 m.

**12** (A 3902). Fig. 3, Pl. 21. Lower part of an intermediate or end frame preserving part of the first step and the entire lower ovolo. Lower ovolo  $0.045 \times 0.041$  m. with painted egg-and-dart design (1 egg and part of 2 others preserved) 0.057 m. o.c.

P.W. 0.500 m., P.H. 0.278 m., P.L. 0.340 m.

**13** (A 3903). Fig. 2, Pl. 21. Part of narrow abutting frame preserving the rough anathyrosis, part of the first step, the entire lower ovolo, the entire second step and part of the upper ovolo. Width of frame soffit to rough anathyrosis 0.116 m. Lower ovolo  $0.045 \times 0.041$  m. with painted egg design ( $3\frac{1}{2}$  eggs preserved) 0.056 m. o.c. There are no darts. Second step 0.073 m. wide and 0.054 m. high. Upper ovolo: painted egg-and-dart design (bottom part of  $4\frac{1}{2}$  eggs preserved) 0.0477 m. o.c.

P.W. 0.266 m., P.H. 0.148 m., P.L. 0.394 m.

#### B. END PTEROMA COFFER FRAGMENTS

**1** (A 3898). Fig. 3, Pl. 21. Intermediate part of a frame (indeterminate location) preserving the lower ovolo and second step. Ovolo  $0.039 \times 0.0335$  m. with painted egg-and-dart design (1 egg and part of 2 others preserved) 0.0482 m. o.c. Second step 0.060 m. wide and 0.041 m. high.

P.W. 0.152 m., P.H. 0.150 m., P.L. 0.215 m.

**2** (A 3906). Fig. 3, Pl. 21. Bottom part of a narrow abutting frame preserving anathyrosis and part of the first step. Width of frame soffit 0.104 m. Carved bead-and-reel design (3 beads and part of 2 others preserved) 0.0427 m. o.c., with corner return. P.H. of first step 0.053 m.

P.W. 0.104 m., P.H. 0.121 m., P.L. 0.301 m.

**3** (A 3907). Fig. 3, Pl. 21. Upper part of a frame (indeterminate location) preserving the second step and upper ovolo. Second step

0.0605 m. wide and 0.041 m. high. Upper ovolo  $0.0325 \times 0.027$  m. with no trace of design.

P.W. 0.139 m., P.H. 0.121 m., P.L. 0.178 m.

#### C. PORCH COFFER FRAGMENTS

**1** (A3904). Fig. 3, Pl. 21. Almost complete section of a wide abutting frame preserving rough anathyrosis, both steps and both ovolos. Width of frame soffit to rough anathyrosis 0.1075 m. Carved bead-and-reel design (2 beads preserved) 0.021 m. o.c. First step 0.037 m. high. Lower ovolo  $0.0245 \times 0.020$  m. with painted egg-and-dart design (1 egg and part of 2 others preserved) 0.030 m. o.c. Second step 0.040 m. wide and 0.030 m. high. Upper ovolo  $0.020 \times 0.0155$  m. with part of two corner eggs preserved.

P.W. 0.226 m., P.H. 0.219 m., P.L. 0.334 m.

Drawing published in *AAA*, IV, 1971, p. 265.

**2** (A 3905). Fig. 3, Pl. 21. Bottom part of an end frame with a chiseled resting surface starting 0.0625 m. back of bead-and-reel. The full chiseled resting surface, 0.289 m. deep, is preserved, as is the first step and lower ovolo. Carved bead-and-reel design (6 beads and part of 2 others preserved) 0.021 m. o.c. There are two pairs of incised lines between the bead-and-reel and the chiseled resting surface, back 0.0085, 0.011, 0.0315 and 0.036 m. from the bead-and-reel. First step 0.037 m. high. Lower ovolo  $0.026 \times 0.021$  m. with traces of painted egg-and-dart design (tips of 3 darts) 0.030 m. o.c.

P.W. 0.460 m., P.H. 0.109 m., P.L. 0.273 m.

Photograph published in *AAA*, IV, 1971, p. 265.

