


Restored Section of Cornice of Hellenistic Stoa. One Eighth Full Size
(Water Color by J. M. Shelley)

# CORINTH 

## RESULTS OF EXCAVATIONS

CONDUCTED BY
THE AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS

## VOLUME I PART II

## ARCHITECTURE

BY

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PUBLISHED FOR
THE AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS

HARVARD UNIVERSITY PRESS<br>CAMBRIDGE, MASSACHUSETTS

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## PREFACE

Although many of the monuments published in this volume have been in part uncovered for a long term of years, it was not until a relatively short time ago that it was possible to excavate them fully. Their final publication owes much to the many hands that recorded and mapped the successive stages of their appearance from the soil. Unpublished studies, many careful notes and observations by various excavators, and a thorough restudy and resurvey of the monuments themselves form the basis for their presentation here. It would be difficult to enumerate the sources of all the information which has been gleaned from the records and surveys; to do so would be to list nearly all the members of the American School who took part in the Corinth excavations during the period from 1896 to 1935. Suitable acknowledgment has been attempted in the respective chapters, but to those whose names fail to appear the authors would also tender their grateful recognition.

The task of preparing the material for definitive publication has been complicated by the fact that the buildings surrounding the Agora of Ancient Corinth are not isolated structures, but are limited and conditioned in many instances by adjacent construction; thus a full understanding of the many problems has had to await a time when it was possible to extend the field of excavation. The Peribolos of Apollo, for instance, was not finally cleared until 1929 and even now certain elements still lie buried under a modern road, to the east, which it has not been possible to remove. Across the line of the Northwest Stoa lay a modern road which did not disappear until 1933, when the resulting excavation supplied the clues to several problems. West of the Agora, the foundations of Temple E had been noted very early in the course of the excavations and a few trial trenches seemed to indicate that there was little further information to be gained by clearing the mass of rubble concrete foundation which formed the podium of the temple. It was one of the characteristic fortunes of archaeology, however, that the construction of the new Museum and the levelling off of a plaza in front of it brought to light some important architectural fragments and justified a complete excavation of the temple.

A large part of the periphery of the Agora still remains to be studied and published in final form. Since 1932, preliminary reports of the excavations have appeared from time to time in the American Journal of Archaeology. The lower levels, below the Roman pavement, have been only partially tapped and await further exploration. The publication of the West Shops and of the small temples and buildings along the terrace in front of them is now in process of preparation.

It is safe to say that the Agora at Corinth will not be as long in publication as it was in building, but the complexity of the site is no small obstacle to a rapid attain-
ment of final conclusions. Many periods and subperiods of construction, frequent devastation by earthquakes and the no less thorough, though more gradual, destruction of classic buildings which took place in the Byzantine, the Frankish, and the Turkish periods have produced an architectural puzzle of no little size and intricacy. The preliminary studies of the complete plan of the Agora, however, have shown the inter-relationship of the buildings in a much greater measure than can be deduced from the study of the buildings on but a single side; they illustrate quite clearly the successive stages by which the Roman builders at Corinth sought to achieve monumental unity and coherence in a development which was the product of many generations of builders. The study of the whole will throw new light on many of the parts, and, as in this volume, the final study will necessarily be based on the work of many individuals.

Richard Stillwell

Princeton University
December, 1940

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## ABBREVIATIONS

Abh. Berl. Akad. = Abhandlungen der preussischen Akademie der Wissenschaften, philosophischhistorische Klasse
A.J.A. $=$ American Journal of Archaeology

Altertümer von Pergamon $=$ Königliche (later staatliche) Museen zu Berlin: Altertümer von Pergamon, herausgegeben im Auftrage des Reichs- und Preussischen Ministers für Wissenschafterziehung und Volksbildung (Berlin, from 1885)
Ath. Mitt. $=$ Mitteilungen des deutschen archäologischen Instituts. Athenische Abteilung
B.M.C. $=$ A Catalogue of the Greek Coins in the British Museum (London, from 1873)

Cook, Zeus = Arthur Bernard Cook, Zeus, a Study in Ancient Religion (Cambridge, 1914-1940)
Corinth $=$ Corinth, Results of Excavations Conducted by the American School of Classical Studies at Athens (Cambridge, Mass., from 1932)
Frazer, Pausanias = Pausanias's Description of Greece, Translated with a Commentary by J. G. Frazer (2nd ed., London, 1913)
Hesperia $=$ Hesperia, Journal of the American School of Classical Studies at Athens
Jahrbuch $=$ Jahrbuch des deutschen archäologischen Instituts
J.H.S. $=$ The Journal of Hellenic Studies

Leutsch and Schneidewin, Paroemiographi Graeci = Corpus Paroemiographorum Graecorum: Paroemiographi Graeci, Vols. I (ed. E. L. von Leutsch and F. G. Schneidewin, Göttingen, 1839) and II (ed. E. L. von Leutsch, Göttingen, 1851)

Magnesia am Maeander = Königliche Museen zu Berlin: Magnesia am Maeander, Bericht über die Ergebnisse der Ausgrabungen der Jahre 1891-1893 von Karl Humann, die Bauwerke bearbeitet von Julius Kohte, die Bildwerke bearbeitet von Carl Watzinger (Berlin, 1904)
Milet $=$ Königliche (later staatliche) Museen zu Berlin: Milet, Ergebnisse der Ausgrabungen und Untersuchungen seit dem Jahre 1899, herausgegeben von Theodor Wiegand (Berlin, from 1906)
Nilsson, Griechische Feste $=$ Martin P. Nilsson, Griechische Feste von religiöser Bedeutung mit Ausschluss der Attischen (Leipzig, 1906)
Odelberg, Sacra Corinthia = Per Odelberg, Sacra Corinthia, Sicyonia, Phliasia, commentatio academica (Upsala, 1896)
Pauly-Wissowa, R.E. = Pauly's Real-Encyclopädie der classischen Altertumswissenschaft, neue Bearbeitung (Stuttgart, from 1894) ; edited by Georg Wissowa and others
Reinach, Répertoire $=S$. Reinach, Répertoire de la statuaire grecque et romaine (Paris, 1897-1931) Rev. Arch. = Revue Archéologique

## ARCHITECTURE

## CHAPTER I

## THE PERIBOLOS OF APOLLO

By Richard Stillwell and H. Ess Askew

## I. INTRODUCTION

BY H. ESS ASKEW
The ruins of the Roman Court called the Peribolos of Apollo dominate the complicated section of the excavations of Corinth in the corner bounded on the south by the walled court of Peirene and on the east by the high embankment for the village road (Plate I, Fig. 1). The actual area of excavation under consideration includes with the Peribolos the greater part of the monuments as far west as the Lechaion Road Shops. For the visitor walking up the Lechaion Road towards the Propylaia, the comprehension of the ruins of the Roman Peribolos has been facilitated by the replacement of several fragmentary columns on the stylobate. The ruins of the other, earlier buildings beneath the pavement level of the Peribolos, or in the area to the west, can be observed only by careful study on the site.

In all periods the area was centrally located in the ancient city. Though in the Greek periods it was comparatively open, arranged as a temple precinct, in the Roman it was certainly dwarfed in conspicuousness by the elaborate court of Peirene and the colonnaded shops along the east side of the Lechaion Road. The relation of the buildings of the area to those on the east can, of course, only be suggested.

The name, Peribolos of Apollo, has been accepted with little hesitation, on the basis of the comment of Pausanias (II, 3, 3) made as he passed down the Lechaion Road in the direction of the Gulf of Corinth: ${ }^{\prime \prime} \tau \iota \gamma \epsilon \delta \grave{\eta} \kappa a i ̀ ~ ' A \pi o ́ \lambda \lambda \omega \nu o s ~ a ̈ \gamma a \lambda \mu a \pi \rho o ̀ s$
 ${ }_{\epsilon}^{\epsilon} \chi$ оvбa $\tau \bar{\prime} \lambda \mu \eta \mu a$. Nothing is known either of the statue or of the painting. ${ }^{1}$ The existence, however, of such a statue of Apollo suggests that the buildings may have been consecrated to that god, possibly in Greek times as well as in the time of Pausanias.

A brief enumeration of the successive stages of buildings which are represented by remains in situ will be useful. For the more important, at least eight main periods are to be observed (plan, Plate I).

[^0]
Fig. 1. General View of Peribolos of Apollo, Looking North
I. A temple and altar, with related bases, etc., of the fourth century в.c. and the Hellenistic period.
II. A Hellenistic building, probably a stoa, on the lines of the north portico of the Peribolos, presumably with precinct walls running to the south from the east and west ends.
III. The terrace walls, or buildings, on the east side and the bronze foundry, of a Roman period probably about the end of the first century b.c. (Roman Pre-I).
IV. An early Roman shop and colonnade arrangement, probably of the first half of the first century after Christ, with the terrace wall on the east side, and the circular base in the centre (Roman I).
V. A revised plan, possibly not completed, of the poros period, about $60-70$ a.D.
VI. The actual Peribolos of Apollo, built in marble, in the second half of the first century after Christ (Roman III, IV, V).
VII. The reconstruction of Peirene, affecting the exedra of the Peribolos, under the Emperor Hadrian.
VIII. A complex of Byzantine buildings of uncertain character.

The proximity of the area to the water of Peirene explains its continual use from the earliest Greek times. There are several features connected with this water system which are of importance in understanding the remains. Directly through the middle of the area, under the foundations of the circular base, runs the deep main drain from Peirene with its massive walls and heavy cover pieces; the location here of such a drain naturally influenced the character of the construction of the foundation. When this drain was cleaned in 1910, the well-known head of Dionysos, of the "Sardanapallos" type, was found." Also straight across the Peribolos area to the east of the Peirene drain, there is the group of late Roman, Byzantine, and modern water channels, three in all, set one on top of another. The uppermost was used till recent times to supply water to the village. These channels have been particularly destructive for the classical remains. It is interesting also to note the plan and location of the early draw basin, in front of the exedra at the south side of the Peribolos. It appears to have been in use throughout the Greek periods, closed in the Roman, and open again in the Byzantine. ${ }^{3}$

It is quite clear that the plan of the marble Peribolos of Apollo depended largely on the arrangement of those buildings that preceded it. ${ }^{4}$

[^1]
## II. THE AREA PRIOR TO THE ROMAN PERIOD

BY H. ESS ASKEW

The frequent rebuilding in the area has left little trace of the prehistoric or early Greek periods; there was, in fact, little opportunity for digging to the required depth. In the colonnade on the east side of the Lechaion Road, just south of the remains of the stylobate of the Hellenistic stoa, a pit, 4.00 m . in length, was dug to hardpan. Quantities of sherds of the Corinthian and Protocorinthian styles were found, and, beneath them from a depth of 2.00 m . to 5.27 m . below the poros stylobate of the Roman colonnade, sherds of Neolithic pottery and some Early Helladic ware. Near the bottom of the pit there were an Early Helladic burial and, at a depth of 4.04 m ., a rude stone structure of unintelligible character.

The first period of which there are satisfactory remains is the Geometric. One large sarcophagus was found beneath the northwest corner of the temple, and a small one to the north underneath the Greek foundations, 1.22 m . to 1.82 m . below the stylobate of the Roman colonnade. ${ }^{5}$ In the vicinity of the larger, sixteen vases, the majority oinochoai and kylikes, of a local Geometric style, were uncovered. In the smaller, with the skeleton of a child wearing a bronze ring on each hand, the finds were limited to one small amphora of a style similar to that of the others. "The decoration consisted of zones of dark paint and on the shoulder triangles with hatching within." ${ }^{6}$

Throughout the excavations of 1930 and 1931, many Geometric sherds were found, but no remains of a monumental nature were discovered. It is a question whether or not the draw basin, sometimes called the Tirynthian basin, deep in the south portico of the Peribolos, may be dated in so early a period.

## Temple A and the Semicircular Altar

For the Greek classical periods, the important monument in this area was clearly the small temple of which the strong poros foundation, including the euthynteria, is preserved (Fig. 2). The foundation is three courses deep, resting on a bed of gravelly earth and is crossed at its west end by the back wall of the Lechaion Road Colonnade. The fine masonry, of a truly Greek character, is best seen from the north (Fig. 3). The blocks are laid as headers and stretchers. ${ }^{7}$ One block, obviously re-used,

[^2]is bevelled at the edges; several have anathyrosis on their outer faces. The jointing and finishing are finely done, and at the time of the excavation there were traces of a red color probably used for the levelling of the surface of the blocks. There are no apparent clamps or dowels.

Restoration of the building as Doric or Ionic is impossible since no certain fragment of its superstructure has been identified. The foundations show the ordinary


Fig. 2. Foundations of Temple A, from East
plan of pronaos and cella. On the top of the foundation there are faint marks for setting-lines indicating the position of the wall above.

There is evidence for the pavement level in the ground cutting at the upper edge of the euthynteria, and, moreover, at the same level, to the east against the altar, a layer of packed earth, of the coarse quality of poros chipping, was found, over which there was a stratum, 0.10 m . deep, of pure sand. The remains of a second monument erected on the temple foundations corroborate the conclusion drawn from the evidence of such a sand deposit, that the temple was demolished in Greek times, or dismantled to its present form, and lay in disuse for a short period.

Of this superimposed monument (Figs. 2 and 3) there are four bases forming a square 3.70 m . from axis to axis, on a slightly different orientation from that of

the temple. In each base there are three courses, the two uppermost cut from a single block. ${ }^{8}$ The lowest course does not belong to the base proper but serves as a foundation; in the northwest base, this course is of greater thickness. All except the southwest base are treated as statue bases with an interior drafting at the lower edge of the top course (Fig. 4). Between the west bases extends a sill of poros, 0.36 m . wide, with its original face to the east as shown by the continuation of the drafting around the lower edge of the bases across the corresponding course of the sill. The working of the other bases proves that no other connecting sill existed; the one on the southwest, though generally without the drafting, has it on the east side of the north face


Fig. 4. Base of One Pier of Baldachino on Foundations of Earlier Temple
to meet the drafting from the sill. The sill itself is two courses high, set, with the northwest base, on a heavy foundation of its own, built of irregular poros blocks.

The indicated restoration is a wooden roof supported on square pillars or on columns, the two on the west being connected by a thin and possibly low screen wall. The structure thus resembled a baldachino and may be considered as an open shrine which succeeded the dismantled temple.

The excavators observed that the tops of the four bases were worn by the tread of feet and suggested rightly that this could have been done only before or at the time of the building of the shops which were erected over this area in the Roman reconstruction; in other words, that the bases were in their present condition probably during the hundred years between the destruction of Corinth by Mummius and the refounding by Julius Caesar, or, at any rate, during the first years of the Roman occupation.

[^3]On the east face of the upper course of the southwest base, there are faint traces of an inscription with letters of the classical period about 0.04 m . in height. The reading is not complete; the inscription is upside down on the block. ${ }^{9}$

The ground level, at the top of the lowest or foundation course of each base, is in the form of a pavement, 0.10 m . thick, consisting of pebbles carefully bedded in cement and formerly covered with stucco. It extends from the south line of the temple two thirds of the way across its front and is bounded on the north and south


Fig. 5. Pavement, Altar, and Foundation for the Peribolos Colonnade from the West
by a narrow curb of poros. On the east it meets the face of a large semicircular altar, and, on the west, it has been broken along the edge of the temple foundation over which it must originally have extended (Fig. 5). The level is 0.25 m . above that of the pavement in front of the temple. All facts considered, we must conclude that this well-laid pavement belongs to the baldachino and the second period of the altar.

For fixing the date of the erection of the baldachino and the demolition of the temple, definite facts can be adduced only from the relations of these buildings to the altar on the east, though those facts, too, are far from satisfying. The temple

[^4]itself, though of excellent and familiar technique, is constructed of re-used blocks and may therefore be reasonably dated in the fourth century b.c. In the altar, there is evidence for two distinct periods, with ground levels corresponding respectively to those of the temple and the baldachino.

The massive foundations and carefully constructed semicircular member of the altar, like one half of the drum of an immense column, make it the most impressive monument in the area (Fig. 6). It lies 2.15 m . east of the front of the temple and 6.10 m . from the baldachino. Its orientation is much more closely adapted to the baldachino than to the temple, though this adaptation is not exact. The upper surface was hidden by the crossing of the early Roman and the marble Peribolos foundations, several blocks of which (lying over the northwest corner) were removed by the excavators in order to distinguish more clearly the form of the altar. Seen from the north or east, the half drum of the semicircular part of the altar, resting on foundations of right-angled form, is conspicuous. The height of the drum over these foundations is 0.81 m .; the radius of the semicircle is about 1.90 m . (Fig. 7). Two lifting-holes ${ }^{10}$ of an early type, cut for the insertion of rope, are to be seen in each of the large facing blocks on the east side. Inside of the facing for the semicircle, the fill was more carelessly fitted in and certainly covered over.

On the upper north edge, a hard grey earth was preserved, which seems to have been stuccoed like the stone below. Its ashy greyness suggests an interesting comparison with those altars of ash at Olympia mentioned by Pausanias (V, 13, 5) and Plutarch (De defectu oraculorum, 41). There is a bare possibility, of course, that this earth silted in when a block was removed and that it was hardened by the action of lime from a lime pit which was discovered just above and to the east of the altar. But the stucco is of a fine variety and would probably have been entirely broken away with the removal of the block.

That the altar was roofed is indicated by four bases forming a square around the altar proper about 2.60 m . on the side, from axis to axis. ${ }^{11}$ Those on the east have deep foundations; those on the west have only single blocks which project 0.055 m . above the pebble pavement. The southwest base barely escapes concealment by the rubble foundation of Roman construction. On the southeast base, there are settinglines and remains of stucco for a column 0.48 m . in diameter ; they appear less clearly on the northeast base. An attempt at reconstruction may be made with a battered Doric column, a monolith now broken in two parts, which was found in the district, and a badly damaged Doric capital, of Hellenistic form, which may be associated with it. ${ }^{12}$ The connection of this column with the altar is, however, uncertain, since the bottom of the column has a shallow cutting for a dowel, and the bases have no cuttings ; the capital has a rectangular dowel cutting, and the top of the column a small

[^5] Dimensions of capital: diameter at neck, 0.37 m . ; height, 0.19 m .
circular one. The restored height of the structure from the pavement to the beam or entablature, using this column and capital, would be about 2.50 m ., which is in reasonable proportion to the intercolumnar width.

On the east, the foundations of the altar have been cleared to a depth of 2.50 m . from the top. Their great strength is hardly in proportion to the size of the monument above. Beneath the semicircular drum, there are three courses made up of large


Fig. 6. Semicircular Altar from the Northwest
re-used poros blocks, some with drafting and rough anathyrosis. Five courses of the same material support the two bases on the east; the foundation of the southeast base rests on a cover slab of what was probably a drain, at the bottom of the trench dug for the foundations. At approximately the level of the lowest course of the altar proper, there was a dense stratum of poros chippings, beneath which the fill was not distinctive, though certainly of good Greek period. A small altar or hearth of poros (Fig. 8) lay on this stratum. It was rectangular in shape ${ }^{13}$ with a roughly fashioned pediment at each end, and, in the centre, a circular depression in which black ashy earth was observed by the excavators.

[^6]As for the earlier of the two periods indicated in the construction of the altar, the stratum over which the sand was deposited relates it to the temple. The second period, with the preserved pebble pavement, is clearly that of the baldachino. The two are distinctly marked by the stuccoing on the east face. The first, with its three coatings of fine stucco, has its level 0.05 m . above the lower edge of the drum, thus corresponding approximately to the level of the stratum for the period of the temple. The second level, or period, is seen 0.30 m . higher and has a coarse waterproofing over the fine stucco of the earlier period and a similar fine stucco for the surface finishing. The uppermost course of the drum, one corner of which shows, projected so far over the course beneath that the thick waterproofing was not used. To meet this raised level with the waterproofing and pebble pavement on the west, it was necessary to raise the column bases by the insertion of foundation blocks, each 0.43 m . in height, which, because of their rough finish, could have been visible only at the top. In this way, the lower part of the drum or altar proper, with the fine stucco applied directly to the stone, was buried beneath the ground. The bonding of the base foundations to the altar foundations on the east side seems to prove that the earlier altar had the same arrangement of columns and roof as the later. On the west, the bases of the earlier period probably rested directly on the pavement stratum. ${ }^{14}$

The curve of the semicircle was changed with the alteration of the altar. The setting of the uppermost course and the consequent filling-in below with the waterproof stucco followed a more exactly circular line than the earlier one; on the north and east it was found necessary to cut back, by as much as 0.07 m ., the lower and original course (Figs. 6-7). Thus the earlier form was of greater fullness and less accuracy. The reduction of this early full curve to the circle also caused the cutting back of the anta, which, on the north side, is 0.39 m . wide (Fig. 6).

That this anta belongs to the earlier period and was disregarded in the later is shown also by the thickness ( 0.02 m .) of the waterproofing above the pebble pavement on the front or west face (Fig. 6), a thickness which is enough to take the depth from the anta projection. On the front the anta measures 0.29 m . In cleaning the northwest corner of the altar so that it might show well, it was found that the fine stucco of the temple period continues on the face of the anta to within 0.12 m . of the foundation block, 0.34 m . beneath the pebble pavement. This fine stucco can be seen also on the front beneath the thick waterproofing. The height of the altar form used for the temple was certainly at least that of the anta.

From the evidence of the fill against the east face, fill which extends from the pavement levels to the low stratum of poros chipping, the most probable date for the erection of the altar is the third century b.c. There were in the fill many Corinthian coins of the well-known Pegasus | Trident types (which run into the third century, if not later), ${ }^{15}$ a third-century lamp with black glaze and perforated lug at the
${ }^{14}$ The circular depression in the foundations at the northwest corner (Fig. 6) might indicate a more temporary wooden structure. It is reasonably near the temple level.
${ }^{15}$ B.M.C. Corinth, pl. XIV (400-300 в.c.). Corinth, III, i, p. 64.


Fig. 7. Plan and East Elevation of Semicircular Altar
side, ${ }^{16}$ and many Hellenistic sherds with relief and stamped decoration and a metallic black glaze. There were also several fragmentary terracottas of the archaic period, including two dogs and an Aphrodite with dove and pomegranate. Unfortunately no change could be ascertained in the two strata, or pavement levels, of the altar proper. The period of the later or higher may be considered late third or early second century in accordance with that of the fill and with the building of the good Greek walls at the northeast corner of the stoa on the north side of the area. It is possible that the temple, altar, and entire precinct were demolished at some time in the late third century b.c., and that all were reconstructed, with the baldachino and stoa on the north, either immediately or soon after, in the second century в.c., only to be again torn down by the Romans in 146 b.c. It seems probable that the temple was the earliest construction of which there are now remains and that it was built in the fourth century with an altar of which the small hearth was a part.

The deity of the temple and precinct is not known, although one may argue from the comment of Pausanias about the Peribolos of the second century after Christ that the area was sacred to Apollo from Greek times and that the sanctity of the precinct was preserved, though the temple was hidden beneath the Roman reconstruction, just as its sanctity was apparently respected in Greek times when the baldachino was erected. Of course, Pausanias mentions


Fig. 8. Small Portable Altar only a statue of Apollo.

About midway along the south side of the temple and 0.43 m . distant from it, there is a box-like basin, cut from a single piece of poros (Fig. 9). ${ }^{17}$ The southwest corner was repaired in ancient times. On the east and west sides, there are intentional breaks which may originally have been square holes not broken out at the top as at present. The basin rests on earth, and, although the ground level is that of the temple, it could also have been used with the baldachino. A circular depression in

[^7]the floor of the basin served the purpose of allowing whatever liquid flowed in to settle, perhaps the water from the sacred sources above in the Agora. ${ }^{18}$

North of the northeast corner of the temple, a conspicuous poros foundation suggests a base for a group of statues or perhaps an equestrian figure ( $a$, Fig. 3). ${ }^{19}$ It seems by its orientation to be associated with the baldachino, yet its ground level is that of the temple, with which it is probably contemporary. The inclined cutting on the west side indicates a slope rising gradually from the temple. At the foundation, there is a stratum of poros chipping. The crossing of the Roman shop wall and drain channel has cut off its obvious extension toward the north.


Fig. 9. Offertory Box Re-used as Settling Basin

The temple, or baldachino, was the nucleus, in the Greek periods, of the surrounding monuments and walls. The statement must be made that there is no definite proof for calling the building on the north a stoa, or the wall on the west a mere precinct wall. In the case of the former, there are walls and foundations which form a logical plan for a stoa, and their character is consistent. In the case of the latter, there are only the scanty remains of a single wall, which it seems best to restore in a form similar to the terrace wall on the east, but which could possibly be the front foundation for a building of some kind. An arrangement of walls and stoa gives a wide and open area for the temple, extending on the south to the low terrace that bounded the court of Peirene.

Of the so-called precinct wall on the west side of the area, only the short stretch

[^8]uncovered in a break in the sidewalk of the Lechaion Road can be seen (Fig. 10). It lies 3.90 m . west of the temple, and has the same orientation. The wall is constructed in a manner similar to that of the stylobate foundation of the north stoa, with one course, averaging 0.75 m . in width, set upon a broad euthynteria; no clamps or dowels are apparent. The remains of the wall were made accessible by the breaking of the limestone pavement for wells, the round cuttings of which are to be seen in the upper course. At the south end of the stretch of wall, a single block, with the


Fig. 10. Precinct Wall under Sidewalk of Lechaion Road
same wide euthynteria, projects 0.65 m . to the west, and the upper surface of the projecting part of the block is worked with a drafted edge, above which the central part of the top rises irregularly. Even if a wall were continued to the west from the end with anathyrosis, the roughness of the top would not permit stone courses above. The length and transverse setting of the block would strengthen the wall. The rustication and anathyrosis may be explained by regarding the block as re-used, in which case the raised surface of the rustication was worked off only on the east half of the block which was to receive the upper courses. The extension to the south of this so-called precinct wall is not known, though it is supposed that it ran against the Greek construction below the later Propylaia, where there was perhaps a gate into
the precinct and Peirene. On the north, the wall probably met the corner of the north stoa.

## The Hellenistic Stoa

The north stoa is 5.00 m . in width, from the back wall to the outside of the stylobate foundations, and extended probably for 33.00 m . from the excavated corner on the east with the terrace walls to that formed on the west by the junction beneath


Fig. 11. Back Wall of Hellenistic Stoa Seen from North
the Lechaion Road of the lines of the stylobate and the precinct wall. The long lines of the stoa were followed in the early Roman and Peribolos reconstructions. The stylobate lies approximately 14.00 m . north of the temple, a distance practically equal to that between the temple and the court of Peirene. The high north wall of the stoa, which was also that of the Peribolos, was repaired many times, even in the Byzantine period, but the strong, late Greek masonry can be seen in the lower courses from the excavated area to the north (Fig. 11). The blocks are well jointed and regularly cut, ${ }^{20}$ and the iron clamps, of the hook type, are still preserved in lead. The projection
${ }^{20}$ Height, 0.40 m . ; average length, 1.00 m .
of several blocks beyond the west wall of the shops indicates that the stoa extended, originally, to the Lechaion Road and the line of the west precinct wall.

The wall, now thought to be the foundation of the stylobate of the stoa, was first cleared in 1926 just east of the Lechaion Road and beneath the stylobate of the colonnade along the Road. ${ }^{21}$ Four courses of masonry are now preserved, consisting of re-used poros blocks. ${ }^{22}$ Rough channels have been cut through them for Roman terracotta conduits (Plate I). Under the shop wall crossing the poros foundation at its east end, two more courses appear, bringing the height to within 0.20 m . of the level of the stylobate of the Lechaion Road colonnade. South of the wall are the remains of a Greek pavement made up of a layer of fine pebbles in brown cement over one of larger pebbles. It is a type of pavement found in several parts of the excavation, all at practically the same level.

The same pavement, in very poor condition, was found south of the stylobate wall within the shops, just east of the shop wall which crosses the poros foundation (Fig. 12). Here, above the remains of the pavement, were many fragments of fine white and brown wall stucco. In every case, this pavement has been broken near the stylobate, and many fragments of it were scattered through the earth, along with several coins of the Pegasus $\mid$ Trident type. It is clear that the pavement and the stylobate are not from the same period. The two courses of the wall above the pavement are exceptionally well preserved. A euthynteria course projects about 0.13 m . beyond the two blocks seen on top. The Byzantine builders added on the north a flanking of rough rubble.

The north face of the stylobate foundation was cleared to the lowest course in a trench within the north portico of the Peribolos, just above and to the east of the large Peirene drain (Figs. 13 and 14). Beneath 1.00 m . of rubble foundation for the Roman buildings, five heavy courses reach a depth of 2.00 m ., the lowest set in a hard earth with many coarse, red sherds, similar to the early Greek stratum within the northwest corner of the Peribolos (cf. Fig. 18). The poros blocks are re-used material, all approximately 0.40 m . in height but varying in length and breadth. The low level, poor jointing and uneven facing, show that the wall now to be seen is merely a foundation. The earth in the trench yielded coins of the Pegasus |Trident type ${ }^{23}$ with some Hellenistic sherds. At the level of the two partition walls of early Roman date, there was a layer of poros chips with some fragments of the Greek pebble pavement.

For the determination of the east end of the stoa, it was necessary to dig under the mosaic floor and stylobate of the Peribolos. It was found that the stylobate wall extends eastward to within 0.50 m . of a large piece of bedrock, where a terrace wall,

[^9]${ }^{23}$ See above, p. 11, note 15 .
running north and south, meets it. Although the corner is hidden beneath the Peribolos construction, a part of the east face of the end wall has been uncovered. It is built of large poros blocks; those of the top preserved course are rusticated with broad flat bands around the edges. The last block against the north wall is missing. This end wall, beneath the Peribolos stylobate, is seen to continue to the south, without interruption in facing, along the first block of the terrace wall, most of which, as has been noted above, belongs to a period later than that of the stoa.


Fig. 12. Foundation of Stylobate and Pavement through Which It Cuts
Another short wall, about 1.30 m . to the east along the north wall, is built obliquely to the piece of bedrock from the latter wall. The roughly triangular area between the end wall of the stoa and this oblique wall was excavated, so that the two faces of the walls are now easily seen. The oblique wall, though of more careless workmanship, seems to be of the same period as the other. It was probably a supporting wall to strengthen the end of the stoa against a higher level on the east. That the intervening area was not left open was proved by the excavation. At a depth of 2.05 m . from the top of the supporting wall, there is a stratum of hard, red earth, and the earth taken from above this layer seemed to show a stratification which could have been the result only of intentional filling. In one of the several strata there were


Fig. 13. Foundation of Stylobate of Hellenistic Stoa. At the Top Is the Stylobate of the Marble Peribolos with Its Rubble Concrete Foundations
numerous fragments of Hellenistic terracotta figurines (Fig. 15), very soft and fragile, apparently discarded by the maker because of faulty firing or bad clay. The most important of these were heads or fragmentary figures of young women or goddesses, some apparently of the fourth century, but the majority purely Hellenistic in style. There were also fragments of framed reliefs on thin clay bases with moulded footings, terracotta moulds, and fragments of figures leaning against stelai. The finds were not limited to the one stratum. One of the lamps found was particularly interesting for its size. It belongs to a class produced in the fourth and third centuries, though, with its two nozzles one opposite the other, somewhat more developed than the ordinary lamps of the class. ${ }^{24}$ The most conclusive evidence was that of the


Fig. 14. Section through Foundations at North Side of Peribolos
coins found in the same trench, for, with many of the Corinthian Pegasus $\mid$ Trident type, there were two of Ptolemy V (204-181 b.c.). ${ }^{25}$ It is on this evidence that we suggest such a late building of the stoa, near the final destruction of the Greek city in 146 в.c. ${ }^{28}$ The suggested date is certainly in agreement with the evidence in general. There is the possibility, however, that the oblique wall was added at a slightly later period for support and that the fill between the two walls belongs to that period.

Although the terrace wall now preserved on the east of the precinct is of the early Roman period, it is safe to assume a similar wall of the Greek period following the same line across the Peribolos toward the back wall of the Greek stoa east of Peirene. The bedrock more or less necessitates such a wall, since the rock would protrude in an ugly way in any plan that restores a terrace wall farther to the east. Furthermore, there are cuttings in the ledge of bedrock at the northeast which were

[^10]filled up in the early Roman reconstruction. Except at the north, where the one block beneath and inside the Peribolos stylobate continues the end wall of the stoa, the Greek wall must have been completely torn down, when the brickwork of an early Roman foundry for bronze was laid across the line of the wall.

From each of the two early Roman partition walls uncovered in the north portico, a poros cornice of the Doric order was taken (Frontispiece). A possible reconstruction


Fig. 15. Terracottas from Fill against Foundations of Hellenistic Stoa
is thus offered for a Greek building and perhaps for the stoa under consideration. On one of these cornices, the color was very bright at the time that it was excavated, but it has slowly faded in the light. The mutules and guttae were blue; the viae, red. On the curved moulding beneath the mutules, there was a blue egg-and-dart pattern on a white ground; on the next flat moulding, a red fret on white; and the surface on the bottom outside of the setting-lines was red. The colors as preserved were of a soft, terracotta quality. ${ }^{27}$ At the back are cuttings for beams. Two other fragments of the same cornice were found in the vicinity, and a badly damaged epistyle-frieze block
${ }^{27}$ Dimensions of cornice: length, 0.92 m .; width, 0.67 m .; width of mutule, 0.265 m .; width of via, 0.065 m .
upon which a triglyph can be made out corresponding in width to the mutule of the cornice.

With calculations based on these members, the general scale of the building can be determined. Sixteen columns with an intercolumniation of 1.98 m . can be set on the stylobate of the stoa, which was $c a .33 .00 \mathrm{~m}$. in length. The height of the column would be about 3.25 m . The lower diameter, $c a .0 .54 \mathrm{~m}$., is not too great for the width of the supposed stylobate.


Fig. 16. Paved Basin from Southeast
Judging from the levels and variations in the Greek pavements, there are two periods, one of which may coincide with that of the stoa. In every case, the pebble pavement was broken against the stylobate foundation, indicating a later building date for the stylobate. One type of pavement is seen in front of the altar (Fig. 5) and of the peculiar basin to be described later (Fig. 16). In both cases, curbing for support seems to have been required. The second type, finished off with smaller pebbles set in a well-smoothed cement, is to be seen in the northwest corner of the area and lies approximately 0.05 m . lower than the other pavement. It is impossible to ascertain what building each pavement served. The higher one is closer in level to the stoa. The preserved top course of the Greek foundations, however, is higher than the pave-
ment and seems very irregular to have been a visible course. We must conclude, therefore, that both pavements are earlier than the stoa.

There is further proof for the earlier date of the pavement of the second type in the discovery of the broken fragments below the north wall of the paved basin and in the earth excavated for the north face of the stylobate. It seems clear that it was well broken up for the latest, Hellenistic, building of the area. Built into the stylobate, visible on the north face from the Byzantine room in the northwest corner of the excavations, an interesting block is preserved which has the fine layer of cement and pebbles, of the second type of workmanship, still plastered on the narrow, integral socle; the block is obviously a base piece from an earlier building. A second observation points to the existence of the building here before the stoa; the execution of the high north wall with its good clamps is far better than that of the stylobate.

## Greek Remains in the Area Anterior to the Stoa

Although the form of this earlier construction is not intelligible, the various fragments of pebble pavement are enough to show that it was used for some sort of commercial purpose in which water was necessary. Of the fragments found, many have upper surfaces with raised and rounded edges, as if to form a basin for the retention of water. When first excavated, part of this pavement with a swelling, or rounded edge, was still in situ within the walls of the Lechaion Road shops, north of the temple; though most of the flat pavement is still preserved, the swelling for the side of the basin has been broken off.

The paved basin mentioned above (Fig. 16) is probably a later form of these water retainers. The pavement here preserved, 2.17 m . wide, on the northern half is like that of the altar and baldachino, with the layer of pebbles covered with a fine cement, which is without the pebbled surface of the earlier Greek pavement. The curbing which supports the raised level of the pavement is 0.12 m . broad and roughly rounded on top. A small piece of the thick waterproof stucco, like that on the west face of the altar, is preserved at the southeast corner, on the south curbing. A broad, shallow gutter, with the same waterproof stucco, runs 1.80 m . towards the Peirene drain. The width of the area from the south curbing to the north is 4.10 m ., the west end having been broken by the stylobate foundations of early Roman period. In the centre, two upright blocks remain, ca. 0.25 m . high and 0.77 m . apart, with the finishing stucco preserved on the pavement between them. It is supposed that, over these, a cover was laid, the table having served perhaps for some kind of washing. The edge of the pavement on the north side projects 0.15 m . over the boundary wall, and extends from the rubble foundation on the west almost to the Peirene drain on the east. It seems obvious that this low wall had an upper course of some kind to meet the edge of the pavement. However, the irregular upper surface would permit only a balustrade or low brick addition. The setting of this balustrade wall broke the bedding of the earlier pavement, the pebbled surface of which can be seen 1.00 m .
to the north. The roughness of the fill in the break between the wall and the pavement bedding and the irregularity of the north face of the one visible course of the wall make it all the more probable that in the latest or Hellenistic building the level was higher than that of the earlier pavement which now remains. From the ground line noted on the Greek pedestal, northeast of the temple, it is clear that one pavement, probably the later, sloped up from the centre of the court to the stylobate.

The earliest Greek stratum is pre-


Fig. 17. Greek Pavement and Water Channels in Northwest Corner of Peribolos served north of the basin in the corner formed by the Peribolos stylobate (see Fig. 14, lower dotted line). The rubble foundation of the early Roman stylobate crosses the area. Beneath and to the north of the balustrade wall, there are the remains of a construction consisting of five re-used poros blocks projecting only a little above the stratum. Four of these are curved on both the long sides and stuccoed with a fine finish. ${ }^{28}$ The fifth, between two curved blocks, has a panel of fluting on the north face. Just to the north, a block with a slight curve or rounded edge, covered by the stratum, may be the top of a channel which empties into the Peirene drain where the mouth can be seen in the west wall.

The remains of this early Greek work are too incomplete even for conjectural restoration. The stratum itself, 0.20 m . below the pebble pavement, is 0.15 m . in thickness and is distinguished by a surface packing of coarse red sherds and grey pebbles with no particular pattern (Fig. 17). It is cut north and south by a narrow, shallow channel, with a brownish stuccoing which continues on the north side of a deep channel running east and west and emptying into the Peirene drain. The fact that the last block of the shallow channel against the stylobate foundation was turned aside toward the west suggests that this construction interfered with the building of the Greek stylobate and therefore that it belongs to a period anterior to that of any

[^11]building with its wall along the line of the stylobate. Peculiar long courses of stone, like curbings, are set into the stratum at various places. The channel trench, 0.60 m . to 0.70 m . deep, has, along the bottom, water conduits cut in large poros blocks. The walls of the channel are roughly built up to support the stratum. The channel is thus such an integral part of the stratum construction that the relative chronologies of this and the shallow channel are difficult. The deep one was probably covered and used at the same time as the shallow one above. The predominance of Corinthian sherds of the sixth century in the earth over the stratum and especially in the deep channel renders an early date possible. In the fill west of the west stylobate of the Peribolos, where the stratum and channel are also visible, the Corinthian fragments were exceptionally interesting, including one with a representation of the head of a warrior with part of his horse's head and an incomplete inscription in the Corinthian alphabet.

Between the basin and the Peirene drain, north of the basin spout, there were two other water conduits probably of the same period, the sixth and fifth centuries; they were covered over again by the excavators. To the mouth in the wall of the drain, one brought water from the west, the other from the southwest. The former was nothing more than a shallow cutting in the stones. The latter was of ordinary Greek type with a deeply cut channel, 0.11 m . wide and 0.12 m . deep, covered with stucco.

As the Peirene drain determined the nature of the construction on the surface, so also it determined the building of the many branch drains and channels which were dug through the area. These drains become interesting as parts of the entire Corinthian system. Along the south stylobate, a drain of the Greek period, 0.50 m . deep and 0.47 m . wide, runs down to the big drain. It is stuccoed with the heavy waterproofing seen on the altar and on the curbing of the basin. Beneath the marble pavement of the Peribolos, in the southeast corner, there is a fork, one branch continuing to the southeast and emerging in the north wall of the modern Byzantine museum, the other turning to the north, from a point just above the junction with the terrace wall.

The heavily constructed drain branching off to the southwest from the Peirene drain is 1.00 to 1.20 m . in width and ca. 2.50 m . in depth. Byzantine sherds were found near the cover slabs, and, in the fill of the channel, a damaged portrait head of the third century after Christ. From an apparent break in the north wall, 2.50 m . above the late closing wall at the mouth, along the floor of the channel toward the west, there was a deposit of an iron substance or refuse. It was similar to the iron found in the interstices of the bottom slabs of a large drain from which the sides have been removed beneath and east of the altar. In the earth at the same level were large sherds of the Geometric style.

Of earlier date than the southwest branch, perhaps of the seventh century, is another channel, 1.30 to 1.55 m . in width, in the southwest corner of the Peribolos behind the stylobate. The wall toward Peirene consists mainly of one huge piece of rough poros, 2.50 m . long, 0.55 m . deep, and 0.93 m . wide, comparable in size to three
other poros blocks in the vicinity, two in the so-called Tirynthian basin and one over the southwest branch drain and under the foundation of the Peribolos stylobate. The opposite wall of the channel is made up of smaller blocks of strong masonry. The channel was not followed in either direction outside of this corner.

Approximately on the same orientation as this channel there is a massive wall, two courses deep, of large poros blocks, between the two early Roman partition walls. In the pit dug to the north of this wall, the earth yielded, together with many coarse sherds, fine examples of the Geometric-Protocorinthian style, as well as an implement of iron, broken and corroded, which resembles a straight-edged chisel with tubular handle. Above this wall, to the west, the floor of clay tiles belongs to a Byzantine grave.

In the northeast corner, near the stylobate, there is another drain channel that probably was used through a number of periods. The cutting is in the clay. The roof consists of heavy pieces of conglomerate rock supported in many places by architectural members of unidentifiable character. There are actually two channels running toward the Peirene drain. The upper one, on the surface, is built of thin-walled sarcophagi with their ends knocked out. The lower runs beneath the conglomerate slabs which, under the terrace wall, are well propped with re-used architectural pieces.

These drains from the eastern area suggest the possibility of an interesting excavation beneath the embankment for the road. In the construction of the area in both the Greek and early Roman periods, during which the higher, eastern level was retained by terrace walls, one may perhaps think of a stoa cut back into the rock, like that north of the temple of Apollo, and a passageway to the district of the basilica that lay at the eastern limit of the market place. Two tunnels were dug into the embankment for the discovery of the east wall of the Peribolos. That on the north disclosed, behind the east wall, a cut section of bedrock, like a high curbing; and that on the south, a similar piece, practically on the same orientation, with a filling of small stones behind.

There is enough evidence in these Greek ruins to give a very rough idea of the arrangement of buildings and monuments. The temple, or its successor the baldachino, and the stoa were conspicuous, and the open court extended to the terrace that bounded the north side of the court in front of Peirene. The deep Tirynthian basin which was in use during the Greek periods must also be included in the picture, as well as the hexastyle Doric portico east of Peirene. It is a plan of little architectural regularity.

## III. EARLY ROMAN PERIODS

BY RICHARD STILLWELL AND H. ESS ASKEW
It has been noted from good evidence that at least the baldachino and altar lay in ruins at the time of the rebuilding in this area by the Romans. Unfortunately there is no exact evidence for the dating of the buildings of the reconstruction. One more or less industrial and probably two architectural periods must be fitted into the hun-
dred and twenty-five years between the refounding of the city by Caesar and the erection of the marble Peribolos of Apollo. For these early periods, the excavation yielded such evidence as to date them either in the first century before Christ or the early part of the first century after Christ.

The circular foundation in the middle of the excavations is perhaps the factor in the design by means of which the colonnades and shops on the south, west, and


Fig. 18. Bronze Foundry from Southwest. At the Left May Be Seen the Roman and Mediaeval Water Channels Leading from Peirene
north sides can be understood both in the plan and in the excavations. However, there are the remains of a period earlier than these, which are mainly concentrated on the east side of the line of the three Roman and Byzantine water channels and must represent work of the earliest Roman settlers at Corinth.

## The Bronze Foundry

Northeast of the circular foundation are remains of a foundry for bronze which is distinguished by a long, low bench of unburnt brick with two deep channels or flues at the sides (Figs. 18, 19). The explanation is rendered difficult by the intrusion
of later constructions, but the discovery over the surface of the bench of many minute particles of bronze mixed into a hardened clay deposit, about 0.03 m . thick, indicates the use of the structure as a furnace for the working of bronze and perhaps other metals.

The southern end only is preserved with a stuccoed facing. On the east, the terrace wall of the later shop-surrounded court broke through; on the west, the Roman and Byzantine channels; and on the north, a well of modern times.


Fig. 19. Plan and Section of Bronze Foundry

Between the Roman and Byzantine channels and the central bench, south of the break of the west channel of the foundry, the earth was full of fragments of heavy water jars, with several lamps of the Corinthian wheel-made type ${ }^{29}$ and sherds of Arretine ware. One interesting fragment is from a decorative handle of a large lamp (Fig. 20). ${ }^{30}$ The glaze is a dull black; the clay, grey. A nude warrior stands in the centre with a spear in his right hand. He is framed with a border of an elaborate floral design. There is a short sword in the background as a filling-motive. The handle was originally fan-shaped, but almost one half is lost. The relief was formed in a mould, and the back was left with an uneven surface from the pressure of the clay. All of these objects can be dated in either the first century before Christ or the first

[^12]century after Christ. In some cases, the fragments of water jars were found beneath the west wall of the bench. Much of the Arretine ware had been crumbled by the action of intense heat. The furnace must, we believe, be given a date in accordance with this evidence.

The central bench, in its preserved state, is 5.70 m . in length, 0.56 m . in top width, and 0.75 m . at the bottom. The declination is toward the south. The actual body of the bench, 0.81 m . deep, is constructed of unfired brick. In the cutting for the late well on the north, the red clay of the brick shows clearly the horizontal divisions, 0.08 m . thick; ${ }^{31}$ the mortar is now seen as a green clay. Thin, vertical joint lines can be distinguished. Near the channels, and in them, there is another kind of brick preserved in its original hardness and squared off in a heavier and more solid form. Over the brick construction, the clay mixture in which the bronze particles were observed was plastered on and subsequently baked hard by the heat of the foundry. The brick near the channels turned grey, and the plaster on the sides of the channels green from the heat which apparently circulated through them.

These channels have one straight, slightly inclined wall, formed by the side of the bench, and one arched (Fig. 19). Their full depth is $c a .0 .50 \mathrm{~m}$. ; at the bottom they are 0.47 m . (one brick) wide and at the top only 0.28 m . They slope down with the bench toward the south. The shape of the east channel is clearly seen from the well. After the cutting and plastering of the channels, large tiles were set in for flooring. Both channels, when excavated, were found to be filled with fragments of hard baked clay with curved surfaces, which may have fallen from the broken-down walls of


Fig. 20. Lamp Handle Found Near Bronze Foundry the channels or from some sort of covering built over them at the times of firing. Both channels show that, at some time after the construction of these arched passages, they were narrowed down by means of the insertion of the more solid bricks.

The top of the bench is marked with certain peculiarities which should be of importance in an attempt at reconstruction. At a distance of $c a .1 .08 \mathrm{~m}$. from the south end, there is a hole, ca. 0.34 m . in diameter, around which the plaster or stucco is curled up as if to continue in a vertical chimney. The cavity beneath seems to have no exact shape, or walling ; beneath 0.20 m . of the brick work of the bench, it is 0.55 m . deep, ca. 1.50 m . long, and ca. 0.65 m . wide. The fill was of grey flood earth with some disintegrated clay of the bricks. A second round depression, 0.36 m . in diameter, lies $c a .0 .58 \mathrm{~m}$. farther to the north; it was full of hard, ash-grey earth to within

[^13]0.06 m . of the stuccoed top of the bench. At the south end, on each side of the bench, there was a lug of terracotta with a groove in the middle as if to hold a pipe or rod. The groove on the lug on the east side was turned toward the south; the other was at right angles to the channel. In both cases, the clay in the groove was greyed by heat. The location of these appliances over the channels is somewhat similar to that shown


Fig. 21. Terrace Walls at East Side of Peribolos: Upper Terrace (A), Unknown Building (B), Spur Walls (C) to Lower Terrace (D)
in the drawing of an iron foundry discovered at Jolenze in Krain. ${ }^{3 z}$ These on the foundry may have been similarly repeated along the channels, since, above the first circular cut, there are indentations in the hard plaster as if for the retention of the terracotta lugs, and at the north end, over the west channel, there is another. Near the former, a roughened square on the plastered surface suggests an upright of some kind over the channel or bench.

On the north side of the well a small wall, 0.20 m . wide, is preserved; it may have
${ }^{32}$ See Neuburger, Die Technik des Altertums, p. 26, fig. 20; for the drawing of a foundry with regularly curved channels, ibid., fig. 19.
been the northern termination of the foundry. All connections, however, between the two are now broken. For 2.00 m . to the south of the south end of the brick bench, carbonised matter and red earth indicated firing. Above the terrace wall, east of the south end, two interlocked blocks of a water channel are built on the same orientation as the channels of the foundry (Figs. 19 and 21). The cutting for the water channel proper is 0.065 m . wide and 0.10 m . deep; it has been filled in for 0.05 m . with a hard cement. The level is approximately that of the bench, and the declination is toward the south. There is another channel, cut 0.40 m . deep in the clay hardpan, $c a .2 .20 \mathrm{~m}$. below the top of the bench and just to the west. It winds from beneath the bench in a southwest direction, but it has no determinable relation to the foundry.

In accepting the date for the foundry, it must be remembered that the evidence comes from beneath the west wall of the bench at a point where the west channel was broken away. The tile projecting from the bench at the south end seems to be the flooring for the continuation of this west channel. It is unlikely that it was ever cut short during the use of the foundry. The channel then, originally, was built over earth in which there was evidence of early Roman date.

