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THE AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS

## **VOLUME XIV**

# THE ASKLEPIEION AND LERNA

BY

## CARL ROEBUCK

BASED ON THE EXCAVATIONS AND PRELIMINARY STUDIES OF F. J. DE WAELE



THE AMERICAN SCHOOL OF CLASSICAL STUDIES AT ATHENS PRINCETON, NEW JERSEY

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## PREFACE

The excavation of the Asklepieion and of the adjacent resort of Lerna was carried out in 1929-34 under the supervision of Professor F. J. De Waele of Nijmegen University, Holland, at that time attached to the staff of the American School of Classical Studies at Athens. Professor De Waele was unfortunately unable to complete the final publication of the material before the recent war and, in the course of the war, much of his illustrative material and notes was lost in the destruction of Nijmegen. Thus, in 1946, I undertook the task of completing the publication at the invitation of the American School of Classical Studies. The work is based, of course, on the excavation notebooks and inventories of Professor De Waele and on the portion of his manuscript which had been completed. It dealt with the material remains in the precinct and in Lerna. It was found desirable, however, because of the lapse of time, to restudy in detail the site and the objects from it and to conduct some further excavation. Thus, the material has been restudied and the account of it reorganized and rewritten. An opportunity was found to talk over the revised views with Professor De Waele in Amsterdam and he is in agreement with the views which are expressed in the text. The notice of differing interpretations in the preliminary publication is for bibliographical completeness.

These two periods of work by different hands has had its effect on the illustrative material. The plan of the actual state of the Asklepieion and of Lerna was made by Mr. Joseph Shelley; it has been corrected, and enlarged by Mr. John Travlos, the architect of the American School of Classical Studies, to show the results of the investigations of 1946-47. Mr. Travlos has also made the restored plans and sections published in the folding Plates and the drawings for many of the figures in the text (1-3, 8, 9, 11-13, 17-20, 22, 24-25, 31). The publication owes much to his careful work on these and to his many helpful suggestions in connection with the interpretation of the remains in place and their restoration. The other drawings, mainly of single architectural blocks, are by Mr. Shelley, Mr. George von Peschke, and Mr. Leicester B. Holland (Figs. 16, 23). Most of the photographs were taken by Mr. H. Wagner of the German Archaeological Institute in Athens in the course of the excavations of 1929-34. The remainder were taken in 1946-47 by Mr. Harissiades of Athens, Dr. Saul Weinberg, and by myself.

For aid in the excavations of 1929-34 Professor De Waele has expressed his thanks to Professors Rhys Carpenter and Richard Stillwell, Directors of the American School during the excavations; to Miss Lucy Talcott who supervised the trial investigations of 1929-30 and catalogued the material from them; to Joseph M. Shelley, George von Peschke, and the late Mrs. Mary Wyckoff Simkins for illustrative material; to Bert Hodge Hill for suggestions, and notes on his own digging in the Asklepieion area; to Miss Katherine M. Edwards who identified and studied the coins from the excavations of 1929-34.

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To this list I should like to add my own acknowledgments to Professor Oscar Broneer, in particular; to Bert Hodge Hill and Mr. Leicester B. Holland for many helpful suggestions; to the late Mrs. Verna Broneer for identifying the coins from the excavation of 1946-47; to my wife, Mary Campbell Roebuck, for aid in studying the architectural terracottas; and to the American School of Classical Studies for the grant of a fellowship which enabled the completion of the work.

CARL ROEBUCK

University of Chicago.

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ILLUSTRATIONS

## 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 Aufträge des Reichs-und Preussischen Ministers für Wissenschafterziehung und Volksbildung (Berlin, from 1885)
- Arch. Anz. = Archäologischer Anzeiger. Beiblatt zum Jahrbuch des deutschen archäologischen Instituts
- 'Αρχ. 'Εφ. = 'Αρχαιολογικὴ Έφημερίς
- Ath. Mitt. = Mitteilungen des deutschen archäologischen Instituts, Athenische Abteilung
- B.C.H. = Bulletin de Correspondance Hellénique
- B.M.C. = A Catalogue of the Greek Coins in the British Museum
- B.S.A. = The Annual of the British School at Athens
- 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)
- C.G.-C.I., I, 1, = Corpus der griechisch-christlichen Inschriften von Hellas, I: Die griechisch-christlichen Inschriften des Peloponnes, Lieferung 1: Isthmos-Korinthos
- Délos = École Française d'Athènes. Fouilles de Délos
- Delphes École Française d'Athènes. Fouilles de Delphes
- Edelstein, Asclepius = E. and L. Edelstein, Asclepius (Baltimore, 1945), Vols. I and II
- $^{\prime}$ E $\phi$ .  $^{\prime}$ A $\rho\chi$ . = See  $^{\prime}$ A $\rho\chi$ .  $^{\prime}$ E $\phi$ .
- Hesperia Hesperia, Journal of the American School of Classical Studies at Athens
- Hogarth, Archaic Artemisia = D.G. Hogarth, Excavations at Ephesus, The Archaic Artemisia (London, 1908)
- I.G. = Inscriptiones Graecae consilio et auctoritate Academiae Litterarum Borussicae editae (Berlin, 1875)
- I.G., II<sup>2</sup> = Inscriptiones Graecae, Vols. II-III, editio minor (Berlin, 1915-)
- I.G., IV<sup>2</sup> = Inscriptiones Graecae, Vol. IV, editio minor (Berlin, 1929-)
- Jahrbuch = Jahrbuch des deutschen archäologischen Instituts
- J.H.S. = The Journal of Hellenic Studies
- Necrocorinthia = H. Payne, Necrocorinthia (Oxford, 1931)
- Not. d. Scavi Notizie degli Scavi di antichità. Atti della Reale Accademia nazionale dei Lincei Olynthus Excavations at Olynthus (Baltimore, 1929-)
- Pauly-Wissowa, R. E. = Pauly's Real-Encyclopädie der classischen Altertumswissenschaft, neue Bearbeitung (Stuttgart, from 1894); edited by Georg Wissowa and others
- Perachora H. Payne, Perachora. The Sanctuaries of Hera Akraia and Limenaia (Oxford, 1940).
- Πρακτικά = Πρακτικὰ τῆς ἐν ᾿Αθήναις ᾿Αρχαιολογικῆς Ἑταιρείας
- Rev. Arch. = Revue Archéologique
- Röm. Mitt. Mitteilungen des deutschen archäologischen Instituts, Römische Abteilung
- Shoe, Greek Mouldings = Lucy T. Shoe, Profiles of Greek Mouldings (Cambridge, Mass., 1936)