**3** (A 4106). Fig. 4, Pl. 21. Lower part of a wide abutting frame at the center of a slab between two panels preserving anathyrosis, intermediate soffit width, first step, lower ovolo, second step and beginning of upper ovolo. Width of frame soffit on abutting side 0.112 m. Width of intermediate frame soffit 0.174 m. Carved bead-and-reel design (22 beads and part of 4 others preserved) 0.0212 m. o.c. First step 0.037 m. high. Lower ovolo  $0.024 \times 0.022$  m.

(no trace of design). Second step 0.037 m. wide and 0.030 m. high.

P.W. 0.343 m., P.H. 0.145 m., P.L. 0.255 m.

#### D. COFFER DOME FRAGMENT

1 (A 3889). Fig. 5, Pl. 21. Central section preserving part of three of the four original eleven-petal palmettes which radiate from the center. Each palmette springs from a triangular calyx. Below the palmettes, clustered around the center of the dome, are four heart-shaped designs with open tops ending in enclosed spirals. Within the hearts are reversed eight-petal palmettes. At 45 degrees to the palmette patterns, and presumably radiating out to the corners of the dome, are the beginnings of three-stalked lotuses. The maximum preserved length of the dome curvature gives a versed sine of 0.007 m. with a chord of 0.163 m. This fragment probably comes from a porch coffer.

P.W.  $0.237 \times 0.175$  m., P.H. 0.061 m.

#### E. INTERIOR DORIC COLUMN CAPITAL FRAGMENT

1 (A 3923). Fig. 5, Pl. 22. Bottom fragment of a capital of the lower order preserving part of the resting surface with an incised guide line, part of a flute and of two annulets. Est. diam. 0.858 m. Est. diam. at bottom of second annulet 0.900 m. Width of annulet 0.005 m.

P.W. 0.231 m., P.H. 0.258 m., P.D. 0.448 m.

Drawing published in *AAA*, IV, 1971, p. 267.

#### F. INTERIOR COLUMN DRUM FRAGMENTS (Figs. 9-10)

1 (A 3962). Pl. 22. Intermediate fragment from the superimposed order preserving part of two flutes. Arris has a fillet 0.002 m. wide. P.H. of fluting is 0.19 m. Est. diam. *ca.* 0.790 m.

P.H. 0.257 m., P.W. 0.140 m., P.D. 0.140 m.

2 (A 3963). Pl. 22. Bottom fragment of a bottom drum of the superimposed order preserving part of two flutes (arris broken) and a relieving surface of *ca.* 0.00025 m. extending

0.014 m. back from the flute. P.H. of fluting is 0.366 m. Est. diam. *ca.* 0.833 m.

P.H. 0.377 m., P.W. 0.290 m., P.D. 0.180 m.

Photograph published in *AAA*, IV, 1971, p. 267.

3 (A 3917). Fig. 10, Pl. 22. Top fragment of a top drum of the lower order preserving one full flute and part of two others. One arris has a fillet 0.002 m. wide while the other is broken. Anathyrosis 0.078 m. in from flute and flush with chiseled inner surface (no incised circular line). P.H. of fluting is 0.200 m. Est. diam. 0.858 m.

P.H. 0.205 m., P.W. 0.230 m., P.D. 0.210 m.

4 (A 4368). Pl. 22. Bottom fragment of a top drum of the lower order preserving one flute and part of two others (arrises broken). Incised circle demarcates anathyrosis 0.068 m. in from flute and flush with chiseled inner surface. P.H. of fluting 0.174 m. Est. diam. 0.885 m.

P.H. 0.182 m., P.W. 0.305 m., P.D. 0.320 m.

5 (A 4369). Pl. 22. Intermediate fragment of a drum second from the top of the lower order preserving two flutes and part of two others (arrises broken). P.H. of fluting 0.120 m. Est. diam. 0.908 m.

P.H. 0.168 m., P.W. 0.550 m., P.D. 0.230 m.

6 (A 3912). Pl. 22. Top fragment of a drum third from the top of the lower order preserving one full flute and part of two others. One arris has a fillet 0.002 m. wide while the other is broken. Incised circle demarcates anathyrosis 0.077 m. in from flute and flush with chiseled inner surface. P.H. of fluting 0.204 m. Est. diam. 0.9325 m.