## The Terrace Walls

The upper or eastern terrace wall which extends from the northwest corner of the Greek stoa on an orientation somewhat similar to that of the foundry probably belongs to the same early Roman period as the latter. It is built close to the upper ledge of bedrock, leaving the lower to project in an ugly way. The wall is constructed, about 0.75 m . wide, of small stones of irregular shapes, some of which had fallen to the west. About halfway across the court, $c a .12 .00 \mathrm{~m}$. from the corner of the stoa, it turns back to the east with a corner of two well-squared blocks of poros (A, Fig. 21). The east extension (B, Fig. 21) can be followed beneath the Peribolos stylobate into the embankment. The foundations which continue this terrace wall on the south, after an interval of 2.80 m ., possibly belong to a building, the north wall of which extends into the embankment parallel to the east extension of the terrace wall. A passageway, 2.80 m . in width, is thus formed between the wall on the north and the building on the south. The west wall of the building is set back to the east but lies on the same orientation as the terrace wall north of it. The southwest corner can be seen beneath and to the west of the Peribolos foundation. The building was 7.30 m . in length on its west side. Only a short stretch of the returning south wall can be seen. The foundations are made up of miscellaneous poros pieces in a heavier masonry than that of the terrace wall. The walls of these early Roman periods are of two varieties, one of strong rubble resembling that used in the construction of the Peribolos foundations, and the other of re-used poros stone fragments. Both varieties are used in the same building and even in the same wall. The second and more conspicuous terrace wall belongs to the first, poros, Peribolos.

## IV. THE EARLY PERIBOLOS

## BY RICHARD STILLWELL

It seems probable that the idea of establishing a court in the area north of Peirene, together with the execution of the idea, must have occurred not long after the refounding of Corinth. The great basilica west of the Lechaion Road, the poros Propylaia, and the poros façade of Peirene must all have been erected within a short time of one another, presumably during the reign of Augustus. To the early years of this period we must assign the erection of the first court of the Peribolos of Apollo, and the east shops of the Lechaion Road, as they form an integral plan. The construction of the shop foundations, which consist almost entirely of re-used material, rather carelessly laid, makes it seem probable that of the entire complex of structures that arose within a short time of one another, in the most critical point of the centre of the new city, the Peribolos of Apollo was among the first to be built. It had at the time no clearly articulated connection with Peirene, nor did it have one until the great rectangular court of the latter was erected some time in the first century after Christ. The orientation of the court of the Peribolos was determined by the orientation of the Lechaion Road, which was first laid out at this time. It happened to agree very closely with the lines of the Hellenistic stoa, the back wall of which was used as the northern limit of the new court. The southern boundary was oriented at right angles to the line of the east colonnade of the Lechaion Road and was placed as far to the south as possible without encroaching on the sunken area which lay north of Peirene. This south wall was carried east as far as the rear wall of the Hexastyle Stoa, ${ }^{33}$ cutting off a slice of the north end of that building. A terrace wall (D D, Fig. 22), built of blocks that may have been taken from the Hellenistic Stoa to the north, runs from the east corner of this latter building to meet the south wall of the Peribolos at a point very near its juncture with the back wall of the Hexastyle Stoa. The terrace wall cut through the brickwork of the foundry, which was abandoned at this time. Probably the growing consciousness of the need for a fine civic layout caused the authorities to disperse the primitive industrial agglomerations that centred in the first years of resettlement about the chief water supply of the new city. The passageway that ran between the older terrace wall and the building south of it (above, p. 31) seems to have continued to serve as an approach to the newly established Peribolos, for two spur walls (C C, Fig. 22) carry out its line and bond with the new terrace. One of the stylobate blocks of the Hexastyle Stoa seems to have found its way into the southern of these walls. On the north, the various drain cuttings connected with the earlier terrace and with the structures of Greek times were filled in. There are two short extension walls east of the new terrace for the purpose of strengthening it.

[^14]The plan, within these boundaries, was a rectangular court with a colonnade on its south, west, and north sides. The east side was marked by the terrace wall just described. Behind the colonnades were shops, but it is questionable from which side the shops that lay between the west colonnade of the Peribolos and the east colonnade of the Lechaion Road were entered. The Peribolos had two entrances, one from the east, along the passageway just described, the other from the west, very near its centre.


Fig. 22. Lower Terrace Wall (D-D) and Spur Walls (C-C) from Upper Terrace. The Bronze Foundry Appears at the Left

The spacing of the East Colonnade of the Lechaion Road, together with certain traces on the pavement of the sidewalk, seems to indicate some such feature at about this point. ${ }^{34}$ The space occupied by one of the shops would serve as a passage. In the centre of the court, almost exactly on axis with both the east and west entrances are the foundations of a large circular base, 7.50 m . in diameter (Fig. 23). This, from its construction, position, and level must be associated with the Peribolos in its initial form.

The foundation, 2.10 m . in depth, rests on its western side on the floor slabs of a Greek drain. Well-cut blocks of poros alternate with layers of rubble masonry
${ }^{34}$ Corinth, I, i, pp. 154-156.
in which there is no apparent use of mortar. The circle is roughly centred over the main Peirene drain, and on the north the drain is spanned by an arch that lies slightly outside of the exact line of the circle. Obviously the weight of the construction above the foundation was considerable, but there is absolutely no indication as to what it was. A small circular temple, a fountain, or a large base with, perhaps, a statue of Apollo are possible suggestions. The monument does not seem to have survived the first period, as it is off centre with the later marble court, nor have any recognizable


Fig. 23. Foundation of Circular Monument
fragments of its superstructure been found. It is quite certain that it did not survive after the laying of a marble pavement in the fourth century after Christ, as the lime pit for that pavement covered the foundation on the southwest side.

No architectural fragments of this poros court have been identified with certainty. The foundations provide the only clue to the early arrangement, and in many places even these are lacking, torn out in Byzantine times, when many pits were sunk in this region. On the north side of the court the back wall of the Greek stoa was repaired. The foundation for the Greek colonnade became the foundation for the front wall of the shops, and, where necessary, was built up to the required level with
rubble masonry (Figs. 13 and 14). About 3.50 m . in front of this wall a rubble foundation was built, some 0.80 m . wide, for a colonnade. Stones of this wall can be traced in a slightly irregular line as far east as the terrace wall. On the west, the foundation bonds with a similar one that runs southward, for the colonnade on the west side of the court. This line was afterwards used for the western colonnade of the marble Peribolos, and the earlier foundation wall has been much built over.

The foundation for the west stylobate crosses over the semicircular altar in front of Temple A. A cross section at this point shows that whereas the colonnade foundations on north and south are only about 0.80 m . wide, on the west they are just twice that, 1.60 m . No vertical line of differentiation appears in the construction, and it is possible that on this side the colonnade had a gutter along the front, as was the case in the later period. On the south side of the court, the foundation lies about a metre and a half to the north of the stylobate foundation of the later Peribolos. It is made of re-used material and small stones thrown roughly together, but very little of it remains. The foundation for the front of the shops is only partially preserved. It lies 0.40 m . south of the foundation for the colonnade of the later Peribolos, and also includes much re-used material. Unfortunately the eastern part of this foundation wall, which lay over the deep Tirynthian basin, completely disappeared when the basin was excavated by the Byzantine inhabitants of Corinth. The back wall of the shops, on the south, is preserved for a distance of about 8.50 m . from its east end, where it abuts on the rear wall of the Hexastyle Stoa. It consists at present of a course of blocks about 0.25 m . high and 0.55 m . wide, and shows a fairly well finished face toward the south. Below this course the foundation, which crosses the stylobate and steps of the stoa, is built of blocks and small stones adapted to the varying levels at which the earlier construction provided a solid bed.

In the area occupied by the shops on the north side of the court are two small partition walls, about 5.60 m . apart. They are built of small re-used blocks of poros, and are bonded into the rubble construction of the front wall of the shops that lies above the Greek foundation. We may restore, then, three shops of slightly unequal dimensions along the north side of the Peribolos. On the west, the shops that were shared with the Lechaion Road colonnade numbered nine. At the south, two walls still remaining indicate shops along this part as well. They are not spaced as far apart as the shop walls on the north, but measure only 4.50 m . from centre to centre. Four shops of this dimension, with a fifth smaller one, can be accommodated along this side.

Several items, not directly connected with this period of the Peribolos should be mentioned before proceeding to a consideration of the later stages of the court. At the north side of the court, between the front and rear walls of the shops, near the eastern end of the wing, was a small hypocaust. Four round clay supports still remain, and there are three steps at the north end, cut in the hard earth. The side walls of the area are also cut in earth, and were roughly plastered and faced carelessly with coarse tiles. An opening 0.58 m . wide can be seen in the west wall of the hypocaust, about
1.00 m . from the south end. Several coins of the fourth century after Christ came from the fill, and the late date of the hypocaust seems to be confirmed by the fact that the layer of limestone chips from the working of the stylobate of the marble period has been cut through in order to dig the oven. Many lumps of bronze were found in the fill, such as would be formed by metal flowing into forms and spilling over, and it seems possible that we have here a recrudescence of the bronze-working industry that marked the earliest Roman use of this area.

When the foundation of the west stylobate was removed at the point where it ran across the altar in front of the temple, a large round altar of a familiar Hellenistic type was found built into the wall (Fig. 2). ${ }^{35}$ The base and cornice, of which only parts remain, are of the Ionic style. The soft poros stone is badly damaged, but its original surface is preserved to some extent by a coating of fine-grained stucco. On the front there is a bucranium of rather ordinary workmanship; on the sides, rosettes. A rectangular niche was cut out of the back and a flooring of tile set in. Another block taken from the same foundation was a fragment of the cornice of the Greek North Stoa.

The scanty remains of the south wall of the Peribolos have been mentioned above (p. 32). The present south wall, which follows a line parallel to the limestone stylobate, cannot be taken for a part of the original south wall, since it is oriented differently, nor can it be connected directly with the Peribolos during the marble period on account of the fact that its euthynteria is $c a .0 .20 \mathrm{~m}$. too low. It does not bond with the northeast corner of the rectangular Peirene court, but is set away from it by some 0.30 m . The wall blocks of the court show that they were laid, and even cut, so as to avoid some construction that was in place when the court of Peirene was erected, and this construction is definitely shown to have been the original south wall of the Peribolos. Even supposing that the present south wall were contemporary with the marble Peribolos, the manner of inserting the limestone stylobate that divides the colonnade from the large exedra on the south, which was at first trapezoidal in shape, and later apsidal, seems to show conclusively that the poros wall and the limestone stylobate cannot be contemporary. The rubble foundation of the wall continues under the stylobate, but there is a horizontal line of demarcation at the exact level where the poros euthynteria blocks of the wall would have rested. The rubble above this line is of a different character from that below. The mortar contained a large amount of gravel, and the stones used are smaller. Clearly, when the limestone course was laid, the blocks, which were of an uneven thickness, were more easily bedded on rubble construction than on an even course of poros which would have had to be cut to fit. Moreover, at the west end of the stylobate, the limestone block has been inserted under the corner of one of the orthostates which was partly cut away. The irregular triangular space left above it was carefully patched with a small poros piece, set in with the same kind of mortar that was used in the bedding of the stylobate (Fig. 24).

[^15]

Fig. 24. South Wall of Peribolos. The Limestone Stylobate of the Hemicycle Is Shown at A

In the rubble foundation of the marble peristyle, at the southwest corner, there is a line of demarcation some 0.65 m . below the top of the limestone stylobate. It may, of course, be explained by the manner of construction, which would be to carry the top of the foundations up to a convenient level all around the court, and then to proceed with the laying of the stylobate, building up the rubble as far as necessary above the section already in place so as to set the stylobate blocks. There may be another explanation as well, and that is that the lower part of the rubble foundation was intended for a peristyle of poros, possibly never completed, which was the direct predecessor of the marble one. The latter would have followed the lines of the former, both being quite different from the scheme of the poros Peribolos of the first period. This would enable us to restore a poros court, with which the poros south wall of the Peribolos would be contemporary, and the level of the stylobate of this (projected ?) poros court would be given by the euthynteria of the south wall.

## V. THE MARBLE PERIBOLOS

## BY RICHARD STILLWELL

After the destructive earthquake of a.d. 77 (see p. 233, note 35), the Peribolos of Apollo was restored as a court, some $28 \mathrm{~m} . \times 22 \mathrm{~m}$. in size, surrounded by an Ionic colonnade (Plate I). The earlier arrangement, consisting of a colonnade behind which were shops, was suppressed, and the limits of the new court were established as follows: on the north, the line of the Greek wall that formed the rear of the Greek stoa; on the east, a wall ${ }^{36}$ lying under the road that connects the modern village square with the houses to the south near the church of the Panaghia; on the south, the boundary was formed by a wall (p. 36), part of which is now incorporated in the rear of the apsidal arrangement of the court of Peirene, built by Herodes Atticus, and was interrupted east of the centre by a large exedra, some 6.10 m . in radius, facing north. The western boundary of the Peribolos of this later period was formed by the back wall of the East Shops of the Lechaion Road. The connection, if it once existed, between these shops and the Peribolos does not appear, as only the foundations remain, and in some places even these have disappeared. It seems probable, however, that there was a passage through the space occupied by one of the shops,

\footnotetext{
${ }^{36}$ The difficulty of tunnelling under the road made trials on this side of the court very unsatisfactory. A rubble concrete wall foundation was found running parallel to the colonnade. It was somewhat nearer to it, however, than the walls on the other three sides of the court were to their respective colonnades. The dimensions follow:

| East side, f | m . |
| :---: | :---: |
| North side. | 4.50 m . |
| West side. | 4.50 m . |
| South side. | . 90 m . |

as has been suggested in the discussion of the poros Peribolos. The entrance, in both periods, probably occupied the same place.

The foundations of the marble colonnade on the west side, are built in part above those of the poros colonnade that preceded it. There is a distinctly noticeable break in the masonry, about 0.65 m . below the later stylobate, but toward the north, where the prolongation of the foundations runs over the space formerly occupied by the portico between the earlier north side of the Peribolos and the shops built against the northern limit, the foundation is uniform down to the Greek level some two metres below. The stylobate on the north follows the line of the front, or entrance wall of the earlier shops, which, as has been noted, rests in turn on the foundations of the Greek stoa. On the east, the foundation rests on rock, which is found at varying levels, averaging about a metre below the finished stylobate. Here it follows no earlier line, but cuts across several walls of the preceding Roman periods. The southern foundation also does not coincide with any previously built line, but runs almost parallel to the front wall of the shops of the earlier Peribolos, where this is still visible towards the west end. So far as it can be traced, this foundation rests on Greek fill and on the various walls of the earlier Roman period which it crosses. The material is rubble of very poor quality, reinforced with a small amount of lime mortar. In places, notably on the north side, the foundation where it rests on earlier construction has not been carried down to hardpan for its whole width, but has been allowed to overlap its predecessor where necessary. As a result, a very considerable settlement is noticeable, particularly in the case of the gutter, which has rarely more than 0.50 m . of stone beneath it. The rather careless nature of this construction may be explained by the fact that the fill inside the court was quite densely packed and the builders of the marble Peribolos accepted it as sufficiently solid. The foundations are not "laid up," but have been formed by the simple method of cutting a trench of the desired width and filling it with stone, a practice commonly followed in Corinthian foundations of this period whenever the load to be carried was not extreme.

On this foundation rests a gutter and a stylobate of white Acrocorinth limestone, similar to the paving of the Lechaion Road. The gutter was laid first, and the stylobate overlaps it by five to ten centimetres. The gutter blocks are of varying length, ranging from about 0.60 m . to 1.30 m ., and have a trough 0.35 m . wide by 0.10 m . deep. The direction of the drainage is not certain, as the settlement of the construction has upset the levels, but it seems to have run to the north side at a point very nearly over the main Peirene drain. A narrow groove, 0.06 m . wide, was cut in the outer lip of the gutter block at the northwest corner at a later period, and apparently was intended to take care of water which collected there because of a settlement of the foundation. The stylobate is set 0.20 m . behind the outer side of the gutter and is drafted along its lower edge. ${ }^{37}$ There are no clamps or fastenings of any kind.

[^16]The actual dimensions of the area are as follows: the south side measures 22.29 m . from angle to angle of the stylobate. The east, north, and west sides measure respectively, $28.83 \mathrm{~m} ., 22.22 \mathrm{~m}$., and 28.87 m . Square dowel-holes, with their centres 0.38 m . back from the face of the stylobate give the position and spacing of the columns. There were ten along the shorter sides of the court and thirteen on the longer, counting the corners twice. It follows from the unequal dimensions that the intercolumniations of each side varied slightly from those of any of the others, but to such a small degree that the difference would not be noticeable. ${ }^{38}$

Where the original stylobate is preserved on the north, round dowel-holes midway between the square ones are noticeable in certain places. They have no pour-channels and are only three centimetres deep. They do not appear to have served for columns, but inasmuch as the Peribolos underwent a great deal of rebuilding toward the end of the Roman and the beginning of the Byzantine periods, there is no good reason why they might not have served for a re-spacing of the columns along that side.

None of the bases of the order carried by this stylobate remains in situ, but numerous fragments exist, some of which can be pieced together to form whole bases. The dimensions vary considerably, especially as regards height. The lowest is 0.175 m . and the highest 0.20 m . This discrepancy may be explained by the fact that the Peribolos of the marble period shows evidence of repair. ${ }^{39}$ Several of the original AtticIonic bases (Fig. 25) have holes for mending-clamps cut in the scotia, and new bases were doubtless supplied in place of some that were too badly broken to be mended. In the upper surface of each base is a square dowel-hole and pour-channel for the attachment of the shaft.

A great many fragments of the columns that belonged to the Peribolos have been found in the area, but unfortunately no complete shaft has been discovered. There
${ }^{38}$ The calculation of the intercolumniations agrees quite well with the measurements where setting-lines make it possible to take the distance from column to column. Allowing 0.38 m . for the distance that the centres of the columns fall behind the face of the stylobate and adding twice that to the length of the sides, we get respectively, south, 23.05 m . ; east, 29.59 m . ; north, 22.98 m . ; and west, 29.63 m . for the four sides of the court. Dividing by the proper number of spaces we have intercolumniations respectively of, south, 2.561 m .; east, 2.466 m. ; north, 2.553 m. ; and west, 2.469 m . Two spaces on the south can be measured and give 2.54 m . The stylobate, however, is not complete, and the over-all dimension may not represent the true length. On the east we have 2.48 m . and 2.47 m ., as measured between setting-lines, and this agrees quite well with the calculation. On the north we have 2.53 m . and 2.57 m ., averaging 2.55 m . The stylobate, however, has been patched and the actual dimensions are not too reliable. In any case it can be shown that an architrave block which measures 2.515 m . in length can hardly have belonged to one of the long sides of the court, and that, since this block shows some signs of having been cut down slightly, it can be restored with reasonable certainty on either the north or south side of the court.
${ }^{39}$ Many other buildings of the Roman period at Corinth show evidence of repair at a comparatively late date. The basilica (Corinth, I, i, p. 206), the Odeum (Corinth, X, pp. 97 and 148), the Façade of the Colossal Figures, and others may be cited. Professor Broneer points out in his article on the excavations of $193 \rightarrow$ A.J.A., XXXIX, 1935, p. 58, note 1 ) that the earthquake of 375, the year in which Valentinian II became emperor (Zosimus, IV, 18), may have been responsible for the damage to many of these buildings.


Fig. 25. Profiles of Entablature and Base (Scale 1:3)
are two fragments, however, that may be fitted together to give a complete height of 3.57 m . There is another shaft, unbroken, which is now in the Byzantine reconstruction of Peirene, and may have come from the Peribolos, that measures 3.44 m . in length. If we add an average base, 0.19 m ., and a capital, 0.165 m ., to the longer shaft we get a height of 3.925 m . or, roughly, about eight and a half diameters. In making the restoration it has seemed preferable to use the longer rather than the shorter column. There is some discrepancy in the diameters of the shafts, the smallest having a lower diameter of 0.46 m . and the largest measuring 0.475 m . The upper diameters also vary, running from 0.43 m . to 0.44 m . The column shafts are mostly of Pentelic marble, but there are some that appear rather to be Hymettian. They are uniformly without channels, and have the usual astragal and fillet carved at the top and an apophyge at the foot. Both ends were dowelled on to the bases and capitals respectively, and two fragments show holes for mending-clamps.

The Ionic Capitals are of a good


Fig. 26. Ionic Capital from the Order of the Marble Peribolos pattern, with the conventional three eggs showing on the echinus (Figs. 26-27). The eye of the volute is decorated with a rosette, and the angles between the volutes and the echinus are filled with a small anthemion. The abacus is undecorated. The bolster of the volute has a band of overlapping scales down the middle and the flare-out, toward the volute, is decorated with leaves. The workmanship on the best specimens preserved is of good quality, the eggs being cut with a deep, full profile, and the finish in general is excellent. One of the fragments shows a mending-clamp in the centre, similar to that seen in one of the bases. Several other capitals which may be assigned to the Peribolos show very inferior workmanship and no signs of repair ; hence we may assume that these date from the period of restoration.

At the corners of the colonnade, the stylobate shows the trace of columns, and from the fragments of three capitals that are preserved it is probable that the angle was turned by means of an Ionic capital with four angle volutes (Fig. 28). The effect of such a solution of the always embarrassing corner problem would hardly have been pleasant, but there seems to be no other evidence on the basis of which a restoration may be made.

The epistyle-frieze blocks which may be associated with the Peribolos can be divided into two main categories, the inscribed and the plain. The chief dimensions, together with the mouldings of the inscribed series, correspond so closely that there is no doubt but that all of these blocks belong together, although there is a slight variation noticeable in the profiles of different examples. An illustration of this

Fig. 27. Ionic Capital from the Order of the Marble Peribolos (Scale 1:4)
difference is shown in Fig. 25, where the frieze of one is slightly S-shaped, and the same element of the other is flat, with an apophyge at top and bottom. For an inscribed frieze this flatness would be more desirable, since any exaggeration of the $S$ curve would tend to distort the letters. All the inscribed blocks have on their soffits a narrow panel ending in an incurve. The cutting and finishing are not beyond reproach, but compare favorably with other late first-century work at Corinth. The fascia of the architrave, as well as the frieze, is worked with a toothed chisel and the edges of the fields show the use of a broad chisel. The backs of the blocks carried the same mouldings as the faces. Hook-clamps are found in some, and not in others.

The uninscribed series in turn falls into two groups. Some fragments show profiles that match the inscribed series and are of the proper dimensions to go with it. The greatest variation seems to be in the curve of the frieze. Other fragments (Fig. 25) have a receding frieze and a different treatment of the mouldings above frieze and architrave. The taenia, instead of


Fig. 28. Corner Capital with Four Angle Volutes having a cyma recta, consists of a cavetto above a very shallow cyma recta, and the astragal above the frieze is lacking. In height, this second division of the uninscribed series is a little less than the first, and the proportions of frieze and architrave differ. We may, therefore, omit these blocks in our consideration of the architecture of the Peribolos, admitting only that they may have found their way into the structure in some period of repair. It is possible, also, that we may see in them the epistyle frieze that spanned the exedra, but we have neither the complete lengths nor the thickness on the soffit of this particular set of blocks.

The inscribed blocks have all been published by A. B. West, ${ }^{40}$ and there is no need to repeat his commentary. Since this publication, however, the blocks have been rearranged and several pieces that fit together have been properly set up. It seems advisable, therefore, to illustrate the entire series (Fig. 29) and to give new photographs of two of the set ${ }^{41}$ (Figs. 30-31).
${ }^{40}$ Corinth, VIII, ii, pp. 96-100.
${ }^{41}$ The block shown in Fig. 30 (West, op. cit., no. 123 a, Inv. Nos. 243 and 545d) is, as West points out, a corner block from a re-entrant angle and may represent the beginning of the inscription, since the first letter occurs 0.50 m . from the angle. This space is nearly twice that which normally separates the letters, and there is no punctuation mark that would indicate that a word had preceded it on the architrave at right angles. The upper left-hand corner has been cut for a patch where the mouldings above the frieze had been damaged at some time.

The block shown in Fig. 31 (West, op. cit., no. $123 f$, Inv. Nos. 545c and 930) should have its inscription restored--OS AYg.

g INV 545 G


Fig. 29. Inscribed Epistyle-frieze Blocks

The position of the inscription with regard to the periphery of the court cannot be determined with absolute certainty. There are, however, certain factors which may throw some light on the question. If the corner block inscribed EX --- may be correctly restored to give the letters EXedram, and fragment --- ICV --may be made to read portICVm, the whole reading EXedram atque portICVm, the logical place for the inscription to begin is, as West points out, on the south side of the court at the southeast corner in front of the exedra.

It is to be expected that the inscribed block with a wreath in the centre, and, on the back, the relief of a man in a boat, would occupy a central position in one of the sides of the court. Again, as West points out, the south or north sides of the court are better candidates than the east or west, since in the first case there are nine intercolumniations as against twelve in the second. Furthermore, the presence of the relief on the back of the block would argue in favor of a position where it could be viewed more easily than in the normal colonnade, and such a position may easily be found if we assign this block to the middle of the south side where the exedra would allow a spectator to stand a little farther away.

We have, thus, two of the inscribed blocks assigned to the south side of the court, with a fair amount of probability. The question then remains, did the inscription extend around the three remaining sides, or did it perhaps occupy one or two sides over and above the south side? Among the uninscribed blocks that match the profiles and dimensions of the inscribed series are two which must be considered. The first is preserved to a finished length of 2.51 m .,


Fig. 31. Inscribed Block but there is some indication that one of the ends was worked down slightly. In any case it could have been, originally, only on the south or north sides of the court, since the intercolumniations on the east and west are too small.

The inscribed block with the wreath measures at present 2.49 m . long, and this too has been cut down, truncating the final bar of the letter M . I have placed it to
the south, and hence the uninscribed architrave would, under this arrangement, go at the north. The second block of the uninscribed series to be taken into account is a corner block, from a re-entrant angle, and it shows on its upper surface a deep cutting made to receive a beam that ran, at a direction of $45^{\circ}$ from the corner of the colonnade to the angle of the back wall (Fig. 32). The presence of this block is sufficient proof that one side at least of the court was left without inscription.

There remain only the east and west sides, then, for the possible presence of lettering. If we assume lettering on the east, then either the location or the restored reading of the block EX --- is wrong. The inscription may have occupied only the south and west sides of the court, in which case the arrangement would have been


Fig. 32. Uninscribed Angle Block
somewhat asymmetrical; or it may have begun at the southwest corner, and run around to the southeast corner, leaving the south side plain. The second, however, seems to be a less plausible arrangement. The chief argument against limiting the inscription to one side of the court is the greater aggregate preserved length of inscribed blocks as against that of the plain blocks, whereas under normal circumstances one would expect the latter to be the greater. In spite of this factor, it is suggested here that the inscription was limited to one (the south) side of the Peribolos.

The presence of clamps in some of the epistyle blocks and not in others is confusing, but it seems to confirm the hypothesis that the fragments that we now have are not all the work of one period. The epistyle block bearing the wreath has, at either end, cuttings for a hook-clamp. Only one other inscribed block shows such a feature. On the other hand the plain epistyle blocks of a slightly different profile, but of essentially the same dimensions, rather coarse in finish, show clamp-cuttings, and may indicate that when the restoration of the Peribolos took place the entire colonnade was not taken down, but only such parts of it as required attention.

The cornice, of which there are some four or five large pieces preserved, as well as many smaller pieces, shows the same variation between two periods that has been noticed in respect to the other architectural members. The profile is the simple Asiatic type generally employed in Corinth during the Roman period (Figs. 25 and 33). These cornice blocks were not dowelled in any way to the epistyle frieze, nor do they show traces of clamps. The upper member, a cyma reversa and a fillet above the corona, is bevelled slightly on the upper surface of the block as though to take the under surface of the sima tiles. The backs of the blocks are unfortunately broken off,


Fig. 33. Cornice and Uninscribed Epistyle Frieze
but from certain traces in the blocks and from the manner of breaking we may with certainty restore a ceiling of wooden beams behind the colonnade. There is no definite indication, save the bevel on the front of the cornice, as to whether the roof was sloping or flat, but the former seems preferable. The restoration of the order (Fig. 34) shows a terracotta sima with lion's head spouts of a type that is commonly found in Corinth both in Greek and in Roman times, but again definite evidence is lacking.

The relation of the apsidal exedra at the south side of the court to the plan of the whole is irregular. It is quite plain, however, that its position, off centre to the east, was dictated by the presence of the rectangular Roman court in front of Peirene, and also largely by a rectangular space at an angle of $30^{\circ}$ to the court, in which the exedra was placed, for this is tangent to the outer wall of the court and also abuts on its south side against a wall that seems to be contemporary with the court wall.

The exedra is more than a half circle, and its horse-shoe curve is quite evident on the plan. It differs in construction from the south wall of the Peribolos, which, as we have seen (p. 36), is earlier than the marble period. The south wall rests on a socle which is in turn laid on a foundation of rubble, and has its first course laid in


Fig. 34. The Order of the Peribolos Restored
the manner of orthostates; the exedra has no clearly defined socle, no orthostate, and, although well built, shows the use of tile and brick, as well as marble revetment for the purpose of chinking the stone courses. It is clearly earlier than the apsidal arrangement for the court of Peirene, built presumably by Herodes Atticus, and we have seen that the white limestone stylobate carrying four columns across the base of the
exedra was inserted in the south wall of the Peribolos. The socle of the wall was removed, and although the earlier foundations were used to some extent, the work of laying the heavy limestone blocks caused considerable relevelling of the foundations at this point. It is plain also that the exedra does not bond with the south wall. In fact, there is a considerable gap which has been chinked up. The south wall also shows at the west side of the exedra evidence of having been reworked so as to give a proper anta or pier from which to start the row of four columns.

The columns themselves do not agree in spacing with the colonnade of the Peribolos. This might be taken as an indication that the exedra is earlier than the Peribolos in its marble form. It seems quite impossible, however, to make it agree with any


Fig. 35. Pilaster Capital, Possibly from Exedra (Scale 1:4)
arrangement that appears from the plan of the preceding period. It may be noted that although the columns do not correspond in the sense of being opposite each other, they are admirably placed to afford an unobstructed view to one who stands either in the middle of the Peribolos, or in the centre intercolumniation of the north side of the court. One hesitates to lay emphasis on this fact, for naturally one row of columns seen behind another is capable of a great variety of combinations, according to the position of the observer. There is another conspicuous vantage point near the centre of the west side of the court, where a visitor who had come from the Lechaion Road might very naturally stand.

There is a possibility that the exedra was introduced after the construction of the marble court, but if so, this must have been done very shortly afterward, and there is little reason to think that such was the case. The floor of the exedra was paved with marble slabs, and there does not seem to have been any provision for carrying off rain water. We may, then, suppose that the area was roofed. There are traces of marble revetment at the base of the walls, and, in its original form, the exedra had no openings in its circular wall. Its construction blocked a doorway that once led from
some rooms behind the trapezoidal space that was later occupied by the exedra. A curious composite pilaster capital (Fig. 35) and an Ionic capital (Fig. 36) of smaller dimensions than those of the Peribolos colonnade may be associated with the hemicycle. What purpose did the exedra serve? Possibly only as a place where one could


Fig. 36. Ionic Capital, Possibly from the Order of the Exedra (Scale 1:4)
retire and sit quietly in the shade during the heat of the day. Possibly also, the reflections of the visitor were affected by the sight of the wall painting of the Slaying of the Suitors which Pausanias saw fit to record. The curved wall of the apse would have provided an admirable place for such a decoration, and the lighting, through a clerestorey rising above the four columns across the chord of the exedra, would have been entirely adequate. The reconstruction of the court of Peirene as a tri-apsidal enclosure cut into the apse of the Peribolos, and if the painting just mentioned really
was here, the reconstruction consequently ruined it. The piers on either side have been extended at some time, and the two outer columns of the row of four removed to make way for them. This may have occurred at the time of the Herodian reconstruction of Peirene.

The various entrances and exits from the court of the marble period may be summarized as follows. On the south, opposite the end of the eastern colonnade is a wide opening ( ca. 2.40 m .) which is clearly contemporary with the construction of the marble Peribolos. The wall at this point differs from that farther west in that there is no orthostate construction. Five courses ranging from 0.54 m . to 0.58 m . in height are preserved. At a later time in the Roman period the opening was narrowed, and still later was entirely filled up. There is a second opening, nearly opposite the end of the western colonnade, which connected with Peirene through a small exedra in the north side of its court. This entrance was probably made at the same time as the opening just mentioned, at the southeast corner of the Peribolos, and is also contemporary with the construction of the marble colonnade. Since this western opening can be shown to be later than the first construction of the poros-stone rectangular court of Peirene, but earlier than the Herodian rebuilding, ${ }^{42}$ we have a bracket in which to place the construction of the marble Peribolos. It is probably to be linked with the first marble period of Peirene, near the end of the first century after Christ. It is clear that the south wall of the Peribolos, which it will be remembered is earlier than the marble Peribolos, but later than the rectangular court of Peirene, was cut through for this opening. There is another opening, a few metres east of the one just considered, which led to the eastern entrance to the rectangular Peirene court, and was blocked up in the marble period. It was subsequently re-opened, along slightly different lines for the eastern entrance of the Herodian court, and the opening from the west colonnade of the Peribolos was closed up.

With regard to the openings on the other three sides of the court, we have very little evidence. That there was a passage near the centre of the west side is fairly certain. Two other passages have been suggested on the plan, but with no evidence to substantiate them. It would seem likely that there was communication with the baths of Eurykles to the north, and on the east it may be assumed that the old line of approach that was established for the earlier Peribolos continued in service.

In the southeast corner of the colonnade, and along the north side toward the east, are remains of a mosaic flooring which cannot date from the original construction of the marble Peribolos, but was inserted after a considerable settling of the east end of the stylobate of the exedra had occurred (Fig. 37). The pattern consists of a triple border, in which a degenerate form of bead-and-reel motif encloses a wave pattern which, in turn, encloses an inner border of guilloche and diaper. The field is divided by interlacing large and small circles; in the interstices between them are fish and water fowl. The centres of the circles are filled by simple rosettes, in the case of the smaller ones, and by rosettes plus a radiating scale pattern for the larger. The colors
${ }^{42}$ The history of Peirene is now being studied by B. H. Hill.

used are white, black, red, and yellow. The stone and terracotta tesserae measure about 0.013 m . square on the average, and, although rather coarse in quality, the floor gives an effective pattern. The section preserved at the north side of the Peribolos shows only a part of the border, which is a basket interlace of red, blue-black, and white.

In the course of time the floor at the southeast corner has-settled, but it is evident that it was never at any time level with the stylobate. It also shows the rather curious feature of being laid right up to the poros blocks which form the south wall of the Peribolos, and takes no notice of the fact that at some time there was marble revetment on this wall. Either it must have been laid before the revetment was placed, which seems unlikely from the rather late character of the floor pattern, or, as is more likely, it was laid after the revetment had been removed and replaced with stucco or plaster, of which remains exist. The strip of mosaic on the north side of the Peribolos shows that it was put in place after certain repairs had been made to the stylobate, and one is inclined to date it as contemporary with the reconstruction of the Peribolos. There is a somewhat similar mosaic to be seen in the Roman market place north of the temple hill, excavated by Dr. F. J. de Waele in 1929-1930. ${ }^{43}$

The flooring or pavement of the court of the Peribolos does not exist in any place in its original form. What that was, it is, consequently, impossible to say. In the fourth century after Christ, however, a new floor was laid on a fill of rubble concrete. The slabs were a blue schist, split quite thin $(0.04 \mathrm{~m}$.) and squared. The date of the floor is indicated by a coin of Valentinian I (364-375 a.d.), or possibly Valentinian II, found below it. It is interesting to note that it was at an almost identical period that a new marble floor was laid in the orchestra of the theatre, on a foundation that is very similar to the one in the Peribolos. One peculiarity of this pavement must be noted. It is at a higher level, by some ten centimetres, than the outer lip of the gutter, which it overlaps up to the edge of the trough.

During the Byzantine period the Peribolos was remodelled. Whether it retained its character as a court is difficult to say. A wall was built along the east side halfway between the stylobate and the original outer limit, but not quite parallel to them. Further alterations are visible in the stylobate, which has been pieced out with poros blocks. At the northwest corner the stylobate was shifted so as to run past the corner to the west, and a large piece of stylobate found its way into an east-and-west wall between the west colonnade and the rear wall. Other walls found a ready foundation in the line of the Roman shops along the Lechaion Road, and the entrance into Peirene also was altered at this time. How much of the colonnade, if any, remained is not clear, but in any case a great part of its architectural members found their way into the foundations of the long Byzantine east wall, from which numerous fragments of capitals and bases were rescued by the excavators of the site. The central part of the court also suffered considerable encroachment. Pithoi and foundation walls were numerous, and it does not appear that the ground level underwent much change. In many cases Byzantine work cut down far below the level of the Roman pavement.

[^17]
## CHAPTER II

# THE FAÇADE OF THE COLOSSAL FIGURES 

By Richard Stillwell

## I. LOCATION AND RESTORATION OF THE FAÇADE

Adjacent to the west end of the Propylaia, and continuing its line about seventeen metres westward is a heavy foundation of opus incertum about 3.00 m . from front to back and 3.00 m . to 4.00 m . high, measured from the hardpan on which it rests. Originally it extended farther and seems to have crossed the line of the Greek Triglyph Terrace wall ${ }^{1}$ (Plate II, Fig. 39, and Corinth, I, i, plates I, XV). The foundation supported a platform of blocks of poros stone, part of which, especially towards the east end, is still in place, beyond the line of a cut made for the excavation tracks during the campaign of 1900. The blocks are not bonded together, but are closely fitted. The forward half of the platform is cut down a trifle lower than the rear half, and at the edge of this cut, near the east end of the foundation, a single block, 0.64 m . high, gives the position of the wall which ran along above the back of the foundation. There are traces of reddish mortar on the stones of the southern part of the platform, similar to that observed on the foundations for the colonnade of the Basilica. ${ }^{2}$ It served, presumably, a similar purpose, namely, that of affording an even bed for the blocks of the marble stylobate.

The lower part of the foundation was evidently made by digging a deep trench through the existing Roman and Greek stratifications and filling it with opus incertum in which a sufficient quantity of mortar was mixed to insure a fair bond between the unshaped stones.

Crossing the eastern part of the foundation at an angle of nearly forty-five degrees, is a drain, built of squared blocks which were evidently laid at the time of the construction of the Façade (Plate II, plan and section). The drain is 0.55 m . wide, $c a .1 .10 \mathrm{~m}$. deep, and, in the short part that projects southward of the foundation, is vaulted in brick. ${ }^{3}$ The bottom is of stone and concrete. It served to carry off

[^18]
a part, at least, of the water that collected in the large area of the market place, and to dispose of it, ultimately, by means of the great drain that flows from Peirene under the Peribolos of Apollo. The connection between the two drains was made by a large, well-built drain under the upper platform of the Propylaia in front of the central arch, and a branch that ran out from beneath the platform, took an S-shaped course around the northwest corner of Peirene, and crossed diagonally the adjacent corner of the Peribolos.


Fig. 39. Present Western Extremity of the Foundation and Area Where It Once Crossed the Line of the Triglyph Terrace

The course of the drain southwestward has been cut through and the excavated area between it and the Triglyph Terrace has been taken down to the earlier level. The further connections of the drain should be found under the hitherto unexcavated section of the market place. ${ }^{4}$ The cover of the drain, where it passes through the foundation, is formed by the slabs that carried the stylobate, and the top of the brick vault lies just below the level of the paving of the market place.

[^19]The purpose of the foundation just described was to carry an ornamental marble façade erected to enclose a square court in front of the Basilica and thus eliminate, on the northern side of the market place, an awkward re-entrant left between the Propylaia and the corner of the colonnade of the Northwest Shops. The discovery of many fragments of architecture that can be assigned to this façade, nearly all lying in the immediate vicinity of the foundation, leaves little doubt of the site to which they should be assigned. Enough elements exist to furnish a probable restoration, but not enough to make it absolutely certain. The doubtful and the certain elements will appear in the course of the discussion of the individual pieces and their relation to the whole.

No evidence is preserved that will show the total original length of the Façade. Since it was erected to mask the front of the Basilica, in its second period, ${ }^{5}$ and to provide a monumental entrance to the forecourt, it is reasonable to assume that the central axes of the two buildings coincided. The orientation of both does, in fact, correspond exactly. The Basilica itself had an extreme width of $c a .27 .50 \mathrm{~m}$. From the assumed centre line of the façade (coinciding with that of the Basilica) the distance to the line of juncture which the foundation makes with the Propylaia is almost exactly 13.00 m . This gives, then, for the entire foundation a presumable length of 26.00 m . The axial distance of the columns of the Façade, as given by the average of two preserved architraves, is $c a .3 .04 \mathrm{~m}$., which, if divided into 26.00 m ., gives eight, with 1.68 m . left over. This arrangement, however, would place a column on the axis of the Façade, which is virtually impossible from the standpoint of design; we must, therefore, disregard this possibility. Another factor enters into our calculation, namely, that there were at least two semicircular indentations in the upper order of the Façade, and a calculation based on the surviving architectural members gives a distance of about 3.89 m ., from centre to centre of the supports on either side of one of these niches. ${ }^{6}$ The following calculation may then be tried:

| Axial width of niche, $3.89 \times 2$ | 7.78 m . |
| :---: | :---: |
| Normal interaxial, $3.04 \times 5$ | 15.20 m . |
| Column axis to stylobate, $0.50 \times 2$. | 1.00 m . |
|  | 23.98 m . |
| Presumed length of foundation | 26.00 m . |
| Presumed length of stylobate | 23.98 m . |

Remainder . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2.02 m.

## ${ }^{5}$ Corinth, I, i, p. 200.

${ }^{6}$ As will appear in the discussion of the architectural pieces, there is a considerable irregularity in the dimensions of fragments from the same element of the order, and hence our calculations involve, unavoidably, a small margin of probable error. For instance, the radius of the curved members of the upper order cannot be measured accurately since they are not cut on a true curve, and one is compelled to take averages wherever possible.

This remainder may be taken up, on the east side at least, by two steps $(0.50 \mathrm{~m}$. $\times 2$ equals 1.00 m .), and on the west, where two steps would not have been needed on account of the gradual rise of the market-place paving, the remaining part of the foundation may have been omitted, or perhaps built and not used. Ancient foundations of this sort are frequently built in a generous manner, and the actual lines of the building laid out on them after completion.

Another possible restoration must be considered, namely, three niches with four straight sections of entablature. A calculation of this gives:

| Axial width of niche, $3.89 \times 3$ | 11.67 m . |
| :---: | :---: |
| Normal interaxial, $3.04 \times 4$. | 12.16 m . |
| Column axis to stylobate, $0.50 \times 2$ | 1.00 m . |

This leaves a remainder of 1.17 m . from the presumed length of the foundation, or a distance of 0.585 m . at either end. There is a chance that the central niche was broader than the other two, for a careful measurement of the existing cornice, which came at the angle formed by the niche and the front of the Façade, indicates that its radius, measured at the forward edge of the bed, was $c a .1 .89 \mathrm{~m}$., and a restoration of the niche on this basis would give an axial distance between supports of $c a .4 .24 \mathrm{~m}$. This would bring the length of the Façade up to 25.18 m . Before we attempt to go farther along this line, however, we must take into account certain factors that would appear to militate against this restoration.

The only surviving straight epistyle-frieze block (No. 31) of the upper order is finished on the left end as though the adjoining block continued the line straight on (Plate V). In other words, it is not cut so as to accommodate either a right angle or a curved return of the architrave. The restoration showing four straight and three curved sections will, obviously, not accommodate such a block. It must be further noted, however, that the block in question is peculiar in having not only no carved decoration along its face, but in having quite a different form of taenia than the other blocks of the series. It is certain, however, that it belongs to the Façade, since its right end is cut to fit the beginning of the curved return of the entablature of a niche, and, moreover, the palmette decoration has actually been executed on this return (Figs. 53 and 54). It will be shown later on that this block belongs to a restoration of the Façade which was severely damaged in antiquity. Unless, indeed, the restorers made use of it at the extreme left of the composition, and instead of providing for a right-angled return to the end of the wall behind the colonnade, left a raw end hanging in the air, or else ran a flanking wall forward to the back of the end support, we must attempt to use the block in a restoration that will not do violence to the conditions at its left end.

There is, however, another and more definitive consideration afforded by a study of the lower order. Two epistyle-frieze blocks (Nos. 8 and 9) are preserved that fit
together beyond any reasonable doubt (Plate III, Fig. 44). The clamp cuttings coincide very accurately and it is most improbable that in a set of three such cuttings on each block there could have been two instances exactly similar. The lengths of these blocks are, respectively 3.025 m . and 3.052 m ., and hence we cannot make use of a restoration whereby straight sections alternate with niches, viz., alternating wide and narrow intercolumniations. We know, furthermore, that the lower entablature must have run straight across the building, since there is no way of making use of two joining straight pieces of architrave none of the ends of which show evidence of a return or adjustment for an angle, keeping in mind the fact that wherever a niche occurs in the upper storey the length of the lower architrave must be greater than that of its neighbor.

The various combinations may be graphically illustrated thus:


We have already considered B and C , and the latter has been eliminated. Two other combinations might be suggested, A and D , and a brief consideration will show them also to be impracticable, leaving B as the most likely set-up on which to base our restoration.

The first, A, is to restore only one niche in the centre of the upper storey. The two adjoining pieces of architrave from the lower storey might be placed either at $b c$ or $e f$. The objection to this restoration is that the curved cornice (No. 39, Plate V ) does not fit the dowels or the curve of the entablature blocks below (Nos. 31, 32, Plate V). Two niches, thus, are indicated.

The other combination, $D$, with two niches, is awkward from the point of view of design, and, moreover, the two lower order architraves cannot be fitted into the arrangement, since neither can be accommodated to an angle. ${ }^{7}$

[^20]The juncture between the Façade and the colonnade of the Northwest Shops must remain purely a matter of hypothesis since no part of the foundations of either now exists at this point. ${ }^{8}$ A restoration of the Shop colonnade, based on existing evidence at the west end, and assuming symmetry, gives an arrangement as indicated on Plate II. The building of the Façade would have truncated the end of the colonnade which then might have been reconciled to the new building in the manner shown on the plate.


Fig. 40. Restoration of the Façade by H. D. Wood

## II. CATALOGUE OF ARCHITECTURAL PIECES

The presentation of the various pieces assigned to the Façade, in catalogue form accompanied with suitable commentary, would seem to be the briefest and at the same time most adequate manner of placing the available material before the reader. For identification of the various pieces that appear in the composition now erected on the foundation, refer to Figure 41. Other illustrations and drawings will be noted in connection with each fragment. The numbers in parenthesis following the number of each block refer to the catalogue made by Mr. H. D. Wood, unless specified to the contrary.
one in the second storey, and adds to either end of the Façade a short section of upper entablature, in order to make use of the full length of the foundation. There is an ingenious arrangement of the east end pilaster of the upper storey that places it on the angle of the small arch flanking the central opening of the Propylaia. The undecorated epistyle-frieze block of the upper storey finds a place to the left of the western niche.
${ }^{8}$ A piece of opus inccrtum foundation is recorded in one of the excavation notebooks, and labelled " Powell's foundation." It appears to have occupied an area as shown on Plate II. Whether it belonged originally to the Façade or to the stylobate of the Shops cannot be determined, since its orientation is doubtful. It seems more likely that it is a part of the stylobate foundation.

## STYLOBATE

## Lower Order

No definitely recognizable fragments of the lower order stylobate exist, but we may assume it to have been, on the analogy of other contemporary buildings at Corinth, from 0.27 m . to 0.30 m . high. A block with tool marks similar to those observable on the other pieces of the Façade lies west of the Triglyph Terrace and could have served, even with clamps showing in either end, for a stylobate. It measures 1.24 m . long, by 0.89 m . broad, by 0.275 m . high.

## SUPPORTS

1. Column base (Plate III). The base is of the usual Attic-Ionic profile. Height, 0.30 m .; radius of lower torus, 0.47 m .; radius of weather line on top, giving size of column at apophyge, 0.35 m . Apparently the base was originally in two pieces, for the surface where it is cut is carefully sawn and two hook-clamps served to attach it to the other half. A circular dowel-hole with pour-channel is preserved in the top.

2 (88). Shaft of column (Plate III, Fig. 41). Upper part of shaft preserved. Diameter below astragal, 0.588 m .; diameter, 0.40 m . from top, 0.646 m .; total preserved length, 2.90 m . In the top, a square dowel with pour-channel. The diameters of the shaft, taken at intervals of 0.20 m . beginning 0.40 m . from the top, are as follows:

```
-0.40\textrm{m}.................... 0.597m.
-0.60 _................. 0.609
-0.80 .................. 0.616
-1.00 .................. 0.625
-1.20 _................ 0.629
-1.40 ................. 0.635
-1.60 _................ 0.640
-1.80 _................ 0.645
-2.00 .................. 0.646
-2.20 ..................0.646
-2.40 ................. 0.646
-2.60 \ldots................ 0.643 (not reliable, column weathered)
```

3 (89). Shaft of column (Fig. 41). Lower part of shaft preserved, badly battered near foot. Diameter 0.50 m . above bottom, 0.648 m . Remains of dowel hole 0.05 m . square. Preserved length, $c a .3 .20 \mathrm{~m}$. The diameters of the shaft, taken at 0.20 m . intervals beginning 0.50 m . from the bottom, are as follows:

$$
\begin{aligned}
& +0.50 \mathrm{~m} . \ldots . . . . . . . . . . . . . . . \\
& +0.70 \text {........................ } 0.651 \\
& +0.90 \text {......................... } 0.654 \\
& +1.10 \text {........................ } 0.656 \\
& +1.30 \text {........................ } 0.655 \\
& +1.50 \text {....................... } 0.658 \\
& +1.70 \text {....................... } 0.656 \\
& +1.90 \text {........................ } 0.654 \\
& +2.10 \text {........................ } 0.651 \\
& +2.30 \text {........................ } 0.650 \\
& +2.50 \text {........................ } 0.645 \\
& +2.70 \text {....................... } 0.639
\end{aligned}
$$

4 (90). Shaft of column. Mid-section, broken at both ends. Preserved length, ca. 1.33; diameters near breaks, 0.607 m . and ( 0.80 m . away) 0.612 m .