P.H. 0.209 m., P.W. 0.305 m., P.D. 0.290 m.

7 (A 3914). Pl. 23. Top fragment of a drum fourth from the top of the lower order preserving part of two flutes (tip of arris broken). Anathyrosis *ca.* 0.095 m. in from flute and flush with chiseled inner surface (no incised circular

line). P.H. of fluting 0.094 m. Est. diam. *ca.* 0.974 m.

P.H. 0.094 m., P.W. 0.200 m., P.D. 0.170 m.

8 (A 3913). Pl. 23. Top fragment of a drum fourth from the top of the lower order preserving part of two flutes (arris broken). Anathyrosis *ca.* 0.105 m. in from flute and almost flush with chiseled inner surface (no incised circular line). P.H. of fluting 0.090 m. Est. diam. *ca.* 0.984 m.

P.H. 0.128 m., P.W. 0.195 m., P.D. 0.195 m.

9 (A 3920). Pl. 23. Intermediate fragment of a drum fourth from the top of the lower order preserving part of two flutes (tip of arris broken). P.H. of fluting 0.086 m. Est. diam. *ca.* 0.994 m.

P.H. 0.120 m., P.W. 0.200 m., P.D. 0.225 m.

10 (A 3921). Pl. 23. Intermediate fragment of a drum fourth from the top of the lower order preserving part of two flutes (tip of arris broken). P.H. of fluting 0.102 m. Est. diam. *ca.* 0.994 m.

P.H. 0.130 m., P.W. 0.195 m., P.D. 0.180 m.

11 (A 3922). Pl. 23. Intermediate fragment of a drum fourth from the top of the lower order preserving part of two flutes (arris broken). P.H. of fluting 0.110 m. Est. diam. *ca.* 0.994 m.

P.H. 0.120 m., P.W. 0.160 m., P.D. 0.180 m.

12 (A 3915). Pl. 23. Bottom fragment of a drum fourth from the top of the lower order preserving part of one flute. Incised line demarcates anathyrosis 0.099 m. in from flute and flush with chiseled inner surface. P.H. of fluting 0.134 m. Est. diam. *ca.* 1.012 m.

P.H. 0.138 m., P.W. 0.205 m., P.D. 0.255 m.

13 (A 3911). Pl. 23. Bottom fragment of a drum fourth from the top of the lower order preserving part of two flutes. Arris has a fillet 0.002 m. wide. Incised circle demarcates anathyrosis 0.086 m. in from flute with slightly recessed chiseled inner surface. P.H. of fluting 0.151 m. Est. diam. *ca.* 1.028 m.

P.H. 0.177 m., P.W. 0.190 m., P.D. 0.225 m.

14 (A 3916). Pl. 23. Top fragment of a drum sixth from the top of the lower order preserving part of two flutes (arris broken). Incised circle demarcates anathyrosis 0.091 m. in from flute and flush with chiseled inner surface. P.H. of fluting 0.126 m. Est. diam. *ca.* 1.054 m.

P.H. 0.139 m., P.W. 0.200 m., P.D. 0.215 m.

15 (A 3918). Pl. 23. Indeterminate intermediate fragment preserving a small amount of one flute.

P.H. 0.164 m., P.W. 0.130 m., P.D. 0.270 m.

16 (A 3919). Pl. 23. Indeterminate intermediate fragment preserving a small amount of one flute.

P.H. 0.160 m., P.W. 0.182 m., P.D. 0.085 m.