Fig. 41. Elements of the Façade with Fragments Numbered


Fig. 42. Capital of the Lower Order

Obviously, with only two ends of two separate shafts to reckon with, it is not possible to obtain accurately the original height of the shafts and hence of the order. The upper section diminishes to a diameter of 0.642 at a distance of $c a .2 .60$ from the top, and the lower section reaches the same diameter $c a .2 .55 \mathrm{~m}$. above the foot. This would give a shaft 5.15 m . long, and if we add 0.67 m . for the capital and 0.30 m . for the base, we have a total of 6.12 m . Taking a round number, and calling the height of the support 6.10 m ., we find that it is divisible by 0.642 m . (the lower diameter by measurement of No. 3 ), almost exactly $9 \frac{1}{2}$ times, which is a reasonable proportion for the order. It should be noted that the columns swell out slightly from their bases to a point a little less than a third of the way up the shaft and then begin to diminish.

5 (91). Capital, Corinthian (Plate III, Fig. 42). Height, 0.673 m ; lower diameter, 0.56 m. The corner spirals are all broken away. The modelling is giving way to a technique that is not far from coloristic in its effect, and the use of the drill is very marked. The design is sharp and vigorous.

6 (92). Capital, Corinthian. Bottom broken away, but the original height may be estimated at from 0.66 m . to 0.67 m . The carving and design are similar to No. 5 .

7 (93). Pilaster capital, Corinthian (Fig. 43). Height, 0.585 m .; width at bottom, 0.63 m. A lift-hole is preserved in the top, and two cuttings for hook-clamps, reversed, in the bottom. Although the dimensions of this piece are such as to make it a good candidate for membership in the Façade, a glance at the carving, the style of the acanthus leaves, and, especially, the calices from which the volute-tendrils spring, casts considerable doubt on its use in the Façade.

## ENTABLATURE

8 (38). Epistyle-frieze block (Plate III, Figs. 41 and 44 at left). Length, measured on taenia of architrave, 3.052 m .; height, 0.717 m .; width on soffit, 0.57 m .; width on top, ca. 0.70 m .

Decoration: On the soffit is a narrow panel with incurving ends, carved with overlapping leaves running from either end and meeting at the centre of the block. The lower fascia of the architrave has a twisted strap ornament that runs toward the spectator's left ;


Fig. 43. Pilaster Capital, Possibly from the Lower Order
the middle fascia has a bead and reel, and the cyma reversa below the taenia carries a Lesbian leaf. On the frieze, which has an S-shaped profile, are palmettes and anthemia, alternating and connected by reversed spirals that run from the outer leaf of the palmette. Above the frieze is a bead and reel surmounted by an egg and dart. On the back of the block the carved decoration is absent. The entire surface shows clearly the pick marks made by the mason, and the moulding below the taenia is merely a bevelled surface. There are no mouldings below the respective fascias of the architrave, and the bed moulding above the frieze is undecorated.


Fig. 44. Entablature of the Lower Order
Clamp cuttings: At either end of the block there are two sets of clamp cuttings. The first to be made and used were for a pair of T clamps, 0.021 m . deep. Later on, a pair of large hooked clamps was introduced, using the shank of the T-clamp cuttings, and a smaller hook-clamp was placed between them. Two sets of dowel holes appear, arranged as shown. They indicate that the length of the cornice block above would have been about 1.55 m . The block is broken in two pieces that fit together accurately.

9 (39). Epistyle-frieze block (Plate III, Figs. 41 and 44 at right). Length, 3.025 m . ; height, 0.712 m . ; width on soffit, 0.57 m . ; width on top, ca. 0.70 m .

Decoration: Similar to that on No. 8, but better done. The back is rather more carefully finished, and there is no carved ornament.

Clamp cuttings: Those at the left end of the block match very exactly those on the right end of No. 8. The only difference is that the forward hook-clamp has a smaller, deeper cutting between the end of the block and the larger, shallower cutting that received the hook of the clamp. Seemingly some change was made, possibly during the construction. Only one set of dowel holes appears, a
long dowel running parallel to the face of the block and a smaller dowel at right angles to it, about 0.06 m . away. A mason's mark, X, appears at the right, on top. The clamps on this end are like those on the left, save that there is an additional cut for a small hooked clamp that seems never to have been used as the hole, for the hook is absent.

10 (40, 42). Epistyle-frieze block (Fig. 41). Broken in two pieces which join. Preserved length, $c a .2 .64 \mathrm{~m}$. ; height, 0.71 m . ; width on soffit, 0.57 m .

Decoration: Similar to that on No. 9, but not identical. The small leaf at the base of each anthemion has its petals turned out rather neatly and does not show the perfunctory juxtaposition of nearly vertical lines to be seen in the other example.

Clamp cuttings: The right end of the block is preserved, and shows cuttings for two T clamps and also holes for two hooked clamps that made use of the shank cuttings for the T clamps. Between the clamp cuttings the end of the block is depressed as though by a lever used in shifting the block to the right of it.

11 (36). Epistyle-frieze block (Fig. 41). Preserved length from left end, ca. 0.80 m .; height, 0.71 m . ; width on soffit, 0.57 m .

Decoration: While of the same type as the other blocks of this series, the decoration differs slightly. The spiral tendrils of the frieze are more carefully drawn and the coils of the spirals are separated from each other by a groove made by a running drill instead of by a simple V cut.

Clamp cuttings: At left end, two T-clamp cuttings with holes for hook-clamps added later. On the face, in the upper band of the architrave, and on the back, in the frieze, and on the forward panel of the soffit, are cuttings for hook-clamps which were inserted to mend the block after it had been broken, or to strengthen a crack. Although at present this fragment is set up adjacent to No. 10 (42), and it happens that the two pieces seem to fit, it is certain that they do not, and that the apparent join is a matter of chance. Actually only a very small area of contact is involved.

12 (37). Epistyle-frieze block (Plate III, Fig. 45). Preserved length, ca. 1.10 m . ; height, 0.72 m . ; width on soffit, 0.568 m . Right end preserved.

Decoration: Similar in general to other pieces of this series, but better cut. The tendrils connecting the palmettes and the anthemia do not form an $S$ with spiral ends, but the curls for each tendril have the same twist. The soffit ornament and the carving on the architrave and frieze are much more crisply and cleanly executed than on the other pieces.

Clamp cuttings: none.
It will be noted that the centre of the first palmette falls 0.25 from the right end of the block, and only the left half of the ornament is finished. The right half is partially blocked out and then the surface of the frieze is carried to the right for a short distance on the plane of the front of the ornament. The last eight or ten centimetres of the face of the block are picked roughly back at an angle. The carved moulding below the taenia, and the carved astragals below the fascias of the architrave are left plain for a short distance, and clearly the fascias themselves were never carried farther.

The inner face of the block has a projecting surface for about 0.26 m . from the end of the block, terminating in a groove, at the other side of which the profiles of architrave and frieze come to an end. On top is a raised surface extending about 0.26 m . from the end, and raised, toward the outer face of the block, some 0.03 m . above the general level of the top. This surface slants down to the level of the moulding above the frieze on the inner face of the block.

It should be noted especially that the soffit ornament, after three repeats from the right end of the panel, reverses direction, and we must suppose that after three repeats farther on it came to an end in the usual invected-curve panel end. On the inner face is a mason's mark, $A B$.

Evidently this block must be restored as having its right end embedded in a wall, and from its short length, as shown by the soffit ornament, it should come from the return of the epistyle at the right, or east end, of the Façade. The original length of the block is difficult to recover, but it may be approximated fairly closely.

From the centre of the partly carved right-hand palmette to the centre of the soffit ornament is 0.42 m . To the left end (presumed) of the soffit ornament, assuming the reversal of direction to occur in the centre of the panel, the distance would be 0.695 m . In the other epistyle blocks of this series, the distance from the end of the soffit panel to the joint, or centre line of the capital, is respectively $0.50 \mathrm{~m} ., 0.49 \mathrm{~m}$., and 0.525 m . on three different examples.


Fig. 45. Epistyle-frieze Block from the Lower Order
If we take 0.50 m . as the required distance we can calculate an original length by the following addition:
0.25 m . right end to centre of partially carved palmette
0.145 centre of palmette to right end of soffit panel
0.275 end of panel to centre
0.275 centre of panel to other end (if symmetrical)
0.50 presumed left end of panel to joint over centre of column

### 1.445 Total length of block

Since it is clear that the right end of this block must have extended into a wall, and hence that its overall dimensions do not particularly matter, we may ask whether
it is possible to recover by means of the piece the distance that the colonnade was set out in front of the face of the wall that ran behind it and formed the background of the Façade. In order to do this we must turn to the inner face of the block.

An inspection of this face (Plate III) shows that a groove, 0.05 m . to 0.10 m . wide, and roughly 0.03 m . deep, has been cut vertically on it, about 0.25 m . from the left end, as one faces the inner side of the block. Further inspection shows that the right edge of this groove appears to give, roughly, the profile of the epistyle and thus indicates that a thin revetment slab bearing this profile was fitted into the groove. The cutting is rough and uneven, especially in the upper part, but the upper fascia of the architrave is marked by a very clear line, and we may use this as a base from which to reckon. If we trace the profile of the inner face of the epistyle frieze against this cutting, using the line of the upper fascia of the architrave as a starting point, the extreme projection of the ovolo above the frieze will fall 0.102 m . to the right of a line that represents the projection; through the block, of the centre of the partially carved palmette. There is a ceiling slab that most probably belongs to the lower order (No. 18, below). Between the beds on either side of its lower surface the distance is very nearly 0.77 m . With this block in mind, the following calculation may now be tried:
0.285 m . one half width of soffit of architrave
0.051 projection of ovolo above frieze beyond edge of soffit
0.77 distance between bed lines of ceiling slab
0.051 estimated overhang of ovolo beyond lower fascia of revetment architrave
1.157 m . distance from lower fascia of revetment architrave to axis of column

If we add to this dimension 0.051 (the distance from the lower fascia of the revetment architrave to the projection of the centre line of the half-carved palmette), we get a total of 1.208 m . for the distance from the axis of the column to the centre line of the palmette. This may be compared with the calculation first made where the same distance is figured as 1.445 m . less 0.25 m ., which gives 1.195 m . We may then, for convenience, and because no great degree of accuracy is to be found elsewhere in the building, set this distance arbitrarily at 1.20 m ., and the distance to the lower fascia of the revetment architrave at 1.15 m .

There is a slight difficulty with the carved ornament if we accept these dimensions, namely, that the last palmette, on the return, at the corner, will be slightly crowded, but not unduly so. In the disposition of the carved ornament of the upper entablature there may be noticed, also, a tendency to crowd the ornament near a corner. The soffit panel on the returned architrave causes some difficulty when we try to restore a pilaster to take the return of the architrave against the back wall. On the basis of the accepted calculations, the inner end of the panel would lie only 0.09 from the line of the face of the pilaster, which is not sufficient to allow for the forward curve of a pilaster capital and the rosette which it would have in the centre of the abacus. If the
pilaster capital listed above (No. 4) is used, a portion of the end of the panel would have been covered.

An inspection of the outer face of the block shows that the mouldings of the epistyle frieze seem to have been returned at right angles toward the east, along a wall that lay about 0.20 m . behind the plane, projected, of the wall behind the colonnade. This would have provided a link with the west wing of the Propylaia, and the set-back would have given the appearance of a pilaster, or pier to which the architrave of the lower order of the Façade was returned. In the restored plan a pilaster with a very slight projection has been suggested at the angles of the Façade wall.

Five large pieces of the lower order cornice remain. Two are corner pieces, two are from the returns at the ends of the Façade, and probably once were actually a part of the corner blocks, and one is from the front. The corner pieces have the peculiarity that whereas the face of the corona along the front of the building is almost perpendicular, towards the returns at either end it slopes back from bottom to top. This helps determine the original position of the two end fragments, which show the sloping corona and have, moreover, a broader bed than the block that can be assigned to the front of the Façade, a condition allowed by the fact that at the ends no ledge had to be provided for the ceiling slabs to rest upon.

The design of the cornice is simple, though the elements are richly decorated. The bed mould above the dentils carries water leaves alternating with small inverted palmette-like leaves. The face of the corona is elaborately carved with a rinceau of scroll acanthus, crisply executed, with flat surfaces and sharp angles. The crowning taenia has the usual Lesbian leaf. The decoration of the corona ran out from the centre to either corner, and, on the east, continued in the same direction back to the wall. At the west end, however, the direction of the ornament was reversed, and it came forward from the wall to the angle of the cornice. The corner dentils were treated as cones.

13 (101). Cornice block (Plate III, Figs. 41 and 46). Length 1.363 m .; height not preserved as the dentils have been cut away together with the bed of the block; depth from face of corona, 0.70 m . (By analogy with the other pieces the original depth, measured on the bed, should have been ca. 0.57 m .) The top shows a smooth-sawn surface, about 0.12 m . wide, running along the front edge. Behind this, the top is picked down 0.02 m . Three hook-clamps are represented by cuttings in the right, and two in the left ends. A lewis-hole appears in the centre of the block, and a pry-hole, just to the left, suggests that the lewis-hole may also have served for a dowel. A short, deeply incised line, parallel with the face of the cornice and 0.25 m . behind the face of the corona, may indicate where the plinth supporting the upper order was set, but a restoration based on this assumption would make the centre line of the upper epistyle fall 0.30 m . within that of the lower, and hence it seems preferable to discard this hypothesis and set the face of the plinth supporting the upper order as far forward as the cut-down top of the block will permit. On the back, the block is picked smooth. There is anathyrosis at either end. The block may be assigned to the front of the Façade.

14 (102). Cornice block, corner piece (Plate III, Figs. 41, 46, 47). Length of bed, on front, 0.71 m. ; depth of same, 0.31 m . ; height, 0.415 m . to 0.395 m . The top is much worn as the block


Fig. 46. Entablature of the Lower Order: Nos. 13, 15, 9, and 14


Fig. 47. Cornice Block from the Western Angle of the Lower Order
served later for a paving slab or step. The face of the corona along one side is perpendicular, on the other, it rakes back at an angle ( 0.015 m . in 0.14 m .) . No clamp cuttings are preserved, but there is a cut at the right end for a shift. No anathyrosis is to be seen, and the joint at the end of the shorter side of the block is not perpendicular, but there is reason to believe that this is not an original cutting, and dates from a re-use of the block.

15 (103). Cornice block, from side of Façade (Plate III, Figs. 41, 44, 46). Length of bed, near front, 0.635 m . ; depth of same, 0.70 m . ; height, 0.353 m . Top much worn. Two cuttings for hookclamps in left end, none in right. Decoration of corona runs to the right. Back finished quite true, with picked surface.

Although this piece does not actually make a join with No. 14, it probably once formed part of the same block. Along the back are two lines, scratched near the bottom, that correspond to two similar lines on the right end of No. 14. The dimensions of 0.70 m . in No. 15 (from the front to the back of the bed) and of 0.71 m . in No. 14 (from the left to the right end, along the bed) are compatible. The carving of the decoration, which differs to some extent among the several blocks of this series, is in these two cases quite identical. The original block, if restored from these pieces, would have had a minimum length on the return, measured along the bed, of 0.98 m .

16 (105). Cornice block, corner piece (Figs. 41 and 44). Length of bed, on front, 0.74 m. ; height, 0.375 m . The block has been recut at an angle so as to form a paving slab or step. It was actually recovered in the Byzantine ramp leading up to the Propylaia. A natural flaw in the marble caused the back of the block, along the return, to split off, and the remainder was squared up by the later builders. The decoration of the corona is preserved on the front for a distance of about 0.20 m ., and the face of the corona at this point is almost perpendicular. A very small patch of the corona decoration remains on the return, but there is sufficient to show that it raked back at an angle, and that the decoration ran to the right. There is no trace of clamp cuttings.

17 (104). Cornice block, from side of Façade (Figs. 41, 44). Preserved length on bed, 0.45 m .; depth of same, 0.70 m . ; height, 0.33 m . The top is worn smooth, and the block is broken at both ends. The face of the corona rakes back. There are no clamp cuttings to be seen.

This piece may have once formed an integral part with No. 16 and the angle at which the block is broken is very much the same as the angle of the break in its immediate predecessor. The spacing and carving of the leaves on the bed mould of each of these pieces agree very exactly.

We may suggest, then, that Nos. 14 and 15 once were one and the same piece and occupied the left, or west angle of the Façade, while Nos. 16 and 17 as a single block were on the east, or right, angle. Inasmuch as the blocks have been cut apart, and do not actually fit, it has seemed better to list them separately.

18 (Corinth Sculpture 195). Ceiling slab (Plate IV, Fig. 48). Preserved length, 1.83 m. ; width, 0.98 m . ; thickness, 0.155 m . On the under side of the slab are three panels of which two bear, respectively, the busts of Helios and Selene, while the third has a carved rosette. The panels with the heads are, otherwise, plain, but the third panel has a Lesbian leaf carved around it. The stiles between the panels are decorated with a free rinceau motif, and bordered by a reed carved with bead and reel. At either edge of the slab are the rough-picked beds that rested on the top of the frieze below. These surfaces measure, respectively, 0.10 m . and 0.12 m . in width. ${ }^{9}$

[^21]19. Ceiling slab, fragment. Width of panel, 0.45 m . ; depth not preserved; width of bed, 0.12 m .; width of stiles, 0.15 m . This was a panel with a rosette in the centre and a border of Lesbian leaf. The decoration of the stiles resembles that on No. 18.

There are two possible positions for the slabs of this series: above the lower order, or as a ceiling for the upper order. The height of the latter, and the virtual impossibility of getting a view of its ceiling would render this position unlikely, and there can be little doubt that the heads of Helios and Selene once occupied a position as the ceiling of the lower colonnade, and were, presumably, placed above the centre


Fig. 48. Ceiling Slab with Busts of Helios and Selene, from the Lower Order
line of the Façade. The panels seem to have been spaced from 0.60 m . to 0.61 m . on centres, which would call for thirty-six panels in all.

## Upper Order

The second storey of the Façade consisted of a series of square pedestals that carried rectangular piers against the fronts of which were carved figures of colossal scale. The piers in turn carried Corinthian capitals which supported the upper entablature, broken, as described above, by two semicircular indentations of niches. The order began with a plinth, or stylobate on which the pedestals rested. The pedestals themselves were roughly cubical, with base and cap mouldings, and on the face of the die were carved scenes in high relief. A socket in the top of each plinth received the combined base of the figure and shaft, which were carved out of a single piece of stone. The Corinthian capitals were dowelled to the tops of the shafts, and where
the back of the head of each figure came against the face of the capital, the acanthus leaves were roughly chipped away. The epistyle frieze carried a decoration similar to that of the lower order, but the cornice differed in that it was provided with modillions. Above the straight sections of the horizontal entablature were pediments for which several blocks of the raking cornice remain; moreover there is from the angle of a pediment one piece that has the sima carved on it and is provided with a plinth for an acroterium.
20. Stylobate block (Plate III, section, Fig. 49). Length, 2.91 m. ; depth, 0.73 m . ; height on face, 0.30 m . Two hook-clamp cuttings are preserved at the left end, and one at the right. From a point 0.28 m . from the left end for a distance of 1.04 m . the upper side of the block is dressed down from 0.02 to 0.03 m . and finished with a fine-picked surface. The remainder of the top is somewhat rough, save that along the front edge it has been dressed to an even line for a distance of about 0.015 m . back from the face. Two roughly cut elliptical holes appear in the top, but do not seem to have served as dowels. The back and the bed of the block are rough-picked.


Fig. 49. Stylobate Block of the Upper Order, Top View
It is evident that the upper order must have been provided with some sort of plinth, and the character of the finish of this block resembles closely that of many others of the Façade. Moreover, the breadth of the cutting in the top surface is just right to accommodate the pedestals, leaving a slight margin over for adjustment.

21 (Corinth Sculpture 225). Pedestal (Plate IV, Fig. 50). Width at bottom plinth, 1.015 m. ; width of fillet above crowning moulding, 0.97 m . ; height to top of fillet, 0.853 m .; extreme depth of base, 0.82 m. ; extreme depth at top fillet, 0.78 m . There is an upper plinth above the top fillet, into which the figure was set. Height, 0.067 m . The mouldings at the base of the pedestal consist of a Lesbian leaf with a small reed above it, and at the top of the die is a bead and reel surmounted by an ovolo carved with egg and dart. The die tapers slightly to the top and has on its face a crudely carved scene. ${ }^{10}$ The ovolo at the top is carried back on either side of the pedestal to a point some 0.10 m . from the back of the block and then terminates in an uncarved projection.

22 (Corinth Sculpture 224). Pedestal (Fig. 51). Width at bottom plinth, 1.005 m . ; width at fillet above crowning moulding, 0.975 m. ; height to top of fillet, 0.86 m .; extreme depth of base, 0.82 m . ; extreme depth at top fillet, 0.86 m . The mouldings and their decoration are essentially the

[^22]

Fig. 50. Pedestal, Shaft with Figure, and Capital of the Upper Order


Fig. 51. Pedestal, Shaft with Figure, and Capital of the Upper Order
same as in No. 21. The height of the plinth above the top fillet is 0.10 m . The face of the die is likewise decorated with a crudely carved scene. ${ }^{11}$
23. Pedestal, fragment. A part of the upper left corner of a pedestal is preserved. Height of plinth above upper fillet, 0.105 m . The egg-and-tongue moulding ends in a partly executed palmette.

The sculpture from the Façade of the Colossal Figures has been published by F. P. Johnson in Corinth, IX, pp. 101-107. The present account, therefore, will be limited to the addition of certain comments pertinent to its place in the architectural ensemble.

Four figures, two male and two female, are represented by the fragments preserved. There is no sure way of telling how many figures there were originally, but in the opinion of the writer a restoration showing eight figures seems preferable to that proposed by Mr. Wood, who limits the number to four.

24 (Corinth Sculpture 217). Male figure and shaft (Plate IV, Fig. 50). The figure stands on an irregular plinth that was fitted into the upper part of the pedestal, and leans against a rectangular shaft. The upper part of the shaft measures 0.45 m . by 0.36 m . and carries a dowel for attaching the capital. At the foot, the shaft has a width of 0.47 m ., the left side a depth of 0.29 m ., and the right of 0.305 m . A dowel at the back of the shaft served to attach it to the pedestal. The figure from shoulder to knee overlaps the front corner of the shaft and extends sideways past it to a greater or less degree, so that from the front practically no part of the support is visible.

25 (Corinth Sculpture 218). Male figure and shaft (Fig. 51). The lower part of this figure and its shaft are missing. The direction of the gaze is reversed from that of No. 24.

26 (Corinth Sculpture 221). Female head. The rectangular cut at the back of the head shows where it once fitted against the capital and leaves no doubt as to the assignment of the head to the Façade.

27 (Corinth Sculpture 222). Female head. Corresponds to No. 26.
Several fragments of feet which presumably belonged to these figures are listed by Johnson, ${ }^{12}$ together with two other fragments, one of an arm and one of a piece of drapery. Unfortunately they are not sufficiently well preserved to furnish an argument either for or against the hypothesis that there were once eight figures. ${ }^{13}$

28 (82). Corinthian capital for rectangular pier (Plate IV, Figs. 50, 52). This capital fits the pier behind No. 24. Height, 0.55 m . The inner left-hand corner of the abacus, together with the volute tendril below it, is pulled out to the side so as to accommodate itself to the curved epistyle that it supported. The centre line of the fleuron on this side lies about 0.07 m . behind the true centre line of the capital, and the tendrils beneath the fleuron are remarkable for their asymmetry. The bed for the epistyle, prepared on the top of the capital, is sunk from 0.002 m . to 0.003 m . below the free part of the abacus. At the back, the capital has the two lower acanthus leaves merely blocked
${ }^{11}$ Corinth, IX, p. $104 . \quad{ }^{12}$ Corinth, IX, nos. 219, 220, 223.
${ }^{13}$ For the sake of convenience, Johnson's references are given here:
No. 24 (217) : A.J.A., VI, 1902, pl. I; p. 8, fig. 1; p. 9, fig. 2; Reinach, Répertoire, III, 137, 3.
No. 25 (218) : A.J.A., VI, 1902, pls. II and II $a$; Reinach, Répertoire, III, 137, i (restored).
No. 26 (221) : A.J.A., VI, 1902, pl. III, at right. Restoration: A.J.A., VI, 1902, pl. IV (Reinach, Répertoire, III, 185, 1).
No. 27 (222) : A.J.A., VI, 1902, pl. III, at left.
out, and the upper part of this side is quite uncarved, and left to swell out as a roughly finished curve. Unfortunately the "pulled-out" corner of the capital is broken away and lost, so that we have no data on which to restore this rather difficult bit of design.

29 (83). Corinthian capital for rectangular pier (Plate IV, Fig. 51). This capital fits fairly well the pier behind No. 25. Height, 0.55 m . The capital, differing from No. 28, is symmetrical and has scratch lines on its top for guiding the setting of the architrave. The ornament, on the back of the capital is drawn in line, and the lower leaves are blocked out.

30 (84). Corinthian capital for rectangular pier. Only a fragment of this capital remains, but the scale and carving show that it belongs to the series. Enough is preserved to indicate that it was a symmetrical capital, like No. 29.
entablature (upper order).
31 (20, A, B, C). Epistyle-frieze block (Plate V, Figs. 41, 53, 54). The block is broken into three pieces which fit together. Length, on soffit, 3.34 m . ; height, 0.642 m . ; width of soffit, 0.425 m .

Decoration: The soffit has a panel with


Fig. 52. Capital of the Upper Order invected ends, which is carved with an overlapping leaf pattern, as in the lower order. The frieze along the front is undecorated, but at the right end, where the block is cut for the curve of a niche, there is a palmette that joins with the decoration of the neighboring block. The moulding above the architrave is of a different pattern from the other blocks of the series, in that it has a cavetto between the fillet and the cyma reversa. The lower edges of the fascias of the architrave are plain.

The upper moulding of the frieze has been cut away for a distance of 0.25 m . from the left end as though for a patch. The back of the block is divided into three plain fascias, and a shelf has been sunk along the upper edge of the back beginning 0.68 m . from the left end and running to within 0.20 m . of the angle formed by the right end of the block and its neighbor, the adjacent curved piece. This shelf probably served for a shallow moulding answering to the moulding that crowned the backs of the two curved blocks of the series. There are two cuttings for hook-clamps at the left end of the block, and one at the right, set at an angle to join with the curved block. Two dowels, a large and a small one, appear at right angles to each other at the left end, and two more, also at right angles to each other, near the right end of the block. There are also two pry-holes which seem to have no relation to the dowels. Further, near the right end is a very small dowel-cutting. The left end of the block has anathyrosis.

This rather peculiar block, were it not for the small bit of carved ornament at the return at its right end, and the character of the back, would hardly find a place in the Façade. However, it must belong and, moreover, it fits very satisfactorily to the left end of No. 32, both as regards its clamp cuttings and ornament. We must seek to explain, first, the position that it once occupied in the Façade, and then account for its lack of decoration and other peculiarities.

The clamps at the left end indicate that its neighbor on that side was a straight block, carrying on the line of the Façade. There is no possibility that its left-hand neighbor could have made a right angle with it, and the only other possibility is that the end of No. 31 may have been built into a wall. The evidence of the clamps is against this. Since, then, both right angle and wall are ruled out, we must place the piece just west of the right-hand, or eastern niche, and allow its length to fall over the


Fig. 53. Joint of Epistyle-frieze Blocks Nos. 31 and 32
fifth intercolumniation from the left end of the building. As has been suggested above, it is on the evidence of this block, as well as on the fact that in the lower order Nos. 8 and 9 join, that we must abandon a restoration of the Façade with three niches and four straight sections.

The lack of decoration on the face of the frieze may be explained by the hypothesis that this block belongs to a late repair of the Façade, and that while the short returned end was carved to match the existing curved epistyle, the face was left plain. It is possible that the block may have come from another building. The way in which the back is cut, and the shelf let in to the top to receive a flat slab, or slabs that would carry a moulding, is a further indication that we have to do with a repair.

32 (22). Epistyle-frieze block, curved (Plate V, Figs. 53, 54). Length on frieze at point of greatest projection, 1.505 m . ; height, 0.645 m . ; width of soffit, 0.46 m .

Decoration: The soffit of the architrave has a panel with overlapping leaf pattern. The architrave and frieze are decorated, as in the lower order, with twisted strap, bead and reel, Lesbian leaf, alternating palmettes and anthemia, and egg and tongue.

The left end of the block is cut to fit an angle and actually matches with the right end of No. 31. The clamps and ornament agree closely. There are two cuttings for $T$ clamps in the left end, which have been altered to accommodate hook-clamps. Two dowel-holes appear in the top, one near the


Fig. 54. Entablature of the Upper Order
left end, the other near the right end ; here the top is dressed down slightly where it fitted into the back wall. This end is roughly finished off where a corner of the block fitted into the wall, and an inspection of the soffit shows a line that corresponds to the wall line on the top. There is a cutting at the right end to receive a thin slab of revetment (No.37) that carried the architectural members and the ornament across the back part of the curve. It should be noted that when the block was fitted into the back wall, a part of the corner of the soffit panel was concealed, evidence of a rather poor adjustment of the members.

The radius of the piece is hard to determine, for, whether by accident or by design, the face is not worked on the perfect arc of a circle. Measurements taken along the fillet above the architrave give the following results:

Chord, 0.80 m ., from a point 0.09 m . from left end, r equals 1.69 m .
Chord, 0.80 m ., from a point 0.50 m . from left end, r equals 1.604 m .
Chord, 0.80 m ., from a point 0.90 m . from left end, r equals 1.562 m .
Measurements taken on the upper and middle fascias of the architrave show the same decrease in radius toward the right end of the block. If the greatest possible chord is measured along the fillet above the architrave, the radius works out to 1.645 m . An average of the measurements gives 1.625 m .

33 (21). Epistyle-frieze block, curved (Fig. 41). Similar to No. 32. Length on frieze, restored ca. 1.48 m . Height, 0.642 m . ; width of soffit, 0.465 m .

The decoration of the frieze, of which six repeats are carved on the block, begins at the right with a palmette. As shown by the left end, which resembles the right end of No. 32, the block comes from the right-hand quarter of a niche.

There are traces of cuttings for T clamps in the right end ; they have been modified for the use of hook-clamps. An additional small hook-clamp has been added. The dowels are as in No. 32, reversed.

A survey of the radii for this block shows that they vary in different parts of the curve, but that instead of growing larger at the outer part of the niche, they tend to diminish. Two readings taken on the fillet above the architrave give respectively 1.657 m . and 1.562 m . Measurements on the fascias of the architrave confirm this variation.

34 (48). Epistyle-frieze block, fragmentary (Fig. 55). Corner piece, made up of five parts which join. Present length, 0.935 m . ; height to top of architrave, 0.385 m .; preserved thickness, ca. 0.29 m .

The dimensions of the architrave, as well as its decoration, make it certain that this piece belongs to this series. The return of the architrave, which measures 0.245 m . along the lower fascia, is at an angle of 90 degrees, and runs straight, thus precluding the restoration of the block at the angle of one of the niches. The back of the block is broken away, but the cutting, 0.31 m . wide, made to receive the next block of the return is still preserved. Very little of the frieze remains, but a small section of the bottom of an anthemion is visible on the return, and shows that the adjacent palmette was divided on the corner, turning its sides at right angles to each other. Not enough of the soffit remains to determine the ornament.

We may assign this fragment to the left-hand corner of the upper order.
35. Epistyle-frieze block, fragment (Fig. 55). The lower right-hand corner of a block.

36 (41). Epistyle-frieze block, fragment (Fig. 41). Corner piece with obtuse angle. Only a short section of the frieze is preserved. The dimensions are right for the piece to belong to the upper order. The anthemion is crowded up to the corner, and the space between it and the adjacent palmette is only 0.235 m ., or 0.02 m . less than the average.

As far as can be ascertained, it is possible to fit the piece against the right end of No. 33, but the top is broken in such a way as to eliminate any clamp cuttings. It is certain, however, that this piece comes from a block that ran from the angle of a niche along the front of the Façade, and hence shows that the ornamented frieze was carried along the entire front save where the new block, No. 31, interrupted it after the repair. No. 34 indicates the same thing.

37 (49). Epistyle-frieze, curved revetment slab (Plate IV). Preserved length, 0.33 m .; preserved height, 0.27 m .; thickness, from 0.108 m . to 0.075 m . Anathyrosis at left end where joint is preserved. A cutting for a hook appears in the bottom, showing how the piece was suspended on the wall.

The fact that the twisted strap ornament runs to the right, as it does in No. 33, suggests that these two pieces belong to the same niche. The carving of the ornament also resembles more closely that on No. 33, being a little heavier than the work on No. 32, the strap ornament of which runs to the left. Either the twist was carried in


Fig. 55. Fragmentary Epistyle-frieze Blocks of Upper Order (No. 34, Left; No. 35, Right)
the same direction all around each niche, or the direction was changed in the centre. It is unlikely that the slab filling the back part of the niche was in two parts; hence the most likely arrangement is to assign Nos. 33 and 37 to the left-hand niche, and leave No. 32 for the right-hand niche, for reasons discussed above. This would mean that the end sections, over the final intercolumniation would, as shown by No. 34, have had the twist running outward, toward the corners of the Façade, and that from the outer angles of the niches the direction would have been toward the centre.

Note: Two epistyle-frieze blocks are preserved and now lie side by side on the foundation of the Façade, behind the restoration. Their respective lengths are 3.02 m .
and 3.06 m ., which suggests that they may be associated with the building. Their height is 0.665 m. , which is a little greater than that of the epistyle-frieze blocks of the upper order, and they have the same profile, essentially, as the face of No. 31. There is, however, no soffit decoration, and the backs are unfinished. One block (17) has two sets of cuttings for hooked clamps in the left end, and one set in the right. Two pry-holes, about 1.48 m . apart, may be seen in the top, which is rough picked for the most part, but worked down a little smoother toward the front. The soffit is smooth, and at either end the bed of the block projects slightly from the plane of the remainder of the soffit. The other block (18) has a pair of hooked clamp cuttings in each end, two pry-holes on top, but no dowels. There is a worked bed at either end of the soffit some 0.30 m . wide. On the upper fascia of the architrave of each piece there are letters. Block 17 has I at the left, K at the right, and 18 has T at the left


Fig. 56. Whirling Rosette on Soffit of Cornice of Upper Order and $Y$ at the right. On the left end bed of this block there is also the letter Z .

These blocks find no place in the composition of the front of the Façade, and it is not welcome to have to provide a place for them. They may have been used in the upper storey, on the wall, behind the free-standing entablature, but the workings of the beds seem to argue against this. Possibly they were used on the back of the wall where a two-storey order of some description may have been executed, but there are no other indications as to just what such an arrangement may have been.
CORNICE (upper order).
There are numerous pieces of the cornice that may be assigned to the upper order. It consists of a row of dentils, above which a series of modillions springs from a plain band. A simple bed-mould runs along the top of this band and breaks forward around each modillion. Rectangular coffers between the modillions are enriched with rosettes of varying patterns. Above the plain corona is a cyma reversa carved with a Lesbian leaf, and surmounted with a plain fillet. The back part of the modillions infringes on the dentils, which are, nevertheless, carried on behind them without interruption, two being placed behind each modillion, and four, generally, occurring in the space between. The face of the dentils is set back very slightly ( 0.02 m. ) behind the modillion band, which is slightly canted to the rear. The under surface of the dentils is raised slightly above the level of the bed of the blocks.

The modillions carry at either side an attenuated S curve, terminating at each end in spirals. The lower side of the modillion is decorated with an acanthus leaf
backed by a broader lobate leaf, cut very shallow. At the forward end is a scroll of rounded leaves, treated as a pair of opposed calyxes, joined at the centre by a band of overlapping scales, bead and reel, or knot. The execution, although far from regular, is generally vigorous and shows up well from below. The rosettes are of a number of types, including one that is unusual in that the leaves are swept around the circle so as to radiate in spiral form (Fig. 56).

Four types of cornice block may be distinguished: (1) curved; (2) curved angle pieces; (3) straight pieces from the horizontal cornice; (4) pieces from the raking cornice. No pieces showing a right-angle return are preserved.

38 (34). Cornice block, curved (Plate VI, Fig. 41). Preserved length, ca. 1.50 m. ; height at front, 0.345 m . ; height at back, 0.395 m . The right-hand joint, which is preserved, is exactly on the radius of the curve; the left end of the piece is broken. The top shows a cutting for a hooked clamp at the left end, set at an angle. The front edge of the top is dressed down along the curved side, for a width of 0.21 m . Two dowel-holes, one at the middle of the block, the other near the end, appear in the worked-down surface whose level is that of the top of the fillet above the corona. These dowels, together with the cutting in which they occur, bespeak a sima that was run around the curve of the niche. There is a lewis-hole near the centre of the block. On the bottom surface, one corner, near the back, is cut up for a distance of 0.09 m . to adjust the block to the back-wall construction.

39 (33). Cornice block, curved, from angle of niche (Plate V, Fig. 41). Greatest length, 1.46 m . ; greatest depth, 1.08 m . ; height, 0.34 m . The modillion treatment is interesting in that one modillion is placed along the forty-five degree line at the angle. Its greater length causes its sides to have an additional scroll carved on them, and the small triangular bit of soffit at the end of the modillion was concealed by a leaf. In the trapezoidal panels adjacent to this modillion there are, instead of the usual rosettes, carved flowers growing out of calyxes that spring from the forward corners of the panels.

There is a dowel-hole at either end of the bottom of the block, and a cutting 0.08 m . up from the bottom to accommodate the ceiling slab. The top, at the left end, is cut down from 0.02 m . to 0.045 m . to receive the lower end of the raking cornice. There is also, at this end, one cutting for a hooked clamp. The other joint, towards the curve, is provided with two, of which one is twisted at an awkward angle. The back of the block was also clamped to the rear wall by a long iron with a hook in the end. A large lewis-hole crosses a smaller one and may show that the block was set up twice. There are two dowel-holes that served to fasten the angle block of the raking cornice, bearing the sima.

The corona has a radius of 1.475 for the most part, but the outer corner cuts in slightly, a total at the corner of 0.005 m . The inner corner, which has been reworked for a distance of 0.185 m ., is slightly rougher than the rest, and is farther from the centre.

The reworkings, as well as the double lewis-hole, seem to show that the block was reset, and bear out the theory that the entire Façade was rebuilt at some period in antiquity after it had been damaged, presumably by an earthquake.

Although now set on top of Nos. 31 and 32, it is clear that the dowel-holes do not correspond, and hence this block must be assigned to the other (western) niche.
$40(35,44)$. Cornice block, curved, from angle of niche (Plate VI). The piece is in two fragments that join. The left-hand joint, in the curve, is partly preserved. There is a dowel-hole in the bottom of the left end; the top had two dowel-holes, one with pour-channels.

41 (23). Cornice block, straight, horizontal (Plate VI, Fig. 41). Length, 1.552 m. ; height, 0.34 m . ; depth of bed, 0.535 m . The bottom has a dowel in the right end, and is cut to a distance
of 0.165 m . above the bed all along the back to receive the ceiling slabs. The top shows three hooked clamps in the right, and three in the left end. A lewis-hole appears in the center of the top. There is a weather line 0.25 m . behind the extreme front of the cornice. This is puzzling, since the tympanum of the pediment should be set about 0.10 m . further back.

42 (27). Cornice block, straight, horizontal (Plate VI, Fig. 57). Preserved length, 1.237 m. ; height, 0.332 m. ; depth of bed, ca. 0.49 m . The left end is not preserved, though a clamp cutting appears that may be for mending, since the lewis-hole is 0.83 m . from the end, which would make


Fig. 57. Cornice Block of the Upper Order
the original length $c a .1 .66 \mathrm{~m}$. The bottom is dowelled at the right end, and is cut up from 0.09 m . to 0.20 m . from the bed for a width of 0.17 m . all along the back to accommodate the ceiling slabs. Three hook-clamp cuttings appear in the right end. A hook-clamp, with a very long shank, served, as suggested in No. 39, to anchor the cornice to the back wall. A smaller round hole appears in the groove for the shank. The lewis-hole is double, at right angles. The top surface is carefully picked for a distance of 0.25 m . back from the extreme front, and there are traces of weathering at this point. On the bottom, at the right, is the letter $\Theta$, and towards the middle of the block, also on the bottom, the letters BS.

The weather lines, 0.25 m . back from the front edge of this cornice and of No. 41, suggest that perhaps there was a narrow step at the foot of the tympanum,
on which low relief carving may have stood, decorating the pediments. No recognizeable traces of such carving have been found, but one of the pediments, at least, was fairly large, and unless decorated, its plain triangular surface would have contrasted badly with the richness of the architectural decoration.

43 (30). Cornice block, straight, horizontal (Plate VI, Fig. 41). Preserved length, ca. 0.77 m. ; height, 0.34 m . ; depth of bed, 0.34 m . Dowelled at the right end at bottom. The lower side is cut upward at the back for a height of 0.165 m ., leaving an overhang of 0.32 m . The right end of the block is cut at slightly less than a right angle to the face. Two hooked clamp cuttings are preserved at this end. A lewis-hole may be seen just at the place where the block is broken, and just to the right of it, a dowel with pour-channel. A short incised line appears in the top, 0.28 m . behind the extreme front.

44 (31). Cornice block, straight, horizontal (Plate VI, Fig. 41). Preserved length, 1.14 m. ; height, 0.34 m . ; depth of bed, 0.35 m . The bottom, dowelled at the right end, is cut up at the back for a distance of 0.11 m ., leaving an overhang of 0.29 m . The profile of this cut is quite irregular. Toward the centre of the block the height of the rebate is barely 0.05 m . At the right end of the top are cuttings for two T clamps and holes for two hook-clamps that make use of the shanks of the earlier cuttings. A third hook-clamp was inserted at an angle. Near the middle of the back of the block is another hook-clamp cutting with a very long shank, for attaching the block to the back wall. Two lewis-holes, crossing each other at right angles, show that the block was set up twice, and from their position give the original length as about 1.66 m . There is a cutting as though for a dowel near the lewis, with lead in it. No clear weather line appears in the top, but the top is picked. smooth for distance of $c a .0 .12 \mathrm{~m}$. back from the front.

45 (43). Cornice block, straight, horizontal (Plate VI). Preserved length, $c a .0 .66 \mathrm{~m}$. ; height, 0.343 m . ; front and back broken, but width of bed on bottom was probably about 0.485 m . The bottom was cut upward for a distance of 0.17 m ., leaving an overhang of at least 0.08 m . The block was dowelled on the bottom at the right end, and the top shows cuttings for two hooked clamps at this end. One of these is at an angle. A peculiar feature of the block is that there are six dentils between the modillion and the preserved right end, and no trace of the next modillion within the usual distance.

Possibly the block may be assigned to the return at one end of the Façade.
46 (24). Cornice block, straight, raking (?-Plate VI). Preserved length, 1.98 m . ; height, 0.345 m . ; depth of bed, 0.57 m . Three hook-clamp cuttings show at the right end. The broken left end was clamped, in antiquity, to the now missing part with two clamps. A lewis-hole appears at the break, and what may be a cutting for a second such hole. The original length of the block seems to have been about 2.44 m . A weather line shows on the top, 0.27 m . behind the front.

The width of the bed, and absence of overhang at the rear, would make it appear that this block belonged to the raking cornice. The weather line on the top may indicate the contrary, but the fact that the block was an extra long one may also be some indication that the first assignment is correct.

47 (25). Cornice block, raking (Plate V). Length, 0.86 m . ; height, 0.34 m. ; depth of bed, 0.39 m . The bed, at the right end, is chamfered off at an angle, and the last panel of the soffit is not entirely finished, nor are the last two dentils. The lower side of the block has, at the back, a slight rebate, only 0.065 m . high and overhanging about 0.10 m . It is quite different from the same sort of thing on the horizontal blocks. There is a beam cutting at the back of the block. Two hooked clamps, of which one was set at an angle, were introduced in the top of the block at its left end.

There is also a small rectangular hole as though for a dowel. The right end is not quite perpendicular to the bed. No weather lines can be seen on the top, which is worked quite smooth.

The beam cutting immediately suggests a purlin for the roof of one of the pediments, and although the shelf cut at the back recalls vaguely the horizontal cornice blocks, there can be no doubt of the position of this block, at the lower angle of a pediment.

48 (26). Cornice block, raking (Plate VI). Length, 1.14 m ; height, 0.335 m . (at front); depth of bed, 0.40 m . The bed at the left end is chamfered off at an angle, and the last panel of the soffit is only partially worked, as are the final dentils. There is a beam cutting in the top, and cuttings for two hooked clamps at the right end, and for one at the left. The left-end joint is not quite perpendicular to the bed. On the top surface is a picked band, 0.11 m . wide, along the forward edge.

49 (28). Cornice block, raking (Plate VI). Length, 1.47 m . ; height, 0.337 m . ; depth of bed, 0.56 m . Two hooked-clamp cuttings are preserved in the right, and four in the left ends. There is a lewis-hole, off centre, to the left. The top is quite smooth, but shows a water line 0.31 m . from the front, and another, on the left half of the block, 0.48 m . from the front.

The off-centre position of the lewis-hole is disturbing, but may be due to the position in which the block was hoisted so as to lower it properly on to a slanting bed.

50 (29). Cornice block, raking (Plate VI, Fig. 41). Length, 0.87 m . ; height, 0.328 m . ; depth of bed, 0.63 m . There are two hooked-clamp cuttings on the upper surface at either end respectively. The lewis-hole is lacking. The under side of the block shows a dowel at the left end. The right end is sawn smooth, instead of having the usual anathyrosis, but the presence of the clamps bespeaks a joint.

The absence of a lewis-hole and the smooth-sawn right end suggest that the block is not in its original form, but was cut down and re-used in the repair of the Façade.

51 (45). Cornice block, raking (Plate VI). Preserved length, ca. 0.57 m .; height 0.34 m. ; depth of bed, 0.44 m . No clamp cuttings are to be seen. There is a beam cutting at the left end of the block. The top is sawn smooth in three bands, stepped down to the rear about 0.005 m . at each cut.

52 (32). Cornice block, raking (Plate VI). Length, 0.407 m .; height not preserved, as lower half of dentils are sliced off; depth of bed. 0.62 m . There were two hooked clamps at the left, and one at the right end. The modillion at the right has been chiselled away.

53 (46). Cornice block, perhaps raking (Plate VI). Length, 1.44 m. ; height, 0.34 m. ; depth of bed, as far as preserved, 0.40 m . One hooked-clamp cutting appears at the right, and two at the left ends. Lewis-hole off centre to the left. Only three dentils occur between modillions.

54 (47). Cornice, raking, incorporating sima (Plate V, Fig. 41). Preserved length, 0.71 m. ; height, 0.48 m .; depth of bed, 0.58 m . A part of the corona and its crowning moulding appears at the left-hand lower corner of the block. Above is a cyma recta, 0.26 m . high, carrying acanthus and water leaves, each repeat being at intervals of 0.20 m . A plain fillet surmounts the cyma. Above this is the roughly picked, wedge-shaped plinth that supported the acroterium. The plan of the block shows that it occupied the angle of a niche and the two dowel-holes in its bed fit very well with those in the top of No. 39. Two rectangular dowel- or pin-holes appear in the left end and served to fasten the adjacent block of the sima.

## III. REMARKS ON THE RESTORATION AND CHRONOLOGY OF THE FAÇADE

It would be well, perhaps, to comment briefly on the restorations that have been attempted and that appear on Plates II, IV, and VII. The east end of the foundation for the Façade is returned to the north for a distance of about 3.05 m ., measured from the back of the single existing wall block. At this point it meets the end of the "good high wall" that bounded the east side of the court in front of the Basilica. Although there is no direct evidence, it seems as though the wall of the Façade might well have been returned this far, but whether at the full height of the building, or possibly only one storey high, it is impossible to say. The foundation is in all respects similar to that of the main part of the Façade, and could have supported an equal load.

At the other end, where the Façade impinges on the colonnade in front of the Northwest Shops, a similar return has been suggested. The easternmost wall of the shops juts out into the court in an awkward manner, but there is clear evidence that it was left in place when the Basilica of the second period was erected, and there is a strong probability that it would not have been torn down, lest the buttressing of the vault of the last shop in the row be imperilled. The juncture of the colonnade and the end of the Façade wall has already been commented upon.

With regard to the number of openings through the back wall of the Façade, nothing definite can be said. The most obvious arrangement is the one suggested, of three openings, although the number might have been increased. The original level of the court is marked by a weather line on the back of the " good high wall," and also was marked at the west by a mosaic floor which has been removed. A flight of three steps would have been needed to get down from the doorsills of the Façade at the east, but only two steps would have been required at the west.

The pavement of the market place also seems to have sloped upward to the west, and probably a single step, the stylobate, is all that would have been needed on the front at this end.

Nothing definite can be said about the back wall in the upper storey. The way in which the curved architrave blocks of the upper order are finished on their inner ends shows conclusively that they were built into a wall, but whether there were openings in the wall does not appear. None have been suggested, but that is purely a matter of opinion.

With regard to the restored section, a word of explanation may be in order. We have seen, from the calculations in connection with block No. 12, that the face of the rear wall, in the lower storey, was set about 1.20 m . behind the centre line of the columns. The face of the lower plinth of the pedestals of the upper order lies, if the restoration is correct, 0.40 m . in front of the lower column axes. The centre line of
the rectangular shaft, at the top, falls 0.525 m . behind the face of the plinth, and hence the setback of the axis of the upper supports from the lower is 0.125 m .

From the marks on the top of capital No. 28, the lower fascia of the upper architrave was set forward 0.20 m . from the centre of the support. The same is shown by capital No. 29. We have, by direct measurement, the distance between the lower fascia of upper architrave No. 31 to the wall line marked on the top and bottom of architrave No. 32, a distance of 1.28 m .

The following calculation should, then, give the distance from the centre line of the lower columns, projected upward, to the back wall of the upper storey:
1.28 m . front of upper architrave to wall
less 0.20 m . front of upper architrave to centre of upper support
1.08 m . centre of upper support to back wall
plus 0.125 m . setback of upper from lower support axes
1.205 m . setback of rear wall, upper storey, from lower support axis.

This may be compared with the calculation for the back wall of the lower storey, and the difference will be seen to be only 0.005 m. , which is negligible, and, in fact, is considerably within the usual margin of error in the building dimensions of the Façade.

It does indicate, however, that the face of the wall was practically plumb for the two storeys. In the restoration, the upper part of the wall has been thinned down, since it is probable that it would have been made lighter.

There are some ceiling coffers, in a very fragmentary condition, which may have come from the upper ceiling, but although some of them are of a size that could be made to fit, there is no piece complete enough to furnish us with definite information as to whether they belonged to the building.

With regard to the date of the building, there is no direct evidence. The style of the figure sculpture would place it about the middle of the second century after Christ, as has been suggested by Carpenter, ${ }^{14}$ and also by F. P. Johnson. ${ }^{15}$

The relation of the Façade to the adjacent Propylaia has been discussed elsewhere ${ }^{16}$ and a mid-second century date seems to agree with the general history of the building developments in that region of the market place. The character of the design and of the ornament also confirms this. It is interesting to compare the Façade with the Roman north gate to the market at Miletus, for which Knackfuss ${ }^{17}$ suggests a building date shortly after A.D. 155.

[^23] fig. 94).

There is ample evidence from the condition of the various blocks of the building, as has been noted above from time to time, that the Façade was repaired in antiquity. Probably it was badly damaged by an earthquake, and had to be practically demolished before rebuilding. We have abundant evidence, furthermore, of a considerable period of rebuilding in Corinth toward the end of the fourth century after Christ and there is a known earthquake in the year 375 (Zosimus, IV, 18), which may have been responsible. ${ }^{18}$

We do not know when the final destruction occurred. The evidence of the coins in the grave built into the drain under the foundations (p. 55, note 3 ) seems to show that the drainage system in that part of the market was put out of use about 375 a.d., and it is entirely possible that this date marks the final downfall of the structure. In view, however, of other evidence from the region of the market place, the end of the fourth century saw a considerable amount of rebuilding, and it seems unlikely that such an important architectural feature would have been left definitely in ruins during this time.

It is more tempting to delay the final destruction at least until the very end of the century.

[^24]
## CHAPTER III

# THE NORTHWEST STOA AND SHOPS 

By Richard Stillwell

## I. LOCATION AND PLAN

In the Hellenistic period the market place of Ancient Corinth was bounded on the north, for most of its extent, by a Stoa that stretched along the entire southern scarp of the hill on which stood the Temple of Apollo (Plate VIII). ${ }^{1}$ The presence of an earlier colonnade preceding the building of the Hellenistic period may be implied by certain cuttings in the hardpan, but no other identifiable remains of it exist. A considerable part, however, of a broad stairway that gave access to the temple hill from the southeast is still preserved, but this stair was blocked by the construction of the later Stoa and in part removed when the foundations of the second Roman Basilica, built along the east scarp of the hill, were installed. ${ }^{2}$

Toward the western end of the Stoa the rock of the hill is a firm poros stone that breaks down as it runs eastward into an easily dug conglomerate. The stratum of clay that underlies the entire area is over two metres below the general level of the Stoa foundations. When the building was first erected, a street, seven to eight metres wide, led along its façade from the lower area near the Propylaia and the region of Peirene up to a terrace that extended out at right angles from the western corner of the colonnade. It is probable that the western end of this street was no more than a narrow plaza, or cul-de-sac, in front of the Stoa, for there seems never to have been any direct exit from it to the higher level at the west. On the other hand, as the general level of the market place sloped up gradually in that direction, the south side

[^25]of the street was marked by a low terrace wall, parallel with the Stoa, and interrupted at intervals by broad flights of a few steps that gave access to the large open area to the south. This terrace appears to have been retained during the earlier part of the Roman period and some sections of the retaining wall seem to be the work of the Roman restorers of the city.

At present, the ruins of the Stoa are limited at the east by the remains of the Roman Basilica, in its two periods, and along the greater part of the front of the


Fig. 58. The Northwest Shops. West Half with the Temple of Apollo in the Background
Hellenistic building is a row of shops opening out behind the foundations of a colonnade (Figs. 58 and 59). The Northwest Shops, as they are called, extend from near the original east end of the Stoa to a point about 23.00 m . from its western limit. The remainder of the distance is masked by remains of other buildings that will be considered later.

The orientation of the Stoa, nearly parallel to the long axis of the Temple of Apollo and to the great South Stoa across the market place, dictated the orientation of the later Roman buildings along that side of the market, and introduced an awkward angle near the centre where it lay adjacent to the Roman Basilica, whose plan was laid out in relation to the Lechaion Road of Roman times. The final arrangement,
by which the Façade of the Colossal Figures masked the forecourt of the Basilica, marks the end of a considerable period of groping for an acceptable solution.

The plan of the Stoa was extremely simple (Plate IX). It consisted of two rows of columns and back and end walls, the latter terminating in antae behind the end columns of the front colonnade. Forty-seven Doric columns, spaced 2.18 m . on centres, gave the building a total length on the stylobate of approximately 101.00 m ., or a little over three hundred feet. The inner order was Ionic, with a column behind every


Fig. 59. The Northwest Shops. East Half
alternate column of the façade. The faces of the antae, of which only the western one is preserved, were 1.60 m . behind the corner columns. The depth of the Stoa, measured from the stylobate to the rear of the back wall, was about 9.20 m . The Ionic colonnade stood midway between the front colonnade and the rear wall. Along the base of the wall ran a bench, whose foundations are preserved near the east end of the stoa. Toward the east, the rear wall was about 0.60 m . thick, but at about 8.50 m . from the end this dimension was increased to nearly 1.00 m ., and the remainder of the wall continued at this thickness. Most probably this was a measure of expediency in order to provide an adequate retaining wall for the back of the Stoa where it was set against the temple hill, but the thickening also suggests a possible arrangement of the upper storey that will be considered below.

Beyond the west end wall of the Stoa, rock cuttings (Figs. 60 and 61 ) show that there was once a staircase that led to an upper level. In fact, four steps and part of a fifth are still in place, beginning just inside the Stoa and leading up between the corner column and the anta, after which they turn to the north (Plate X).

The disposition of the first few steps, and the square landing to which they lead, is certain. Higher up, the arrangement is more problematical, but the restoration


Fig. 60. Rock Cuttings at West End of Northwest Stoa
gives what seems, from the evidence of the cuttings in the rock, to be a possible solution. A straight flight of steps, running directly north after the anta is turned, would, of course, be simpler, but the width of the stair cuttings, and their arrangement, if properly interpreted, suggest a more complicated scheme.

A gutter, interrupted at intervals by square catch-basins, ran along the front of the Stoa to carry off the water that dripped from the cornice. Just by the southeast corner of the Stoa, the water was discharged into a large drain, which runs under the road in front of the building (Plate VIII) and once connected with the main Peirene drain after passing beneath the Roman Propylaia and the adjacent areas.

A terrace wall, consisting of triglyphs and metopes, was moved forward a metre and a half from the position it had formerly occupied ( $a$, Plate VIII) in order to give
room for the east end of the Stoa. ${ }^{3}$ Only the socle on which the triglyphs stood remains, but when it was excavated, the traces of the stucco that covered the triglyphs and metopes were clearly discernible on the upper surface. The prolongation of the


Fig. 61. Plan of the West End of the Northwest Stoa
earlier line of this wall falls to the west of a small flight of stairs, now to be seen in the area covered by the Basilica ( $b$, Plate VIII). If these stairs continued in use after
${ }^{3}$ The similarity of this terrace wall, with its motif taken from the Doric frieze, to the terrace further south, connected with the Sacred Spring, suggests that it is, perhaps, contemporary (late
the construction of the stoa, some sort of re-entrant angle must have existed as is suggested on the restored plan (Plate IX), but certain evidence of the arrangement is lacking. The problem of terracing and accommodating the various levels which existed in this area must have furnished a considerable problem to the architects of the period.

## II. FOUNDATIONS

The foundations of the Stoa were carried down to a stratum of rock, generally some two metres thick, overlying a deep layer of clay. At the western end of the Stoa, the stylobate rests directly on the rock; at the eastern end, it rests on a crepidoma of two steps and a euthynteria course that increases in height as the rock falls away to the east. The rock surface is carefully dressed to receive this foundation. The inner row of columns was supported on blocks of stone roughly 0.90 m . square, which rested either directly on the rock or, if the level required it, on another course usually formed of two oblong blocks. Along the back wall there is a considerable irregularity in the arrangement, depending on the nature of the rock and the level at which a sufficient degree of hardness was found. The foundations were carried down, along the front part of the wall, to a shallow trench that runs fairly evenly along the rock level. At irregular intervals there are cuttings back into the softer overlying rock as though to receive buttresses, but an almost continuous cutting that runs along the line of the back wall, at a higher level, bespeaks a thickening of the entire wall, as noted above, for all but about eight metres of its length. At the extreme west end, the wall is carried on a step of the actual rock ( $c$, Plate VIII and Plate XI), but it may be noted that at this point the rock was firm and did not require to be worked down so far. A cutting, roughly 1.10 m . wide, runs behind the Ionic colonnade from the sixth to the tenth column, counting from the east end. Its line is approximately that of the bench foundation farther east. It seems too broad, however, to have served for this purpose, and it may belong to an earlier building. The fact that the buttress cuttings do not coincide with the spacing of the columns may also be an indication that they are not contemporary.

It is a curious and rather startling fact that the stylobate is not level, but slopes down gradually from the west. The difference at the two ends may be calculated at about 1.32 m . and one would expect that the effect on the design of the Stoa would be unpleasant. The discrepancy, however, would be offset, optically, by the gradual slope of the line formed by the top of the terrace wall, bounding the main area of the market. The steps below the stylobate, since the road sloped more steeply, are not continued for the whole length of the building but give out in turn as the road level rises to the west.

[^26]Save near the extreme west end, the stylobate has a double drafting at its lower edge, and the steps are treated in similar fashion. Some of the blocks are apparently step blocks from an earlier building that have been turned over and recut, but it is also possible that they were either so worn or so damaged by the time the Stoa was rebuilt that the reversal is the work of the Roman restorers. The blocks thus would have served the same building a second time. Across the east end the steps were returned to a point about a metre from the northeast corner, but the colonnade, as


Fig. 62. East End of Northwest Stoa. Euthynteria and Step Block in Place Beneath Foundations of Second Basilica
will appear below, was not thus treated. The evidence for this reconstruction of the steps is as follows.

Beneath the foundations of the southwest corner of the interior peristyle of the second Basilica, the blocks of the euthynteria and the first step are still in place ( $d$, Plate VIII and Fig. 62). Just north of these blocks, the cutting for the Stoa foundations continues, and at its west side, turned up on its back, is a block illustrated in Figure 63. It shows clearly, on the original face, the cuttings made to receive the return of the upper part of the euthynteria and two steps. The block was not moved far from its original position, but when in the construction of the second Basilica it was necessary to provide a large drain ${ }^{4}$ ( $e$, Plate VIII and Fig. 62) to carry off
${ }^{4}$ Corinth, I, i, p. 202.
water from the area left between the temple hill and the west wall of the Basilica, this block, as well as others of the same course farther south, was merely turned up on its back and shifted slightly to provide a part of one wall of the drain. A clamp cutting at right angles to the length of the block shows that it belongs to the corner of the building.


Fig. 63. Foundation Block from Northeast Corner of the Stoa, Showing the Return of the Steps

## III. SUPERSTRUCTURE

The lower parts of sixteen of the outer row of columns are still in place; several are preserved to a considerable height. The columns had the usual twenty channels, but on the back of the columns, for a height of 1.60 m ., nine of the channels were left flat in order to avoid damage to the delicate arrises.

No complete set of drums has been found, and an attempt to restore the height of the order on the basis of the remaining fragments gives indifferent results. The lower diameter of the shafts was about 0.64 m ., but measurements taken on the existing lower drums vary considerably, since the original shafts were all worked down in the Roman restoration of the building to give a key for the heavy coat of stucco with which they were then covered. Some of the existing pieces seem to be entirely of Roman origin. One capital remains that may belong to the Hellenistic period (Fig. 64 and Plate XIII, 8). Its diameter, at the neck, is 0.51 m . and this
may be taken as the original upper diameter of the shafts. The measurable diminution on the existing fragments gives a series of heights for the shafts varying from 4.55 m . to as low as 3.92 m . with the majority tending toward the lower figure. Assuming a height of 4.00 m ., which seems to be a fair average, and adding the height of the preserved capital, 0.25 m ., and the entablature, 1.05 m ., we get a total for the order of 5.30 m . It is interesting to note that the presumable height of the terrace roof over


Fig. 64. Hellenistic Capital of the Stoa, Recut and Stuccoed in the Roman Period
the Roman shops which were later built in front of the Stoa is 5.50 m . above the level of the stylobate, and it would seem reasonable to assume that, inasmuch as the Stoa was left standing for a time after the Northwest Shops were built, there may have been some relation between them. If we add the lower element of the plinth for the second storey, 0.20 m ., we get exactly the same dimension, 5.50 m ., which may be purely a coincidence. On the other hand the relationship may have some significance.

We are indebted to the Roman builders of the late first century after Christ for the preservation of several important blocks of the epistyle frieze. Some time after the construction of the first Basilica, the end of the Stoa was modified by two chambers, built into its eastern end and extending as far west as the sixth column from the
corner. A part of the entablature of the eastern end of the façade was taken down, and the blocks found their way into this new construction. From them the heiglt of the architrave and frieze, which were cut on the same block, may be recovered, as well as the triglyph spacing. The remains of the Greek stucco on the soffits of the epistyle show clearly the location of the abaci of the capitals and agree perfectly with the column spacing. The drawings (Plate XII) show the dimensions and the system of jointing. Two of the blocks from the façade are inscribed with the letters $\Gamma$ and $\Delta$ respectively (Plate XII, 4 and 5), ${ }^{5}$ and it seems probable that these referred to the place that the blocks occupied near the corner of the building. Unfortunately, the first block of the series, A, is missing and hence the problem of triglyph and metope spacing on the building is left unsolved; for, from the extant columns at the west end, it appears that there was no contraction at the corners. The blocks inscribed with $\Gamma$ and $\Delta$ retain traces of the heavy coat of Roman stucco with which the building was covered by the Roman restorers, as well as a part of the original Greek stucco. This is very thin, hard, and greatly superior to the later coating. We have here the evidence for the reconstruction of the building in Roman times, and since the Basilica, in its first phase, respected the corner of the Stoa, it is likely that the restoration antedates the erection of the Basilica, and hence must be dated in the early years of the Roman re-occupation of the city, prior to the reign of Augustus.

A portion of a third epistyle-frieze block (Plate XII, 3) also exists and now occupies a place in the dividing wall of the two chambers immediately to the east of the block marked $\Gamma$. Unhappily it does not reveal much of importance since most of it was cut away by a door that was hacked through the dividing wall at some later period. The further continuation of this wall toward the east is represented by some foundations only, and the remaining and essential architrave blocks that should have been in it disappeared when the second Basilica foundations were laid ( $f$, Plate VIII). A careful scrutiny of the blocks of which the corner of the Basilica is composed fails to show any fragments of the missing blocks. In the wall parallel to, and north of, this dividing wall there are, however, two other blocks (Plate XII, 1 and 2) ${ }^{6}$ that must have crowned the wall at the east end of the Stoa. They are only two triglyphs and two metopes long, not a sufficient length to span the normal intercolumniations. One (Plate XII, 1) has on the back a cutting, slightly wedge shaped, at the level of the frieze. This seems to have been intended to receive the long beam that ran the length of the building above the inner columns. The other (Plate XII, 2) is similar in style and dimensions. It could be placed adjacent to and south of 1 , but in this case its southern triglyph would be the third from the angle, and the joint at this end would give an impossibly short interval between the corner column and the anta. On the other hand, it is not possible to place the block just north of 1 , since there are no traces on it of the beam cutting, half of which should have occurred on this block (2). If,

[^27]however, we place it in the position suggested in Figure 65, it will be noted that the curved cutting on its under side, probably indicating a roughly cut opening in the end wall of the Stoa, comes very nearly in the centre of the space between the inner row of columns and the rear wall. Such a doorway would provide access from the Stoa into one of the small rooms of the first Basilica.

The epistyle-frieze block spanning the opening between the corner column and the anta would have had to be one metope longer than those normally placed on the façade, since a joint in the epistyle just above the anta would hardly have given sufficient bearing surface for the block. It will be noticed that the average spacing of the elements of the frieze places a triglyph almost exactly over the anta, restored on the


Fig. 65. Restoration of the East End of the Northwest Stoa
analogy of the west end at a distance of 1.60 m . behind the rear of the column, or $c a .1 .92 \mathrm{~m}$. from its axis (Fig. 65). ${ }^{7}$ In attempting to restore the stone coursing of the east end, it appears that the height for the columns suggested above, ca. 4.25 m ., is equal to nine courses each 0.473 m . high. The measurable courses at the west end are respectively $0.52 \mathrm{~m} ., 0.44 \mathrm{~m}$., and 0.46 m ., giving an average of 0.473 m . On the rock at the rear of the Stoa the measurable height of five courses gives an average of 0.48 m . This would show that the calculation for the height of the columns is approximately correct.

The backs of the epistyle-frieze blocks of the main entablature show at the top a shallow sinking which was intended to receive the floor beams or, more probably, a longitudinal plate on which the beams were set. Block $\Gamma$ shows also a dowel for fastening this plate. The line of this member is recalled on the back of the frieze across the east end by a fascia. In the Roman repairs the arrangement was not repro-
${ }^{7}$ It is barely possible that the difference in dimensions, 1.899 m . versus 1.915 m . might indicate a forward tilt of the anta.
duced, but a series of heavy floor beams was set into rough cuttings that were hacked out in the upper rear surface of the frieze.

Several other epistyle-frieze blocks exist (Plate XII, 6 to 10), and save for one (Plate XII, 6), they are probably Roman in origin. Although their dimensions correspond closely enough to the Greek elements, so that they undoubtedly come from the Stoa, they are roughly cut and the spacing of the elements is irregular. It is clear that stucco was relied on to provide the necessary adjustments and finish. The resulting effect is precisely what might be expected of a hasty restoration made in the heat of rehabilitating the city for use as a budding Roman colony.

The cornice of the lower order is represented by about a score of pieces, most of which seem to be entirely of Roman origin. There are, however, enough pieces on which the hand of the Hellenistic stonecutter is apparent to give an idea of the original design. A selection of these blocks is given on Plate XIII. One corner piece (7) is partly preserved as well as two blocks that come from the end of the building. One of these (6) retains on its back a fascia crowned by a narrow reed. These two elements supplemented the fascia at the top of the frieze and probably reflected the cross beams of the ceiling. The other cornice blocks, with the exception of one which is discussed below (page 106), are all presumably from the colonnade after it had been restored in the Roman period. The present length of the preserved pieces is never more than 0.90 m ., and the joints fall with fine disregard of the mutules or viae. On the extant Greek epistyle-frieze blocks, the spacing of the dowel-holes shows that the original length of the cornice pieces was about 1.09 m . or just half the length of the epistyle.

Before considering the upper part of the Stoa, brief notice should be taken of certain interesting features connected with the construction of the back and end walls. The varying thickness of the rear wall has already been discussed, and the fact that near its east end it was reduced to about 0.60 m ., or more exactly 0.58 m ., has been noted. Apparently the use of clamps was restricted to the corners of the building and the antae. The west anta is secured to the block behind it by a hook-clamp, and the foundation block (Fig. 63) is also provided with clamps and dowels. The wall blocks in place at the west end, save for the anta and its neighbor, are not provided with fastenings of any kind, but it is interesting to note that a hole was made at the top of the joints so that a waterproofing mixture of stucco could be poured into the cavity left by the anathyrosis. The rock bench along the rear wall at the west end has a great number of holes, some of which may be cuttings, and there is a probability that the lower course of the wall was dowelled to the rock at this point. The peculiar feature of anathyrosis cut in the rock at the back of the wall, near its west end, should be noted, and the dimensions of the blocks that faced it can be recovered within very narrow limits (Plate XIV, Section D-D, and Fig. 66). The courses vary in height from 0.43 m . to 0.52 m ., and there is no evidence for an orthostate. The length of the blocks varies from 0.95 m . to 1.24 m . for stretchers, and 0.64 m . is the average length, along the surface of the wall, for the headers. The west wall (Plate XIV,

Section B-B) shows blocks from 1.105 m . to 1.13 m . long and about 0.65 m . wide, or a little more where the outer surfaces are not worked off.

In the centre of the end wall, an opening (Plate XIV, Sections B-B and D-D) about 0.92 m . wide was cut at some time before the installation of the Roman flight of steps and the building of the web wall between the columns of the façade. ${ }^{8}$ Later, this opening was closed and one of the blocks used for the purpose can be recognized


Fig. 66. View of the Excavations at the West End of the Stoa. In the Foreground, the Foundations of Temple D ; in the Middle Distance, at Right, Rock Scarp of Temple Hill with Anathyrosis for the Back Wall of the Stoa; at Left, Line of the West Shops and, beyond, the Precinct Wall of Temple C
as a wall block taken from the gable of the Stoa (Fig. 67). It measures about 1.25 m . long and is 0.63 m . thick, almost exactly the thickness of the end wall. The slope has an increment of 0.22 m . in 1.00 m .

The inner colonnade suffered as much as the outer in the repairs effected during the Roman period. Although the general profile of the bases may be recovered (Plate XIII, 5), they have all been reworked. The shafts have been deeply tooled before

[^28]restuccoing. No complete capital of this order exists, but some fragments (Fig. 68) which may be assigned to it give the basis for a restoration. ${ }^{9}$

The lower diameter of the shafts varies between 0.545 m . and 0.525 m . From the fragments of the existing capital the upper diameter may be restored at about 0.45 m ., but this figure is questionable as it is impossible to tell how much should be allowed for stucco, which, in the Roman reconstruction, was quite thick. As usual in poros architecture, the lower portion of the shaft was carved on the same piece as the base (Figs. 68 and 69), and the upper part of the shaft is attached to the capital. There were only twenty flutes. It is doubtful if any of the original Greek capitals of the inner order survive. If the Stoa was burnt, as seems likely, the poros stone would have been exposed, especially in the interior of the building, to great damage, and one may hardly look for any original fragments. The single existing capital of this order (Fig. 68) is undoubtedly Roman work, although the position of the eye of the volute, raised well above the bed of the capital, bespeaks a Greek rather than a Roman precedent. On the other hand, the presence of well-formed darts between the eggs on the echinus seems rather an indication of Roman work. The volute band above the echinus is fairly high, the volutes are well turned, and the plain bolsters are decorated with three ribs. The abacus has a sharply curved cyma reversa moulding between narrow fillets.

Three shafts of the inner order are pre-


Fig. 67. Wall Block from Pediment served, standing to a height of about 2.50 m ., by the chance of their having been built into a Roman foundation wall that supported a building which at a later time was erected over the then disused Stoa (Fig. 70). The soft white stucco with which the shafts were covered in the Roman restoration is well preserved and shows the interesting fact that when the work was carried out the arrises were made in the shape of rather blunt angles instead of being flat.

There can be but little doubt that at some period the building had a second storey. Its precise arrangement, however, is open to question. A number of unfluted half columns, attached to square piers, together with the bases and Ionic capitals that go with them, may be assigned quite definitely to the second storey (Plate XIII, 1 and 2, and Fig. 71). The combined height of base, column, and capital would have been about 2.95 m . The epistyle is entirely lacking, nor have any pieces been found that appear to belong to it. Several fragments of an Ionic cornice with dentils were recovered, and from their workmanship and the heavy stucco that covers them it is possible that they may be assigned to the building (Fig. 72).

Cuttings in the lower parts of the piers with half columns attached show that a

[^29]

Fig. 68. Ionic Capitals and Bases from the Stoa
balustrade or parapet ran between the supports, as would be necessary for the protection of persons using the upper floor. Several blocks built into the Roman shops in front of the Stoa may be identified as belonging to the plinth course on which the half columns rested (Fig. 72). The course is 0.35 m . high overall, but the face is divided into two bands of 0.22 m . and 0.13 m . The lower band runs straight along the line of façade, directly over the cornice of the main order; the upper band breaks


Fig. 69. Eastern Portion of the Stoa During Excavation (1904)
back between the colum.ns and serves as a socle for the parapet. On the back of the blocks is a very shallow raised surface along the lower half, which would give an indication for the restoration of the level of the floor inside.

The interior supports for the second storey may be found in a series of small column drums, partly fluted and partly plain, built into two late walls that are preserved in the floor of the Stoa, behind the Roman Shop XV. Although these are visibly of the Doric type, with twenty sharp arrises, the presence of several Ionic capitals (Fig. 68, and b, b, b, Fig. 71) having also sharp arrises and twenty flutes on the section of shaft dependent from them, makes the association of these members certain. The dimensions are congruent, and the fact that the shafts were unfluted all around for


Fig. 70. Ionic Columns of Interior Order and Roman Foundation Walls


Fig. 71. Architectural Fragments from the Stoa
about one third of their height is an argument for giving them an interior position as suggested. There is also a fragment of an Ionic base that may be assigned to this order. The lower part of the plinth is worked back as though to receive a floor, possibly of tile (Fig. 68).

The restoration of the north wall of the Stoa on the second floor presents a problem for which the evidence is practically non-existent. The thickening of the rear wall for a great part of its length might be taken as an indication of an arrangement on the second floor similar to that suggested in the restoration (Plate X). The small column drums which have just been assigned to the interior supports of the second storey might be placed on the north side as a colonnade facing the Temple, and the Stoa restored as being open both to north and south at this level. On the other hand, the height of the half columns and piers is fixed within fairly narrow limits at about


Fig. 72. Cornice, Possibly from Stoa, and Plinth and Base of Upper Order
2.95 m . A colonnade on the north side, in order to comply with the diameter indicated for the small columns, would have to be of the Doric order, which would mean that the building showed different orders on the opposing sides of the second floor. Again, this objection would not be insurmountable, as it would be possible to have the northern colonnade occupy only the central part of the north side, but in any case the arrangement would be unusual.

It seems safer, although far less interesting, to restore the north wall as solid (doors are not excluded), and account for the thickening of the lower part of the rear wall as a structural precaution against the pressure of earth from the fill behind. The height of the interior columns of the upper storey, on the basis of a lower diameter of 0.45 m ., may be restored at about 3.60 m . or practically eight diameters. This would bring the top of the capital at a level which may be postulated for the upper surface of the epistyle and consequently fit in properly with a normal roof construction, as suggested in Plate XI.

Mention should be made here of a cornice block (Plate XIII, 9), resembling in profile the series of cornice blocks from the main order, but belonging quite clearly to an entablature on which a roof was set. The width of the mutules and via, 0.29 m .
and 0.072 m ., corresponds very closely with the dimensions of the elements already assigned to the Stoa, and the block raises the question as to whether we are to assign it (a) to the lower order, hence giving the building but one storey in its original form, or (b) to the upper order, or $(c)$ to some other building. The increment of the slope, 0.205 m . in 1.00 m ., is slightly less than that noticed in the block for the pediment. It is possible that the second storey, for which there is ample evidence, may be entirely the work of the Roman period, but the elaborate stair at the west end, certainly contemporary with the original building and destined apparently to give access to an upper floor, suggests a two storey building from the first. ${ }^{10}$ Moreover, the workmanship of some of the second-storey elements seems superior to many of the parts that may definitely be assigned to the Roman reconstruction. The second possibility, that of using the cornice in question for the upper order, must be ruled out on the grounds of scale. A Doric entablature, though not unknown over Ionic columns in the Hellenistic period, would, if of the same proportions as the lower entablature, be entirely too heavy. The third consideration, that of associating the block with another building, is barely possible, but the close correspondence of its dimensions with the other cornice pieces, and especially the spacing of the mutules, makes it almost certain that the block belongs to the Stoa. The width of the mutule plus the via, multiplied by six, gives 2.172 m ., which corresponds almost exactly with the normal column spacing.

From these contradictory results we are led to suppose that the building in its original form did not possess two stories and that the addition of the second order, as suggested in the restoration, is probably the work of the early Roman restorers of Corinth, following a good Hellenistic tradition.

The task of unravelling the relative chronology of the numerous changes that took place in and about the Stoa during the Roman period is a complex one, and a clear presentation and interpretation of the remains will involve a certain amount of repetition. In general, it seems best to consider the two ends of the Stoa independently after a brief description of those elements that appear to be practically contemporaneous with the original building or with its restoration in the first part of the Roman period.

## IV. THE WESTERN AREA

Running southward at right angles to the Stoa, with its eastern face tangent to the corner column, is an ashlar retaining wall, four courses high. Most of the wall has been concealed by later construction, but it may be seen in the narrow space between the Stoa and a Roman building that occupies the area between its western

[^30]part and the foundation of Temple D (Plate XIV, Section B-B). The upper edge of the fourth course is notched at the back to receive a shallow course, 0.22 m . thick and 0.55 m . wide, which formed the bottom of a gutter, intended presumably to catch the water that collected on the higher terrace to the west at the point where the Sikyonian Road entered the market (Plate XIV, Section C-C). There is a shallow hollowing of the upper surfaces of these gutter blocks along their middle line, whereas


Fig. 73. Steps in Terrace Wall Opposite Shops VIII and IX their edges are not worn at all, and thus it appears that the gutter had blocks along its sides, and may possibly have been covered. Although no trace of it remains, there was probably a parapet at the outer edge to prevent careless passers-by from falling into the street below. Most probably this construction belongs to the Hellenistic period and is contemporary with the Stoa. We cannot tell how far to the south the wall originally extended, but presumably it went not much farther than it can now be traced. This would bring it to the extension of the line of terrace wall that marked the side of the street in front of the Stoa. The level of the hardpan rises at the south after this line is passed, and there would be no need to continue the wall farther. The western portion of the terrace wall facing the Stoa is Hellenistic, and, although farther east the wall may belong to the early Roman period, we may suppose that the work represents either an extension of the wall or some restoration. A single wall block (Plate XIV, Section B-B) is preserved in situ just north of the centre of Temple $D$, and the socle continues to the east. The workmanship is good, and the construction of the flight of steps (Plate XIV, Section A-A) which led from the street level to the higher level to the south, six metres northeast of Temple D, has every right to be called work of the Hellenistic period. Unfortunately we cannot recover with certainty the level of the Greek market at this point. It would seem to have been about that of the Roman, but, in point of fact, since the Roman level farther west was actually dug deeper than the Greek, the same may have been the case here. The origin of the other flight of steps (Fig. 73)
near the centre of the stoa is doubtful. The north-south terrace wall was raised in the Roman period and also repaired. Presumably the level of the Sikyonian Road had also risen and some accommodation was needed.

A deep, narrow drain, cut in the hardpan, runs down from west to east behind the northern end of the terrace and finds its way through a cutting in the foot of the wall to a larger drain that ran roughly north and south at the foot of the terrace. The course of the larger drain has not been cleared, since it is blocked, after running a few metres to the south, by filling for later foundations. It appears to have passed under the corner of the Stoa, but this is uncertain and it is possible that it never went farther in this direction, but connected somehow, toward the south, with the drain that runs under the entire extent of the Northwest Shops and on to the Peribolos of Apollo.

One other feature near the foot of the terrace wall must be mentioned. A small area, paved with cobblestones ( $g$, Plate VIII) and then covered by waterproof Greek stucco, with a raised curb to the east, appears inside the foundations of the building with the interior buttresses. Its connection with the foot of the Greek terrace wall cannot be seen, and hence their relation remains uncertain. Not enough of the arrangement is preserved to admit of a certain definition of its purpose, but it may be suggested that here was a fountain of some sort.

Before considering the subsequent alterations in this area, we must turn for a moment to the actual entrance at the northwest corner of the market beyond the west end of the Stoa. Two heavy foundations ( $h, h$, Plate VIII and Fig. 66) in line, with a space between, prolong the direction of the colonnade of the Stoa westward to the boundary wall of the precinct of Temple C. The foundations consist of squared blocks of poros stone, laid over a fill of rubble concrete which was thrown into a trench cut to hardpan through the accumulated fill of the road. On the east, two blocks of the lowest wall course remain in place. They form a pier, 1.50 m . by 1.24 m . The western foundation shows, next to the precinct wall, the cutting for a pier 0.72 m . by 1.24 m . and, after a space of 1.60 m ., where the surface of the stone is higher and considerably worn, the beginning of another cutting for a pier which may be restored as similar in size to the pier at the east. The restored plan would give a gateway with a triple opening consisting of a central arch about 4.25 m . wide flanked by two smaller openings, each 1.60 m . in width. Cuttings in the socle show that at one time this entrance was faced with marble, but it is likely, from the careful manner in which the blocks of the existing pier are joined, that the arch was originally not revetted. There are no recognizable fragments of the superstructure, which, it must be supposed, was originally of a fairly simple design. A definite date for the construction of the entrance is not obtainable. It would be reasonable to assign it to a period soon after the re-establishment of the Stoa by the Roman settlers, but enough later to permit the construction of the precinct of Temple C, against which it is laid. From a comparison of the half columns that lined the inside of the precinct wall with those on the façade of Peirene, it might well be assigned to the reign of Augustus and, on account of the rubble concrete used in the foundation, late rather than early in the reign.

The fill that was excavated from practically the entire western area of the Stoa and the space in front of it seems not to have been later than the end of the first century after Christ. ${ }^{11}$ In the area occupied by this fill are several foundations which, to judge from their nature, must have been erected before the fill was made, and these must now be considered.

A curious foundation occupied the space between the west end of the Stoa and the Hellenistic retaining wall just north of Temple D. Against the east face of the terrace wall that ran south from the corner of the Stoa a rubble wall, some 0.50 m . thick, was built, streng thened by two square buttresses. The north wall of this new building was set about 0.80 m . away from the face of the Stoa. The south wall


Fig. 74. Sketch of Stratification, Looking East and Showing Location of Wall Parallel to Front of Stoa seems to have been built on a line a little south of that of the Hellenistic-early-Roman retaining wall facing the Stoa. How far exactly this construction extended to the east is not clear, but in the excavations the back-fill of the trench in which the wall once ran was clearly discernible as far as the eighth column from the end (Fig. 74). Beyond this point the area had been excavated in the early campaigns.

[^31]A cross wall occurs about four metres from the west wall, and in the north and south walls, midway between the end wall and the cross wall, are two more buttresses on the inside, as it were, of the chamber thus formed. The cross wall is not well preserved and, in so far as it exists, is built of rubble and re-used material. The north wall, which continues for four metres more, is built of squared blocks and at present is only one course high. The purpose of the room with the interior buttresses in a sort of cellar is not clear, and the buttresses must be explained by assuming that the room was intended as a kind of crypt, for which they were to assure the stability of the outer walls. In a later period most of this room was filled by a large mass of rubble concrete that served as the foundation of a monument. From the manner in which the lower part of the mass assumes a roughly hemispherical section, it seems as though the crypt had been filled before it was partially dug out again in order to lay the foundation.

We have no indication as to the nature of the building. It should be noted that the drain at the foot of the terrace wall was taken into account when the crypt was built, since the northern wall of the latter, where it crosses the line of the drain, was carried on an arch built of well-cut voussoirs. The extreme western end of this same wall is built, in general, of squared blocks, and the opus incertum picks up gradually toward the east.

A cutting in the hardpan shows that the second cross-wall, now represented by a single block, ran originally over to the face of the south terrace wall facing the Stoa, and it may have gone farther, since it would appear that most of the terrace wall had been ripped out at the time that the area was remodelled and filled in at the end of the first century after Christ.

There is another isolated section of the building, or buildings, that occupied this corner to be seen a little east and north of Temple D. A person mounting the angle of the shallow steps that lead up westward to the Temple and north to this complex would reach, after the seventh step, a broad door with a marble sill, which is still in place ( $i$, Plate VIII). On either side of the sill are heavy foundations of squared blocks reaching down to hardpan. To the east of the door is a large block, the upper part of which has been cut so as to form a base for a square pier (Plate XIV, Sections A-A and F-F). Presumably a similar block stood on the western foundation. Behind the sill are some slabs of a later marble floor.

Before considering this floor and a fragmentary mosaic floor that appeared at almost exactly the same level ( 4.65 m .) in connection with the cross walls built into the Stoa behind this point and embracing three of the Ionic columns of the inner order (Fig. 70), we must consider the web, or screen, wall (Plate XIV, Section C-C, and Fig. 75) which was placed between the Doric columns. Traces of this wall extend down as far as the tenth column from the corner. It is constructed of small, roughly squared blocks of poros stone set in a very poor grade of mortar, consisting mostly of earth and sand. Its thickness is about 0.40 m ., and there is no indication as to how
high it was carried, whether to the tops of the columns or only part way up. On the inner face, the wall was covered with a coat of stucco which was also extended over the inner face of the west wall of the Stoa and across a large block used to fill up the opening where the Greek stair passed between the corner column and the anta. The screen effectively separated this part of the Stoa from the north wall of the building


Fig. 75. West End of Stoa, Showing Web Walls and Roman Stair Passing Through the Line of the West Wall
set in what was once the street. The narrow space left between the two served for drainage.

Very shortly after the construction of the web wall a further alteration was made in the end of the Stoa. The west wall was pierced, leaving only a pier on the line of the interior colonnade, and a flight of steps, roughly built of re-used material, was extended across the entire width of the structure, leading up from its floor to a point outside the arched northwest entrance to the market. This arrangement effectively transformed a portion of the west end of the Stoa into a cryptoporticus through which access might be had to the lower level of the market place opposite the central portion of the building. It is evident that the steps, which are later than the web wall, must be earlier than the cross walls built a few metres to the east, since otherwise the
stairway would have no purpose. The construction of the cross walls and the stratification against them (Fig. 76) are such that the walls must have been installed before the area was filled and, although their connection with the web wall has been entirely severed by a modern excavation tunnel, which was pierced along the back of the colonnade before the road above could be cut, the remains of the web walls, opposite the truncated ends of the cross walls, show no sign of having bonded with them.

It should also be noted that in the construction of the web walls care was taken to allow a part of the face of each column to show, and hence it may be supposed that the web walls were installed before the construction of the building immediately south of the Stoa. The installation of the cross walls would represent an extension of the building complex toward the north, presumably not very long afterward. There are


Fig. 76. Sketch of Stratification, Showing Deposit about Cross Walls. View Looking West
two factors that point to there having been a relatively short interval between these constructions. The first is that the flight of steps at the west end does not show signs of very heavy wear, and hence did not serve for more than a relatively few years; the second, that the type of objects found in the fills in the area south of the Stoa and in the area about the cross walls themselves does not differ greatly. Save for two examples, found in areas open to suspicion, no coins later than the reign of Domitian appeared in the respective fills, and the pottery and lamp fragments were in no case necessarily later than the end of the first century after Christ. A Corinthian coin of Trajan appeared in a trench cut for a light wall in the floor level of the Stoa (see note 11, supra, p. 110). ${ }^{12}$
${ }^{12}$ Extract from Dr. Broneer's notes, March 15, 1933 :
" Opposite [the middle of the three columns enclosed by the cross walls], close to the rear wall of the Stoa, a well-marked floor level was found approximately level with the top of the plinth on which the column is standing. The floor consisted of hard-packed earth. Directly below was a layer of ash and other signs of burning. In the ash were found some pieces of a very thin Arretine Vase, the bone stylus recorded as [Inv. No.] M. F. 2161 ; also a coin (Patrae, Claudius). Since this floor was under the layer of tiles, it must have existed before the stoa was demolished. The coin will antedate the destruction."
It would seem better to say that both this coin and a coin of Trajan " found in a shallow trench for a light wall, cut into the floor level of the Stoa" (O[scar] B[roneer], March 16, 1933), show that the fill above was not put in until the time of Trajan, and that hence the cross walls must date at the earliest from that period. The layer of tiles might have been thrown in in the process of making the fill.

The cross walls (Figs. 70 and 77) are well built of opus incertum, and, as has been noted above, the longitudinal wall connecting them embraces the stumps of three of the Ionic columns of the Stoa and has preserved the heavy coat of Roman stucco with which they were covered in their last phase. The end cross walls are thicker than the others and at present their outer faces are in very ruinous condition, but it is fairly clear that they were once as good as the inner faces. There is some indication that they were carried across the line of the web wall and presumably ran as far as


Fig. 77. Cross Walls Built into Stoa. Just Above the Track at Right, the West End Wall of the Northwest Shops
the wall parallel with the colonnade a little over a metre to the south. The line of demarkation between what was foundation wall and what was to be above grade is clearly visible in the tops of the east and west walls (Plate XIV, Section D-D, and Fig. 77) where about 0.30 m . of the construction survives. The face of the upper construction is set back slightly from the face of the foundation, and the wall is brought to a smooth, even surface. The work resembles somewhat that of the web walls.

Two floor levels may be noted in connection with these foundations. The upper, represented by a small area of mosaic floor in geometric pattern, is at the same level as the marble pavement of the area to the south, at the top of the flight of steps. The other, only a hard-packed strosis, is some 0.25 m . lower and corresponds to a similar
level in the southern area. Quite logically, the level of the area to the south dictated the level of the extension of that area over a part of the Stoa. One other wall must be noted before turning to the complex of steps in front of Temple D. Running westward from the northwest corner of the Stoa is a heavy retaining wall, built of rubble and resembling in its upper part the general construction of the web wall (Plate XIV, Section D-D, and Fig. 66). This served to flank the extension of the broad stair that led through the end of the Stoa, and the line of the steps may be noted on its surface by the way in which the part of the wall that was visible (although originally stuccoed) is better built than that which was concealed. The wall extends for about four metres, and at its western extremity there are two blocks that turn to the south. A cutting


Fig. 78. At Left: Foundation of Poros Blocks at Edge of Stair
Platform. At Centre: Part of the Western Steps Belonging to the Hellenistic Terrace
in the pier of the arched gateway seems to show that they represent a wall, now gone, which connected the retaining wall with the gate and probably marked the top of the flight of steps or perhaps a sort of landing adjacent to the Sikyonian Road.

The last element to be considered in this area is the flight of steps which led up to the terrace on which stood Temple D and, at right angles, to the building in front of the Stoa (Plate XIV, Section F-F). A broad, low platform, bounded at the east by a heavy foundation of large poros blocks (Fig. 78), serves as the starting point for the stairs. It will be noted (Plate VIII) that the orientation of both platform and stairs is not at right angles to the Stoa, but agrees very nearly with the line of the West Shops and the general orientation of the terrace at the western end of the market place.

The steps are constructed of broad, shallow blocks of poros stone, each step being about 0.20 m . high and 0.35 m . broad. They are bedded on a fill of earth and broken stone. Part of the marble revetment with which they were covered still remains, and it appears to be contemporary with the steps which, in their lower parts, do not show
any appreciable wear. The flight is at present terminated to the south by a spur of the west terrace, on which stands the foundation of the circular monument erected by Babbius Philinus, but it is not certain that the steps are contemporary with the monument. Three or four more steps would be needed to reach the level of the stylobate of Temple D ; there is hardly room for more. Some of the blocks employed show earlier use, and in one case two steps have been cut from what was once a voussoir block (Plate XIV, Section A-A). A subsequent, and presumably late, alteration took the form of covering the steps with rubble concrete which was in turn faced with marble, but the traces of this alteration are clear only on the section that led up to the north.

The east end of the northern flight is no longer preserved, but it probably extended as far as the line of the heavy foundation at the eastern edge of the platform at the foot of the stairs to Temple $D$. This line would also mark the eastern limit of the building in front of the Stoa and give a starting point for the installation of the Northwest Shops, whose westernmost wall is at a slight angle with the normal Stoa orientation. It should be observed that the outer face of this wall is quite uneven (Fig. 77) and was probably left so because it came very close to some earlier construction immediately to the west. We know that the north wall of the building in front of the Stoa ran at least as far east as the eighth column from the corner, and it probably extended to the prolongation of the line that was marked by the foundation at the foot of the platform below the stairs.

Temple D and its adjacent monuments will be considered separately and in connection with the row of small buildings that marked the edge of the west terrace of the Roman market place. It is enough to say here that only the rubble concrete foundations and.a few blocks of poros stone of the podium remain in place, cut and re-cut by later drains and water channels of the Byzantine period.

## V. THE EASTERN AREA

Passing by the Northwest Shops for a moment, we turn to the building complex at the east end of the Stoa. Several elements are present and must be considered. They are: $(a)$ the Stoa; $(b)$ the first Roman Basilica; $(c)$ alterations to the east end of the Stoa; $(d)$ the construction of the Northwest Shops and the Basilica in its second period. Subsequent Byzantine alterations will be mentioned only in passing, since their remains are so fragmentary and confused as to be of little value.

The arrangement and construction of the east end of the Stoa have been discussed above. There remain now in situ the south stylobate, preserved as far as the fifth intercolumniation from the corner, with the lower steps and the euthynteria extending to within about 5.00 m . of the original corner ; the euthynteria and the first step still visible under the later construction, near the northeast corner of the building (Fig. $62, d)$; the lowest course of the back wall and, farther west, the two lower courses of
the same with the bench foundation in front. The back-wall foundation has had two blocks ripped out at the east end, and the last block, which lay in the line of the east wall and bears the marks of the return of the steps, lies turned up on its back and forms part of the drain contemporary with the second Basilica. The plinths and their foundations for the two easternmost Ionic columns remain, as well as the base of the last column.

The rock cuttings for the southeast corner of the building are quite clear, as well as the traces of the narrow gutter in front of the steps, both on the south and east. It is curious that the bench along the back does not show traces of having run to the east end of the Stoa. The cutting for it, where preserved, appears on the forward end of a series of headers that end just before the cross wall of the narrow end chambers formed by the parallel walls. Farther east the foundation on which the north wall of the chambers rests would seem to be contemporary with them, and still farther along there is no good rock cutting to be seen save that for the actual back wall, which is formed of stretchers. These are one course lower, however, than the section preserved west of the cross wall, and hence it would have been possible for the course of headers supporting the bench to have cantilevered forward without any foundation, since the weight of the bench was not great.

As discussed elsewhere, ${ }^{13}$ the first Basilica seems to date from the Augustan period. Its construction took into account the east end of the Stoa (Plate IX) which, as shown by the Roman stucco remaining on its fragments and overlying stucco of the Greek period, we know to have been restored in the early Roman period. The priority of the restoration of the Stoa is borne out by the orientation of some of the early Roman retaining walls in this area. They are oriented with regard to the Stoa and not to the Basilica. Furthermore, the re-used Greek material in the first Basilica cannot be associated with the Stoa. The deflected south end of the west wall of the Basilica ran parallel to, and about 0.90 m . away from, the end wall of the Stoa, and the façade of the Roman building lay on a line about a metre behind the face of the anta. Thus enough of a return was left visible at the end of the Stoa to give a seemly appearance to the connection of the two buildings. The space between may have been closed by a wall, but, unless one may take the irregular projection of one of the foundation blocks at the corner of the Basilica as an indication, there is no sure information on this point. Most likely the space was left open. Fortunately the actual southwest corner of the Basilica is still preserved, including a block the upper part of which seems to have been visible above the level of the court in front of the building (Plate XV, Section K-K). The level of the stylobate of the Stoa was slightly lower, not more than about 0.20 m .

The presence of a doorway leading from the Stoa into the southwest chamber of the Basilica, as indicated by the curve cut in the under surface of one of the epistylefrieze blocks of the Stoa, has already been noted (p. 99).
${ }^{13}$ Corinth, I, i, p. 211.

A difficult problem in chronology is afforded by the three parallel walls (Plate XV, Sections I-I, J-J, and K-K), built respectively over the stylobate, on the line of the inner colonnade, and immediately in front of the rear wall of the Stoa. The central wall contains epistyle blocks from the façade; the rear wall has two blocks from the east entablature; and the front wall contains no material from the Stoa save a few cornice blocks that form the sill of a doorway providing access to the narrow space between the Stoa and the Northwest Shops in front of it. All three walls may possibly be contemporary, but a careful survey of their differences suggests that this is not the case. ${ }^{14}$

The central wall, which was evidently curtailed by the construction of the second Basilica, once ran to the end of the Stoa, as is shown by the line of its foundations, which embrace the last of the Ionic column bases. On the other hand, the rear wall has an unusually broad foundation and the two epistyle-frieze blocks rest on a course of two rows of stretchers which have their tops on nearly the same level as the stretchers that form the foundation course of the original back wall. In order to accommodate the header course, however, the front edge of the Greek foundation is notched down about 0.04 m . to the exact level of the tops of the new blocks placed in front of it. The east end of this later foundation runs against a series of smaller blocks, laid, for the most part, with reference to the direction of the second Basilica and forming the lowest course of its foundations. Re-used material is apparent, but none of it can be said to come from the Stoa. There is a cutting on the tops of some of these foundation blocks which can be only to accommodate the end block of the header course, from which the eastern four blocks are missing. The notch in the front edge of the Greek foundation terminates with the edge of this cutting, that is, approximately on the line of the outer wall of the Basilica. This evidence points conclusively to the contemporaneity of the rear parallel wall and the later Basilica.

The outer, or south, parallel wall rests directly on the stylobate. Its western end rises three courses high facing the sixth column from the corner. The wall, interrupted by a narrow opening 0.60 m . wide, returns to the south and abuts on the back wall of the shops. The sill of the opening is formed by a cornice block from the Stoa, and two other similar blocks are to be seen in the same course, under the south pier flanking the opening (Plate XV, Section I-I). Beneath this sill runs a drain, 0.30 m . wide and about as deep, of which the bottom is formed by the slightly hollowed channel of a gutter that was installed at the time of the Roman restoration of the Stoa. It is not certain that this drain ever extended west of the opening, but it does run on for a distance to the east and once emptied into a large covered channel built across the space in front of the Basilica to connect ultimately with the main Peirene drainage system. Clearly its purpose is to carry off water that fell into the area between the Stoa and

[^32]the Shops. The southern pier flanking the opening makes a slight bond with the back wall of the Shops. One of the blocks of the latter is cut down slightly to accommodate one of the stones of the pier, and this block in turn is notched at the top to accommodate the next course of the shop wall. The part of the south parallel wall that runs eastward on the stylobate is not evenly finished on the side toward the shops; hence it is not earlier than they are. A door was cut through the wall in the Byzantine period. The north face of the wall is brought to an even plane, and the workmanship, though not of the best, is fair enough. On the whole, it seems to be more in keeping with the period of building of the Shops than with anything else.