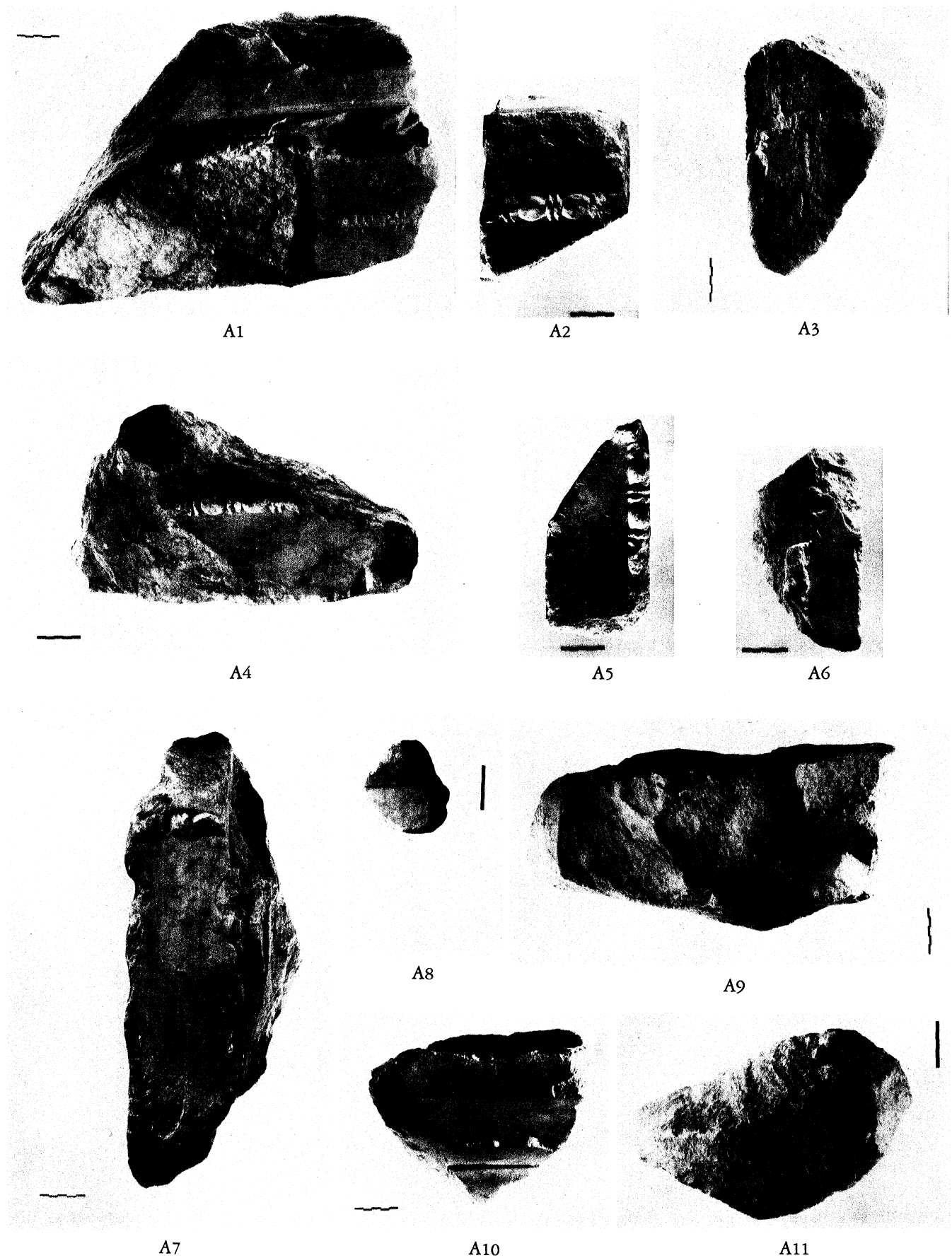
#### G. TRIGLYPH FRAGMENT

1 (A 3964). Fig. 5, Pl. 23. Top fragment; preserved height of fascia 0.120 m. including the top astragal (0.0155 m. high) with maximum broken projection of 0.002 m. Fragment broken at both sides. Relieving edge at top is recessed 0.001 m. and is 0.055 m. deep from plane of fascia.

P.W. 0.132 m., P.H. 0.147 m., P.D. 0.165 m.