The western ends of the parallel walls are connected by a cross wall two courses high. There are at present certain mediaeval additions above the upper course, which is much worn along all its length and probably was never anything more than a sill serving the two chambers. Its top coincides roughly with the uneven projection of some blocks in the lower part of the mid parallel wall, and hence indicates the floor level of the chambers.

Before proceeding to consider the Northwest Shops and their relation to the second Basilica, it might be well to attempt a brief interpretation of the complex just considered.

At some time after the construction of the first Basilica, possibly coincident with the introduction of the web walls at the west end of the Stoa, the east end of the colonnade was torn down and replaced by a wall running from the corner to the sixth column west. The east wall was left standing, and a wall, including the frieze of the eastern part of the colonnade, was introduced on the line of the Ionic columns and ran to the east wall of the Stoa. The construction of the second Basilica and the Shops, which seem to belong together, truncated the mid parallel wall, but retained a smaller chamber between it and the wall resting on the stylobate, as is shown by the fact that the angle of the southwest corner of the later Basilica is sliced off at right angles with the mid wall. In order to give room to the Basilica, a portion of the east end of the Stoa was removed and the truncated end of the rear wall of the building was reinforced by a doubling wall that contained two or more of the epistyle blocks from the east entablature. The pressure of the earth from the fill above the old stairway behind the east end of the Stoa would provide sufficient reason for strengthening the wall at this point. At the same time, the south wall over the stylobate was rebuilt in connection with the construction of the Shops and the second Basilica.

It is one of the misfortunes of excavation that the actual connection between the mid wall and the corner of the Basilica in its later phase has been entirely ripped out, for there is an alternate possibility that the portion of the mid wall that contains the large epistyle blocks may also be contemporary with the second Basilica and the rear parallel wall. In this case the east end of the Stoa would have remained intact until the general rearrangement. The extension of the foundations of the mid wall to the east end of the Stoa would, however, still have to be explained.

## VI. THE SECOND BASILICA AND THE NORTHWEST SHOPS

If allowance is made for some displacement due to the shifting of the rather loose foundations, the easternmost wall of the Shops will, if projected back to the front of the Basilica, coincide with the western limit of a finished surface that appears on the remains of the front wall of the Basilica (Plate XV, Section K-K). From this point to the corner, the construction of the Basilica presents a rough, unfinished appearance. It is also interesting to observe that the end of the shops cuts off, on the façade of the second Basilica, a distance very nearly equal to that cut off by the " good high wall" that separates the area in front of the building from the Propylaia complex (Plate IX). There is thus the same attempt at symmetry for the front of the later Basilica as was observed in its predecessor. ${ }^{15}$

The Shops are symmetrically disposed on either side of a central motif. Their design and extent were dictated on the one hand by the second Basilica and on the other by the existing arrangements at the west. The front line of the Shops was suggested by the old terrace wall lining the street in front of the Stoa, and the depth of the new colonnade was made about equal to that of the Shops. A narrow passage, less than two metres wide, was left betwen the rear of the Shops and the stoa colonnade, save for the space where the central shop, wider and deeper than the others, came within a very short distance of the older building. This shop, numbered VIII (Plates VIII and XV, and Figs. 58 and 69), measured on the interior 4.40 m . by 6.00 m . and was covered by a vault of cut stone that is still in place. The walls of the chamber are over 2.00 m . thick and consist of large blocks of poros stone laid in even courses. The jointing and finish are not especially good, since the walls were intended to be stuccoed. The quadrated masonry is carried down to hardpan at the level of the early street. The vault consists of seventeen courses of voussoirs, averaging 0.60 m . thick and varying in length from 0.90 m . to 2.40 m .

The foundations of the remainder of the building consist, for the most part, of two deep courses of blocks for the front and back walls and of a rubble and mortar construction for the partition walls and the walls at the ends of the building. The door openings of the Shops begin at the level of the top of the second foundation course, and cuttings in the existing doorways show that they once had sills about 0.30 m . high. ${ }^{16}$ The front wall and the partition walls are carried up in regular courses, the lowest being about 0.75 m . to 0.80 m . high and the rest averaging about 0.60 m . The rear wall, however, is peculiar. It consists for the most part of opus incertum, resembling somewhat the construction of the web walls built in the Stoa, farther west. The manner of bonding the partition walls with the back wall is interesting and is
${ }^{15}$ Corinth, I, i, p. 198 and fig. 131.
${ }^{16}$ The width of the original doors seems to have been about 1.60 m . Shop VII shows an original door-opening 1.55 m . wide; Shop IX shows the bedding for a sill block 1.60 m . long, and Shop XI has one measuring 1.68 m . The door-opening of Shop XIII may be definitely set at 1.60 m .
shown in Figures 79 and 80. Some of the partition walls toward the west end of the building are preserved to their full height, about 2.50 m . above floor level. At this point, on the walls between Shops XII and XIII, and XIII and XIV, there are traces of rubble concrete that springs forward slightly from the face of the wall. On either side of the central shop, the greater thickness of the side walls ends at the fourth course, the top of which is slightly bevelled as though to provide for the spring of a vault. Furthermore, the next four courses of the walls of the central shop are left


Fig. 79. Sketch Showing Manner of Bonding Rear and Partition Walls of Shops
rough and project unevenly, showing that they were not intended to be seen. The highest preserved course, however, the ninth above the socle, is again brought to an even surface. The total height of the four rough courses is 2.35 m ., which is almost exactly one half of the width of Shop IX plus 0.50 m ., the thickness of the vault at the crown. Thus we have definite proof that the smaller shops were covered with barrel vaults built of rubble concrete.

The outer walls of Shops I and XV do not actually form the limits of the building, for about 2.30 m . beyond them are other walls which extend forward past the front of the Shops and join with the stylobate that runs the length of the building, some 5.40 m . away. The purpose of these two narrow passages thus contrived at either end of the building is explained as a means of buttressing the vaults of the end shops. The remains at the east end of the building are too scanty to give much information,
save that the front wall of the Shops extends across the entrance of the narrow chamber up to the end wall of the building. It has the same sort of foundation and bonds in with it. On the west, the connection between the shops and the end wall has been cut and then later rebuilt, but enough is left of the socle to show that the front wall once was carried right across to the end. It might be possible to suggest that the narrow chambers served for stairways that led to a terrace roof over the vaults, or to a second storey of shops, but no traces of stairways exist.


Fig. 80. The Central Part of the Stoa During Excavation. At Left, the Back Wall of the Shops. In Distance, Modern Retaining Wall for Road

Less than half of the stylobate for the colonnade in front of the Northwest Shops is preserved. It is built of hard poros stone, similar to that used in the East Colonnade of the Lechaion Road. ${ }^{17}$ The blocks, 0.30 m . high and about 0.70 m . wide, are carefully faced on the south, but project irregularly to the north. On this side, however, they are worked down three centimetres along a straight line, and the projecting portions of the blocks were concealed by the floor of the colonnade. There are no traces of the floor remaining, and it is probable that there was no pavement but merely a surface of hard-packed earth. The foundations for the stylobate consist of one course of blocks of varying sizes, laid, generally, at right angles to the line of the stylobate and

[^33]resting on a subfoundation of stone chips and rubble mixed with a small amount of mortar. This foundation was made by filling in a trench that was cut through the early Roman and the underlying Greek levels to the hardpan which, toward the east, is about 1.00 m . below stylobate level. At the west there is no rubble subfoundation, but the course below the stylobate rests directly on hardpan. The west angle of the stylobate connects with the end wall of the building by means of a course of rather roughly laid blocks which were clearly intended to act as the socle or foundation of a wall and hence to be almost wholly concealed.

The arrangement of the colonnade may be made out with a fair degree of certainty from the traces of weathering on the stylobate. There are no dowels for securing the bases, but in some cases, near the centre of the space formerly occupied


Fig. 81. Plan of Stylobate at West End of Colonnade of Shops
by a base, a small hole, about a centimetre in diameter, has been cut in the stone as though to mark the spacing of the columns. The average intercolumniation is 2.53 m . The arrangement at the ends and at the centre of the colonnade is peculiar and must be considered more fully. The marks show that the last column at the west end did not come at the angle of the stylobate but was placed ca. 1.70 m . from its end (Fig. 81). Either there was a pilaster at the end, with an axial distance of only about 1.40 m . between it and the last column, or the end wall was turned at right angles along the stylobate and then terminated by a pilaster that faced the column at a distance of about 0.20 m . It is difficult to make sure whether the existing stylobate between the last column and the corner was originally covered, but so far as can be seen there are no traces of weathering on it, and it is most likely that it was protected by the return of the wall. ${ }^{18}$ Although the eastern part of the stylobate is missing, it is altogether probable that the arrangement at this end was similar to that at the west.

[^34]The arrangement of the columns in front of the central shop cannot be determined from any element of the stylobate actually in position at that point. The centre of the easternmost preserved column setting lies 9.70 m . west of the centre line of the building. A normally spaced series of columns, if extended eastward from this point, would result in placing a column about 0.70 m . short of the east end of the stylobate, which would not agree with the arrangement visible at the west. Moreover, a column would fall about 0.40 m . east of the centre line, an arrangement that is obviously improbable.

There is an oddly shaped stylobate block, not at present in situ, lying on the foundation opposite the west wall of Shop VIII (Fig. 81). It shows that the stylobate at one point projected forward 0.10 m ., and the weather lines on the top of the block indicate a pier with a notch in the angle. If this block is placed 0.40 m . east of its present position, and the face of the rebate aligned with the stylobate, we can restore a pier as suggested in Plate IX. There is, furthermore, a rebate cut in the front edge of the course below the stylobate as though for a step, and the end of this rebate will correspond to the angle in the stylobate block beneath the pier when it is moved to the suggested position. A further piece of evidence for placing the block is given by a pry-hole in the foundation. At present it has no significance but, if the stylobate block is moved to the new position, the pry-hole is in exactly the right position for use in setting the block. A symmetrical arrangement on the eastern side of the axis of the building gives a space of 3.60 m . between the faces of the piers, and, if we assume columns standing just within the faces of the piers, their axial distance would be about 2.80 m . A greater span in the centre of the colonnade is a reasonable piece of design and it is also likely that the two central columns were slightly larger and higher than the others, in harmony with the larger proportions of the shop behind them.

Thus the colonnade may be restored as shown, with a central motif of two columns flanked by piers, all set forward about 0.10 m . from the general line of the stylobate. On either side of the central motif there would be thirteen columns spaced 2.53 m . on centres, and after them a pier, succeeded by a short section of wall that extends to the angle of the stylobate and then returns and runs north as the end wall of the building.

The restoration of the order is most uncertain, and it is not possible to assign to it definitely any of the various marble fragments in the vicinity. A base exists, however, with a plinth 0.64 m . broad (Fig. 82). The dimension is just right for the weather marks on the stylobate, but they show that the bases of the colonnade stood on square plinths, whereas the piece in question has an octagonal plinth. It is possible, however, that the base was re-cut. Various fragments of plain shafts of cipollino with suitable dimensions are built into some Byzantine work in one of the shops, but not enough pieces are preserved in suitable size to give an indication of the height of the shafts. A capital (Figs. 82 and 83) of the Aeolic type that is fairly common in Corinth at this period was found near the east end of the colonnade. It had a diameter of 0.42 m ., which accords well enough with the bottom diameter of the columns, calculated atabout 0.53 m . Eight well-cut acanthus leaves, with five serra-
tions on each blade of the leaf, are surmounted by a ring of sixteen tall leaves that surround the bell. The abacus has a narrow fascia at the top, joined to the broader band below by a forty-five degree bevel. The top is square in plan.

Several pieces of epistyle-frieze blocks of coarse-grained blue marble were found between the colonnade and the church of St. John. No complete block is preserved, nor can the original length be recovered by fitting any of the pieces together. One exterior corner piece survives (Fig. 82) and this, if assigned to the colonnade, would


Fig. 82. Architectural Details Possibly Associated with the Colonnade
indicate that the space between the last column and the pier terminating the wall across the end of the colonnade was open and not closed as suggested above, for a part of a soffit panel is preserved. At least two pieces of the epistyle with mouldings only on one face exist. They are barely 0.25 m . thick and may have been placed on the walls at either end of the colonnade. The identification of the cornice of the order is also uncertain. There are three blocks, one of which is shown in Figure 82, of the same marble as the epistyle-frieze and they may be reasonably associated with it. The cyma was carved with alternating acanthus and water leaves and shows a curious feature in the cutting of the interdentils which are curved in vertical section. Three
other fragments, of the same marble, seem to have been related to this cornice, for they show the same curved interdentils, but they also seem to have been carved on the same block as the frieze, of which a portion may be seen on each of the fragments. Until the many fragments that have come to light recently in the clearing of the entire western and central area of the market place can be studied and assorted it seems idle to give more space to possible attributions.

## VII. LATER CONSTRUCTION

There still remain for consideration certain constructions contemporary with or later than the Shops, although their relative importance is small.

The cross walls built into the western part of the Stoa and embracing three of the Ionic columns have been dealt with above (p. 114). It would be reasonable to make these walls contemporary with the shops on the ground that once the shops had been established there was very little use of the Stoa, since the Roman stair leading down through the west wall was cut off and the western end of the Greek building filled in. The nature of the building supported by the cross walls is doubtful. It may have been a kind of entrance to the platform of the temple hill.

Farther to the east, just behind Shop XV, are the foundations of a wall


Fig. 83. Aeolic Capital Possibly from the Colonnade that runs across the Stoa at a slight angle. The preserved portion consists almost entirely of re-used pieces, most of which are from the upper storey of the Stoa. Still farther east, in the space between the rear of the Shops and the Doric colonnade, are two low walls forming a channel the bottom of which is lined with tile. The arrangement suggests a latrine, and this identification is further countenanced by a small drain, built of re-used blocks from the Stoa and extending back in a curved line into the Stoa area. It ends in a small settling basin. Access to the latrine was by means of a door cut through the northward extension of the west wall of Shop XV (Fig. 84). Behind Shop XIII is a short wall, also built of re-used stoa material ; the wall runs from the rear of the Shops to the front of the colonnade. Behind Shops XII and X are the foundations of two walls built of brick and provided with buttresses on the sides facing the chamber formed by the walls. It seems as though a room had been contrived behind the shops and that,
furthermore, it was constructed at a time when the Stoa was to be filled in, or had been filled in. The buttresses would have given some support to the walls against the pressure of earth from the outside. When the area was excavated the remains of what may have been a vault were found in the space between the walls.

Still another structural feature must be mentioned. On the stylobate, between the columns, are remains of connecting walls built of rubble with some tile. The construction is quite different from that of the web walls farther west and is certainly later. It seems certain that they are even later than the Shops, since the area just behind the Shops was found to have been filled up for about 0.80 m . with a very hard deposit of fine dark soil, such as might have been caused by dust washed down by the


Fig. 84. Construction at Juncture of Narrow West Chamber of Shops and Colonnade of Stoa. The Door, Cut to Gain Access to the Latrine, Was Later Blocked
rain from the roof of the Stoa or of the Shops. This deposit lies against the rear wall of the Shops and over the stylobate. The connecting walls between the columns are bedded in the deposit, and hence their relative chronology is assured. We must conclude that, after the Shops were built, the Stoa behind them stood roofed and empty for a time until the screen walls were built and the lower part of the building filled in. The latrine also rests on this fill and was probably put in a little after the connecting walls. It is not certain whether the heavy stone construction that appears in place of the rubble of the connecting wall between the columns standing at the north end of the passage just west of Shop XV is contemporary. I am inclined to think that it belongs rather with the construction of the shops.

It may be significant that the doorways cut in the back walls of Shops XI and XII, communicating with the brick-walled room behind, were subsequently filled in with material from the upper part of the Stoa, especially some of the plinth blocks for the upper order. The rear walls of the Shops have also been repaired with similar material from the Stoa and it seems as though the upper storey must have lasted for
some time after the building of the Shops, so that it could furnish material for the later repairs and alterations.

The Shops were used in one form or another during the early part of the Byzantine period, and an idea of some of the remains may be had from Figure 85. Rooms were built out over the space occupied by the colonnade, doors were cut through between different shops, and the central shop, VIII, still retains some fragments of Byzantine fresco painting.


Fig. 85. Northwest Shops During Excavation. In Middle Distance, the Church of St. John the Theologian

## VIII. CHRONOLOGY

The date of the erection of the Northwest Stoa cannot be determined accurately, since nothing is known of the building from literary sources and no concrete excavatory evidence was forthcoming. It is dangerous also to date the building on purely stylistic grounds, since it belongs, in general, to a period when such criteria are apt to be uncertain. From other observations at Corinth, notably in the region of the Peribolos of Apollo and the great South Stoa, it appears that during the latter part of the Hellenistic period there was a very considerable amount of building activity, somewhere around the end of the third and the beginning of the second
century b.c. The Stoa may well belong to this period, and the profile of the cyma reversa mouldings at the top of the geison and below the geison seem to confirm a date nearly at the turn of the century. ${ }^{19}$

The first destruction of the building is safely placed in 146 в.c. and ascribed to the work of Lucius Mummius; its restoration should have occurred in the early years of the Roman re-occupation of the city, even before the construction of the Basilica on the west side of the Lechaion Road, about the time of Augustus, since the Basilica was indented at the southwest corner so as to avoid impinging on the reconstructed Stoa.

No definite date can be given for the building of the middle parallel wall at the east end, save that it must have been erected before the abandonment of the first Basilica. The east end of the Stoa may have been rearranged toward the latter part of the first century after Christ, possibly before the earthquake of 77 , or it may be suggested that the erection of the middle wall, and a front wall on the stylobate, replacing the first six columns, is the work of the period immediately after the earthquake, and preceding the subsequent erection of the second Basilica.

It is in this short period that we must place the construction of the web walls ${ }^{20}$ between the western ten columns of the Stoa and just after this, the filling in of the west end of the street overlooked by the colonnade. In the fill below the floor of this area, approached by steps from the south, the latest objects cannot be dated later than the end of the first century, but approach it nearly. The great flight of steps in the west end of the Stoa, giving access through its western wall to a sort of cryptoporticus that in turn led to the market place is the next step, following very closely after the construction of the web walls.

Thus far the central part of the Stoa was exposed, and it was not until the erection of the Second Basilica that the plan of building shops in front of the now much curtailed and undoubtedly shabby building evolved. The Northwest Shops may in all probability be assigned to the same general building period as the Basilica in its second phase, and thus be given a date early in the second century, a time when much of Roman Corinth, as it was to last through the remainder of the Imperial period, took form.

As has been observed above, the placing of the shops is motivated by some limiting factor at the west and by the Second Basilica at the east. The attempt to give the façade of this Basilica a symmetrical disposition with regard to the angle of the shops on the one hand and the "good high wall," forming the eastern boundary to the court on the other has been noted above ( p .120 ). The western limiting factor must

[^35]have been the platform or terrace, with some building on it approached by the stairs running at right angles to the flight leading up to Temple D.

Since the shops effectively blanketed the Stoa and rendered the approach through the west end useless, it is probably at the time of the erection of the shops that we are to place the construction of the cross walls in the western part of the old Greek building and the filling up of this part, at least, of the Stoa. ${ }^{21}$ The accumulation of the hardpacked black silt from the roof drainage, extending over the stylobate of the Stoa, suggests that the central portions were not filled in at this time, and the squaring off of the small chamber formed by the middle parallel wall, the rebuilt wall along the stylobate, and the southwest corner of the second Basilica seem to indicate the same for the eastern end. The chamber formed between the middle parallel wall and the wall built in front of the back wall of the Stoa, a chamber which was contemporary with the Basilica in the second phase, adds additional weight to this assumption.

How much time elapsed before the roughly built rubble connecting walls behind the Shops were built and the Stoa was filled in is difficult to say, nor is the actual period important. The latrine at the west, behind Shop XIV, and the buttressed brick walls behind Shops XII and X belong presumably to this later phase.

We have seen that the construction of the arched entrance to the market place should be placed not long after the restoration of the Stoa, possibly in the Augustan period and contemporary with the first Basilica. The establishment of Temple D may be contemporary with, or even somewhat earlier than the filling up of the area at the west end of the street in front of the Stoa, that is, some time in the first century after Christ. It is perhaps significant that the orientation of the Temple and that of the steps in front of it do not agree exactly, but from the existing conditions either could have preceded the other. There are some marble fragments found near the building that can in all probability be assigned to it, and these would not appear to be much earlier than the Hadrianic period. They may, however, belong to a rebuilding of the Temple, and a study of the entire series of small Temples and monuments across the edge of the west terrace of the market place may be expected to throw further light on the question.

Finally, there is the closing in of the court in front of the second Basilica by the ornamental Façade of the Colossal Figures, the structure studied in Chapter II of this volume and there assigned to the period of the Antonine Emperors. Its erection, curtailing the eastern portion of the colonnade in front of the Northwest Shops, probably marked the final stage of the architectural development of the north side of the market place.

[^36]
## CHAPTER IV

## TEMPLE C AND THE SANCTUARY OF HERA AKRAIA ${ }^{1}$

By Robert L. Scranton

Between the archaic temple of Apollo and the archaic rock-cut fountain of Glauke are the ruins of an early Roman building as great in extent as any in the city, now so utterly destroyed as to be almost unnoticed by the casual visitor to the site. These ruins consist of part of the foundation of rubble and concrete, itself partially removed, of a temple which has been called, since its discovery in 1907, Temple C. Surrounding the temple there are the foundations of an encircling wall and colonnade from which the superstructure has been so thoroughly stripped that it has excited almost no interest since that date (Plate XVI and Fig. 86). ${ }^{2}$ It is the purpose of the present study to assemble the scanty material preserved from this originally imposing complex, and to propose a restoration that must of necessity remain in large part conjectural, but which may claim to give the essential appearance of a monument whose associations and interest will be found worthy of note.

## I. RESTORATION OF TEMPLE AND PRECINCT

The temple was constructed on foundations measuring, over-all, 11.30 m . in width and 19.00 m . in length. The substructure, as preserved in situ, is made of rubble, concrete, and miscellaneous blocks of poros stone. The foundations rest in the mass of poros chips and various débris which was used to fill the quarry on the site of which the buildings of the sanctuary were constructed; at a depth of 3.35 m . below the

[^37]
original ground level of the precinct, the foundations are bedded on the same fill, which continues to an unknown depth to the rock floor below. No block of the superstructure was found in situ; few architectural


Fig. 87. Fragment of Column Drum fragments of any sort were discovered near by, and none of those which were found can, in the nature of the case, be atiributed with absolute certainty to the building.

Of those which will be employed in the following restoration, the first is a fragment of a column drum. It has been split in halves, and smoothed at one of the resultant corners. It belonged to a drum ca. 0.80 m . in diameter at top and bottom, ca. 0.60 m . in height. It was not fluted (Fig. 87). The second is the mutilated drum of a column, re-used for a basin of some sort. Its lower diameter is $c a .0 .76 \mathrm{~m}$.; its present upper diameter is $c a .0 .715 \mathrm{~m}$. (these measurements are not accurate, because the column is too worn to make close measurements possible). It is $c a .0 .63 \mathrm{~m}$. in height at the highest preserved point. The remarkable difference in diameter at the ends may be explained by assuming that the lower half of the drum was originally plain, but the upper half had once been fluted, then later reworked in such a way that the channels were smoothed off (Fig. 88; infra, p. 136). There is also a capital from a half column. The block, 0.44 m . in height, includes part of the upper end of the column shaft, with a diameter of 0.64 m . The echinus only has been cut on this block, which has a crude clamp cutting on the top; the abacus must have been on another, higher course. The block has anathyrosis on both sides, indicating that it had been inserted into the wall at least 0.25 m . Whether or not the present back surface is original is uncertain. There are many traces of coarse plaster adhering to the channels and the


Fig. 88. Fragment of Column Drum echinus (Figs. 89 and 90). Finally a fragment of Doric cornice comprising one com-
plete mutule and one complete via was discovered near the temple foundation. The length of the mutule is 0.395 m ., and of the via 0.10 m . (Figs. 91 and 92). Neither end is certainly original; the block has been re-cut for use in mediaeval construction. Other fragments of various orders found near the precinct or in it include none large enough for a building the size of Temple C. ${ }^{3}$

The key to our tentative restoration is the cornice block and its relation to the foundation of the temple. The latter is 11.30 m . in width; the side foundation walls are each 2.00 m . in thickness. If there were no steps along the sides, and the walls of the superstructure were approximately flush with the outer sides of the foundations, the length of the frieze along the front, and hence the cornice, might have been equal to the width of the foundation, or 11.30 m . If the side walls were each 0.50 m . in thickness, and were built flush with the inner side of the


Fig. 89. Capital of Applied Column foundations, the length of the cornice or frieze may have measured as little as 8.30 m . Given the former figure, a cornice represented by our preserved fragment could have had as many as twenty-three mutules; given the latter, as few as seventeen. Within


Fig. 90. Elevation, Section, and Views from Bottom and Top of Half-Column Drum with Capital these limits it is possible to have nine, ten, eleven, or twelve triglyphs. With these figures, it would be possible to imagine a hexastyle façade with a triglyph over each column and one over each intercolumniation, or eleven in all. Another possibility is a tetrastyle façade, or distyle in antis, with a triglyph over each column and two in each intercolumniation, or ten in all.

The hexastyle system is almost impossible, because it is difficult to accept a frieze of almost exactly the same length as the width of the foundation, and the attempt to place the columns would lead to great difficulties in the matter of intercolumniation. On the other hand, a most reasonable effect could be produced by using four columns.

[^38]

Fig. 91. Fragment of Cornice with Mutule and Via

With four columns, there would be, as suggested above, ten triglyphs in the frieze. Assuming, in view of the lack of evidence to the contrary, that all the mutules and viae had the same dimensions, the cornice and the frieze would be 9.30 m . in length (the sum of the combined widths of nineteen mutules each 0.395 m . in length and eighteen viae each 0.10 m . in width). The columns would be centred on the triglyphs above them, with an interaxial distance equal to the sum of the lengths or six mutules and the widths of six viae, or 2.97 m . The corner columns may have been subjected to any of the solutions devised to meet the problem of the corner triglyph, but with no evidence pointing in any direction, it may be assumed that the corner triglyphs were not centred on the columns, but that the side intercolumniations were approximately 0.17 m . less than the centre intercolumniation (Plate XVII).

As to the columns themselves, the following tentative conclusions may be drawn. The larger fragment preserved shows no diminution, having a diameter of 0.80 m . at top and bottom. It is almost certainly, then, near the bottom of the shaft, and its diameter represents the lower diameter of the shaft. The capital from the half column will suggest approximately the upper diameter. The free-standing column would be heavier, perhaps 0.70 m . in its upper diameter. The height can be only approximated, but on the analogy of typical late Doric temples, it may be suggested as about eight and one-half lower diameters, or about $6.80 \mathrm{~m} .{ }^{4}$ The second drum pre-


Fig. 92. Isometric Drawing of Fragment of Cornice with Mutule and Via

[^39]served, with a lower diameter of 0.76 m ., may be placed a little below the middle of the column, approximately as the fifth drum from the bottom in a shaft of ten drums of varying heights.

The lower, larger portion of this drum is about one third of the total height preserved, or a little more than twenty centimetres (Fig. 88). This part is much better preserved than the upper portion, and fairly smooth. The upper portion has been irregularly worked to give an approximately smooth surface. It is probable that there were originally flutings on this part, later worked off. Thus the restored column may be supposed to have been smooth for perhaps 2.50 m . of its height, and fluted for the upper four metres.

For the eastern façade a tetrastyle system is here preferred to a distyle in antis scheme for the following reasons. In the first place, there is the analogy with the three tetrastyle temples mentioned above (p. 135, note 4). Moreover, it seems more in keeping with the general feeling for such things in the Roman period; relatively few distyle in antis temples are preserved. Finally, with these slender columns, a prostyle façade presents a better appearance than columns in antis (Fig. 93). None of these reasons is conclusive, but taken together they lead to a preference for the system as adopted.

We may turn now to the position of the half columns represented by the capital described above ( p .133 ). There is no place for half columns along the sides of the building. The frieze along the sides must have contained eighteen triglyphs, with a length of $c a .17 .20 \mathrm{~m}$. Nineteen triglyphs would make a length of almost 18.20 m ., thus allowing no space on the foundations for steps, to correspond with those on the sides. Seventeen triglyphs would give a length of about 16.20 m ., which gives too little room on the end foundations for the rear wall and the front columns. No regular spacing of columns can be devised to fit eighteen triglyphs, and we have no reason to suppose that the spacing was irregular. Thus, the half columns must have
height of shaft, 5.91 m . ; height of capital, 0.25 m. ; total height, 6.26 m . The lower diameter is 0.71 m ., the upper, 0.61 m . The column, therefore, has a height of about 8.80 lower diameters, and a diminution of almost one seventh. The temple of Dionysos at Pergamon (Richard Bohn, Der Tempel des Dionysos zu Pergamon [Berlin, 1885], also published in the Abh. Berl. Akad., 1884, phil.-hist. Klasse, I, pp. 1-11; Dinsmoor in Anderson, Spiers, Dinsmoor, The Architecture of Ancient Greece, p. 162, and in the chronological list of temples differs from the published source on unstated evidence) measured as follows: lower diameter, 0.62 m. ; upper diameter, 0.525 m .; height including base, 5.15 m . These figures give a height of eight and one-third lower diameters, and a diminution of $10 / 65$. The Cori temple dates from the first century b.c., the Dionysos temple, from the beginning of the second century b.c.

At Eleusis the hexastyle temple of Artemis Propylaia, dated in the second century after Christ, has proportions much more like the classic Greek, but it is obviously an archaizing work (Orlandos,
 of Hera Basileia at Pergamon, tetrastyle (Paul Schazmann, Altertümer von Pergamon, VI; p. 104 ; Robertson, op. cit., pp. 159, 330), is restored by Schazmann (op. cit., plate XXXIII) with a height of approximately 7.77 lower diameters, but without conclusive evidence. Its date is $c a .150$ в.c.
belonged to the rear façade. Eliminating improbable alternatives, we restore the rear façade with two applied columns in antis, against a wall ca. 0.50 m . in thickness. ${ }^{5}$


Fig. 93. The Order of Temple C as Tentatively Restored
In the proposed restoration (Plate XVII) a space of 1.00 m . is left on the flank foundations outside the walls, and a space of 0.90 m . along the front and rear. These
${ }^{5}$ This is hardly a usual plan, but it is not impossible. The temple of Zeus Sosipolis at Magnesia on the Maeander (Kohte, Magnesia am Maeander [1904], p. 141; Robertson, op. cit., p. 333), dated about 200 b.c., was Ionic, tetrastyle prostyle in front and distyle in antis behind. The temples of Asklepios at Agrigentum and of Serapis at Taormina (Dinsmoor, op. cit., p. 162; Koldewey and Puchstein, Die griechischen Tempel in Unteritalien und Sicilien, pp. 183 and 185) were distyle in antis in front, with applied columns distyle in antis in the rear. These two were both Doric. The plan of the Samian Heraion, Ath. Mitt., LV, 1930, Beilage XXVII, p. 95, shows a temple, in the court in front of the later great peripteros, with a plan identical to that adopted here. In Ath. Mitt., LVIII, 1933, pp. 229 ff., H. Schleif restores the temple as Corinthian, tetrastyle prostyle with two columns on the sides. The two columns in antis of the rear façade are shown completely round, but contiguous to the wall behind. The exact location of the antae and the arrangements of the eastern walls are said to be uncertain. The date is given as the second century after Christ.
spaces may be employed for the steps which most probably surrounded the building. Presumably there were three, although it may be remembered that the temple of Dionysos at Pergamon had only two. The exact proportions and disposition of the crepidoma are of course impossible to ascertain.

It may seem that fragments only doubtfully associated with the building have been too confidently used to restore a structure of unusual stylistic character; some may particularly suspect a Doric temple in the Roman period. But that the Romans did use the Doric order in temples is shown above, and Vitruvius (IV, iii) of course gives specifications for the use of the Doric order in temples, although he deprecates the practice, and certainly it was not popular. But Hellenistic architecture has supplied


Fig. 94. Capital of Propylon (?)
the analogies and the sources for all the innovations suggested, and early Roman Corinth, under the conditions surrounding its reconstruction, would have been a most likely place for such a structure to appear.

Surrounding the temple, but quite out of orientation with it, was an enclosing wall and colonnade (Plates XVI and XVII). The wall which ran along the front of the temenos and separated it from the road to the east leading from the agora toward the Odeion and the theatre, was ornamented on its inner face with half columns, whereas on each of the other sides there was a solid outer wall with an inner colonnade, forming a small stoa or peristyle. The enclosure was entered from the road to Sikyon by a tetrastyle Doric porch. Of this the southern half of the stylobate with setting for the columns is preserved. From the setting-lines it can be learned that the interaxial distance for the centre was 1.90 m ., for the ends, 1.70 m . Fragments of the corner column, in situ and unfluted, give a lower diameter of 0.60 m . The column must have been Doric, as it lacked a base. A fragment (rather more than half) of a Doric capital was found near at hand; the upper diameter of the unfluted column for which this capital was designed was 0.385 m . (Fig. 94). The capital has been used in the suggested restoration (Fig. 95) of the order, although a diminution
of over $1 / 3$ of the lower diameter is recognized as excessive. The half columns of the west wall, however, with 0.56 m . lower diameter, diminished 0.014 m . in the first 0.47 m . of its height (Fig. 97) ; on the assumption that these columns had a height of about five metres, the diminution must have been, if it was uniform, about 0.15 m .,


Fig. 95. Suggested Restoration of Order of Propylon
not far from the proportion suggested for the columns of the propylon. But it is difficult to make finely accurate measurements on fragmentary poros blocks; moreover, Roman work was never consistently precise in details so small. Therefore we are not justified in pressing this argument too far. A pry-hole 0.30 m . from the line of the wall of the enclosure on the stylobate of the south side of the porch indicates that half columns or pilasters stood behind the corner columns. The portico was not paved,
nor did it stand above the surrounding ground level. The stylobate was flush with the level of the earth.

The southern half of the toichobate of the east wall is preserved, and at the point where the south colonnade meets the wall there are two blocks of the superstructure in situ (Figs. 96 and 97). One of these is an orthostate of which the north end is original, although the southern part has been broken away. The block now measures 1.30 m . in length, but as the preserved north end is 1.68 m . from the line of the colon-


Fig. 96. The Applied Column Drum in Situ on the Front Wall of the Precinct
nade, this figure may be accepted as the restored length of the block. Beside it to the north is a block 0.60 m . in width ; this is left square at the bottom to a height of 0.30 m . above the toichobate, or to the level of the stylobate as preserved in the southwestern corner of the colonnade, and projects 0.33 m . inward from the inner face of the orthostate. Above the stylobate level, the inner, projecting part of the block is cut to the form of a half column 0.56 m . in diameter. The column is unfluted, and lacks a base; thus it is probably Doric. Pry-holes on the toichobate from this block to the portico indicate that similar orthostates alternated with similar half columns for the length of the wall, the half columns having an interaxial distance of 2.28 m . A half column facing inward stood at the point where the side stylobate of the portico meets the wall. A pry-hole 1.30 m . from this block, on the toichobate within the portico,
indicates that the door to the precinct was behind the middle intercolumniation of the portico, but there is no indication of its form.

The southern part of the inner façade thus had six half columns, including that which stood in line with the southern colonnade. Its total length was about 12.00 m . But the northern part was longer, measuring about 13.60 m . from the southern edge of the half column north of the door, to the line representing approximately the northern edge of the half column to be presumed as standing in line with the northern colonnade. In other words, it was approximately 1.60 m . longer than its southern counterpart. The toichobate is entirely gone, so that there is no way of knowing the intercolumniation of the half columns. But if there were six, as on the south side, the


Fig. 97. Isometric Drawing of Applied Column in Situ on Front Wall of Precinct. The Orthostate Is Completed and the Next Applied Column Is Restored in Dotted Lines
orthostates must have been each 0.32 m . longer than those on the south. On the other hand, if there were seven half columns, the orthostates would have been about 0.11 m . shorter than those of the south façade. Probably the latter solution is to be accepted (Plate XVII).

The inner colonnade is represented only by irregular remains of its foundation, excepting the western stylobate, where several blocks at the south end are in situ. Setting marks on these blocks indicate that the second and third columns had an interaxial distance of 2.39 m . Thus, the western colonnade had thirteen columns, counting both ends, and the north and south colonnades had each thirteen columns, not counting either end. These columns were probably Doric, in harmony with the half columns on the east wall.

Part of the gutter, cut in poros blocks, and laid along the western colonnade, is preserved; presumably it extended along the northern and southern stylobates, if not along the western wall.


Fig. 98. View of Ror:k Scarp along Southern Edge of Peribolos, with Cuttings for Foundations of Wall

The bedding for the southern exterior wall was made on the solid rock which showed as the edge of a quarry scarp along the southern part of the building (Fig. 98). The builders of the colonnade evidently cut away a certain part of the edge of this scarp which projected above ground level within the projected line of the southern wall, but they made no modification in previous wall beddings and cuttings which existed outside this line. Where no previous cuttings existed, as at the southwestern corner, they did not even smooth off the rock to afford a bedding, but laid the foundations on undressed rock. What seem to be beam cuttings at intervals of about 1.30 m . along the lower shelf of the scarp may have supported the beams for a wooden floor of the hall.

On the face of the scarp which the builders made in cutting the rock down to precinct level, however, they left buttress-like projections of rock roughly 0.60 m . square, at intervals of ca. 4.80 m . (Plate XVI). These correspond to alternate columns of the colonnade, and may represent square pilasters carried around the inner wall of the peristyle. The other exterior walls may have been similarly treated, although the foundations afford no indication, perhaps because nowhere are they preserved to sufficient height. The west wall seems even too narrow ( 0.50 m .), but that is not sure proof; the half column of the east wall overhangs the foundations by 0.25 m .

The western and northern outer walls of the enclosure were carried on rubble foundations of small unworked stones with occasional broken building blocks. A small amount of cement was employed.

A most significant feature is the western wall of the enclosure at the point where it becomes one with the eastern face of the fountain of Glauke. Long before the destruction of Corinth, the Greeks had quarried deep below the ground level in reference to which the fountain house was constructed, and the ground level of the later precinct. This is indicated by the existence of the Greek channel cut along the face almost a metre below the stylobate level of the colonnade. But the orientation of the eastern face of the fountain did not agree with the line of the west wall of the colonnade. The southeastern corner of the rock mass projected within the line desired for the western wall. The intrusive part of the rock mass was therefore cut away, so that its new face served as the face of the wall. Where the natural rock did not reach as far as the inner line of the wall, a rubble and concrete foundation was poured against the natural rock. The cement bedding for the wall is preserved on the rubble mass, and indicates that from the southern end of the built wall, where the natural rock first began to recede outside the precinct area, the built wall was very thin, becoming thicker to the north. Thus the western wall was of three parts: the southern, which was built on a normal rubble foundation; the central, which was the quarried rock face of the reservoir structure, and the northern, which was built against the receding face of the rock in such a way as to continue the straight line of the other sections of the wall (Figs. 99 and 102).

In that part where the quarried rock face of the fountain house serves as the wall, a gaping hole opens into reservoir I. It is barely possible that this opening was
a door or random opening broken through by mediaeval builders, at a point where the Romans had weakened the wall by quarrying too close. But it is perhaps more probable that the Romans themselves opened the hole. At the lower southeastern corner of the reservoir they had cut away the side of the rock to such an extent that less than a centimetre of rock could have been left sealing up the chamber. If we continue arbitrarily across the broken part the planes of the inner walls preserved elsewhere, it becomes obvious that the workmen must necessarily have broken through to a considerable extent at the top. For the angle of the surface outside, inclining toward the interior of the fountain, is greater than that of the side of the reservoir. A plumb bob held from the edge of the top of the opening swings some five centimetres within the space of the chamber at the level of the bottom of the opening. Further evidence may be seen in another fact. The southernmost part of the rock-cut shelf above which the face of the rock was cut back in line with the wall, is lower than that part immediately in front of the opening. A step of some 0.50 m . separated the two levels. The inner corner of the riser of this step has been cut through into the fountain leaving a crevice almost 0.02 m . wide. It would appear as though the workmen broke through the wall of the reservoir above the present bottom of the opening. At the same time they prepared to break through even lower down than they actually did, but found


Fig. 99. Drawing of Foundations of Rear Wall of Peribolos against the Reservoir Chambers of Glauke (Levels Relative to Stylobate of Apollo Temple) it unnecessary (Figs. 100 and 102).

It is barely possible that this opening was accidental, and that irregular crevices had been made at the extreme southeastern corner of the reservoir by careless workmanship. The cracks may then have been plastered over; although there is no trace
of stucco here. On the other hand, there was no apparent reason for bringing the wall of the temenos so dangerously close to the fountain house unless an opening was actually desired. Moreover, if the original crevice-like opening had been made by accident, one would have expected that the plan would have been modified so as to avoid the possibility of enlarging the break. But, on the contrary, the entire corner was sliced off in one homogeneous operation. What would seem to be such utter carelessness in the mutilation of a public monument and a valuable source of water should have some reason, and there is no real objection to the supposition that the builders of the temenos desired a door or opening of some sort into the reservoir of the fountain of Glauke.

We may point briefly to a few final points about the arrangement of the precinct. A tunnel, cut or at least remodeled for the purpose, under the porch of the fountain, allowed the drainage from the temenos to escape at the northwest corner into the drains in front of the fountain house.

On the older plans (e. g., Corinth, I, i, pls. III, IV, etc.) walls are indicated outside the precinct as described, and apparently oriented with it, as though they belonged to rooms opening off the colonnade to the west and north. These no longer exist, and were most probably Byzantine. Still, it is noteworthy that the western wall of the precinct in particular seems narrow for an exterior wall, and it is possible that there were


Fig. 100. Detail View of Lower Part of Opening Through East Wall of Glauke rooms opening off the colonnades, somewhat similar to those of the heroön at Kalydon. ${ }^{6}$

A final feature of the temenos leaves only doubts as to its original purpose. Behind the temple, exactly at the central point of the western colonnade with which it is parallel, is a rectangular pit. It measures 3.00 m . by 1.90 m ., and its floor was 1.60 m . below the level of the stylobate of the colonnade (Fig. 101). It is lined with small stones well covered with a coating of plaster, and has a floor paved with tiles covered with the same material. This original plaster coating, however, does not seem to have been watertight. It is rather porous in texture, and is unevenly, crudely applied; nor does it line the walls or floor completely. Clinging to this plaster lining are irregular masses of plaster, never smoothed out. On the analogy of a somewhat

[^40]similar structure near the Odeion, Dr. Broneer has suggested that the pit may have been for the preparation of lime and stucco used in the decoration of the temple. The lumps of plaster adhering to the walls favor this suggestion, and it is possible that at some period of its history the pit was so used.

On the other hand, the orientation of the pit with the colonnade seems far too precise to have been accidental, nor does any reason suggest itself for locating a plaster pit with such care. Although the walls of the pit are weakly built, it is barely


Fig. 101. View of Pit Behind Temple C possible that they were lined with marble slabs or a finished coat of plaster. Then the pit might be thought to have been a ceremonial bath, on the analogy of devices for such a purpose at Samos. ${ }^{7}$ No arrangements for draining it are preserved, which might militate against the suggestion. A definite solution cannot be offered here.

The date of the building may be determined approximately by two considerations. The first relates to the fill in which the temple was built; the second to its relationships with neighboring structures. In Greek times, the region to the east of Glauke as far as the temple of Apollo had been quarried to a greater or less extent. The classical or Hellenistic Greeks had cut the eastern face of the fountain house as a quarry scarp, to a depth not ascertained. The working of the entire surface is homogeneous, and this must all date from Greek times. ${ }^{8}$ The quarry was worked again in the early Roman period, but was soon filled. In this filling the foundations of the temple were laid. Pits dug into the fill produce great quantities of Greek sherds ranging in period from as early as geometric times to types as late as the destruction of the city. There is no stratification, but the earth, including the sherds, was evidently gathered from various places. There is, however, a small percentage of sherds which are definitely Roman. Judging from results produced by pits dug in connection with this study, perhaps two percent of the pottery is from Roman times. These sherds are for the most part Samian and Pergamene. Nothing is later than the early part
${ }^{\text { }}$ Buschor, Ath. Mitt., LV, 1930, p. 32.
$\rightarrow$ G. W. Elderkin, " The Fountain of Glauce at Corinth," A.J.A., XIV, 1910, p. 22.
of the first century after Christ except one imitation Arretine sherd with the signature CAS DO. This is perhaps a little later, but it was found close to an intrusion and may be an infiltration. ${ }^{9}$

There is strong reason to believe that the temple was actually contemporary with the filling of the quarry. In pits dug in search of a footing-trench for the construction of the foundations, it was discovered that the masses of poros chips and other materials which constitute the fill were packed tightly against the walls. Lines of stratification, which indicated the course of the falling earth as it tumbled from the carts in heaps, led directly against the masonry. On the other hand, the cement in which the stones and larger blocks were set, was smoothed off, although carelessly, where it was forced from between the joints by the weight of the stones above. Thus it is not a question here, as in the Odeion, ${ }^{10}$ of digging a trench and filling it completely with material poured in from above. The masons must have had room in which to wield their trowels in striking up the cement at the joints. The explanation for this must be that the quarry was partially filled; then masons began to lay the foundation walls, filling earth against them as they rose. We would thus suggest the late Augustan or Tiberian period for the temple.

The situation is different in the foundations of the colonnade. Here little cement is employed, and small stones are used together with irregular broken blocks. Again, no footing-trench was discovered along the course of the foundations. But the irregular disposition of the stones, of which some project farther than others, and the fact that occasional ragged masses of mortar protrude from between the joints, suggest that another method was followed. Apparently a trench was dug the desired width of the foundation. The masons thereupon either dumped the stone in from above, together with mortar, or descended into the trench and laid the blocks more or less carefully in place at their feet. Later the earth settled somewhat, and by its own weight filled in whatever cavities existed where the stones did not actually meet the sides of the trench.

If this analysis be true, as it seems to be, the peribolos would certainly be later in construction, and possibly appreciably later in date. That the latter is not only possible but eminently probable is indicated by the following observations. It has been noticed that the inner façade of the east wall of the temenos was not symmetrical. There were six columns south of the door, seven north of the door. The entrance was not in the centre of the wall, but it was directly before the entrance to the temple. A study of the plan will show other peculiarities of the colonnade in harmony with these irregularities. As the western colonnade is 1.30 m . shorter than the eastern, the north and south colonnades converge toward the rear. These variations from the square, scarcely noticeable in themselves, nevertheless partially obscure the fact that the temple itself

[^41]is distinctly different in its orientation from the enclosing walls and colonnades. That the Romans, usually so orderly and exact in their planning of buildings, should have designed as part of one original plan two buildings so different in orientation may be doubted. But, on the other hand, the temple may have been built first and given a general orientation toward the east and the agora. Later it might have been decided to surround the temple with colonnades and a wall. The orientation of the east and south walls would have been determined respectively by the road passing from the agora towards the theatre, and the quarry scarp along the south; the irregularities enumerated above would have been designed to mitigate the effect of asymmetry.

An examination of certain buildings structurally related to the complex under discussion will lead to the same conception of the date of its construction which the sherds have suggested.

Against the east wall of the temenos facing the road to Sikyon, was built a small gateway supplying a symbolic entrance to the agora for this road. The foundations of the western pier of the gate are obviously fitted into cuttings in the foundations of the temenos wall, and cannot be earlier than the wall. The toichobate course of the temenos wall was rabbeted for the reception of marble slabs with which the pier of the gate was faced, and a sort of anathyrosis was cut in that block of the toichobate against which was to be fitted the pier of the gateway. It cannot be determined definitely whether the anathyrosis was cut after the temenos wall was finished, or whether the gate and the precinct were built simultaneously. It is probable that the gate is approximately contemporary with the wall of the sanctuary.

The gateway, in its turn, was supplied with steps through its eastern portal, which led down into a landing on the broad flight leading up to the Sikyonian road out of the old Northwest Stoa. The portal steps are not part of the original plan of the gateway, but were rather rudely cut into the foundation blocks of the eastern piers at some time after the completion of the gate. They are certainly not earlier than the broad flight leading out of the northwest stoa, but are probably contemporary. The steps have been dated a little before the end of the first century after Christ. ${ }^{11}$ The propylon is thus earlier than that period.

There is reason, however, to believe that the Northwest Stoa was repaired in its Hellenistic form soon after the re-occupation of Corinth. Moreover, the foundation blocks for the eastern pier of the gateway are bonded with an addition to the terrace wall at the western end of the cul-de-sac court which lay before the western end of the Stoa, and which would seem to be of the same date. The addition to the terrace was apparently designed to raise the level of the road at this point to that at which it passes through the gate. The repair of the terrace wall in question seems to belong to the period of reconditioning the Stoa. The foundation blocks of the western pier of the gate, finally, are fitted against and partly around the westernmost column of the Stoa. It would appear that if the gateway had been built after the.reconditioning

[^42]of the Stoa, the entire southwestern corner of the Stoa would of necessity have been rebuilt. This, of course, is not impossible, but there is no other evidence for such a reconstruction of the corner of the building. Without positive evidence, then, it is possible to assume that the propylon was built as part of the program of restoring this corner of the agora early in the century. Thus the precinct enclosure would be placed at approximately the same time, with the temple slightly older; a date which agrees with the argument presented above.

There is no suggestion of any rebuilding or repair of either temple or colonnade enclosure. In view of the poor preservation of these buildings, one could scarcely expect anything else. Nor is there any evidence for the date of the ultimate destruction of the buildings. The earliest architectural activity on the site after the construction of the peribolos is a group of mediaeval house walls. On that circumstance may rest the conclusion that the early Roman complex stood through all the earthquakes and wars of Roman Corinth until the end of the classical period. Otherwise, on so large a site, some late Roman construction might have been expected.