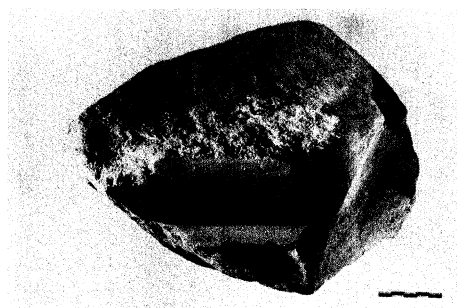
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Parthenon Coffer Fragments (scale 1:6)

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A12



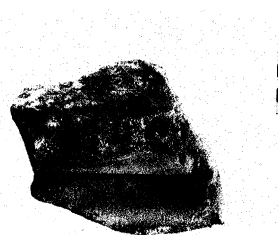
A13



B1



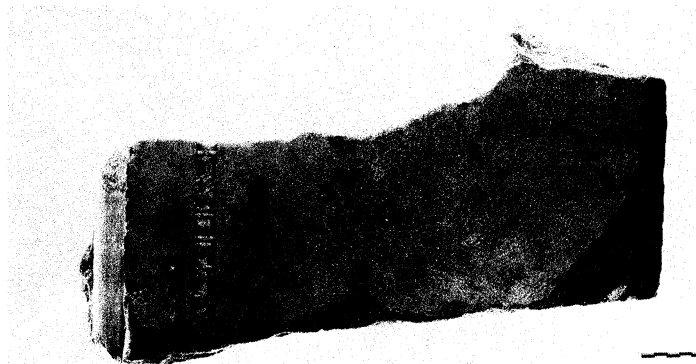
B2



B3



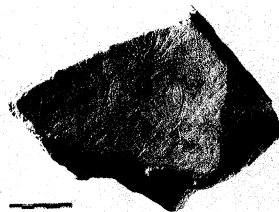
C1



C2



C3

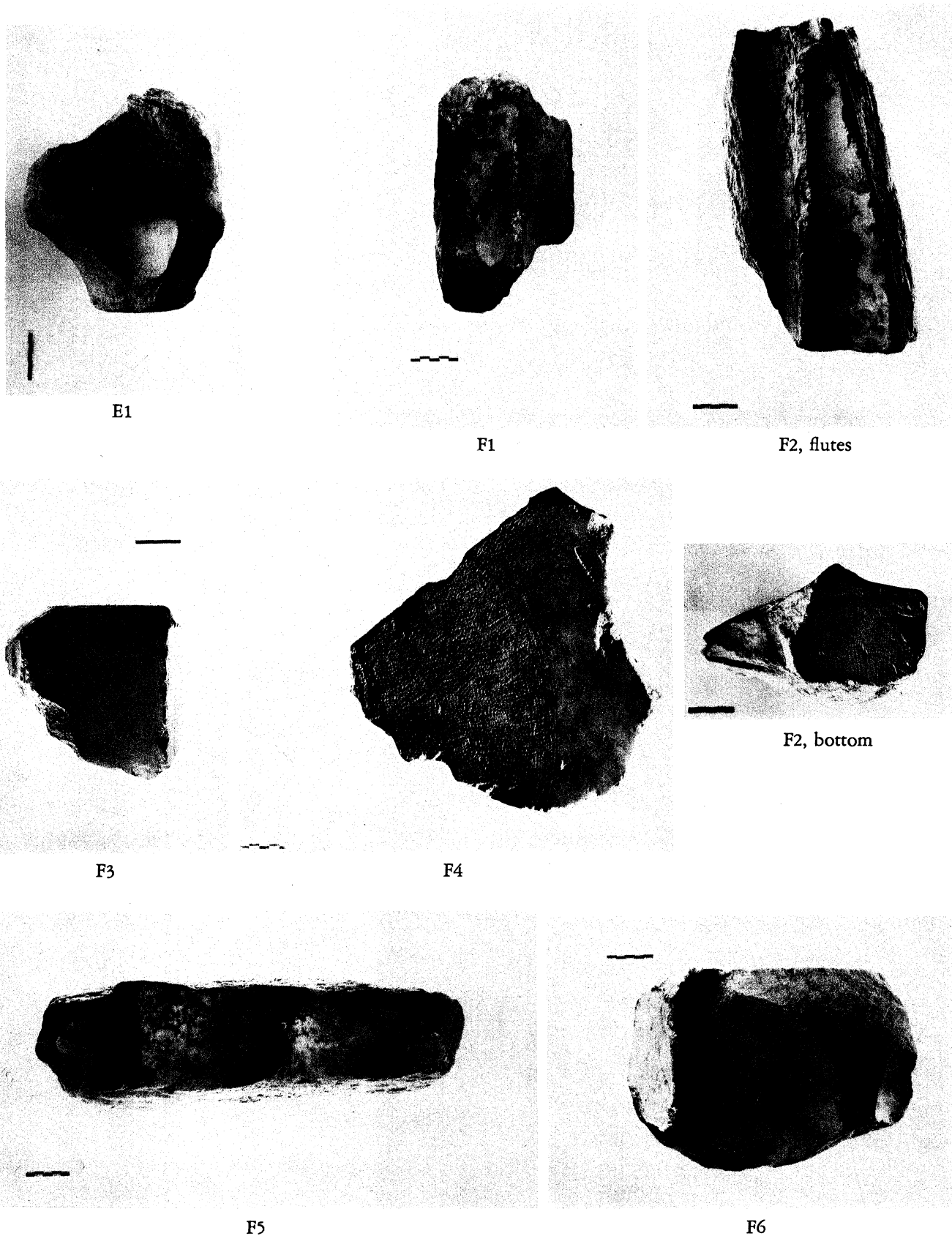


coffer dome fragment

D1

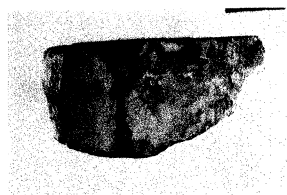
Parthenon Coffers Fragments (scale 1-:6)