## II. THE CULT PRACTICED AT THE SANCTUARY

For the dedication of the sanctuary no direct evidence is at hand. The excavators found no temple deposits, inscriptions, statuary, or evidence of any sort that might be associated with any particular cult. Nor does Pausanias himself give any direct





 $\pi \rho o ̀ s ~ \tau \hat{\varrho} \theta \epsilon \dot{\alpha} \tau \rho \omega \sigma \phi^{\prime} \sigma \iota \nu \dot{\epsilon} \sigma \tau^{\prime} \nu \nu--$. The customary interpretation of these passages of Pausanias ${ }^{12}$ entails the assumption that Pausanias passed along the road in front of Temple C. It is curious that he failed to mention the sanctuary in his account of this area. If he mentioned it elsewhere, the reference, out of place, can no longer be detected, and until some kind of direct evidence has been found, no identification of the sanctuary can be established beyond question.

We may, however, turn for a clue to the most peculiar part about the precinct, which has come to our attention-the opening into the fountain of Glauke (Figs. 100 and 102). As we do know something about the fountain, if we could determine the relation between it and the precinct, some light might be shed on the problem of the cult. It may be no digression to consider the use of this opening.

Possibly, of course, it was merely felt desirable to have a draw-basin in the

$$
{ }^{12}(\rightarrow \text { A.J.A., I, 1897, p. } 46 \rightarrow \text { ibid., IV, 1900, pp. } 458-459 \text { and } 471-475 \text {; Corinth, I, i, p. } 132 \text {; }
$$ ibid., X, p. 1.


102. View of East Face of Glauke, Showing Opening into Chamber I
(All Other Cuttings on the Upper Part of the Face Are Mediaeval)
shadow of the colonnade where people could rest or lounge in comfort. But it could not have been a public source; with great draw-basins just around the corner to the east, there would be no necessity of making the temple precinct a gathering place for housewives as they gossiped at their work.

A more reasonable explanation would be that water was needed in the ritual of the cult, and a draw-basin was installed for the convenience of the priests. But there are some arguments against a solution of the problem so simple as this. Had it been a matter of mere water for the ritual, pipe lines or channels could have been led from the proper draw-basins of the fountain, or from any convenient part of the water supply system, to the sanctuary. Indeed, a controllable flow of water could have been had anywhere within the temenos by tapping the supply line near the upper end of Chamber IV, a system that would have been not only more convenient in itself, but would have eliminated the possibility of an embarrassing lack of supply when Chamber I was drained for cleaning. Simplest of all would have been a door through the north wall whereby the priests could have taken water from the regular basins.

With other more probable means for supplying the precinct with water, there must have been strong reason for inflicting material damage on the fountain house. This at least hints at some necessity on the part of the cult for having not merely water, but immediate access to the waters of Glauke in particular.

Accepting tentatively this line of argument, one may imagine that whatever cult was practiced in the temenos of Temple C had some relation to the fountain and the legend belonging to it. The fact that the temenos is a Roman foundation would seem immediately to deny such connection, for it is hardly reasonable to suppose that a cult established originally in Roman times could have developed an intimate bond with a structure and a myth originating in archaic Greek times. If there was any cult relation between fountain and precinct, we must assume that Temple $C$ was the heir of an archaic Greek sanctuary intimately associated with the fountain and the legend, and that the archaic sanctuary was destroyed with the Greek city in such a way that it could not be rebuilt on its original site.

On this hypothesis we must look in the immediate neighborhood for some sanctuary of the pre-Roman period which required access to the waters of Glauke, but which was destroyed by Mummius in such a way as to cause the Roman heirs to the cult to select the virgin site now occupied by Temple C. Such a sanctuary is not to be found immediately to the north of Glauke, for that was always devoted to the uses of the fountain. Nor could it have been to the south, for there, too, had been a quarry, later filled in by the early Romans. The region west of Glauke is perhaps too far from the site of Temple C, particularly with the fountain house intervening, to have been the antecedent of the Roman precinct. But, finally, the earlier cult place may have been on top of the fountain (Figs. 104 and 105).

As is well known, the fountain of Glauke was not built, but was made by the quarrying of the rock from a natural ledge into such a form that it stood practically


Fig. 103. Plan of Cuttings on Top of Fountain of Glauke (Levels Are Relative to the Stylobate of the Temple of Apollo)
free, a block of native rock enclosing four great and two lesser cavern-like reservoirs. ${ }^{13}$ The walls are of varying thickness, and the thickness of the roof ranges from about 1.50 m . to over 2.00 m . Although at present, since the two western chambers have completely fallen in, the remains seem effectually isolated from any of the surrounding territory, it is apparent that when the roof of Chamber IV was in position, the ground level, or rather the rock level, must have sloped down only a little toward the southwest. The dispositions directly west of the fourth chamber are now lost because the western part of the fountain has been ruined, but there is reason to believe that one of the causes of this destruction was the careless quarrying of the rock from that direction at a period long after the original construction of the fountain. Thus we can visualize the ancient top of Glauke as standing as a well-defined height above the steps in front, sharp and clear above the eastern face, and probably so above the land to the south, but sloping rather gently toward the west and southwest. On the roof ${ }^{14}$ of the two chambers still preserved are to be seen the remains of what must originally have been a fairly elaborate series of rock cuttings extending over the fountain top (Fig. 103).

Along the eastern crest runs a ridge of rock about 0.80 m . in width. This was originally much higher, for its upper surface is such as would have resulted if a wall of living rock had been broken off, the stone splitting on its natural, sloping lines of cleavage. The eastern edge of the ridge in its present condition has a series of rough cuttings designed to receive the upper ends of poles to support a lean-to roof for a room to the east. These belonged to a mediaeval house. Along the ends of these cuttings runs a roughly hacked V-shaped channel, probably to keep rain water from pouring down under the roof.

Approximately 3.50 m . from the present northern edge of the roof, a second ridge, extending east to west, meets the first at right angles. This, likewise, must have been higher, for the same indications of splitting extend over its northern end. Where these two ridges meet, their upper edges have been chipped off. This is interpreted to indicate that once walls of living rock stood along the lines now marked by the ridges, and that horizontal grooves were cut near the bottoms of the walls, preparatory to the insertion of wedges with which the upper part of the walls were split off. The walls must here have been at least a metre in height, because the process of splitting that has been indicated could have been intended only to remove blocks of useful size. About 0.50 m . from the juncture of the two walls, on the east-to-west ridge, there are cuttings for a small door. This door cannot belong to the mediaeval house which was made in the fountain, for the cuttings are totally unlike those for any Byzantine or Roman doors known. ${ }^{15}$ Moreover, the horizontal grooves which have been attributed to the process of breaking down the wall, extend partway along the eastern jamb of

[^43]

Fig. 105. View of Top of Fountain of Glauke from South. 1937
the door, indicating that the doorway belongs to the period when the walls stood to their original height; hence, most probably, the door was part of the original construction. The total length of the east-west ridge as preserved carries it over the Chambers I and II. Even before Chambers III and IV had fallen, the ridge over them had been destroyed by quarrying, so that its original total length and western terminus cannot be learned. Just to the north of the present preserved end is cut an oval hole about 0.05 m . deep, 0.20 m . wide, and 0.35 m . long.

Three metres south of the ridge with the door there seems to have been a third ridge, parallel with it. This is no longer preserved except at its juncture with the north-to-south ridge along the eastern edge. At this point about twenty centimetres of its northern face can be seen, preserved to a height of from one to ten centimetres.

These three ridges, all of which may be assumed to be the vestiges of walls of living rock, refer to the same floor level. Where the ridges are preserved to a height of more than ten centimetres, it can be seen that they are more carefully finished above that level than below it. Above, they are fairly smooth; below, the ridges are rather roughly picked, like the rock floor in general.

The southern half of the roof is covered with quarry marks. All along the southern edge the rock has been smoothed for a wall bedding about 0.50 m . wide. Where this bedding meets the eastern, north-to-south ridge, the latter has been smoothed to receive the end of a block that would rest on the bedding. Except for this preparation, the lower 0.60 m . of the ridge is dressed only roughly. Higher than that the entire west face of the ridge is dressed smooth. This level is the same as that of the bottom of the smooth dressing observed on the ridges in the northern half of the roof. The implication is that all the quarry marks on the south half of the roof were once covered with earth, held by a wall along the southern edge, and that the entire roof was thus brought to a consistent level. A roughly cut channel five to ten centimetres deep extends along the inner northern line of wall bedding, apparently for drainage, to prevent water from seeping through the joint.

At the south end of the roof, a rectangular hole has been cut into the second chamber of the fountain. ${ }^{16}$ Two steps ascend towards the south in this opening, and a third has been cut to the east so that the stairway of three steps makes a turn. The hole itself is 2.00 m . long and 1.75 m . wide. The north end has been cut in such a fashion as to supply a vaulted ceiling for the continuation of the vestigial flight of stairs downward into the reservoir. Along the western edge of the top of the opening is a small ledge or cutting as for the reception of a covering; and on the east edge is a rough hole into which the fastening for the cover might have been let. It is probable that the curved ceiling for the continuation of the steps was made in mediaeval times, when Glauke was a three-storied house. The chisel marks are quite plain and entirely different from those anywhere else on the top of the fountain. On the other hand, the three preserved steps are weathered so that they no longer show signs of working,

[^44]but they do not have the appearance of mediaeval workmanship. Moreover, the rough drainage channel along the wall bedding has been bent in its course at the point where the stairs approach it, as though to avoid the steps. Thus, the three steps would seem prior to the channel, and probably to the wall. If, as seems most likely, the wall is part of the same programme as the living-rock walls on the northern half and the other Greek structural features on top of the fountain, the steps must be part of the same scheme.

Dr. B. H. Hill suggests that the opening is original with the fountain, and is to be explained by the necessity of descending into the rear end of the reservoir in order to control the passage of water through the channel that extends along the side of the rear part of Chamber IV, and the rear wall of Chamber III. ${ }^{17}$ This is definitely possible, and it may well be that this use was habitually made of the opening, in addition to that which will be discussed later in this study. This explanation, however, does not account for the related cuttings. Moreover, in view of the fact that part of the operation of the fountain must have been conducted by diving and swimming, the sinking of such a hole through the solid rock seems an elaborate expenditure of energy, if designed only to accomplish a purpose that might as easily have been effected by entering the reservoir from the front. Nor is the particular function of the steps easily explained as part of a simple manhole.

The complex of rock cuttings described above would seem most probably to date from the archaic period, contemporary with the construction of the fountain and its reservoirs. The hole with its steps can hardly be earlier, for it was evidently meant to give access to the reservoir. The rock-cut walls might be earlier, but it is not probable that they could be later than the fountain. They imply that they were cut when the rock stood at least a metre higher than at present, but after the fountain was once put into operation, large scale quarrying operations on its roof would not have been likely until the destructive Roman quarrying.

The purpose of these cuttings probably can never be established beyond conceivable doubt. One may reasonably dismiss the explanation that they belong to private houses; their shape does not support that view, nor does their extent. Elderkin's suggestion that the transverse ridge has to do with a superstructure completing the façade of the fountain house cannot be demonstrated, nor is it even plausible, in view of the distance from the front of the building and of the smoothed rock to the rear. There may be some truth in the original suggestion of Weller, who first cleared the area, that they all have to do with a sanctuary. ${ }^{18}$ Certainly there is no contrary evidence, and in the development of the hypothesis illuminating material may come to light.

In summary, we see an archaic Greek sanctuary above the fountain, with direct access to the water; and a Roman sanctuary beside the fountain, also with access to

[^45]the water. Although so far nothing pertinent is known further about either of the sanctuaries, we have the evidence of Pausanias that the fountain of Glauke was connected with the Medea legend, that on the way to the Odeion, near-by ( $\pi a \rho a ̀ ~ \delta \grave{\epsilon}$ av̇тó), were the $\mu \nu \hat{\eta} \mu a$ of Medea's children and a statue of Terror set up in memory of events resulting from their murder. It may therefore be of some profit to investigate the personality and associations of Glauke and the fountain.

Glauke was, according to all but the earliest versions of the story, the daughter of Kreon, king of Corinth, at the time that Jason and Medea arrived to take up their residence in the city after the conclusion of the voyage of the Argo. There are also reports to the effect that she was the daughter of Hippotes, ${ }^{19}$ but as he was by some considered the son of Kreon, the difference is not material. If, however, she was the daughter of Hippotes, there is perhaps some reason for identifying or associating her with the Nereid Glauke, for Hippotes has been identified as a sea divinity. Her significance in the present discussion arises from the fact that according to most of the stories ${ }^{20}$ she was the cause of a series of tragic incidents from which ultimately grew an elaborate cult.

For after Jason and Medea had been in Corinth for ten years ${ }^{21}$ and she had borne him children numbered according to different reports, two, three, or fourteen, ${ }^{22}$ Jason either fell in love with Glauke and desired to marry her, or decided upon the union in order to strengthen his position in Corinth, and his children's. ${ }^{23}$ Whatever his reason, the resultant casting aside of his wife was the cause of a passionate grief in the heart of Medea, soon replaced by an equally passionate hatred. To revenge herself upon her faithless husband, she determined to destroy his bride-to-be in a terrible manner. Pretending acquiescence in Jason's plan, she prepared in secret a garment made of the finest stuffs, such as might proudly be worn by a princess on her wedding day, but impregnated with a charmed drug calculated to annihilate the wearer in a burst of flame. This she sent by the hands of her children to the bride on the morning of the nuptials.

At the moment when the girl, having finished her preparations, threw the garment over her body, the poisons did their work and she was instantly wrapped in raging flame. Maddened by the agony of the torture so inflicted, she fled from the palace followed by her horror-stricken father, who desired to save her. He, in his attempt to snatch from her the instrument of her approaching death, was involved also in its deadly charm and was consumed in flame. Glauke succeeded in throwing herself into
${ }^{19}$ Schol. Euripides, Medea, 19. See also article in Pauly-Wissowa, R.E., s. v. Glauke (5), for other references.
${ }^{20}$ In Schol. Euripides, Medea, 273, the account of Kreophylos has no mention of Glauke.
${ }^{21}$ For the following story, see Farnell, The Cults of the Greek States (1896), I, p. 201, with notes, for general account. Also the report of Pausanias, II, 3, 6 f., with commentary by Frazer, and Diodoros, IV, 54; Apollodoros, Bibliotheca, I, 9, 28. See also Nilsson, Griechische Feste, p. 57 ; Odelberg, Sacra Corinthia, pp. 10 f.; Cook, Zeus, I, pp. 244 f.
${ }^{22}$ Euripides, Medea, 273, with schol. ad loc. (quoting Parmeniskos) ; Diodoros, IV, 54, 1. Cf. also Pausanias, II, 3, 6 ff.
${ }^{23}$ Diodoros, IV, 54, 3; Euripides, Medea, 550 ff.
a spring, hoping to find relief, but to no avail. She, like her father, was killed. But, according to the tradition, the fountain into which she threw herself was thereby immortalized, and her story was related in connection with it to the day of Pausanias. ${ }^{24}$

According to the Euripidean version, in order to revenge herself further upon her already stricken husband, Medea slew with her own hand their children. But this tale was accounted even by the ancients a later fabrication to absolve the Corinthians themselves of the crime of which the previous tales had accused them. ${ }^{25}$ For, according to these earlier accounts, ${ }^{26}$ Medea prepared to flee, but her children, being too young to accompany her, she placed in a sanctuary on the altar of Hera Akraia at Corinth, in order to keep them from the vengeance of the angry mob. Previously, soon after their births, as some reported, she had taken them to this sanctuary to dedicate them to Hera and gain for them immortality. ${ }^{27}$ Thus she might rest doubly sure of their safety under the immediate protection of the goddess.

But the Corinthians were aroused to such fury that they no longer regarded even the rights of sanctuary or the inviolability of sacred places. Bursting into the temenos of Hera Akraia, they slew the children on the very altar. ${ }^{28}$ Here they were said to have been buried. In vengeance for the double crime of murder and violation of sanctuary, the dead children visited upon the people of Corinth a plague of such virulence that countless numbers of young children died. At first, not comprehending whence this calamity had fallen upon them, the Corinthians consulted an oracle, who commanded them to establish a cult of the dead children of Medea at their tomb, and carry it on annually for all time. This having been accomplished, the plague abated, and the Corinthians knew that their crime had been atoned for, and that the children of Medea were appeased. In memory of these awful happenings, they set up in the sanctuary where the rites were carried on a statue of Terror, being, according to Pausanias, a woman of horrible aspect.

This, in brief, is the story of the foundation of the hero cult devoted to Medea's children. Before discussing that cult, it may be well to summarize the information gleaned so far from the legend concerning our immediate problem. It is this: The children were buried in the sanctuary of Hera Akraia, ${ }^{29}$ and in that place was per-

[^46]formed the ritual in honor of them. ${ }^{30}$ Pausanias saw a $\mu \nu \hat{\eta} \mu a$ of Medea's children near the fountain of Glauke; if this can be accepted as the original tomb, the sanctuary of Hera Akraia should be near it. If it is only a monument in honor of the children, its location as given by Pausanias may or may not have significance for us. But the fact that the statue of Terror was seen by Pausanias, and mentioned in connection with the $\mu \nu \hat{\eta} \mu a$ of the children which he saw, would imply either that the statue was in its original position by the original tomb, or that both had been not far distant. It is possible, but not probable, that the apparatus of a cult would be transferred far to adorn a mere memorial. Thus we may be justified at least in the attempt to seek in the region near the fountain the sanctuary of Hera Akraia, with the cult of the children of Medea.

Concerning the cult practiced in the sanctuary of Hera Akraia we know little that is definite. In the original cult of Hera, ${ }^{31}$ known also to have been practiced elsewhere, we are told that a goat was sacrificed to the goddess. It was led to the altar, and its path was so contrived that it should stumble upon or otherwise reveal the sacrificial knife, thus being responsible for its own death. In this meagre bit of information there is little from which to infer anything as to the nature of the remaining part of the ceremony or anything as to the physical character of the sanctuary.

For the cult of Medea's children, practiced in the same temenos, we have rather more definite information, and much from which to draw inference. The facts are these. Every year, seven maids and seven boys were sent to the sanctuary of Hera Akraia, where they lived during the course of the year. Annually sacrifices were held in honor of the heroes; the fourteen children wore black clothes and cut their hair. ${ }^{32}$ The rites were melancholy, ${ }^{33}$ and included mysteries as well as sacrifices. ${ }^{34}$

For the inferences we may begin with the fact that the cult of Medea's children was basically one of hero worship. We may assume that the ritual in honor of them included a mimetic dance, in which would be represented some of the more important incidents in their lives, notably those leading to their elevation to the rank of heroes, and the establishment of their cult. Pantomime or dramatic dances seem to have been held at the graves of heroes, ${ }^{35}$ and there is no reason to believe that the children of
 the preceding note.
${ }^{31}$ See Farnell, loc. cit.; Frazer, Pausanias, III, p. 27 (ad II, 3, 6). Zenobius, I, 27 ; Apostolius, I, 60 ; Diogenianus, I, 52 (in vol. I of Leutsch and Schneidewin, Paroemiographi Graeci, 1839) ; schol. Euripides, Medea, 1379. See also p. 158, note 21, for other modern references.
${ }^{32}$ Schol. Euripides, Medea, 273 ; Pausanias, II, 3, 7.
${ }^{33}$ Schol. Euripides, Medea, 1379. Philostratus, Heroica, XIX, 14 (ed. C. L. Kayser, 1871, vol. II, p. 207).

${ }^{35}$ Sir William Ridgeway in The Origin of Tragedy (1910), pp. 26 f., argues with fair plausibility that mimetic dances were part of hero cults. Although Pickard-Cambridge (Dithyramb, Tragedy, and Comedy [1927], pp. 135 f.) brilliantly disputes the theory that tragedy developed from

Medea were not so honored. Indeed, the statement of the scholiast cited above definitely to the effect that the rites included mysteries, would by analogy with other better known mysteries, as those of Demeter and Adonis, indicate that some such performance took place. ${ }^{36}$

It must now be recalled that the original motive of the cult was to appease the wrath of the children for their own murder after their mother's killing of the king and his daughter. Thus any mystery play would represent not only the actual killing of the children, but, with the greatest probability, the events leading up to it. We may assume that the mime began at least with the preparations for the wedding of Jason and Glauke. Presumably there was represented the presentation of the magic robe, and, granting the original premises, it can scarcely be doubted that the mystery included the incident of Glauke throwing herself into the spring. A legend telling of this act would scarcely have continued in flourishing existence so late as the time of Pausanias had the accepted hieratic version contradicted or failed to include it. Medea's placing her children in sanctuary must have been represented, possibly also her flight, and certainly the rush of the infuriated Corinthians to kill the helpless children on the altar beside which was erected their tomb where the actual memorial rites were performed. ${ }^{37}$

Here the important incident of the drama is the scene in which Glauke cast herself into the fountain which came to bear her name. ${ }^{38}$ Maas, writing on Glauke in the
these dances, and doubts (ibid., p. 139) the existence of such mimetic dances at tombs, still Hero-


${ }^{36}$ Farnell, op. cit., III, pp. 129 ff., especially p. 131 ; cf. Lucian, De saltat., 15 : 'E $\hat{\omega} \lambda^{\prime} \lambda^{\prime} \gamma \epsilon \iota \nu{ }^{\circ} \tau \iota$
 well-authenticated particular instances of mimetic performances in cult practices, in which the legend of the hero or god is represented more or less completely by more or less literal mimetic actions on the part of the priests and worshippers. Among these are the ceremony of the Kouretes in Crete (Strabo, X, 468; the context here is also of interest) and three festivals at Delphi (Plutarch, Quaest. Graec., 12, with De defectu orac., 15). In one of the Delphic performances a doll or figurine was used to represent the heroine, Charilla. See further Haigh, The Tragic Drama of the Greeks (1896), pp. 15 ff ., who cites also the Dance of the Cranes at Delos (Pollux, 4, 101). In our own discussion it is of course desirable to avoid controversial subjects, but it may be recalled as possibly suggestive of dramatic tendencies in Corinth itself that Arion is said to have made some (uncertain) contributions to the development of the drama in that city (Haigh, op. cit., pp. 13 ff .; Flickinger, The Greek Theatre and its Drama [1918], pp. 8 ff.).
${ }^{37}$ For the present purpose one need not concern himself over the extent to which these representations were literai. It is sufficient that the ritual included references to the incidents, however symbolic.
${ }^{38}$ The scholiast on Medea, 273, remarks in the course of his narrative of the legend that " events of a similar nature figure in the myths about Adonis." No actual similarities can be found, however, and the statement is usually taken to refer to the note of mourning apparent in each rite. One may tentatively add that, if our deductions as to the rites of the children of Medea are correct, another similarity may be seen in the fact that images of Adonis were cast into springs (Zenobius, I, 49; Frazer, Golden Bough; Adonis, Attis, and Osiris, 1922, Vol. I, p. 224, with references. Also, ibid., pp. 236 f .

Pauly-Wissowa Realencyclopädie points out the possibility of confusing Glauke, the daughter of Kreon and princess of Corinth, with Glauke, the daughter of Hippotes, who was not only a king of Corinth, but also possibly to be identified as a sea god. The second Glauke would have been the Nereid, and Mass suggests that the legend wherein Glauke the princess hurled herself into the spring indicates unification of mortal and divinity. He says that the lack of any cult observance of this fact on the spot can be attributed only to chance. Whatever may be thought of his interpretation of the incident, in view of the foregoing argument we may assume that there was actually a cult celebrated on the site of the fountain of Glauke, in the ritual of which her deed was celebrated. ${ }^{39}$

Everything we know and everything that we have inferred points in this same direction. We know that the children of Medea were buried in the sanctuary of Hera Akraia, where their rites were conducted. We know that a $\mu \nu \hat{\eta} \mu \alpha$ of Medea's children stood near the fountain of Glauke, in the time of Pausanias, and we suppose either that it was the original tomb or that the original tomb had been not far off. We know that there existed around and on the roof of the fountain of Glauke a structure, or complex of structures, which meets all the requirements for the conduct of a ritual and a mystery such as we have inferred for the cult of Medea's children. We can safely assume that its original territorial extent to the westward could have been sufficiently large to include quarters for the children selected annually for the observance of the cult. We are encouraged by the propriety of an explanation whereby the mimetic leap of Glauke into the fountain which legend identified as the scene of her actual death might take place on that same spot, through the opening in the floor of the sanctuary and the roof of the spring. There is no tangible evidence to deny the identification of the ruins on the top of the fountain with an early sanctuary of Hera Akraia. ${ }^{40}$
${ }^{39}$ Cf. Odelberg, Sacra Corinthia, p. 146.
${ }^{40}$ Although the location on top of the fountain does stand higher than the ground to the north, it may seem to some that the situation is not sufficiently elevated and isolated for a sanctuary of Hera Akraia. The epithet "Akraios" applied to Zeus seems to refer to mountainous regions (Cook, Zeus, II, ii, p. 871, note 3), but our information about the use of the epithet "akraia " is more limited (Pauly-Wissowa, R.E., s.v. Akraia ; Roscher, Lexikon der griech. u. röm. Mythologie, s.v. Akraia). In several instances it does seem to refer to a height ; in one (Pausanias, II, 32, 6) at Troizen it does not. The sanctuary at Perachora was on low land, but on a point extending out into the sea. If Farnell (Cults of the Greek States, I, p. 182) is right in suggesting that Hera had the epithet " Euboia " in addition to " Akraia" (Pausanias, II, 24, 1) and "Prosymnaia" (Plutarch, De fluv., 18, 3; cf. Müller, Fragmenta Historicorum Graecorum, IV, p. 522 [Timotheos]), one can suppose that these epithets were derived from the three nymphs who were narses of Hera (Pausanias, II, 17, 1). Although these names in turn may or may not have been derived from the three hills at the Argive Heraion, if we can suppose that the ep:thet "Akraia" derives from the nymph, a sanctuary of the goddess bearing that epithet need not always have been on a high hill. It would seem possible that in very early times Hera Akraia might have been brought to Corinth from Argos (cf. Pausanias, II, 32, 6, where the Halikarnassians brought Aphrodite Akraia to Troizen), keeping the name regardless of the location of the sanctuary.

There are, however, alternative suggestions which have been previously made; these should be considered. There is the statement of the scholiast on Euripides, Medea, 1379, to the effect that the sanctuary stood on Acrocorinth. This reference is obviously to the sanctuary of Hera Bounaia, mentioned also by Pausanias. But the fact that Pausanias, who has described with such interest the legends centring around the fountain and the $\mu \nu \hat{\eta} \mu a$, passes by the Bounaia sanctuary ${ }^{41}$ with no mention of Medea, but rather attributes its foundation to the hero Bounos, is a serious argument against the identification of Hera Akraia and Hera Bounaia. The opinions of the Corinthians, even as reported through Pausanias, must be given particular weight in problems concerning the identification of Corinthian sanctuaries and Corinthian cults. There are some who would deny the existence of a sanctuary at Corinth itself, and say that all references to the temenos of Hera Akraia are to the sanctuary at Perachora. ${ }^{42}$ But Payne ${ }^{43}$ himself believed that literary evidence demanded a site within the city of Corinth; indeed, the writers seem clear enough on the subject. ${ }^{44}$

Assuming, then, that a sanctuary of Hera Akraia stood in archaic times above the fountain, we may now consider the possibilities that Temple C was the heir of the sanctuary.

At the period of the Roman reoccupation, quarrying operations against the west wall of the fountain house left the partition dangerously thin. The region west of the fountain for about thirty metres to the point where the rock now lies at a level practically that of the present top of the fountain was largely quarried. It would seem that whatever sanctuary stood on the top of the fountain and on the rock ledge to the west had been destroyed by the time the quarrying was done. On the opening of building operations in the recolonized city, whichever of the sacred things it was desired to preserve among those which had stood on that ground would naturally have had to be moved. If the $\mu \nu \hat{\eta} \mu a$ of Medea's children seen by Pausanias was the tomb in its original position, the sanctuary must have possessed land extending as far as the later Odeion. On the other hand, if the $\mu \nu \hat{\eta} \mu a$ was only a memorial, it must have been built as near to the original site as convenient, and such of the sacred objects as had been preserved, including the statue of Terror, were set up with it.
${ }^{41}$ Pausanias, II, 4, 7 .
${ }^{42}$ Ch. Picard, "L'Heraion de Pérachore et les enfants de Medée," Rev. Aıch., XXXV, 1932, pp. 218-229.
${ }^{43}$ H. Payne, Perachora, I (Oxford, 1940), pp. 19 f.
${ }^{44} \mathrm{M}$. Picard would say that the rites of Medea's children were performed at their tomb in Corinth, but that the fourteen children stayed at Perachora and sacrificed to the goddess at that place. He assumes that the service of the fourteen children was a feature of the pre-Medea phase of Hera Akraia, aetiologically woven into the Medea iegend. But evidence presented above concerning the relation of tomb, sanctuary, and cult in Corinth seems valid even in the face of M. Picard's argument. The number of sanctuaries of Hera Akraia in the ancient Greek world is unknown. In addition to the two here involved, there was one at Argos (Pausanias, II, 24, 1), but there may have been others, and not all of them could have been involved in the legend. But it is not impossible that relations between the sanctuaries in the city and at Perachora existed even in the matter of this particular cult.

For similar reasons, the sanctuary itself may have been established below and to the east of the fountain, with an opening into the reservoir by means of which the fountain scene of the mystery might be enacted as before.

There are, however, some reasons against identifying Temple C as that of Hera Akraia. In the first place, the $\mu \nu \hat{\eta} \mu \alpha$ is not in it. It might be thought difficult to understand why, if the sacred objects were moved, the $\mu \nu \hat{\eta} \mu a$ might not have been erected within any new precinct. In the second place, the precinct was built some years after the refounding of the city, and the lacuna in the history of the cult might be thought difficult to explain. Finally, and most seriously, Pausanias says definitely that after the refounding of the city the cult of Medea's children was not reinstated. ${ }^{45}$ In this case, it might seem that the opening into the fountain house from the precinct could not have had the cult purpose which we suggested.

Considering the most serious objection first, one can find little equivocation in Pausanias' remark that after the colonization of the city by Caesar " those sacrifices to the children of Medea were not re-established by the colonists, nor do the children of the colonists cut their hair or wear black clothes."

We have, on the other hand, a passage from Aelian, ${ }^{46}$ who says that the Corinthians " up until now" offer sacrifices to the children. Aelian wrote only a few years before Pausanias, and it may possibly be that there is some truth in his statement. However, Pausanias is probably a much better authority for the situation in Corinth than Aelian. It might seem a plausible view that Aelian was quoting from an earlier, pre-Roman writer, and did not bother to ascertain the actual state of affairs in his own time. Nevertheless, the contradiction is interesting, and it is barely possible that the rites did flourish for a while, from some time after the founding of Corinth to the time of Aelian, only to be finally discontinued before the visit of Pausanias.

We must, however, note that Pausanias refers to the cult of Medea's children alone; he says nothing whatsoever about the status of the cult of Hera Akraia after the refounding of the city. It is perfectly reasonable to suppose that the sanctuary of Hera Akraia in its own right was re-established on the site of Temple C. The opening into the fountain of Glauke may have been cut with the intention of continuing the rites of Medea's children, although it is not necessary to believe that the intention was carried out.

The absence of the $\mu \nu \hat{\eta} \mu a$ from the precinct of Temple C can be explained by supposing that by the time it was decided to lay out the precinct, the area around the $\mu \nu \hat{\eta} \mu a$ was occupied in such a way that it could not be included in the new sanctuary. And, finally, the delay in re-establishing the sanctuary of Hera Akraia is easily understood if one considers the greater problems of reconstruction before the new colonists.

[^47]They were busy for some time restoring the old buildings, before they could undertake to erect new temples for minor gods.

Sketching in brief the history of the monuments involved, we see first an archaic, rock-cut sanctuary dedicated to Hera Akraia. Even as early as archaic times this sanctuary became the site of the tomb of Medea's children, and the scene of the mysteries enacted in their honor. With the destruction of Corinth the sanctuary was largely demolished, and in the building activity accompanying the colonization some of the very ground on which it had stood was removed. The work of rebuilding the city was so absorbing that the cult itself was forgotten for the moment, although the tomb of the children either was preserved in its original position at one side of the temenos or a memorial was set up near the original site with some of the dedications and sacred objects by it. A few years later, in the beginning of the first century after Christ, was built Temple C, and we have seen the possibility that it may have been the successor to the old sanctuary of Hera Akraia. The temple then waxed momentarily rich and its precinct was surrounded by a colonnaded enclosure. But by the middle of the second century after Christ the cult had shrunk to the obscurity which had surrounded it in the early days of the colonization, and the destructive forces of the Middle Ages finally resulted in the nearly complete loss of even the architectural setting.

# CHAPTER V 

## TEMPLE E

By Sarah Elizabeth Freeman

## I. INTRODUCTION

Temple E is situated about fifty metres south of the Fountain of Glauke and a little more than the same distance west of the great staircase ${ }^{1}$ which leads up from the lower level of the Roman market.

Trial trenches in $1901^{2}$ and $1910^{3}$ exposed the outline of a characteristic Roman podium of stone and opus incertum. None of the superstructure was in situ. In 1931 excavation was carried on north and east of the temple in connection with the construction of the new Museum, and subsequently during the spring and fall of 1932 the entire area around the podium was cleared. A plan showing the extent of the excavation and the actual state of the temple is given on Plate XVIII. Figure 106 is a view of the excavation from the southwest, giving the location of Temple E in relation to the Temple of Apollo which can be seen to the east beyond the new Museum. The architectural fragments set up at the east end of the podium were found in the course of the excavation and placed in their present position merely as a general indication of the original superstructure and without any attempt at an accurate reconstruction (see also Fig. 107). Since no evidence was found to make the identification of the building absolutely unquestionable we shall continue to speak of it as Temple E.

A building of such prominence must certainly have been included by Pausanias in his brief description of Corinth. It has proved impossible, however, as a result of the excavation, to accept its identification as the Temple of Octavia, ${ }^{4}$ the most logical assumption from a study of Pausanias alone. An alternative interpretation, though not as strictly compatible with a reading of the ancient guide, would make it a candidate for the Temple of Jupiter Capitolinus, as yet unidentified. ${ }^{5}$ The strong though disputable arguments in favor of a more definite nomenclature can be clearly expressed and understood only after a discussion of the temple itself.

[^48]
Fig. 106. View of Temple E from Southwest

The temple stood at the west end of a small open square which extended east to the natural edge of the hill back of the West Shops. Its exact extent to the north and south is not known. It was paved with marble, of which all that remains is a thin strosis of chips and mortar to be found over the entire area eastward from the front line of the paratids which flanked the steps of the podium. For twelve metres east of this point the pavement rested on a solid concrete foundation, and for the remaining distance on the hard-packed earth fill. It was discovered that this same


Fig. 107. East End of the Podium
construction continued under the podium to within ten metres of the west end and extended 2.50 m . north and south beyond the line of the euthynteria (see plan, Plate XVIII and Fig. 106). From the obvious fact that it did not support the entire length of the podium, it seems certain that, though used as a sub-foundation, it was not originally intended for such a purpose. It merits, therefore, individual attention, and will be discussed at length in the next section. Subsequently the podium and the architectural fragments and sculpture assigned to the temple will be described.

Few traces of the Greek period were found, though most of the area was cleared to virgin soil. Four wells and five cisterns were cleaned out. Two of the wells and three of the cisterns contained an almost solidd fill composed of fragments of pottery, lamps, figurines, and architectural terracottais dating without a single exception from
the early Greek era, that is from the last quarter of the seventh to the end of the sixth century b.c. Some of the most important of these small finds have already been published. Fragments of a terracotta group representing Amazons fighting were found in the well just beyond the southwest corner of the podium. The group, which may have been used in the pediment of a late archaic temple, has been dated near the end of the sixth century. ${ }^{6}$ The pottery from the well at the northwest corner of the temple proved, after being cleaned and mended, to be a rich deposit. Most of the vases were of Corinthian manufacture and can be assigned definitely to the Early Corinthian period, in the last quarter of the seventh century b.c. The inclusion of several pieces of contemporary imported wares added materially to the importance of the deposit. Outstanding among these was an early Attic olpe which is said to be " the oldest piece of Attic pottery which has yet been found in the Corinth excavations." ${ }^{7}$ The predominance of architectural terracottas and vases which were probably originally votive offerings suggests the probable existence of an earlier sanctuary in this locality, though the cisterns were the only pre-Roman constructions discovered. They are shown on the general plan, Plate XVIII, marked with Roman numerals.

Cistern I is near the southeast corner of the excavation. Its rather irregular shape may be seen on the plan, indicated by dotted lines. It is about 1.35 m . deep from the bottom of the cover slabs and is lined throughout with good Greek stucco. Two different building periods are distinguishable in its construction. At first a cement floor with raised rim, preserved at the northwest corner, was used to catch the water. This slopes slightly toward the south and has a narrow channel leading to the edge of the cistern. At a later Greek period the interior was restuccoed, the water channel was blocked up, and cover slabs were placed over the reservoir at a higher level. The cement floor was cut off at the north at the time of the construction of the low Roman foundation which was built up against it. Several Byzantine pithoi were found in this area. The outline of one can be seen over part of the cistern where the fill was left around it in excavating.

Cistern II is near the southwest corner of the lower foundation (see Fig. 106 and Fig. 108). It is a rectangular basin, 2.40 m . in length and 1.24 m . in width. Its greatest preserved depth is 1.32 m . The two long sides and east short side are of rubble, the west end of hardpan. The four sides as well as the floor are coated with a thick waterproof stucco. In one corner there is a narrow flight of five steps of stuccoed poros, a not uncommon feature.

Cistern III lies immediately to the south of Cistern II with one long side in common. It was originally of the same length, with a width of 1.45 m . The stucco is well preserved on the north side and the adjoining part of the bottom. The east and south sides are of rubble with not a trace of stucco in situ. The west end (indicated

[^49]by dotted lines on the plan, Plate XVIII) was removed at the time of the construction of the Roman wall which extends south at this point. Figure 108 also shows the relation of this wall to the cisterns. It will be discussed further in connection with the lower foundation. Later, in the Byzantine period, all but the lowest course of the Roman masonry was removed and the wall at the west end of the cistern was replaced, increasing its length by 0.34 m . The upper part of the south side was also repaired.


Fig. 108. Complex at Southwest Corner of Lower Foundation
Figure 109 shows the striking contrast between the well-laid, square-cut blocks at the bottom and the field-stone construction at the top. This cistern, when first discovered, was covered by a vaulted roof composed in great part of marble fragments. It was empty but for a few scattered bones. A number of typical Byzantine stone-lined graves were found in this section at a higher level, and undoubtedly the cistern was used for purposes of burial.

The construction west of the Roman wall, IV on the general plan, is probably another cistern, though no waterproof lining is preserved. It should be noticed on the plan that these cisterns near the southwest corner of the lower foundation form one complex, all included in a single cutting in the hardpan. This cutting is approximately oblong, enclosing the three reservoirs on the east, south, and west. The north
line may be seen back of Cistern II, but at the northwest the cutting extends under the podium. Three of the sides of this western basin are of polygonal masonry, of a type used in the fourth century в.c. The north wall exists to a height of 1.56 m . above the soft rock which forms the bottom. At the west end there is a stone-lined shaft, 0.75 m . in diameter, with a loose rubble filling between it and the enclosing walls. It should from all appearances have been a well, but bottom was reached at 2.50 m .


Fig. 109. South Wall of Cistern III
One other cistern was cleared, on the north side of the temple, V on the plan. It is a circular shaft about one metre in diameter and 3.50 m . in depth, stucco lined throughout, with foot holes. In the bottom is a shallow basin, used for purposes of cleaning. Two tunnels lead off, northeast and south, about two metres in height, and 0.40 m . wide at the top. Both were solidly filled with masonry. This was undoubtedly done at the time of the construction of the first Roman building which covers it, in order that there might be no danger of the ground sinking under the weight of the heavy foundation. The shaft itself was likewise filled with stones. A few pieces of pottery and one sherd of a lamp found at the top can be roughly dated around the middle of the first century after Christ. Their importance increases, however, when
taken in conjunction with evidence from other parts of the excavation. Hence further discussion of this problem must be postponed.

Very little construction from periods later than the Roman was revealed; none which could be given a definite plan. Other excavations have shown that this section of the city was built over extensively in the Byzantine period, and undoubtedly the podium was re-used in other capacities than as a cemetery. About twenty graves were cut in the concrete, and many other burials of a simpler style were found in the ground


Fig. 110. Byzantine Wall Built Over Architectural Fragments Along South Side of Temple
on all sides. There is no clear evidence that there was ever a church on the podium itself, though the number of architectural fragments collected in the course of the excavation may be taken as an indication of the existence of a church in the vicinity. The semicircular cutting in the concrete at the centre of the east end of the podium (see plan, Plate XVIII), certainly intentional and of later origin, may very well be for the apse of a church which faced east, though such an orientation is rather uncommon. ${ }^{8}$ This is only mentioned as a possibility, since the existence of such a church is entirely hypothetical.

After its destruction, the temple received the customary treatment accorded to ruins, use as a quarry. Most of the stone blocks were carried away, leaving the core

[^50]of opus incertum exposed. Later a rubble wall was built against the concrete, along the greater part of the south side about two metres in depth from the top of the podium. Immediately below this wall were found six of the marble Corinthian capitals from the temple. They lay on a fill of earth and marble chips thrown in where the blocks back of the toichobate had been taken out. Too cumbersome to be moved easily, they were pushed aside and left. The wall was obviously built over them, as Figure 110 shows.

Figure 111 gives a typical cross section of the fill on the south side of the podium and is self-explanatory. There is little variation throughout the rest of the area, though on the north side the fill is much shallower and is almost entirely Byzantine down to the top of the lower foundation. The marble chips, evidence of the destruction of the temple, usually rest either on hardpan or a Greek fill. Only a few remains of the early Roman period were found. A discussion of the dating of the construction and destruction of the temple is left for a later section.

The wall (see plan, Plate XVIII) which runs approximately parallel to the podium toward the west is characteristic of the early Christian period. It is built of large dressed stones, taken probably from the podium, alternating with sections of rubble. It had to be partially torn down to permit the removal of important marble fragments which were built into it, and in order to clear the Greek well which it covered. The wall to the south which marks the edge of


Fig. 111. Cross Section of the Fill South of the Podium the area excavated is of similar construction, but seems to have no connection with the wall parallel to the podium. Any explanation for the use of either must be sought outside the confines of the present excavation.

On the north side of the podium near the west end (Plate XVIII) can be seen the traces of a limekiln with the semicircular cutting for the back of the oven in the stone of the temple. This, and the well, just to the north, which was completely empty when found, can be dated from the evidence of coins and potsherds to the Frankish period. A similar kiln was found in one of the early trenches near the northeast corner of the temple. In the face of the existence of such instruments of complete destruction it is indeed surprising that as many fragments of the marble superstructure as we have should have been preserved.

## II. THE LOWER FOUNDATION

The foundation which supports the greater part of the podium is a rectangular platform of stone and concrete, 44 m . in length (east and west) and 23.50 m . in width (see plan, Plate XVIII). Most of the southern long side and part of the north side and east end were cleared during the last excavation. The northeast corner lies under the Museum, where most of the earlier foundations were thoroughly destroyed in the Byzantine period. Enough remained, however, to show that the construction was similar to that discovered at the south. The entrance and driveway south of the Museum made it impossible to leave any of the extreme east end exposed. The trenches dug there, as shown on the plan, were sufficient to reveal any peculiarities in plan or construction.

The opus incertum rests directly on the hardpan, which lies at a varying depth beneath the surface, sloping up toward the west and north to the Roman level. At the southeast it is a little over four metres beneath the Roman ground level. Along the outside edge of the wet concrete a course of irregularly shaped poros stones was placed. ${ }^{9}$ No clamps were used, the joints being filled with concrete. At the west the footing for this stone course was cut in the soft rock, the intermediate use of the opus incertum being unnecessary. On the west half of the north side these stones were removed in some later period, but the cutting preserves the line of the foundation, as can be seen clearly on the plan, Plate XVIII. The regular concrete and stone construction extends 14.50 m . west of the east end of the podium. From this point the soft rock is substituted for the opus incertum. The footing for the stone course turns south under the podium about ten metres from the west end. The western edge of this cutting is in line with the west face of the blocks in situ at the southwest corner of the foundation (see Plate XVIII and Fig. 108). The original stones of this course are also visible on the north side, below the concrete of the podium (Fig. 112), the level being approximately the same as the top of the first stone course on the north and south sides. This course does not appear across the whole of the east end, but is found for a distance of only 7.50 m . north from the southeast corner. Sufficient evidence exists to permit the assumption that it extended a similar distance south from the northeast corner, leaving at the centre a space of 8.50 m . of plain concrete. ${ }^{10}$

The outer surface of this stone course is not regularly cut. It juts out beyond the face of the concrete and is meant to serve merely as a euthynteria and not to be seen. The stones, wherever preserved, carry a setting line $c a .0 .14 \mathrm{~m}$. from the outer edge and a cutting $c a .1 .25 \mathrm{~m}$. wide for a second course (see Plate XVIII and Fig.

[^51]113). This second course is in situ at the west end of the south side (cf. plan, Plate XVIII, and Fig. 106). The blocks, 0.40 m . in height and ca. 0.92 m . wide, are irregular in size, with the outer or south face smoothly dressed and the backs left rather rough. As in the first course, the joints are filled with concrete. Backing the stones is a layer of opus incertum, preserved to the same height but for a width of only 1.50 m . where it was cut through for the euthynteria course of the existing podium.


Fig. 112. Cuttings on North Side of Podium for West End of Lower Foundation and Buttress Wall

Adjoining, but not bonded into, the west end of this foundation is another wall already mentioned in connection with the cisterns (cf. p. 170; also, general plan, Plate XVIII, and Figures 106 and 108). It consists of two rows of stone 1.60 m . wide at the top, contiguous, but held together only by concrete in the joints. The eastern row is four courses in height and extends 4.10 m . south of the corner of the lower foundation. It rests on hardpan and also abuts against the soft rock at the south where the original cutting for the cisterns (cf. p. 170) has been slightly extended. There is no indication that it ever continued farther south at a higher level. We have already spoken of its destruction when the Greek cistern was turned into a Byzantine grave. The second or western line of stones extends only 2.30 m . to the south. It is composed of separate units, piles of blocks not held together in any way. The southernmost stones rest on the lowest course of the east end wall of Cistern IV. Figure 114 shows the relation of this construction to the cistern and to the later podium.

The level of the top of the fourth course is $c a .0 .10 \mathrm{~m}$. below the top of the second course of the lower foundation. At the northwest corner, parallel with the footing for the west end of the lower foundation, is another cutting, 1.60 m . wide and $c a .0 .20 \mathrm{~m}$. below the level of the hardpan farther west. It has the correct width to serve as the bedding for a construction similar to that existing on the south and


Fig. 113. View (from South) at East End of Podium, Showing the Relation of the Podium to the Lower Foundation and the Cutting in the Latter for a Second Course ; in the Centre Foreground the Catch Basin of Cistern I
described above. One course, two stones in width, is in situ below the concrete of the podium (cf. Fig. 112). The top surface is $c a .0 .25 \mathrm{~m}$. above the top of the stones preserved in the adjoining wall at the east, that is, the first stone course, and therefore it would have come just below the top of the second course. It can only be assumed that this wall extended across the entire west end. There is no sign of a cutting beyond the north line of the lower foundation.

The purpose of such a wall is decidedly problematical. At the south it would seem that it was intended to serve solely as a buttress where the Greek fill was
noticeably loose. The type of construction, which is massive but not solid, and the fact that the two parts of the wall do not extend the same distance south, but only as far as was necessary to fill the earlier cutting, would confirm this theory. There is no such excuse for the existence of the wall on the north side, where the single course is firmly bedded in hardpan, unless it was carried across only for appearance. The top surface where preserved carries no cuttings or setting lines for another course.


Fig. 114. Isometric View of Wall West of Lower Foundation, Showing Its Relation to Cistern IV and to Podium

If the wall was originally higher, it might have formed a terrace behind the building which first stood on the lower foundation. Such a possibility is rendered less likely by the fact that no fill of any consequence antedating the podium temple was found in the entire area excavated west of this point. Moreover, if the wall formed such a terrace, it ought to have been carried farther to the north and south. The first suggestion as to its function is, therefore, the most practical and probably correct.

It is quite obvious that this wall was built at the same time as the lower foundation, and not when the podium was placed farther to the west. The blocks in the top course were cut through for the bedding of the euthynteria of the later building, as are those in the west end wall of the lower foundation. Moreover the substructure
which supports the western end of the podium does not overlap or bond into this wall, as it would have done if they had been built at the same time.

This evidence of contemporaneity is extremely important, since it is possible to date with a fair degree of accuracy the construction of the western wall. The fill in the cisterns on both sides was Greek, but resting on the hardpan near the bottom of the lowest course at the south end of the wall was a coin of Corinth, bearing on the obverse the portrait of Caligula, and on the reverse Pegasus with the name of the Duovir, P. Vipsanius Agrippa. ${ }^{11}$ This coin was minted before 41 a.d. (the last year of the reign of Caligula), and since it could not have been in circulation many years, must certainly date the construction of the wall within a decade. Hence the lower foundation, which supported the first Roman temple on the site, can be assigned to the middle of the first century after Christ, probably to the reign of the Emperor Claudius.

It is impossible to determine whether the superstructure which the lower foundation first supported was completely finished or was in the process of construction when it was destroyed. With the exception of the few blocks of the second course in situ on the south side it was completely torn down by the builders of the existing podium. The later construction, however, is built almost entirely of re-used material, many of the stuccoed poros blocks being undoubtedly of Roman workmanship. It is not unreasonable to suppose that they came from the early building. The evidence does not permit a restoration of either plan or order, but certain plausible deductions are possible from the known facts.

Such a consistently massive foundation is certainly an indication of a heavy superstructure. It is, therefore, most likely that the first temple also stood on a podium, slightly longer and wider than its successor. Part of the toichobate course is all that remains today. The stone facing of the podium would have rested on the concrete, some of which is preserved back of these blocks (cf. p. 175). Any cuttings which might have indicated the position of the east end of the podium would have been in this layer of opus incertum. We can only assume that there were steps at the centre of the east end, where the euthynteria course does not occur, flanked by broad paratids which continued the line of the podium and were not set back as in the present temple. It is not at all impossible that part of the old podium may be incorporated in the second, though no changes in construction are visible on the exposed surfaces of the concrete.

The superstructure of this early temple was undoubtedly of poros with a coating of stucco. It is possible to identify a few blocks which may belong to it, but since the surfaces are in many cases recut, it is impossible to obtain any accurate measurements. No fragments of columns or capitals survive. There are pieces of Ionic architrave, of poros with stucco, built into the euthynteria, but none gives the complete length or height of a block. The proportions of the fascia and cymatium are about the same as in the marble architrave of the present temple.

[^52]Most of the re-used Roman stones are wall blocks with characteristic surface treatment, such as can be seen on two, in situ, near the southeast corner of the podium (Fig. 115). It consists of a deep square-cut anathyrosis and the use of drafted edges. The illustrated block, on which both the anathyrosis and the drafting may be seen, would have been used originally on an inside corner. Stone cutting of this kind cannot be assigned to a specific building period in Corinth. Its use, however, is entirely consistent with a date in the middle of the first century.

It is quite obvious that the evidence is too scanty to allow more than a guess at the appearance of the early building. We can only say that it was of poros, of the Ionic or the Corinthian order, and generally similar in plan to its successor. Begun shortly after 41 A.D., it was probably finished and in use, when, like so many other buildings in Corinth, it was destroyed by the earthquake of 77 .

## III. THE PODIUM

The podium consists of a solid core of opus incertum with a casing of stone $c a .1 .30 \mathrm{~m}$. wide, exclusive of the single step or toichobate which rests on the euthynteria. The height from the lower foundation to the top of the concrete is 3.38 m . The dimensions on the toichobate are: length, including the steps, 42.70 m ., width, 18.20 m . It is characteristic Roman opus incertum with irregularly shaped pieces of poros, tile, and terracotta mixed with mortar. No datable sherds or fragments of lamps of the Roman period could be found on the exposed surfaces. As has been said, there is no apparent change in construction, so that the entire podium may be regarded as belonging to the second period.

The change in plan, which placed the east end of the podium several metres farther to the west with very little decrease in length, necessitated supporting


Fig. 115. Re-used Blocks its extension beyond the west end of the lower foundation for a distance of about ten metres. At the north and extreme west it was possible to bed the euthynteria directly in the hardpan, but on account of the existence of another cistern, or at least of an earlier cutting with a soft fill, extending north from Cistern IV (cf. p. 170), a solid foundation had to be built at this point (Fig. 116). It consists of two courses of stone with a layer of opus incertum between, 1.33 m . deep in all. The lower blocks, re-used
architectural pieces of poros with a thick coating of stucco, rest directly on the soft rock. The east end of the first of the three stones in the course below the euthynteria is supported for a distance of 0.08 m . by the stone in the next to the top course of the early buttress wall (cf. p. 175). It is impossible to determine how far north it was necessary to extend this foundation.

Most of the stone casing of the podium has been removed (cf. p. 172). The only well-preserved part is at the southeast corner (see Fig. 117, also Figs. 106 and 107). The blocks re-used from earlier buildings vary in size. They were laid up as nearly as possible in regular ashlar masonry with cement in the joints. Five of the six original courses are in place at the southeast. Faces which carried cuttings were placed on the inside. Thus we find imprints in the concrete clear enough in some instances to permit the identification of the character of the stones now missing. The most obvious example (Fig. 117) is to be seen in the use of pieces of fluted Doric columns, which occur at frequent intervals. A few pieces are still in place. They are of stuccoed poros with a width of $c a .0 .20 \mathrm{~m}$. between the arrises. We know that the old Temple of Apollo was repaired in the Roman period, ${ }^{12}$ and these fragments may be from columns discarded at that time. It is also not impossible that they may belong to another archaic Greek temple, which stood on or near the site of Temple E, the hypothetical building to which we have already assigned much of the débris from the wells (cf. p. 169). Other imprints are of wall blocks, having in some instances a deep anathyrosis and in other cases drafted edges (cf. p. 179). One block, in situ on the east end, has the letters $\operatorname{IN}$ inscribed on it (Fig. 118). This is apparently a re-used Greek block, similar to many found in the early Basilica, west of the Lechaion Road. ${ }^{13}$

The euthynteria, $c a .0 .32 \mathrm{~m}$. in height, rests directly on the lower foundation. The outer face was not exposed. For the west half of the south side it is concealed by the concrete filling back of the toichobate of the early temple, which was not removed. The upper surface of this course carries a cutting (Plate XVIII), ca. 0.50 m . wide, set back $c a .0 .15 \mathrm{~m}$. from the outer edge. This is for a single step of Acrocorinthian limestone, 0.28 m . high (cf. p. 184, Nos. 1 and 2, for a description of the few blocks found but not in situ). The space between the first stone course of the podium wall and the cutting was filled with concrete. The upper part of this course and some of the second course are cut back 0.045-0.08 m. (Fig. 119), a vertical bedding for a base moulding of marble (cf. p. 184). This moulding was held in place by concrete, traces of which remain.

The outer face of the podium wall above the base moulding was concealed by a marble revetment. None of it is preserved in situ, but traces of mortar and holes for the rivets by which the plaques were affixed are proof of its existence. A close examination of the stone surface reveals what seem to be shallow cuttings for blocks $c a .0 .50 \mathrm{~m}$. square. This may be only for slightly thicker pieces, since it is not usual for revetment of such a type to be set in patterns.


Fig. 116. Foundation Under Southwest Corner of Podium


Fig. 117. Southeast Corner of the Podium

No traces or cuttings are preserved for the steps which must be restored at the east end of the podium. The flanking paratids give their width and extent from the façade. The foundation line for the south paratid is preserved (Plate XVIII and Fig. 113). The corresponding one at the north was found and recorded in an earlier excavation, ${ }^{14}$ but no longer exists. The paratids do not continue directly the line of the podium, but are set back 0.60 m . The euthynteria with the single step of the toichobate (cf. p. 184, Nos. 1 and 2) and the base moulding also turn and extend along the length of the paratid and across the short east end. The marble strosis which indicates the pavement of the square to the east (cf. p. 168) is at the level of the top of the euthynteria. Hence this course was probably carried across the entire east end to the north paratid, supporting the toichobate which here becomes the bottom step,


Fig. 118. Mason's Mark on Re-used Wall Block while the base moulding returns around the paratid and ends against the second step.

The top of the podium is in a very bad state of preservation. What remained of its original surface after the stone blocks had been quarried away and a number of graves, some over a metre in depth, had been cut in the concrete during the Byzantine period, suffered further destruction in later years when it served as a threshing floor.

Large poros blocks were set in the top of the opus incertum wherever any weight was to be supported. Only a few pieces are still in place; one, 0.43 m . deep, is in the cutting for the pronaos; another is in the central opening at the east end of the cella (see plan, Plate XVIII). The cuttings left in the concrete when the blocks were torn out are broken and uneven, but serve, in lieu of any better evidence, as a basis for a restoration of the plan.

We can distinguish cuttings on the long sides extending inwards about three metres from the outside edge of the concrete core. The stones in the top course of the enclosing walls continued back on top of the concrete to the cella. The condition of the east and west ends is such that it is almost impossible to differentiate between original cuttings and later breaks. At the east there were two parallel lines of stone set in the concrete, back of the façade, one to support the columns of the pronaos, the other a base for the front wall of the cella. There was also a separate bedding for the rear wall, since the pteron at the west was wider than on the long sides, and there

[^53]was no need to place stones entirely across it. The restored plan of the temple will be discussed in a later section (cf. p. 208) after the architectural fragments upon which it is based have been described.

No accurate date can be given for the construction of the second temple. It was undoubtedly a unit in the great rebuilding program of the first century after Christ. Many poros buildings presumably injured in the earthquake were replaced by marble


Fig. 119. Blocks Near the East End of the South Side of the Podium, Showing Cutting for Base Moulding
at this time. ${ }^{15}$ A terminus post quem is established by a coin of Corinth from the reign of Domitian ${ }^{16}$ which was found just east of the south paratid, below or in the strosis of marble chips.

The condition of the inner face of the marble wall blocks shows that the building was destroyed by fire. All the evidence, coins, lamps, and potsherds, fixes the date of this destruction around the middle of the fourth century after Christ, during the reign of Constantius II (337-361). No coins minted later than the time of this
${ }^{15}$ Corinth, I, i, p. 190 (and infra, p. 233, note 35). The poros Propylaia were replaced by a marble arch, probably in the time of Domitian. The second Basilica may also be assigned to this period.
${ }^{16}$ Head, British Museum Catalogue of Coins, Corinth, p. 72, no. 582.
emperor were found below the undisturbed destruction level. Immediately south of the podium, where the wall blocks were removed, the fill under and around the capitals (Figs. 111 and 120) contained coins from the period of Constantine I to Arcadius and lamps of types common in the late fourth century. It is indeed quite evident that the temple was destroyed some time before 395 a.d., the occasion of Alaric's invasion, which is generally taken to be the date of the final destruction of many of the Roman buildings at Corinth.

## IV. CATALOGUE OF ARCHITECTURAL FRAGMENTS FROM THE PODIUM TEMPLE

Many marble fragments were found in the course of the excavation, which could be assigned to the superstructure of the existing temple, sufficient to permit a restoration of the order (Plate XIX) and the plan (Fig. 165). All of the large and the most important of the smaller pieces will be listed and described in detail, with drawings and photographs.

1. Figs. 121 and 122. Fragment of a step block of Acrocorinthian limestone, found built into the Byzantine wall near the southeast corner of the podium. This block is from the toichobate of the podium and fits the short return north to the line of the south paratid. The exposed east face $a$ has an anathyrosis at one end. The top surface was never completely worked off but is slightly rougher at the back, where it was covered by the base moulding. There is a clamp cutting at the front near the right end. The back of the block is curved rather carelessly around the angle.
2. Figs. 121 and 122. Two fragments forming almost a complete step block of Acrocorinthian limestone found with No. 1. This


Fig. 120. Capital from Fill South of Podium is the first block east of the line of the podium in the toichobate of the south paratid, adjoining block No. 1 (cf. Fig. 121). It has anathyrosis on the ends, and a clamp cutting at the left end corresponding to that on the first fragment. The top surface is smoothly dressed where it was exposed, and rough picked where concealed by the base moulding. The drawing (Fig. 121) shows the manner in which the two blocks were placed on the euthynteria. The step along the paratid was set back 0.12 m . from the front edge. Setting lines indicate a similar treatment along the podium (cf. p. 180). The east face of the corner block, however, was set flush with the edge of the euthynteria. Since the line of the base moulding was definitely fixed by the corner of the podium, the corner step block had to be set forward in order that the exposed surface might be kept approximately the same width.
3. Fig. 123. Fragment of base moulding of white marble, found south of the podium. The drawing gives the dimensions and profile. This moulding is of the correct height, depth, and character for use above the toichobate along the base of the podium (cf. p. 180).


Fig. 121. Step Blocks from South Paratid and Podium


Fig. 123. Moulding at Base of Podium


Fig. 122. Juncture of South Paratid and Podium, Showing Step Blocks in Place
4. Fig. 124. Fragment of white marble, found west of the temple, probably from the crowning moulding of the podium. It consists of a single fascia with a cymatium above and a shallow drip below.


Fig. 124. Crowning Moulding of Podium
5. Fig. 125. Ionic column base of white marble, found on the north side of the temple near the limekiln. It was broken in antiquity. The patch which was held in place by a clamp is now gone. On the bottom, the bearing surface is rough picked, with a single dowel-hole at the centre.
6. Fig. 126. Ionic column base of white marble, found near the southeast corner of the excavation. It is similar to No. 5 except that the pour-channel on the top is carried across both ways from the dowel-hole.
7. Fig. 127. Ionic column base of white marble, found just south of the podium near the west end. This base differs from the other two in that the fillet usually found at the bottom of the shaft was in this instance carved on the base above the upper torus. There is a cutting for a small patch on the top which would have been kept in place by the weight of the shaft.
8. Fig. 107, central column in reconstruction, and Fig. 128. Column drum of white marble, unfluted, found west of the podium. Length, 1.77 m .; lower diameter, 0.865 m. ; upper diameter, 0.855 m . The top surface is smoothly dressed, with a rough picked area in the centre, 0.285 m . in diameter. The central hole is 0.10 m . in diameter. The botiom surface is similar, with the addition of two square cuttings on the centre line, 0.20 m . from the outer edge.
9. Fig. 107, column at the left in reconstruction, and Fig. 128. Column drum of white marble, unfluted, found with No. 8 and probably from the same column. Length, 1.41 m .; lower diameter, 0.855 m. ; upper diameter, 0.825 m . The surface treatment is similar to that described above.
10. Fig. 107, upper part of column at right. Column drum of white marble, unfluted, found in an earlier excavation, east of the podium. ${ }^{17}$ The ends are broken, but the complete length is 1.15 m . Apophyge and fillet at top show that it is an upper drum. The upper diameter without the fillet is $c a .0 .78 \mathrm{~m}$.
11. Fig. 129. Fragment of a column drum of white marble, found in excavation south of the podium. This piece gives a perfectly preserved profile of the cavetto and fillet which crown the shaft.
${ }^{17}$ Excavation for the new Museum in 1931.
12. Column drum of white marble, unfluted, found with Nos. 8 and 9. It is broken, but the complete length is 1.15 m . It is, therefore, undoubtedly the upper drum from the same shaft.

Many pieces of columns were found in addition to those listed above. Also several fragments from excavations in the agora seem to belong to Temple E, having been rolled away and re-used in the Byzantine period.

The exact height of a complete shaft can be computed with a reasonable degree of accuracy. The average for the Corinthian order at this period calls for nine or more often ten times the lower diameter, inclusive of base and capital. The lower diameter obtained from the setting lines on the base is $c a .0 .92 \mathrm{~m}$., giving a maximum height for the column of 9.20 m . The capital and base are $c a .1 .30 \mathrm{~m}$. Therefore the shaft should be slightly under eight metres. The total length of the upper drum and the second and third from the top is 4.33 m . The addition of two more drums, 1.77 m . in height (the same as the third drum), is, therefore, necessary to complete the height of the shaft. A ratio of nine to one would require one drum of 2.50 m . A height of 1.77 m ., however, for the bottom drum would bring the joint at the same level as the top of the first course above the orthostate course in the cella wall (cf. p. 200, Nos. 104 and 105, height of orthostate 1.16 m ., height of wall block 0.61 m .). Hence the assumption of a proportion of ten to one seems justified.


Fig. 126. Column Base

13-22. Figs. 107, 110, 120, 130, 133, and Plates XIX and XX. Corinthian capitals of white marble, found south and west of the podium. All these capitals conform to the same general type with variation in details of the carving of the leaves and flowers. The workmanship is on the whole careless and poor. They vary in height from 0.99 m . to 1.015 m . The lower diameter varies from 0.765 m . to 0.78 m . There is a double ring of acanthus leaves around the base. Between the leaves of the upper row rise fluted cauliculi, crowned with two leaves from which spring the outer and inner spirals. Between the inner spirals is a tendril ending in a flower on the abacus. The greatest variation in execution occurs in the formation of this tendril and flower. There are two main types (Fig. 133) either with or without a bracket between the inner volutes. Very individual attention was also accorded to the leaves from which the tendril rises, and the four flowers on the abacus. The mouldings of the abacus are simple and undecorated. The proportions of the capital are characteristic of the early Roman period, with the volute zone higher than the lower ring of acanthus leaves or the visible part of the second row. According to Vitruvius ${ }^{18}$ the three divisions should be equal. This, however, is not the usual case in early types.
$\mathbf{2 3 - 2 5}$. Fig. 131. Corinthian capitals of poros, found west of the podium. They are carelessly carved and covered with a thick coat of white stucco. They are of the same size and scale as the

[^54]

Fig. 127. Column Base


Fig. 128. View at West End of Excavation, Showing Position of a Few of the Architectural Fragments
marble capitals, and, so far as it is possible to determine in their poor state of preservation, of the same style. They were probably employed as a substitute for marble at the back of the temple. Their possible re-use from an earlier building is extremely doubtful.
$\mathbf{2 6 - 2 8}$. Fig. 132. Typical rosettes from Corinthian capitals, of white marble, found in various parts of the excavation.
29. Figs. 107, 133, and 134. Corinthian architrave block of white marble, found east of the podium in the earlier excavation for the Museum. The treatment of the front and back faces is the same, consisting of three fasciae and a cymatium, separated by a plain bead. The mouldings were never finished off at the joints after the block was put in place. The top surface carries a setting-line for the frieze and a pry-hole near the centre of the block. It had two clamp cuttings at each end. Both ends have anathyrosis and cuttings for dowels at the bottom. The bottom surface is rough picked over the capitals, and carries a simple moulding on the exposed face between


Fig. 129. Fragment of a Column, Giving Profile of Top of Shaft the columns.

This block carries part of an inscription on the top fascia. The letters were cut in the marble and then inset with bronze, the only remains of which are the rivet holes. A correction of spelling is quite evident in the case of one letter, fifth from the left, which is either a $V$ or an $E$. Three


Fig. 130. Corinthian Capital from Temple of the rivet holes are in the correct positions to hold the letter V which is properly spaced between the B and R . It is assumed to have been the letter originally cut, while the letter E is the corrected form. This block came undoubtedly from the east end of the temple, and the letters form part of the dedicatory inscription. It will be further discussed in the section on inscriptions (cf. pp. 230-231).
30. Figs. 107 and 135. Fragment of an Ionic or Corinthian architrave block of white marble, found with No. 29 in the earlier excavation. The drawing (Fig. 135) gives the front face. The left end has an anathyrosis. The top, bottom, and back faces are badly broken. Five letters are preserved on the top fascia (cf. p. 230). It is to be assigned to the east end.
31. Fig. 107, central piece in the reconstruction, and Fig. 128. Corinthian architrave block of white marble, found at the west end of the podium. Length, 2.98 m ., slightly more than that of No. 29. It is exactly similar to No. 29 in height, width, and profile, and also carries the intercolumnar moulding on the bottom surface.
32. Fig. 136. Fragment of an Ionic or Corinthian architrave block of white marble, found near the southeast corner of the temple. Length preserved, 1.61 m . One end has an anathyrosis.


Fig. 131. Corinthian Capitals of Poros and a Corner Architrave Block


Fig. 132. Rosettes from Corinthian Capitals

The broken end preserves part of the pry-hole in the top. This cutting always occurs just to one side of the centre of the block. The break is $c a .0 .06 \mathrm{~m}$. from the estimated centre. Therefore, the complete length of the piece was $c a .3 .10 \mathrm{~m}$.
33. Figs. 131 and 137. Ionic or Corinthian architrave block of white marble, found near the southwest corner of the temple. It was broken into two pieces when it fell, but is otherwise complete. This is the southernmost block on the west end, with the extra length necessary to extend across the capital. The drawing (Fig. 137) shows the manner in which the back was cut at the end to mitre with the corner block on the long south side. The fascia and cymatium were carried around


Fig. 133. Architectural Fragments from the Temple, Set Up at East End of Podium
the exposed end but were never completely worked down. Two lifting-bosses on the lower fascia of the west face were left, and the mouldings were never finished at the joints. The chief importance of this block lies in the fact that it too has the intercolumnar treatment of the bottom surface and thus furnishes a proof that the peristyle extended completely round the cella. Block No. 31, from the position in which it fell, can also be assigned to the west end of the peristyle, while the short fragment found near the southeast corner (No. 32) apparently came from the long side. If the estimated length of this block is correct the intercolumniation was slightly more on the sides than on the ends.

34-40. Fig. 138. Fragments of dentils of white marble, found in various parts of the excavation. Height, 0.105 m. ; width, 0.105 m . ; depth, 0.085 m .; interdental spacing, 0.035 m . None of the pieces preserves the complete height of the block with bed and crowning mouldings, if they were cut in one piece.


Fig. 134. Architrave Block from East End of Temple: Top, Front, and Bottom Faces


Fig. 135. Architrave Block from East End of Temple: Detail of Front Face


Fig. 136. Architrave Block


Fig. 137. Architrave Block from Southwest Corner of Temple
41. Fig. 139. Fragment of a moulding with cyma recta profile, of white marble, found in excavation west of the temple. The upper fascia preserves the original top of the piece. The height of the lower fascia cannot be determined. This is probably the crowning moulding above the dentils. It is used as such in the restoration of the order as shown on Plate XIX.


Fig. 138. Fragments of Dentils
42. Figs. 140 and 141. Modillion of white marble with part of the soffit of the horizontal cornice, found south of the podium. This console has an anathyrosis on the side and traces of the cement which was used in the joint, found generally at the centre of the modillion. A few fragments are preserved which show that the complete width was sometimes cut on one piece (cf. p. 197). The


Fig. 139. Fragment of Crowning Moulding of Dentils


Fig. 140. Modillion from Horizontal Cornice


Fig. 141. Modillions from Horizontal Cornice: Nos. 42 (Right) and 43 (Left)


Fig. 142. Fragments of Modillions


Fig. 143. Soffit of Horizontal Cornice
ornament consists of simple mouldings continuing the divisions of the bolster. There is a great variation in the degree in which they were finished; in most of the existing examples they are merely blocked out. This fragment also gives part of the lower fascia of the crowning moulding of the corona.
43. Fig. 141. Fragment of a modillion of white marble, found near the northwest corner of the podium. The lower surface of the inside end of this console is preserved and has an anathyrosis indicating that there was a joint above the crowning moulding of the dentils.


Fig. 144. Sima with Water Spout
44-58. Fig. 142. Fragments of modillions from the horizontal cornice, of white marble, found in various parts of the excavation. To be noticed are the variation in the treatment of the mouldirigs and, in Nos. 46, 49, 51, 53, 54, and 57, the extra width where no joint occurs at the centre.
59. Fig. 143. Fragment of a soffit from the corona of the horizontal cornice, of white marble, found west of the temple. It is sunk as a coffer, with a single moulding round the panel and a central rosette. The front face carries the complete crowning moulding of the cornice. The section given in Figure 143 shows the profile.
60. Fig. 144. Fragment of the sima from the horizontal cornice with a lion's head water spout, of white marble, found near the southeast corner of the excavation. One end is preserved, giving


Fig. 145. Fragments of Sima from the Horizontal Cornice


Fig. 146. Fragment of an Antefix
the length of a complete block as $c a .1 .45 \mathrm{~m}$., proving that there were two blocks to each intercolumniation. The drawing shows the cutting in the top at the back, for half the width of an antefix, and also the projection for the cover tile. There would have been two spouts, one complete antefix and two halves to each intercolumniation. The best distribution places an antefix over the columns and over the centre of the intercolumniation with the spouts between. The face of the sima is adorned with a spiral and acanthus pattern in high relief.

61-62. Fragments of lion's head water spouts of white marble, found with No. 60, and similar to it.


Fig. 147. Fragments of Sima from the Raking Cornice

63-69. Fig. 145. Fragments of sima from the horizontal cornice, of white marble, found in various parts of the excavation. The ornament is similar to that seen on No. 60 (Fig. 144).
70. Fig. 146. Fragment of an antefix of white marble, found near the southeast corner of the podium. It is an eleven petal palmette in very low relief, and has the correct width to fit the cutting on the sima (cf. Fig. 144).

71-73. Fig. 147. Fragments of sima from the raking cornice, of white marble, found west of the podium. No piece gives the complete height, so that the profile, a cyma reversa, must be restored.

74-76. Fig. 148. Fragments of roof tiles of white marble. A great number of pieces were found in the excavation, but no complete tile or cover tile.

77-83. Fig. 149. Fragments of a large bead-and-reel of white marble, found in various parts of the excavation. This moulding was probably used in the cella. Two pieces, Nos. 79 and 83, show part of a leaf-and-dart pattern that was


Fig. 148. Fragments of Roof Tiles carved above the bead.

84-103. Fig. 150. Fragments of base mouldings of miscellaneous types, of white marble. Many other pieces were found in the course of the excavation.
104. Figs. 151 and 152. Wall block of white marble, found near the northeast corner of the temple. This block is from the orthostate course of the cella wall. A band at the bottom of the inside face, 0.25 m . in height, was never worked off. This indicates the level of the cella floor, one step above the pavement of the pteroma. The remainder of this face is smoothly diressed, but clearly shows traces of fire (see Fig. 152). The outer face is badly broken. The ends of the block have an anathyrosis, and at the top there are two clamp cuttings. Two dowel-holes, a pry-hole, and a setting-line (cf. the drawing of the top of the block, Fig. 151) show the position of the blocks in the next course.
105. Fig. 152. Wall block of white marble, found near the northeast corner of the temple. Height, 0.61 m. ; length preserved, 0.98 m .; width preserved, 0.27 m . One end has an anathyrosis. There are no cuttings on the preserved top surface.
106. Fig. 152. Wall block of white marble, found near the northeast corner of the temple. Height, 0.61 m. ; length preserved, 0.83 m. ; width, ca. 0.53 m . One end has an anathyrosis, and a clamp cutting at the top. One face has been badly burnt.
107. Fig. 153. T-shaped block of white marble found near the northeast corner of the temple, from which it originally came. Faces $\mathrm{B}, \mathrm{D}, \mathrm{E}, \mathrm{G}$, and H are exposed and have smooth dressing in so far as it is preserved. Faces A and C have anathyrosis, and F is broken. The adjoining block at A would have been the projection for the anta, east from the north long wall of the cella. The drawing (Fig. 153) gives the dimensions and shows the cuttings, the clamps in A and C, and the pry-hole for the block above F . The faces on the inside corner, D and E , have suffered badly from fire.
108. Figs. 154 and 155. Block of white


Fig. 149. Fragments of Bead-and-reel Mouldings marble found near the northeast corner of the temple. The drawings (Fig. 154) give dimensions and profiles. Both the outer face and inner face carry fasciae with a crowning cymatium. The fasciae are separated by a plain bead. It is exactly similar in style to the architrave blocks of the peristyle. This block is apparently from the


Fig. 150. Fragments of Base Mouldings


Fig. 151. Orthostate Block


Fig. 152. Wall Blocks


Fig. 153. Wall Block
crowning course (the epicranitis) of the cella wall. The broad cutting on the top (cf. the drawing, Fig. 154) at the outside edge, would be for the stone beams of the pteroma. The narrower cutting


Fig. 154. Wall Block


Fig. 155. Wall Blocks
on the inner edge is for a wooden roof over the cella. This cutting and the inner face are severely damaged by fire.

109-110. Fig. 155. Two small fragments of white marble found with No. 108. They carry part of the lower and middle fascia, and with No. 108 give the complete height of the epicranitis.


Fig. 156. Wall Block


Fig. 157. Wall Block


Fig. 158. Doric Architrave Block of Poros


Fig. 159. Ionic Cornice Block of Poros
111. Fig. 156. Wall block of white marble, found west of the temple. The outer and inner faces are smoothly dressed, though the latter shows traces of fire. The top (cf. the drawing, Fig. 156) has a clamp cutting at the centre of each end, and a pry-hole near the right end. The ends of the block have an anathyrosis. In the bottom (cf. Fig. 156) there is a cutting across the entire width of the block. The pry-hole indicates that the joint between the blocks in the next course came in line with the edge of this cutting. It might be explained as the top of a narrow window cut through the cella wall.
112. Fig. 157. Tympanum block of white marble, found in the excavation west of the podium. The front face has a dressed surface. The back is broken. There is an anathyrosis on the ends. The top of the block (cf. the drawing, Fig. 157) carries a clamp cutting at each end and a pry-hole near the right end. This piece gives the slope of the pediment, $1: 3.24$. The usual slope for pediments during the Roman period is $1: 3$.

Several other large architectural fragments were found in the course of the excavation which obviously could not be assigned to Temple E. It was possible to identify some as belonging to other known buildings. The most important will be described.


Fig. 160. Ionic Anta Capital of Poros
113. Fig. 158. Doric architrave block of poros, found in a trial trench, south of the lower foundation. The front face has a coating of stucco, varying in thickness from $0.004-0.006 \mathrm{~m}$. It is white on the face, while the lower surface of the projecting taenia at the top is red. The face of the taenia is white with traces of a pattern in red. It is impossible to distinguish the design. The block is late Greek or very early Roman.
114. Fig. 159. Ionic cornice block of poros, found with No. 113. The mouldings are cut in the poros and covered with a thick coat of stucco. The dentils are white. The band above carries a design, possibly a meander, in red on white.

Nos. 113 and 114 were found together in the fill south of the lower foundation, below the level of the top of the concrete. It is improbable that either can be assigned to the early Roman temple, since there is no evidence that the fill around the foundation was ever disturbed after its construction.
115. Figs. 160 and 161. Ionic anta capital of poros, found near the east end of the podium, and probably re-used as a wall block there. The surfaces have been considerably recut. The drawing (cf. Fig. 160) gives the dimensions and profiles. There are traces of a coating of thin white stucco. The block is not preserved to its complete width, but would have had, originally, the correct scale for a building of the proportions of the first temple.


Fig. 161. Ionic Anta Capitals of Poros: No. 115 (Left) and No. 116 (Right)


Fig. 162. Ionic Architrave and Frieze Blocks
116. Fig. 161. Piece of an Ionic anta capital of poros with traces of stucco. It was found with No. 115 and is similar to it in scale and style.
117. Fig. 162. Ionic architrave and frieze in one block, of white marble, found built into a Byzantine wall south of the podium. The front face of the architrave has the upper fascia and part of the second preserved. Above them are a cymatium and a taenia separating the frieze and architrave. The taenia projects 0.07 m . from the face of the frieze which has the profile of a cyma recta. The crowning moulding is completely broken off. A small piece of the frieze is the only original surface on the back of the block.
118. Fragment of Ionic architrave and frieze in one block, of white marble, found in the same wall as No. 117, and similar to it in style, though it is not so well preserved.
119. Fragment of an Ionic architrave and frieze in one block, of white marble, found with Nos. 117 and 118. It is similar in style and state of preservation.

The fragments Nos. 117-119 correspond in size and style with those assigned to the West Shops.


Fig. 164. Unfinished Ionic Capital


Fig. 163. Corinthian Pilaster Capital
120. Fig. 163. Fragment of a pilaster capital of white marble, of the Corinthian order, found in the wall of a Byzantine grave (Cistern III, cf. p. 170). Complete height, 0.595 m . ; width of fragment, $c a .0 .31 \mathrm{~m}$. One side has the original surface, but is not preserved to the complete depth. There are two rows of acanthus leaves in relief, with the tops of the leaves turned over. They are broad with rounded ends. The style is characteristic of the capitals of the West Shops, with which it agreas in height.
121. Fig. 164. Block of white marble found east of the podium. It has been cut and roughly worked into the form of an Ionic capital, and never finished. It is an interesting example of the preliminary steps in the cutting of an Ionic capital.

## V. THE PODIUM TEMPLE

A fairly accurate restoration can be made of the second temple (cf. Plate XIX and Fig. 165). It is necessary to supply only a few details for which we have no definite basis.

Little needs to be added to the description of the podium already given (cf. pp. 179-184). As has been said, it rested on a euthynteria course of poros, the outer face of which was not exposed, while the top was almost entirely covered by a single


Fig. 165. Restoration of the Plan
step of Acrocorinthian limestone. The juncture of this toichobate and the outer walls of the podium was marked by a base moulding of marble. Above it the face of the poros blocks was concealed by a marble revetment. One fragment of crowning moulding was found (cf. p. 186, No. 4) similar in style to that used on the face of the horizontal cornice. It is, however, not of the same scale as other pieces definitely identified as belonging to the corona. Such a moulding is of the correct character and size to serve as the crowning member of the podium. If the existing piece was not actually employed in this position, we must restore one of a similar nature.

Nothing remains of the marble surface of the podium. Therefore, no elaborate restoration was attempted on the plan (Fig. 165), though there is little question as to its general appearance. There was undoubtedly a marble stylobate above the crowning moulding of the podium, upon which the columns of the peristyle rested. The bases may have been supported on this step without the intermediate use of
individual plinths. The fact that not a single fragment of a plinth was found in the course of the excavation is no reason for supposing that they never existed.

The plan of the temple (Fig. 165) was hexastyle and fully peripteral with twelve columns on the sides (counting the corner columns twice). An intercolumniation of 2.98 m . was assumed for the ends. There is a slight variation in the lengths of all the complete architrave blocks which were found (cf. pp. 189, 191, Nos. 29, 31, and 33). The dimension 2.98 m ., the length of one piece (cf. p. 189, No. 31), was used on the restored plan, where we have assumed that the five intercolumniations were the same. If this was not the case, the position of the columns could be shifted without seriously changing the plan. The spacing for the columns on the long sides, 3.10 m ., was obtained from one of the blocks found, and fits the requirements of the plan exactly (cf. p. 189, No. 32).

The use of the complete peristyle is not a common feature in Roman podium temples of this type. It is certainly due to the proximity of Greek influence. Similarly local in origin is the long, narrow cella ( $c a .24 .50 \mathrm{~m}$. by 10.00 m .) with a shallow pronaos, having two columns in antis. The front line of the pronaos falls between the second and third columns of the outer colonnade, while the two columns between the antae are in line with those at the centre of the east peristyle. The rear pteron had the same width as the east end, ca. 5.50 m . (compare with cuttings as shown on the plan of original state, Plate XVIII). The colonnade on the long sides is narrower, ca. 3.00 m . The position of the cella walls might be changed slightly, but they were, in any case, in line with the second column from the corner on the ends.

Any restoration of the interior of the cella is pure guesswork. The unfinished band at the bottom of the orthostates (cf.p.200, No. 104) was probably below the floor level, though it may have been concealed by a base moulding and for that reason was never worked off. It is not unlikely, however, that the cella floor was a step up from the pavement of the pteroma. It was entered by a single door at the centre of the east end. The cella walls, which were of marble, one block in thickness, may have been pierced, just below the ceiling, by a series of narrow windows (cf. p. 205, No. 111). There is no evidence for the use of decorative pilasters or an inner order of any kind. At the west end of the cella there must have been one or more niches or bases for statues. The floor was undoubtedly paved with marble. Many fragments of various colors and thin border strips of white marble, which would have been suitable for such a purpose, were found all over the excavation.

The external appearance of the temple is much more certain (cf. the restoration of the order, Plate XIX). The columns are Corinthian and were unfluted. Their exact height is not known, but it is assumed that the proportion of height to lower diameter was ten to one (cf. p. 187). The capitals, which show a great deal of variation in execution, are not very elaborately carved. The architrave consists of three fasciae separated by a plain ovolo and crowned by a cymatium. The upper fascia of the blocks on the façade carried an inscription in bronze letters (cf. above, p. 189, Nos. 29-30, and below, pp. 230-231). No fragments were found which could be identified as
parts of the frieze. It is restored in the drawing, Plate XIX, with a plain surface, but it seems likely that, in contrast with the simplicity of the architrave and cornice, it must have been decorated, probably with a floral or scroll design. There is also no evidence for the moulding used above the frieze. Above the dentils there is a simple taenia and cyma recta (cf. p. 194, No. 41), below the modillions which support the corona or projecting member of the horizontal cornice. The modillions are of double width and are ornamented with simple mouldings (cf. pp. 194-197, Nos. 42-58). There is a rosette on the lower face of the corona between the consoles (cf. p. 197, No. 59). The sima, which crowns the cornice, is adorned with a scroll pattern, while the projecting water spouts are realistically carved in the form of lion's heads (cf. pp. 197-199, Nos. 60-69). The sima above the raking cornice is plain with a cyma reversa profile (cf. p. 199, Nos. 71-73). The pediment, with a slope of $1: 3.24$, is not so steep as that usually employed in the Roman period. The east gable, if not both, undoubtedly contained sculpture (cf. p. 224). Fragments of a marble acroterium with a group representing a Nereid riding on a dolphin were also recovered in the excavation (cf. p. 213).

With so much on which to base a reconstruction it is not difficult to imagine what a magnificient building Temple E must have been, towering above the market place, a mass of white marble from the bottom of the podium to the top of the acroteria which crowned the corners of the gables. It was certainly one of the outstanding buildings in Roman Corinth. ${ }^{19}$

## VI. SCULPTURE

A number of fragments of sculpture were found during the excavation, and some of them undoubtedly formed part of the decoration of the marble temple. It seems best therefore to include them in the same publication.


Fig. 166. Fragment of a Left Foot

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Fig. 167. Acroterium Figure: Front View


Fig. 168. Acroterium Figure: Rear View

## Catalogue of the Sculpture

1. Fig. 166 (Inv. No. 1531). Fragment of a left foot, found in the excavation south of the podium. It is of coarse-grained white marble. The complete width of the little toe is preserved with the beginning of the next two toes and part of the outer edge of the sandal. The complete width of the fragment is 0.285 m . ; width of little toe, 0.095 m. ; length, 0.12 m . A figure with a foot in this scale must have been approximately ten metres in height. It was the only fragment found of such proportions and may be from a colossal cult statue, which stood possibly in the temple. ${ }^{20}$
2. Figs. 167 and 168 (Inv. No. 1534). Fragment of an acroterium group, found near the southwest corner of the temple. It is of Pentelic marble and represents a Nereid riding on a dolphin. The plinth is $c a .0 .08 \mathrm{~m}$. in height. The large dowel which held the statue in position is still attached to the base. The preserved height of the figure is $c a .0 .81 \mathrm{~m}$. Only the lower legs and part of the upper legs remain. It is something under two-thirds life size. The condition of the marble, distinct


Fig. 169. Fragment of a Head, Possibly of a Nereid
even in the photograph (Fig. 167), is indicative of exposure to severe heat, further confirmation for the belief that the temple was destroyed by fire (cf. p. 183). The front part of the dolphin is missing. The back view (Fig. 168) shows the tail, which is turned up supporting the figure. The Nereid wears a long chiton and an upper garment. The drapery gives an excellent effect of rapid motion, clinging to the limbs in front and billowing out in windy folds at the sides and back. The simple treatment of the back of the group, which would not be seen so clearly, is interesting. The broad, sweeping folds of the mantle are done in very shallow relief. Below the dolphin the marble surface is cut in wavy lines to indicate the sea. It must indeed have been a splendid piece, accordant with the majestic simplicity of such a building as Temple E. From the position in which it fell it can be assigned to the southwest corner, and is another proof that the temple was finished to be seen from both front and back.
3. Fig. 169 (Inv. No. 1535). Fragment of the head of a woman, found near the southwest corner of the temple, not far from No. 2. It is of the same kind of marble as No. 2. The surface is badly weathered. The fragment preserves about half of the upper part of the right side of the head, with the hair, forehead, one eye and a bit of the cheek. The greatest preserved length is 0.14 m .

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The hair is brushed back in soft waves from the broad high forehead. The use of the drill is apparent in the hair. Since the head is considerably under life size, and therefore of a suitable scale, it may belong to the Nereid of the acroterium.
4. Fig. 170 (Inv. No. 1538). Head of a woman, found west of the podium, of fine Pentelic marlle. It is broken off at the base of the neck, but two small pieces were found (not shown in the


Fig. 171. Head of Tyche
photograph) which fit the break and show that the neck was rounded off at the bottom with a dowelhole in the centre. It was, therefore, made separately and attached to the body. The back of the head, which was also a separate piece, is gone, and the upper left side of the head has broken off along the dowel. The complete height of the piece is 0.30 m . ; the height from chin to top of head, 0.225 m . It is about life size. The left nostril, right ear, and surface of the hair are badly crumbled. It seems to have been completely finished on all sides, though the back of the neck is not so smoothly polished as the face.

The face is long and oval with heavy jaw and chin. The eyes, below firmly modelled brows, are not quite wide open. The nose, which is perfectly preserved, has a broad bridge and is set at a slight angle to the forehead. The lips are parted. The hair, which is parted in the middle and combed back above the ears, is held in place by a braided fillet. The wavy strands are quite deeply undercut. The head, though it shows Roman sculptural technique, is undoubtedly Praxitelean in type, and can probably be identified as Aphrodite. ${ }^{21}$
5. Fig. 171 (Inv. No. 1540). Head of a woman wearing a mural crown, found with the preceding, in the excavation west of the podium. It is of the same marble. The head is broken off at the base of the neck. The complete height with the crown is 0.225 m . The end of the nose is broken and part of the back of the head is gone. The right ear and hair are chipped slightly. The face is rounder than in the preceding head, but the features are quite the same, with the partially closed eyes, small mouth with parted lips, and broad nose. The head is slightly bent to its own left and tipped forward. The hair is parted in the middle and arranged in a double tier of very stylized curls, with an extra curl in front of each ear. At the back of the head the hair is brushed up in two rows of locks, with the ends turned over like a conventional wave pattern. It was certainly not meant to be seen from this side.

There is an arched gate at the centre of the front of the mural crown and another just back of the left ear. The corresponding one on the right side would have been on the missing piece. Halfway between the gates are towers, projecting from the face of the wall and slightly higher. The masonry construction of the wall and towers is indicated by incised lines, and the crenelated battlements were shown at the top. An additional touch of realism is given by the windows near the top in the outer face of the wall. The small piece of the crown which is preserved back of the left gate is unfinished. The surface is left roughly picked, and there is no attempt to indicate the hair inside the crown. The statue was apparently to be seen only from the front and below.

This is obviously a head of Tyche, the Roman goddess Fortuna, a personification in marble of the city of Corinth. ${ }^{22}$ It is important, since so few good examples of the head with the mural crown well preserved exist in sculpture. ${ }^{23}$
6. Fig. 172 (Inv. No. 1570). Head of a woman, found near the southwest corner of the podium. It is of the same style and marble as the preceding. It has been broken off at the neck. Height from fracture, 0.30 m . The surface is badly weathered. The features are similar to those of the Tyche, as a comparison of the photographs clearly shows. It was undoubtedly the work of the same sculptor.

The head is bent down slightly to its right. The hair is fastened by a narrow band, and falls in shaggy curls over the forehead and down the back of the neck. The hair on the top of the head is indicated by wavy grooves. The back of the head is badly worn but was probably never as well finished as the rest. This piece too may be based on a Greek type. In profile view it is not unlike the head of the seated Fate on the Madrid Puteal, ${ }^{24}$ which is probably a copy of a figure

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Fig. 173. Fragment of the Head of a Man


Fig. 175. Fragment of a Head


Fig. 174. Fragment of Neck and Shoulder


Fig. 176. Left Leg of a Seated Figure
in the east pediment of the Parthenon. In full face, however, it is more reminiscent of fourthcentury sculpture, and its prototype may be found in a figure of the Muse, Melpomene, such as the one of which a copy is preserved in the Vatican Group of Muses. ${ }^{25}$
7. Fig. 173 (Inv. No. 1563). Fragment of the head of a man, found west of the temple with other pieces of sculpture. It is of Pentelic marble. The fragment preserves the left ear with part of the cheek and neck and the hair about to the middle of the head. Height, 0.18 m .; greatest width, 0.08 m . The upper hair is not deeply cut. It is bound with a plain fillet. The locks above and below project and are more deeply undercut, with a profuse use of the drill. There is the usual contrast between the treatment of the hair and the polished surface of the flesh. It is of the same period and style as the other heads.


Fig. 177. Upper Torso of a Nude Male Figure
8. Fig. 174. Fragment of neck and right shoulder, found with the preceding and of the same marble. The width of the piece is $c a .0 .10 \mathrm{~m}$., the height, 0.075 m . Two curls hang down on the shoulder which is draped. The small piece of garment preserved is not very distinct, but might be the top button of a " button-sleeve" chiton, worn at this time by Roman women. The fragment does not go with any of the heads found, though the treatment of the hair is similar in general to the Tyche.
9. Fig. 175 (Inv. No. 1631). Fragment of the top of a head, found with the other pieces of sculpture and of the same white marble. Greatest width, 0.195 m . It is very badly weathered. The lines indicating the hair are scarcely more than incised on the surface. It does not fit with any other piece.
10. Fig. 176 (Inv. No. 1537). Left leg of a draped seated figure, found west of the podium with other fragments of sculpture. It is of good grade Pentelic marble. The foot is broken off at the ankle. The other fractures occur between the legs and at the top of the upper leg. Height from break to knee, 0.43 m . ; length of upper leg, 0.34 m . A heavy garment is drawn across the upper leg from the back in stiff folds and falls down between the legs. The absence of an undergarment, which would have shown below the mantle at the ankle, is clear proof that the fragment belongs to a male figure.
11. Fig. 177 (Inv. No. 1539). Several fragments which fit together and give the upper torso of a nude male figure, found with other pieces of sculpture west of the podium, and of the same kind of marble. It is about life size. The back has a slightly rough finish, in contrast to the smooth treatment of the flesh surface on the front. The complete piece, composed of all the preserved fragments, includes the left shoulder and breast of a man, and the beginning of the neck, with a break showing that the head was not a separate piece; also the beginning of the left arm to just below under-arm. The breast is preserved ca. 0.12 m . down from the neck at the centre of the front and sloping farther down at the sides. The bottom of the piece along the breast and arm has an anathyrosis. It was made, therefore, to fit into the rest of the body with drapery used to conceal the joint, that is, over the right shoulder, diagonally across the back, and over the left arm below the shoulder.
12. Fig. 178 (Inv. No. 1559-1560). Fragment of a left arm, found with other pieces west of the podium and of the same marble. It is preserved from just below the elbow and includes most of the upper arm. Height above elbow, 0.25 m . ; diameter at upper break, 0.105 m .
13. Fig. 179 (Inv. No. 1568). Fragment of a left hand and wrist, found near the southwest corner of the podium. It is of the same Pentelic marble as the preceding fragments and is about life size. The front of the hand with the tips of the fingers holding the drapery is well done. Less attention was paid to the back of the hand, which is scarcely modelled.
14. Fig. 179 (Inv. No. 1541). Part of a left hand of Pentelic marble. The thumb and part of the last three fingers are preserved. Width across back of hand, 0.09 m . The scale is slightly smaller than in the other hand. Some object, possibly a book-roll, is held grasped between thumb and fingers.
15. Fig. 179 (Inv. No. 1542). Fragment of a right hand of Pentelic marble. The thumb and the back of the hand to the wrist are pre-


Fig. 178. Fragment of a Left Arm served. Length, 0.15 m . (about life size). The inside of the hand was not worked. There is a bracelet on the wrist which permits its assignment to a female figure.
16. Fig. 180 (Inv. Nos. 1561-1562). Piece of a base with the front part of a left foot, found west of the podium with other fragments of sculpture, and of similar marble. The foot was found in a separate piece, but fitted the break. One side and the bottom of the base are finished. Greatest length, 0.285 m. ; width, 0.14 m .; height, 0.10 m. ; preserved height of foot above base, 0.07 m .; width of foot, 0.08 m . It probably belonged to a seated figure, though it does not join with the left leg which was found (cf. p. 219, No. 10).
17. Fig. 181 (Inv. No. 1504). The lower part of a seated male figure found west of the Museum, some distance north of the temple. It is of a good grade of Pentelic marble. The feet and the body above the waist are missing. The preserved height from the bottom of the base to the break is 0.51 m . and to the top of the knee, 0.43 m . ; length of upper leg, 0.34 m . The figure


Fig. 179. Parts of Three Hands


Fig. 180. Fragment of Base with
Part of Left Foot
is just under life size. The man wears a mantle wrapped loosely around the lower part of the body, crossing at the back, with the ends falling down at the sides. He sits with legs apart, the right slightly advanced, the left drawn back, on a rock, which is adorned with fillets and laurel branches in relief. This decoration is only on one side and part of the back. The rest of the base is merely rough picked, and the drapery on this side is also unfinished. It was, therefore, meant to be seen only in the three-quarter view shown in the illustration, Figure 181, and undoubtedly formed part of a pediment group. Two projections in the marble on the top of the


Fig. 181. Seated Male Figure from Pediment
thighs could be supports for a lyre and suggest an identification of the figure as an Apollo Citharoedus, and the rock upon which he is sitting as the Omphalos.
18. Fig. 182 (Inv. No. 1505). The upper part of a standing female figure, found with the preceding, and of the same type of marble. It is on a slightly larger scale. The preserved height is 0.63 m . The left arm is missing and the right arm is broken off at the elbow. The head, which was made separately and dowelled into a cutting in the shoulders, is also gone. The figure wears a thin chiton with buttoned sleeves of elbow length. It is gathered in tightly at the waist by a narrow belt, which is tied in a bow at the centre of the front. The drapery clings closely to the breasts but blouses over the belt. The back is unfinished, with the drapery blocked out in large stylized folds. A mantle crosses the back diagonally from the left shoulder to below the right arm, but does not show on the front of the statue, so far as it is preserved. This figure, which is similar in style and workmanship to the Apollo, can certainly be assigned to the same pediment group.
19. Figs. 183 and 184 (Inv. No. 1567). Part of a reclining male figure, found built into a late wall south of the temple. It is also of Pentelic marble. The feet and the body above the waist are missing. Height with base, 0.53 m .; base, 0.80 m . long and 0.45 m . wide. The figure reclines on a base the front face of which is rough picked with drill holes (cf. Fig. 183) to indicate a rock. He supported himself on his bent left arm. The hand is preserved on the edge of the base. He is wearing a mantle which has slipped down onto the rock, curving loosely around his back over the legs from right to left, crossing underneath with the ends hanging down at the sides. The upper part of the body is twisted toward the left at the waist. The right arm and hand, which are not preserved, lay long the top of the right leg. There is a slight projection from the drapery to support the arm and another just back of the knee where the hand rested. A strut broken off in the drapery between the lower legs (cf. Fig. 183) and a slight flatness of the top of the folds in line from the right knee to the strut indicate the position of some attribute such as a spear. The legs extend out from the base with the left bent back under the right. The dowel-hole in the edge of the swirl of drapery is to hold a patch. The edges of the deep stiffi folds are very badly chipped, but the drapery is quite clearly of the same style


Fig. 182. Standing Female Figure from Pediment


Fig. 183. Reclining Male Figure from Pediment: Front View


Fig. 184. Reclining Male Figure from Pediment: Rear View
as that on the other figures. There is a liberal use of the drill, such as can be seen in the line below the drapery on the base, to cast a shadow, and similarly around the fingers of the left hand. This hand, which is badly weathered, is additional proof that the statue faced as it is shown in Figure 183. On this piece the drapery is just as well, though possibly not quite so elaborately, finished on the back as on the front. It is suitable for placing in the left wing of a pediment composition.
20. Fig. 185 (Inv. No. 1525). Fragment of drapery found north of the temple. It is also of Pentelic marble. Greatest height, $c a .0 .25 \mathrm{~m}$. ; complete width, 0.21 m . It is the lower part of a garment of a female figure in swift motion to the left. It is finished on the front and end, while the back is only roughly blocked out. The piece was made separately and has a cutting for the leg at the inner side of the top, with a dowel below (pour-channel from the cutting). There is also a dowel at the outer edge of the piece. The metal is still in place in both. The drapery is badly broken, but it shows the same liberal use of the drill and is undoubtedly of the same style as the preceding fragments. This is conclusive evidence upon which to base the restoration of another piece in the group of sculpture appropriate for a pediment.