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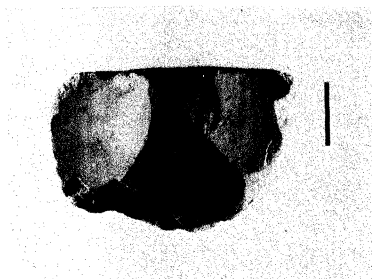


Parthenon Column Capital and Drum Fragments (scale 1:6)

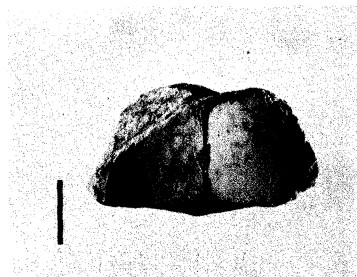
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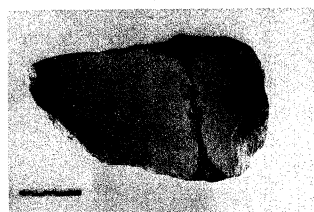
F7



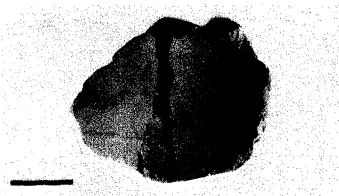
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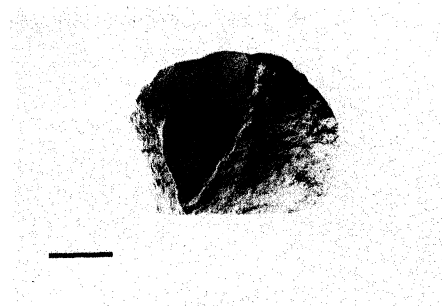
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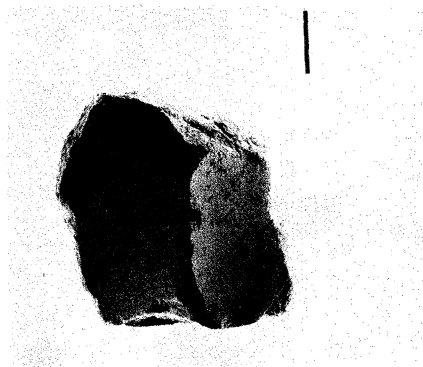
F10