## Comments on the Sculpture

We have in Nos. 17-20 parts of four statues definitely for use in a pediment group. From their place of discovery and from the fact that such sculptural decoration would be consistent with the excellence of the building as a whole, these pieces have been tentatively assigned to Temple E. There is no factual basis for a restoration or any real proof that the temple ever had pediment sculpture, since none of the pediment floor blocks are preserved. Assuming its presence, was it confined to the east gable, or used


Fig. 185. Fragment of Drapery from Running Figure in both? There was no means of access to the podium at the west end (Fig. 165) but, as has already been pointed out, the temple presented an equally magnificient appearance from all sides (cf. pp. 209 f.), though it might not have stood a critical examination at the back (cf. p. 189, Nos. $23-25$ ). From the position in which the four pieces were found, they might have come from either end. The figures have a stylistic homogeneity and could, as will be shown, be used in the same composition. Whether they were so used, or must be distributed between two pediment groups, is not of vital importance, since in any case even a conjectural restoration is out of the question.

Their chief interest lies in their resemblance, certainly not a coincidence, to figures in the Parthenon pediments. The four statues of which we have fragments are clearly in the style of the fifth century b.c., more specifically of the Parthenon and Erechtheum figures, and if they are not exact copies of Greek originals, they are at least Roman interpretations changed only to meet the requirements of a different building scale. The slope of the Temple $E$ pediments can be accurately determined from the tympanum block found (cf. p. 205, No. 112) as $1: 3.24$. This is not so steep as the usual Roman pediment, but is more than the slope in the Parthenon, which is $1: 4$. The adaptation of Greek sculpture to a Roman pediment would consequently involve certain changes. Figure 186 shows these figures restored and sketched in their approximate position in a Temple $E$ pediment. It immediately becomes apparent that, in addition to the similarity of individual figures, the rhythm of the composition


| 1 | 2 |
| :--- | :--- |
| 0 |  |

Fig. 186. Drawing Showing Scale of Pediment Figures
is in general the same as in the Parthenon, with the same arrangement of reclining, seated, running, and standing figures in relation to the central group. There must have been in the pediment of Temple E a group, the individual figures of which copied fairly closely single pieces from the Parthenon, following the same scheme of composition, but in theme, at least in some respects, original, more simplified and with fewer characters.

The reclining male figure (cf. p. 222, No. 19) is obviously not unlike the so-called Theseus of the east pediment, but still it is radically altered by the addition of drapery and the change in pose. Turning to the west pediment of the Parthenon in search of further material for comparison, we find a better prototype in the figure A* from the north wing, long missing, but recently recognized in a statuette at Eleusis. ${ }^{26}$ The similarity of the Roman statue at Corinth to one which can be restored as "a halfdraped Theseus of the east pediment, twisted a little more frontally and propping

[^58]himself on his left arm " is beyond dispute. It is on the other hand not an exact copy. The Parthenon figure A*, interpreted as a personification of the river Eridanos, also used his right arm as a support, the hand resting on the base at the back. In our figure, as we have seen (p. 222), the right arm rests along the top of the leg. The addition of a spear or some similar object is also a variation and permits a less symbolic interpretation of his identity.

The seated male figure (cf. p. 221, No. 17), which we have identified as Apollo Citharoedus, was undoubtedly inspired by a representation of this deity which has been suggested as one of the missing figures in the north wing of the east pediment of the Parthenon. ${ }^{27}$ Again we have not an exact copy, since the position has been reversed for use in the opposite wing and drapery has been added. In addition to being shifted from the right to the left wing of the pediment, the figure must be placed nearer the angle and thus be substituted for the Demeter-Persephone seated group, indicating a simplification of the composition.

Sources for the standing female figure (cf. p. 222, No. 18) and the running figure (cf. p. 224, No. 20) are also to be found in the east pediment of the Parthenon. The fragment of drapery is undoubtedly from the wind-swept garment of a figure similar to the "Eileithyia." ${ }^{28}$ The standing female figure might be either of the two standing Fates, " Aisa" or "Lachesis." In scale our fragment should be placed nearest the central group and would therefore be "Aisa." The line of the right shoulder, which is raised slightly, indicates that the arm was extended, and since it is preserved to the elbow, it can be restored only in the position of this figure. However, the mantle, which does not show at all on the front of the piece preserved, must have been worn more in the manner of the "Lachesis," while the variation in the degree of finish betwen the back and the front of the statue denotes a more frontal pose in the manner of this Fate. We consequently restore our figure as a combination of the two Fates with the supposition that in the Temple E group she is filling another rôle.

The other pieces of sculpture found in the course of the excavation, excepting of course the colossal toe (p.213, No. 1) and the acroterium group (p. 213, No. 2 and p. 213, No. 3), which can be dismissed from the discussion, are too fragmentary in themselves to permit a definite assignment to a pediment group. We must consider them, however, especially in relation to the four pieces of which we can be certain.

As was noted in the individual descriptions, most of these pieces were found west of the podium, and more accurately within a space of a few square metres. They were all lying at approximately the same level, on, or buried in, a deep bed of marble chips. This chip layer is part of the strosis marking the final destruction of Temple E. It extends over almost the entire area of the excavation (p. 173, Fig. 111) and lies

[^59]directly under the fragments from the marble temple. Some of the chips preserve worked surfaces, sufficient to allow us to distinguish between architecture and sculpture, with the former predominant. But where these larger fragments of statues were found, though numerous architectural pieces were scattered throughout the area, the identifiable chips were all of sculpture. These included several hundred fragments of drapery, fingers, arms, and legs, and other parts of the body, varying in greatest dimension from a fraction of a centimetre to ten centimetres. A few of the largest pieces of drapery are illustrated in Figure 187. Although some can be placed with reasonably accuracy, such as the one in the upper left-hand corner which is undoubtedly from a right shoulder, ${ }^{29}$ they are too few and too small to be of much benefit. With these pieces were found several iron hook-clamps and bars (Fig. 188). Though similar to those employed in the construction of the cella walls, the chips of sculpture still clinging to them afford conclusive proof of their use. In this connection their only purpose would be to fasten pieces into a pediment, one end hooking into the tympanum wall and the other into the back of the statue. Does the existence of these clamps mean that all the fragments of sculpture in their immediate proximity came from a pediment group?

In studying these small pieces we must realize instantly the similarity between the fragment described as the left leg of a draped seated male figure (p. 219, No. 10) and the more completely preserved Apollo (p. 221, No. 17). The scale is exactly the same, and the Parthenon style is apparent in the drapery, even to one not looking for it as an essential characteristic. We are secure, therefore, in the assumption that this fragment is from a similar figure, to be placed, in consideration of the excellence of the surface treatment on the preserved piece, in the right wing of a pedimental composition. It is highly unlikely that the Apollo in the left wing would be balanced by an exact counterpart ${ }^{30}$ and hence, with the additional evidence of its place of discovery, we must assign it to a similar position in the other pediment, thus proving that, if the initial assumption that the sculpture belongs to Temple E is correct, both pediments were filled. Another point of extreme importance is the consistent employment of Parthenon types in both gables. This is entirely natural, but takes on a greater significance when we continue our analysis of the remaining fragments.

The heads, arm, foot, and small pieces present no very distinguishing characteristics, but are perfectly suitable in size and style for figures in the pediments. Are the three large heads (pp. 215-219, Nos. 4-6) from the same source? Two were found with other fragments, but the third, which lay in an isolated position (No. 6), is so obviously similar that it should be considered with them. The noticeable change in scale in the three heads ${ }^{21}$ immediately suggests a pedimental composition. In direct opposition to such use is their excellent state of preservation and, more important, the

[^60]

Fig. 187. Miscellaneous Fragments of Drapery
evident derivation of the three types from works of the fourth century and the Hellenistic period instead of from the fifth century. In an earlier section it was suggested (p. 183) that the temple was destroyed in the middle of the fourth century after Christ, and at least partially by fire. It is generally believed that Christian fanaticism at that time may have led to the deliberate destruction of many pagan temples. Could these heads be so well preserved after suffering either a fall of fifteen


Fig. 188. Clamps Found with Sculpture
metres from the pediment to the ground or enthusiastic mutilation by the Christians or even both? It is hard to believe, but must be considered as a remote possibility. Granting it, are we justified in assigning these three heads to a pediment group which, so far as we have any evidence, was true to the Parthenon tradition in types, style, and composition? The only logical answer would seem to be an emphatic negative, unless we accept as a solution the possibility that, lacking the particular deities whom they wished for their cast of characters and yet copying all the types and poses from the Parthenon in order to maintain the proper balance of composition, they gave the desired personality to each figure by changing the head. This theory is difficult to accept, but still it is possible. The Roman sculptors could not have found a Greek
pedimental composition to copy which would have included a figure of Tyche or Aphrodite, and at least in the first case the individual character of the type is expressed in the head with the mural crown. What figure from the Parthenon group could be used as a substitute? The sculptor needed a figure of this popular Graeco-Roman goddess to use in a position definitely limited by the requirements of a pedimental composition of the classical period. The earliest example of the type that he could find was Hellenistic, and then not a pediment figure. He borrowed the head, which was all that he had to have, and moreover all that he could take to maintain without serious difficulties his original plan. The result is that we are confronted with the weird combination of fifth-century bodies and fourth-century or Hellenistic heads, having in common only the distinguishing traits of Roman copies.

It is only too apparent that with the material available a restoration of the complete compositions or even an identification of their themes is impossible. The group in the east pediment was probably an Assembly of the Gods, stressing in some manner the deity to whom the temple was dedicated. The story enacted in the west gable would be more secular, possibly based on a local myth, if Tyche, personifying Corinth or Rome, and Aphrodite were present. Undoubtedly a great many fragments of sculpture, like the architecture, were destroyed in the limekilns, but possibly others will be found which will throw the necessary light on this interesting and important subject.

## VII. INSCRIPTIONS

Very few inscriptions were found in the course of the excavation. The miscellaneous Roman and Byzantine fragments will not be included in this publication. Only those of importance in connection with the temple will be discussed.

1. Figs. 107 and 133-135. Fragment of an inscription on the top fascia of the architrave, assigned to the east façade of Temple E (cf. p. 189, Nos. 29-30). It consists of eight letters on one complete block, and five letters, two only partially preserved, on a block of incomplete length. The letters are $c a .0 .22 \mathrm{~m}$. in height. They were cut in the marble, with lines $c a .0 .03 \mathrm{~m}$. wide, probably after the blocks were in place. The work was very carelessly done, since the letters break into the bead above and below the fascia. Separate bronze letters were then inserted and held in place by rivets. The inscription probably extended across the entire façade, five blocks, so that there would have been forty or more letters. This honorary inscription may refer only to the rebuilding and perhaps did not mention the deity to whom the temple was dedicated. It is unfortunate that so little was found, since it is impossible to make any restoration from the letters which exist.
$a$ (the complete block). This piece is obviously not a corner block, but since we have no evidence for a variation in the intercolumniation, it can be restored in any one of three different positions. The correction in spelling of one letter has already been spoken of (cf. p. 189), with the conclusion that $E$ was the final form.
$b$ (the fragment). Though there is no proof of such an identification, this block was probably the northeast corner piece. The first four letters are clear. The fifth letter has one vertical stroke and could be a P. The S. P. undoubtedly begin one of several formulas employed at the end of honorary inscriptions.

These two pieces do not seem to fit next to each other. The top surface of $b$ is so badly broken that no cuttings are preserved which can be compared. The front faces did not join perfectly when an attempt was made to put the two blocks together, although this may be due to the fact that the mouldings at the joints are unfinished and therefore misleading.

Assuming that $a$ is not the fourth block, the letters would probably be read T (iti) L(iberti) IBERI (cf. next paragraph), meaning two or more freedmen of Titus


Fig. 189. Fragment of an Honorary Inscription
with the cognomen Iberus, a rare name unknown as yet in Corinth. The use of the plural makes the reconstruction odd, but no more than does the possibility that the name is in the genitive.

If $a$ and $b$ are adjoining blocks, we must disregard the punctuation point after the $L$, quite possibly another mistake. The simple insertion of a marble plug would have rectified the error, since there is no difference in the spacing of the letters. The restoration eT LIBERI EIUS S P is entirely natural. The certain shortness of the inscription, preventing the use of very elaborate formulas, is a strong argument in favor of the simpler reconstruction.

It is to be hoped that the other three blocks bearing the remainder of this inscription were not irrevocably destroyed in a limekiln, and that at least fragments may be found in some future excavation.
2. Fig. 189. Fragment of an honorary inscription. Block of dark marble; complete width, 0.45 m . ; complete depth, 0.23 m . ; greatest preserved height, 0.29 m . Height of letters, ca. 0.048 m . It was found on the top of the podium in the edge of one of the Byzantine graves. It may have stood, originally, in the neighborhood, or have been brought from some distance. It is heavy, but portable. The last three lines of the inscription are preserved, and part of the first letters of another line.

$$
\begin{aligned}
& \text { PRAEF } \cdot \mathrm{I} \cdot \mathrm{D} \cdot------ \\
& \text { ECOLO } \cdot \mathrm{IOVIS} \cdot \mathrm{CAPITO} \\
& \text { LI } \cdot \mathrm{IRENARCHE} \cdot \mathrm{IANI} \cdot \\
& \text { OB } \cdot \text { IUSTITIAM } \cdot \mathrm{D} \cdot \mathrm{D} \cdot
\end{aligned}
$$

The first part of the inscription would have listed the political and secular offices held by the person to whom honor is being paid. The letters in the first line preserved on this fragment are PRAEF (or possibly PRAET), toward the end of this group of offices. The first five letters in the second line ECOLO must be the end of a word from the preceding line, which begins the recital of religious offices, the word should be read thE<O $\rangle$ COLO. The mention of Jupiter Capitolinus is interesting, for it was the first indisputable reference to this deity found on any inscriptions from Corinth. The next word, IRENARCHE, a servant of Janus, is also very interesting. It is a Latinized form of the Greek єip $\boldsymbol{\nu} a^{\rho} \rho \chi \eta \mathrm{s}$, and is used at a later period as a term for a Justice of the Peace. ${ }^{32}$ This seems to be its earliest occurrence, a second-century inscription.

## VIII. CONCLUSION

The most difficult task in the discussion of Temple E is the identification of the deity to whom the building was dedicated and its position in relation to the rest of Roman Corinth. Is the temple among those mentioned by Pausanias in his description of Corinth, the only account by an ancient writer which lists many important buildings in the city? ${ }^{33}$ In order that the requirements to be fulfilled may be clearly understood, I will summarize briefly the history of the temple as established by the excavations. Two periods can be distinguished, that of the first poros building and that of its marble successor.

Of the poros temple (cf. pp. 174-179) there remain only the foundation and possibly a few pieces of the superstructure among blocks later re-used. Its construction can be definitely dated by a coin discovered in the footing-trench of a buttress wall (cf.p.178) to about the middle of the first century after Christ. Confirmatory evidence exists in the few Roman sherds taken from a cistern (V, cf. p. 171), which, since it weakened the ground supporting part of the foundation, was solidly filled with stone when the temple was built. This work has been tentatively assigned to the reign of Claudius, since this emperor is known to have been progressive, and other buildings

[^61]in Corinth were built during his period. The poros temple, as has been shown, was probably similar in most respects to its successor. It was indeed larger, though of much cheaper material. Its contemporaries, however, were all alike of poros. ${ }^{34}{ }^{34}$ The first Temple E must, therefore, have been for its time a very superior building. We know that it was destroyed and replaced, but how or exactly when we cannot state decisively, though it is a safe assumption that the disaster occurred in 77 a.d., and was caused by an earthquake. This is the usual explanation offered for the epidemic of rebuilding which struck Corinth toward the end of the first century, ${ }^{35}$ and the association of the Temple E sequence with it is reasonable.

The construction of the marble temple cannot be dated exactly, though there is evidence (cf. p. 183) which points to the very end of the first century or the beginning of the second, possibly the reign of Domitian. The temple was well built and, with the possible exception of some of the capitals at the rear of the peristyle, which were of poros with marble stucco, it was constructed throughout of marble. This finished structure was then adorned with acroteria of beautiful workmanship and the gables, it has been argued, were filled with sculpture, not only the east, but probably both, as we have seen, based in part on the sculpture of the Parthenon, which was apparently even in that period accepted as the canon of pedimental composition.

This immediate rebuilding in an even greater splendor is a certain sign that the temple was considered a necessity in the religious life of the city at the time of Domitian as well as in the period of its original builder, Claudius. It was, therefore, the sanctuary of a national and permanently revered deity and not a personal or temporarily flourishing cult. The size and magnificence of the building in relation to its surroundings in either period, and its commanding position in an isolated situation at the end of a small square overlooking the central Forum, to which it was joined by a broad imposing stairway, further confirm the importance of its cult in the city. It is unfortunate that Pausanias is not a little more specific, or that the excavations so far conducted at Corinth have been insufficient to map his entire route. A number of landmarks have been found and what has been exposed in the surrounding areas, such as the Lechaion Road, confirms Pausanias.

In the first section (cf. p. 166) we indicated that the most obvious identification of Temple E from a reading of Pausanias was as the Temple of Octavia, ${ }^{36}$ the sister of Augustus, which, he says, was above ${ }^{37}$ the market place. Frazer ${ }^{38}$ identifies this
${ }^{34}$ The first Propylaia and the first Basilica on the Lechaion Road were of poros (cf. Corinth, I, i, pp. 190, 193). The Odeion (Corinth, X, p. 2) was also originally of this material.
$\rightarrow$ F. J. de Waele, " A Roman Market at Corinth," A.J.A., XXXIV, 1930, p. 453. Cf. further West, Corinth, VIII, ii, p. 19.
${ }^{36}$ Pausanias, II, 3, 1 .
${ }^{37} \dot{\imath} \pi \epsilon \dot{\epsilon} \rho$ can also be translated as beyond. Cf. Fowler and Stillwell, Corinth, I, i, p. 31, note 1. I believe that the word should not be translated simply as beyond but as beyond and at a higher level. This meaning is certainly applicable in the case of the Odeion, since Pausanias must have looked up at its superstructure towering above the Fountain of Glauke (Pausanias, II, 3, 6).
${ }^{38}$ J. G. Frazer, Pausanias's Description of Greece, III, p. 23. Cf. further, Imhoof-Blumer and Gardner, Numismatic Commentary on Pausanias, p. 22.
temple with one pictured as the reverse type on a coin of Tiberius, ${ }^{39}$ a hexastyle temple with the inscription GENS IULI on the frieze. Frazer assumes that the cult statue was the image of an important lady of the Julian family, such as Octavia, and the temple came to be known by her name. It is obvious that a temple portrayed on a coin of Tiberius was not built in the reign of Claudius, a decade later. Thus Temple E is not the Temple of the Gens Iulia, and even if the Temple of Octavia should not be the Julian sanctuary, it is improbable that Claudius would have built and Domitian rebuilt a temple in honor of a single individual of no particular interest to them. We can thus, discard the Temple of Octavia from our list of possibilities derived from Pausanias.

Since the excavation produced no significant clues in the form of architecture, sculpture, or inscriptions, we are entirely dependent on Pausanias. It is hard to believe that he could have failed to mention such a building at all. Among those which he does list there are two worthy of serious consideration, the Temple of Fortune ${ }^{40}$ and the Temple of Jupiter Capitolinus. ${ }^{41}$

Is it the Temple of Fortune? Such an identification depends upon the interpretation given to the opening paragraph of the description of the city itself. ${ }^{42}$ Does Pausanias begin immediately with a detailed account of the things he has seen from the point where he entered the centre of the city, or does he, in the manner of many modern guide-books, summarize the chief objects of interest regardless of their location? If he has employed the latter procedure and the buildings mentioned in the last part of the second chapter are the outstanding monuments in and around the market place and not necessarily located at the east end, then the identification of Temple E as the Temple of Fortune is not only logical but highly probable. The head of a statue of Tyche which was found (cf. p. 216, No. 5) cannot be taken as confirmation of such a theory, since it is too small in scale to be either a cult statue or a central figure in the pediment group. The worship of this goddess was of considerable importance in the Roman period, however, and it is entirely possible that such a splendid temple may have been dedicated to her. But since we cannot very well overlook the fact that the Temple of Fortune may very well have been on the opposite side of the market, we must examine all the other possibilities.

Excavations have located the road to Sikyon along which Pausanias passed on his way out of the market ${ }^{43}$ and have identified indisputably the Temple of Apollo, the Fountain of Glauke, the Odeion, ${ }^{44}$ and the Theatre. ${ }^{45}$ The connection between the Tomb of Medea's Children, ${ }^{46}$ the Odeion, and the Temple of Athena Chalinitis, ${ }^{47}$ and the Theatre delimits their positions. The recent discovery of the Sanctuary of Asklepios and the Fountain of Lerna ${ }^{48}$ north of the Theatre again confirms Pausanias,

[^62][^63]and shows an unbroken progression toward the north. Was his mention of the temple of Jupiter Capitolinus the proper step in a logical sequence? He again makes use of the ambiguous preposition $\boldsymbol{v} \pi \boldsymbol{\epsilon} \rho,{ }^{49}$ which I believe contains the meaning above as well as beyond (cf. p. 233, note 37). The sanctuary could be above and beyond the Theatre to the west and south, or just beyond to the north. If Pausanias is continuing in normal order, the Temple of Jupiter Capitolinus is to be found somewhere north of the Theatre in the area as yet unexcavated between it and the Gymnasium, ${ }^{50}$ a decidedly unusual place for the most important temple in a Roman city. Without exception, in the examples known, it is to be found in a commanding position on the Forum. In this respect a suggested location on the higher land south and some distance west of the Theatre is equally impractical. ${ }^{51}$

Is Temple E the Corinthian Capitolium? Strong arguments in favor of this identification are its location and indisputable importance. Its position, set apart, yet at the same time in the centre of the city, is fitting for the Capitolium. The magnificent rebuilding after the destruction is what one would expect for this the chief sanctuary. It differs slightly in construction from the usual plan, having no vaults in the substructure, ${ }^{52}$ and lacking the triple division of the cella usually, but not invariably, found in temples dedicated to the worship of the Capitoline Triad. ${ }^{53}$ No conclusions based solely on construction can fairly be drawn, since there are no other Capitolia, as yet, in Greece, or built under strong Greek influence, with which Temple E can be compared.

Would such an identification of Temple E necessitate an illogical interpretation of Pausanias? It is my firm belief that it would not. A thorough study of the topography of the market place and adjoining districts of Corinth, particularly as regards the changes in level, seems on the contrary to prove quite conclusively that Pausanias could not very well have seen Temple E at any earlier point in his itinerary. Recent excavations in the northwest and southwest corners of the market ${ }^{54}$ have only served to make this argument more convincing. Because the temple was set so far to the west it would have been practically invisible to anyone in the Forum. Granting an absolutely unobstructed view on a line with the steps leading up to the temple, one would have had to stand at least one hundred metres east of this stairway to see the complete façade. A glance at the plan of Corinth reveals no such vantage point. North and south of the centre of the market intervening stoas and shops would prevent any view whatsoever.

[^64]Pausanias undoubtedly reached the road to Sikyon by the steps just north of Temple D. ${ }^{55}$ It is obvious that he could have seen only the superstructure of the West Shops and the enclosing colonnade around Temple C, which he failed to mention. The road passed just north of the Fountain of Glauke, and then turned north, east of the Odeion and west of a precinct identified as that of Athena Chalinitis, ${ }^{56}$ continuing down to the Theatre. Pausanias stopped by the Temple of Athena to look at a statue by Daidalos, ${ }^{57}$ and glancing south he had, for the first time since entering the city of Corinth, a completely unobstructed view of Temple E.

It is, therefore, my contention that if Temple E was mentioned earlier in Pausanias' description it must have been only in a general list of important buildings and not when it was seen. If, on the other hand, Pausanias wrote down the buildings in the order in which he saw them, we are justified in concluding that Temple E is the Temple of Jupiter Capitolinus. Unfortunately the inscription in honor of a priest of Jupiter Capitolinus (supra, p. 232, No. 2) cannot be used as evidence for the identification of the temple. Since this inscription was discovered, several other statue bases honoring priests of Jupiter Capitolinus have been found in the market place, far from the ruins of Temple E (one is mentioned by Broneer in Hesperia, VIII, 1939, p. 189, note 7). We can only hope that future excavations will solve this problem in Corinthian topography.

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# CORINTH <br> RESULTS OF EXCAVATIONS <br> CONDUCTED BY 

THE AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS

VOLUMEI PARTII

## ARCHITECTURE

BY
RICHARD STILLWELL, ROBERT L. SCRANTON,
AND
SARAH ELIZABETH FREEMAN

WITH CONTRIBUTIONS BY
H. ESS ASKEW


PUBLISHED FOR
THE AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS


details of the lower order of the façade of the colossal figures



CORINTH VOLUME I PART II


CORNICE BLOCKS OF THE UPPER ORDER OF THE FAÇADE OF THE COLOSSAL FIGURES
CORINTH VOLUME I PART II







PLAN OF THE EXISTING REMAINS OF THE NORTHV

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D---1 STOA AND CONTEMPORARY
USTERMEDIATE
QTILTZZ SHOPS AND SECOND BASHICA

RESTORED PLAN OF THE NORTHWEST STOA AND THE NORTHWEST SHOPS


CHWEST SHOPS






SECTJON E-E


SECTIONS IN THE WESTERN PART OF THE NORTHWEST STOA


SECTION H-H


SECTIONS IN THE NORTHWEST SHOPS AND THE EASTERN PART OF THE NORTHWEST STOA


PLAN OF REMAINS OF TEMPLE C AND PERIBOLOS (Completed from Plan of 1910)


RESTORED PLAN OF TEMPLE C AND PERIBOLOS




[^0]:    ${ }^{1}$ See below, p. 51.

[^1]:    ${ }^{2}$ Corinth, IX, no. 27.
    ${ }^{3}$ The study and discussion of this basin are to be included with the publication of the fountain of Peirene, which will appear at a later date.
    ${ }^{4}$ On the plan it is difficult to distinguish the various buildings, or the remains, without careful reference to the varying means of indication for periods. The Byzantine remains have been disregarded on this plan for purposes of simplification; only those have been drawn which are built over walls of earlier period. The indication of the Greek walls for the stoa has been difficult because, in most cases, these walls have been hidden beneath Roman foundations.

[^2]:    ${ }^{5}$ Interior dimensions of the sarcophagi are, respectively: (a) length, 1.53 m .; width, 0.63 m ; depth, $0.40 \mathrm{~m} . ;(b)$ length, 0.64 m .; width, 0.32 m .; depth, 0.35 m .
    ${ }^{6}$ For the excavations of the small sarcophagus and the pit, $؛ \rightarrow$ A.J.A., XXXI, 1927, pp. 72-73; for the Geometric vases and the large sarcophagi $\rightarrow$ A.J.A., IX, 1905, pp. 411-421, pls. XI-XVI.
    ${ }^{7}$ Overall dimensions of the foundation........................ 9.82 m. by 6.35 m .
    Average thickness of walls....................................... 1.20 m .
    Height of courses, from top. . . . . . . . . . . . . . . . . . . . . . . . . . . . $0.428 \mathrm{~m} ., 0.42 \mathrm{~m} ., 0.395 \mathrm{~m}$.
    Length of blocks. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 0.95 m. . 1.
    Width of blocks. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 0.43 m. to 0.82 m .

[^3]:    ${ }^{8}$ Heights of courses : $0.225 \mathrm{~m} ., 0.18 \mathrm{~m} ., 0.225 \mathrm{~m}$. Dimensions of top course: 0.75 m. square.

[^4]:    ${ }^{9}$ Corinth, VIII, i, no. 225.

[^5]:    ${ }^{10}$ Durm, Baukunst der Griechen (1892), p. 80, fig. 63, b.
    ${ }^{11}$ Height of bases, 0.215 m . ; tops 0.54 m . square.
    ${ }^{12}$ Dimensions of shaft: length, 2.03 m .; lower diameter, 0.48 m ; upper diameter, 0.37 m .

[^6]:    ${ }^{13}$ Length, 0.44 m .; width, 0.31 m. ; height, 0.21 m .

[^7]:    ${ }^{16}$ Corinth, IV, ii, p. 46, Type VII, pl. III.
    ${ }^{17}$ Interior dimensions of basin: 0.635 m . square ; depth, 0.31 m . Thickness of walls: 0.165 m . On the outside are two bands, the lower serving as a socle.

[^8]:    ${ }^{18}$ It is probable that before being used for a basin, this piece was an offertory box. A similar one has been found in the excavations of the Asklepieion at Corint $\rightarrow$ De Waele, A.J.A., XXXVII, 1933, p. 428 and note 2. Cf. H. Graeven, " Die thönerne Sparbüchse im Altertum," Jahrbuch, XVI, 1901, p. 160; F. Hiller von Gaertringen, Die Insel Thera, I, pp. 260 ff.
    ${ }^{19}$ Preserved dimensions : width, 2.45 m . ; height, 0.28 m . The base rests on a euthynteria course which is of varying thickness. The upper part has been trimmed down for a height of 0.12 m .

[^9]:    $\rightarrow$ A.J.A., XXXI, 1927, p. 73. Dr. Hill observes that this wall with the high north wall may suggest a stoa. For conduits, loc. cit., pp. 74-75, figs. 2-3.
    ${ }^{22}$ The preserved height of the wall near its end is about 0.95 m . and the width varies from 0.75 m . to 1.10 m . The relative thinness of the wall would show that there was never more than one step below the stylobate.

[^10]:    ${ }^{24}$ Corinth, IV, ii, Type VII. ${ }^{25}$ Head, Historia Numorum ${ }^{2}$, p. 855.
    ${ }^{26}$ The investigation of other sectors of the excavations confirms the view that the early part of the second century b.c. was marked by great building activity at Corinth.

[^11]:    ${ }^{28}$ Length, 0.92 m . ; width, 0.545 m . ; radius of curve, ca. 4.79 m . inside.

[^12]:    ${ }^{29}$ Corinth, IV, ii, pl. 5, Type XVI.
    ${ }^{30}$ Ibid., pl. 8, Type XXI. Lamp with similar elaboration of handle.

[^13]:    ${ }^{31}$ The bricks, which were presumably square, appear to have measured 0.47 m . on a side.

[^14]:    ${ }^{33}$ The area immediately north of the façade of Peirene was flanked on the east by a stoa of six Doric columns.

[^15]:    ${ }^{35}$ Height, 0.97 m. ; diameter, 0.56 m .

[^16]:    ${ }^{37}$ Drafting, 0.07 m . high, 0.005 m . deep. Height of stylobate, 0.236 m . Average width of blocks, 0.72 m . ; maximum width, 0.85 m . Length of blocks, from 0.60 m . to 1.30 m .

[^17]:    $\rightarrow$ A.J.A., XXXIV, 1930, p. $44 \rightarrow$ ibid., XXXI, 1927, p. 72, fig. 1.

[^18]:    ${ }^{1}$ This section appears to have been removed in the excavations of 1900 , but I have been unable to find a reliable record to that effect.
    ${ }^{2}$ Corinth, I, i, p. 206.
    ${ }^{3}$ A grave had been placed in the drain during the late Roman period. In excavating it, two small pots of coarse clay were found together with five or six skeletons. A coin of Valentinian I (364-375 a.D.) was found in the south end of the drain just above the floor and near the wall of the grave. This may, accordingly, suggest a date at which the drain ceased to function. In the continuation of the same drain, where it passes just north of the western section of the Propylaia foundations, was a coin of Constantius Gallus (351-354 a.d.).

[^19]:    ${ }^{4}$ The excavations of the fall of 1934 revealed, near the southwest corner of the market, a large vaulted chamber, apparently a collection chamber, from which a drain leads out in the general direction of the Façade and the Propylaia. Only about fifteen metres of the drain have thus far been explored, but it seems probable that it connected, once, with the drain under the Façade. The recently discovered drain is, however, of the Augustan period, and hence considerably earlier than the part farther nort $\rightarrow$ ' A.J.A., XL, 1936, p. 23).

[^20]:    ${ }^{7}$ Mr. H. D. Wood, Fellow in Architecture at the School in 1906 and 1907, made a study of this building and his careful notes and measurements have been of the greatest value to me and to Mr. Lyman C. Douglas, Fellow in Architecture at the School in 1929 and 1930, who also worked on the problem and who supervised the restoration of the elements shown in Figure 38.

    Mr. Wood's restoration (Fig. 40) shows a façade with two curved niches and one rectangular

[^21]:    ${ }^{9}$ Corinth, IX, pp. 105-106.

[^22]:    ${ }^{10}$ For a description and discussion of the sculpture, see Corinth, IX, p. 105.

[^23]:    ${ }^{14}$ Carpenter, Guide to the Excavations of Ancient Corinth, 1928, pp. 67-70.
    ${ }^{15}$ Corinth, IX, pp. 106-107. ${ }^{16}$ Corinth, I, i, pp. 185, 186, and 191.
    ${ }^{17}$ Milet, I, vii, p. 148. Compare the honeysuckle-palmette pattern of the epistyle frieze at Corinth with the same pattern at Miletus, on the cornice cymation of the lower order (op. cit., fig. 95). The character of the egg-and-tongue and bead-and-reel is also almost identical (op. cit.,

[^24]:    $\rightarrow$ Broneer, A.J.A., XXXIX, 1935, p. 58, note 1; Corinth, X, The Odeum, pp. 97 and 148 : $\rightarrow$ A.J.A., XXXIII, 1929, p. 97.

[^25]:    ${ }^{1}$ The mapping and measuring of the Northwest Stoa and the Northwest shops is the work of a number of hands. The original survey, including the eastern part of the complex, up to a little west of Shop VIII, was made by Dr. B. H. Hill about 1905. It formed the basis of a large part of the plan shown in Plate VIII, drawn up originally by Mr. A. T. Squire, Special Fellow in Architecture at the School in 1930. Subsequent additions, as brought to light by the excavations of 1933 have been made by me. To Mr. Squire is also due the attempted restoration of the building on Plate X, but again later discoveries have entailed making a change in the roof, which was originally restored as hipped. Mr. William V. Cash, Special Fellow in Architecture in 1926, measured and drew up many of the architectural fragments, especially the epistyle frieze. They have been rearranged and inked by me. Certain other measured details are the work of Mr. Squire, to which I have added other fragments noted and drawn personally. I owe many observations especially to Dr. Broneer in connection with his work on the west end of the building in 1925 and again in 1933; and Dr. B. H. Hill has supplied important information regarding the Stoa in the early years of the excavations.
    ${ }^{2}$ Corinth, I, i, p. 204.

[^26]:    fifth century). In the Hellenistic period the terrace of the Sacred Spring was covered over, and it is probably about this time that the Stoa was erected and the lesser triglyph terrace wall moved forward.

[^27]:    ${ }^{5}$ On Plate VIII the position of these blocks is marked at C 5, C 6, and C 7. See also Corinth, I, i, figs. 134 and 135.
    ${ }^{6}$ On Plate VIII, C 3 and C 4. Also Corinth, I, i, fig. 135.

[^28]:    ${ }^{8}$ The purpose of this opening is obscure. It does not seem to have served as a door, for the two steps cut in the thickness of the wall show hardly any wear, and it is difficult to see to what the door could have led, unless it was some sort of niche or closet arranged under the stair just outside the wall.

[^29]:    ${ }^{9}$ The sketches in Figure 68 have been made from the original drawings of Mr. William V. Cash, Special Fellow in Architecture at the School in 1926.

[^30]:    ${ }^{10}$ The Stoa of Attalus at Athens was provided with stairs at either end to give access to the upper storey and if the Northwest Stoa was indeed a two-storey structure from its origin, the analogy would be quite satisfactory. If, however, we must assume that the original plan was for a single storey, it is necessary to suppose that the stairs existed in the beginning, but served only as a means of access to the level of the temple area. If this is the case, they should probably be restored in a less complicated pattern.

[^31]:    ${ }^{11}$ The records of Dr. Oscar Broneer, who excavated a part of this area in 1933, show the coins from the areas as listed below:

    1. Red-earth fill just north of Temple $D$ foundation

    1 Ptolemy III
    1 Corinth, Early Imperial
    1 Roman Republic, ca. 46 в.с.
    2. Red fill near Stoa

    1 Sikyon 250-146 b.c.
    1 Athens 229-197 в.с.
    1 Corinth, Augustus
    3. In fill below marble floor just north of steps at right angles to Temple D

    1 Corinth 400-146 в.с.
    1 Sikyon 400-300 в.с.
    1 Tiberius
    1 Caligula
    1 Galba
    1 Domitian
    1 Marcus Aurelius (from a doubtful area)
    4. Below level of mosaic floor near east cross wall in Stoa

    1 Sikyon 400-300 b.c.
    1 Early Imperial
    1 Corinth, 68-69 A.D.
    2 Domitian
    1 Hadrian (just below mosaic)
    1 Theodosius (from a doubtful area)

[^32]:    ${ }^{14}$ Ibid., p. 202. When I published my study of the Basilica I was of the opinion that the parallel walls were all of the same date. This opinion I have, as a result of further study, been obliged to modify.

[^33]:    ${ }^{17}$ Corinth, I, i, pp. 154 f.

[^34]:    ${ }^{13}$ A restoration with a pilaster at the extreme end of the wall, facing south, and a pier only a short distance away, next the first column, is also possible, but it seems unduly complex.

[^35]:    ${ }^{19}$ L. T. Shoe, Profiles of Greek Mouldings, pp. 67 and 74, pls. XXIX, 34, and XXXI, 31, 47.
    ${ }^{20}$ The construction of the web walls resembles very closely some work that was done in the " Julian Basilica" at the east end of the market place. This building may be dated, together with the South Basilica, which is almost exactly similar to it, in the first century after Christ, during or after the reign of Claudius and before that of Domitian. Extensive repairs were made in the South Basilica in or after the time of Domitian, and it is reasonable to assume that there was simultaneously some reconstruction in the "Julian Basilica." It is, then, to this rebuilding that the small uncoursed ashlar construction resembling that of the web walls may be assigned.

[^36]:    ${ }^{21}$ This is borne out by the coins found in the fill about the cross walls; see note 11, supra, p. 110.

[^37]:    ${ }^{1}$ To Professor C. H. Morgan II, former Director of the American School of Classical Studies at Athens, to whose encouragement this study is due, I wish to express my gratitude. I want also to thank Dr. Oscar Broneer and Dr. B. H. Hill, who offered criticisms in the development of the theories and the preparation of the manuscript; Professor William Bell Dinsmoor did me the incalculable service of directing my attention to the source of at least one serious error which I was able to correct. I am further most grateful to Herr Wulf Schaeffer, who made the drawings. He performed the difficult work of matching old plans, some of the elements of which have since disappeared from the remains, with the more recently uncovered parts of the complex, and his execution of the restorations was improved by suggestions of his own. Mr. Thomas Dunbabin, of the British School at Athens, listened sympathetically to a preliminary exposition of the topographical phases of the question of the sanctuary of Hera Akraia, and made some much appreciated observations from the tentative views of the students of the sanctuary of Hera Akraia at Perachora.
    ${ }^{2}$ See also Corinth, I, i, pl. III, for their condition in 1907 ; ibid., pl. IV, for their state in 1927. For condition in 1935, see plan in $A$ Guide to the Excavations at Corinth (3rd ed., 1936) reproduced in Fyfe's Hellenistic Architecture (1936), fig. 49.

[^38]:    ${ }^{3}$ Exception must be made of fragments of two Doric column drums and half of a Doric capital, belonging together. They are of suitable dimensions; indeed, they supply a fine looking restoration. They were found on or near the site, and it is barely possible that they were employed in a reconstruction of the temple. But they were apparently made originally for the South Stoa.

[^39]:    ${ }^{4}$ The temple of Hercules at Cori (Richard Delbrueck, Hellenistische Bauten in Latium, vol. II [Strasbourg, 1912], pp. 23 ff., especially p. 31, fig. 27; also Robertson, A Handbook of Greek and Roman Architecture, p. 209) had columns of the following dimensions: height of base, 0.10 m ;

[^40]:    ${ }^{6}$ Dyggve, Poulsen, Rhomaios, Das Heroön von Kalydon (1934), plates I, V, etc.

[^41]:    ${ }^{9}$ Miss D. D. Canaday (now Mrs. Lyman Spitzer), who is studying the Roman pottery at Corinth, has examined these sherds for me.
    ${ }^{10}$ O. Broneer, Corinth, X, The Odeum (1932), p. 17.

[^42]:    ${ }^{11}$ For the dates of the various building periods of the gateway and the stoa see above, pp. 109 ff .

[^43]:    ${ }^{15} \mathrm{~S} \rightarrow \mathrm{G} . \mathrm{W}$. Elderkin, " The Fountain of Glauce at Corinth," A.J.A., XIV, 1910, pp. 19 ff. ;
    $\rightarrow$ R. B. Richardson, " The Fountain of Glauce at Corinth," A.J.A., IV, 1900, pp. 458 ff.
    ${ }^{14}$ See Elderkin, loc. cit., p. 41.
    ${ }^{15}$ Mr. F. W. Householder, Fellow at the American School in 1936-7, has made a study of cuttings for door sills, and agrees with this statement.

[^44]:    ${ }^{16}$ Elderkin, loc. cit., p. 29.

[^45]:    ${ }^{17}$ The opinion was expressed verbally and tentatively; Dr. Hill's final views will be given in a forthcoming publication.
    ${ }^{18}$ The hypothesis was never published, but died with the discovery of the quarry marks.

[^46]:    ${ }^{24}$ Diodoros, IV, 54, 55, in one of the stories he reports, says that Medea burned down the palace with Kreon and Glauke in it. He does not mention the fountain incident.
    ${ }^{25}$ Aelian, Var. Hist., E 21 ; schol. Euripides, Medea, 10.
    ${ }^{26}$ Schol. Euripides, Medea, 273; Apollodoros, loc. cit.
    ${ }^{27}$ Pausanias, II, 3, 11.
    ${ }^{28}$ Apollodoros, loc. cit., says in one of the stories he reports, that the children were first taken from the altar.
    
    

    Euripides Medea, 1378 ff.
    
    
    
     $\sigma \epsilon \mu \nu \grave{\eta} \nu$ є́ $\rho \rho \tau \grave{\eta} \nu$ каì $\tau \epsilon ́ \lambda \eta$ $\pi \rho о \sigma a ́ \psi о \mu \epsilon \nu$
    

[^47]:    
    
     Kopíverot---.

[^48]:    ${ }^{1}$ Excavation south of the West Shops disclosed concrete foundations generally interpreted as the support for a broad flight of steps characteristic of the Roman period. For the location of Temple E, cf. Corinth, I, i, pl. IV.
    ${ }^{2}$ Charles H. Weller, A.J.A., V, 1901, pp. 341-342.
    ${ }^{3}$ No official publication. Excavation was conducted by C. A. R. Sanborn and described in his notebooks.
    ${ }^{4}$ Pausanias, II, 3, $8 . \quad{ }^{5}$ Pausanias, II, 4, 5.

[^49]:    ${ }^{6}$ Cf. Stillwell, " A Terracotta Group at Corinth," Classical Studies Presented to Edward Capps on his Seventieth Birthday, pp. 318-322, figs. 1-4.
    ${ }^{7}$ ( $\rightarrow$ Cedric G. Boulter, " A Pottery Deposit Near Temple E at Corinth," A.J.A., XLI, 1937, pp. 217-236.

[^50]:    ${ }^{8}$ Theodor Wiegand, Baalbek, Ergebnisse der Ausgrabungen und Untersuchungen in den Jahren 1898 bis 1905, II, p. 130 ; I, pl. XVII. There is a church with similar orientation built against the Temple of Jupiter.

[^51]:    ${ }^{9}$ See Broneer, Corinth, X, p. 18, for a similar type of construction used in the Odeion.
    ${ }^{10}$ Excavation notes made at the time of the construction of the Museum mention a cutting for a stone course in correct position and level for the north corner of the east end of this foundation.

[^52]:    ${ }^{11}$ Katherine M. Edwards, Corinth, VI, Coins, p. 21, no. 47.

[^53]:    ${ }^{14}$ Trial trenches of 1910 .

[^54]:    ${ }^{18}$ Vitruvius, IV, 1, 11-12.

[^55]:    ${ }^{19}$ During the season of 1938-39 a small area adjoining the west side of the Museum, north of the section cleared in the excavation of Temple E, was excavated. Remains of a heavy foundation were found, running east to west about twenty-five meters north of the podium and parallel to it. The construction, which employs re-used blocks imbedded in concrete, is similar to that of the podium, and it has been suggested that it may represent a temenos wall $(\rightarrow$ Weinberg, "Excavations at Corinth, 1938-39," A.J.A., XLIII, 1939, pp. 595 f.). Further excavation is necessary to ascertain its extent and to prove a definite relation with Temple E.

[^56]:    ${ }^{20}$ A statue of this size would fit, since the cella ceiling should be on a level with the exterior frieze, approximately eleven metres above the floor.

[^57]:    ${ }^{21}$ It should be compared with statues of this goddess dating from the end of the first and the beginning of the second century after Christ, such as two examples in the Museum at Istanbul, from the excavations at Aphrodisias in Caria. Cf. Gustave Mendel, Catalogue des Sculptures Grecques, Romaines et Byzantines, II, p. 205, nos. 509, 510.
    ${ }_{22}$ Following in the tradition of the Tyche of Antioch, a work of Eutychides (cf. BrunnBruckmann, Denkmüler griechischer und römischer Skulptur, pl. 154). For personification of city, cf. furth $\rightarrow$ Percy Gardner, " Countries and Cities in Ancient Art," J.H.S., IX, 1888, pp. 47-81. It is interesting to note that the city walls of Corinth, recently discovered, had arched gates and windows.
    ${ }^{23}$ Several similar heads have been found at Corinth, though not of such good style; cf. F. P. Johnson, Corinth, IX, Sculpture, pp. 46-48.
    $\rightarrow$ Rhys Carpenter, " The Lost Statues of the East Pediment of the Parthenon," Hesperia, II, 1933, pp. 42 f., figs. 8 and 9.

[^58]:    $\underset{\sim}{\rightarrow}$ Rhys Carpenter, "New Material for the West Pediment of the Parthenon," Hesperia, I, 1932, pp. 25-27, figs. 13 and 14.

[^59]:    $\rightarrow$ Carpenter, Hesperia, II, 1933, pp. 20-22.
    ${ }^{28}$ Carpenter, loc. cit., p. 85. I use Carpenter's dramatis personae. Eileithyia has also been interpreted as Iris or Artemis.

[^60]:    ${ }^{29}$ This piece may belong with fragments described above (cf. p. 220, No. 11).
    ${ }^{30}$ It would be more likely a female, or fully draped figure. Exact symmetry is not usual.
    ${ }^{31}$ The Aphrodite is about life size, while the Tyche is smaller and the Melpomene larger.

[^61]:    ${ }^{32}$ Arcadius Charisius in the Digesta Iustiniani, 50, 4, 18 (Corpus Juris Civilis, I, p. 899).
    ${ }^{33}$ Strabo also described Corinth, but not in such great detail.

[^62]:    ${ }^{39}$ Edwards, Corinth, VI, p. 19, no. 40.
    ${ }^{40}$ Pausanias, II, 2, 8.
    ${ }^{41}$ Pausanias, II, 4, 5.
    ${ }^{42}$ Pausanias, II, 2, 6.
    ${ }^{43}$ Pausanias, II, 3, 6.

[^63]:    ${ }^{44}$ Ibid.
    ${ }^{45}$ Pausanias, II, 4, 5.
    ${ }^{46}$ Pausanias, II, 3, 6.
    ${ }^{47}$ Pausanias, II, 4, 5.
    ${ }^{48}$ Ibid.

[^64]:    ${ }^{40}$ Ibid.
    ${ }^{50}$ Ibid.
    ${ }^{51}$ One suggested site several hundred metres to the southwest was investigated in the summer of 1928 by Dr. F. J. de Waele. No evidence was found for the existence of a temple there.
    ${ }^{52}$ Varro states that there were always "favissae," crypts, under and in the podium of the Capitol. Cf. Varr. $a p$. Gell., 2, 10. They are not always found in provincial examples.
    ${ }^{53}$ Niches or pedestals were often substituted for the triple division of the cella. The Capitolium at Pompeii has three pedestals ; the temple at Thugga has three niches. For various types cf. Cagnat and Chapot, Manuel d'Archéologie Romaine, I, pp. 157 ff .
    $\rightarrow$ Broneer, " Excavations at Corinth," A.J.A., XXXVII, 1933, pp. 566 ff.

[^65]:    ${ }^{55}$ Corinth, I, i, pl. IV.
    $\rightarrow$ T. L. Shear, "Excavations in the Theatre," A.J.A., XXXII, 1928, p. 474.
    ${ }^{57}$ Pausanias, II, 4, 5.