F11



F12, flute



F13



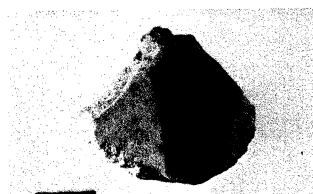
F14



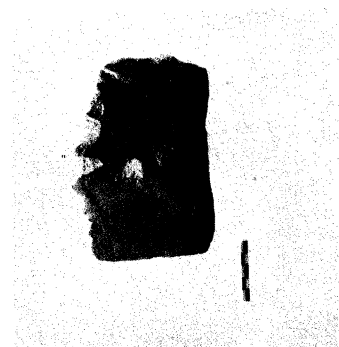
F12, bottom



F15



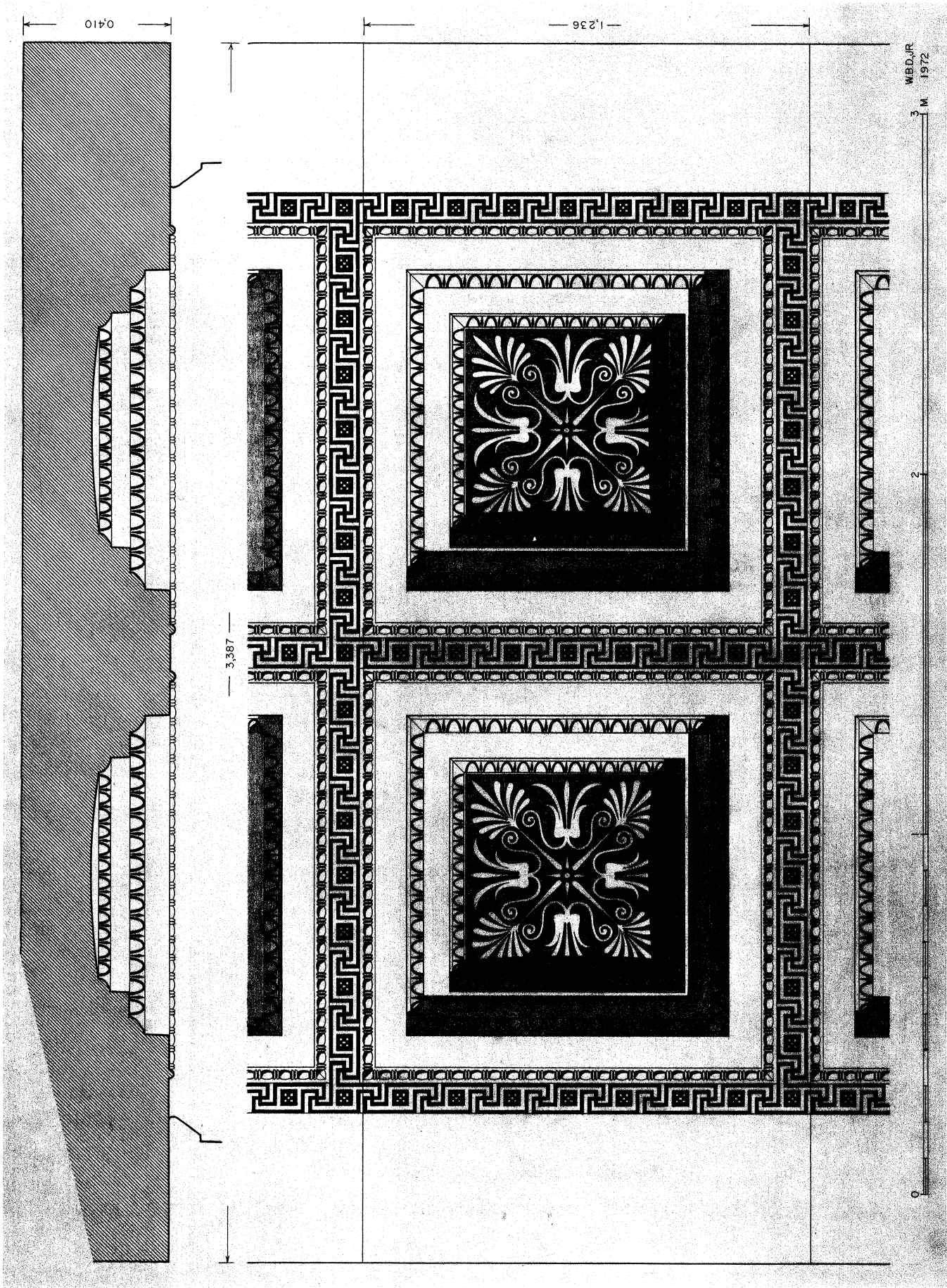
F16



G1, triglyph fragment

Parthenon Column Drum and Triglyph Fragments

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Restored Ceiling Coffers

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