# THE ASKLEPIEION AND LERNA

## INTRODUCTION

## THE DISTRICT OF THE ASKLEPIEION

THE ANCIENT city of Corinth was built on the two plateaus which form steps from the base of the acropolis, Acrocorinth, to the coastal plain along the Corinthian Gulf. In the central part of the upper plateau at its northern edge lay the heart of the city, both in the Greek and Roman periods. Its most prominent landmark is now the Temple of Apollo set above the northwest corner of the Agora (Fig. 1). The lower plateau extends northward below the temple for about five hundred meters and its northern edge formed a natural limit for the city since it drops sharply to the coastal plain. On the top of a low hill at the edge of this plateau, just inside the city wall, and almost directly north of the Temple of Apollo was set the Asklepieion (Plate 11)—as Plutarch observed of such structures, "in a clean place on high ground." 1 Beside it to the west was a small hollow with a spring which was developed into the resort of Lerna. The site was well chosen for a healing sanctuary since it lay sufficiently distant from the Agora to escape its bustle and in a quarter of the city filled with sanctuaries and buildings of a recreational type. For, about three hundred and fifty meters to the south was the Theater and, from the first century after Christ, the Odeion, while, as we know from Pausanias, the Old Gymnasium and the Temple of Zeus were in the immediate neighborhood of the Asklepieion. Thus, the elaborate arrangements for recreation, which were part of the Asklepieia of Epidauros and Pergamon, were unnecessary to the sanctuary at Corinth, which consisted only of the precinct with its temple and abaton. The sanctuary would also have enjoyed the facilities of the resort in Lerna hollow which, for the Greek period at least, communicated with it by a specially built ramp.

The natural facilities of the site, too, were for the most part advantageous. Its position was exposed to the strong, bitter winds which blow from the Gulf of Corinth in winter, but offer some compensation by their freshness in the summer time. Further, the site is high enough to command the magnificent view offered by the coastal plain and the Gulf of Corinth (Plate 12) with the rocky promontory of Perachora lying across the Gulf and, in the background, the mountains Kithaeron, Helikon, and Parnassos. It also had in Lerna hollow a steady, if not copious, water supply from a natural spring. The rock formation here is favorable to a steady supply of water. The edge of the plateau consists of a thin cap of poros or shelly conglomerate lying on thick beds of yellow clay on which water seeps from the higher levels to the south to issue out at the base of the cliff. The spring in Lerna hollow was originally

<sup>&</sup>lt;sup>1</sup> Plutarch, *Quaestiones Romanae*, 94. For a brief discussion of the location of Asklepieia see: E. J. Edelstein and L. Edelstein, *Asclepius* (Baltimore, The Johns Hopkins Press, 1945), II, p. 233. Asklepieia were not necessarily built on a healthy site.

a trickle, but was enlarged by channels tunneled back into the clay when the resort was laid out on a monumental scale. Its water is still carried to the edge of the plateau by the Greek drain through which it flows to the gardens below. It has, however, changed its name to that of the modern owners of the property—Kriebardis or Roustemmi. For their own supply in the precinct the authorities of the Asklepieion at an early date dug wells into the clay and later collected the surface water from the roofs of the buildings and from the paving of the precinct.

Before its excavation little was known about the district of the Asklepieion. The remains above ground were too scanty to attract the notice of the topographers and the region had received only a few dry words from Pausanias and Lucian among the ancient authors. Pausanias, after noticing the Theater, observed: <sup>2</sup>

Not far from this Theatre is the Old Gymnasium and a spring called Lerna. Columns stand around it and seats have been made to refresh in summer time those who have entered it. By this Gymnasium are Temples of Zeus and of Asklepios. The images of Asklepios and Hygieia are of white marble, that of Zeus is of bronze.

While this passage and an implication by Lucian that Lerna was situated at the northern extremity of the city indicate the general district sufficiently well, the various questions of the history and nature of the cult of Asklepios as well as those of the relationship of the various structures mentioned by Pausanias to one another and to the roads and fortifications in that quarter of the city must be answered or, sometimes, only raised by the results of the excavations. Fortunately, the precinct of Asklepios is identified with certainty by the discovery of votive inscriptions and the replicas of human members in terracotta dedicated to the god by grateful patients. The resort which adjoins the precinct on the west at a lower level should presumably be Lerna. It is to be noted, however, that Pausanias' account does not couple the Asklepieion and Lerna so closely as the remains might seem to indicate.

The other structures mentioned by Pausanias have not been identified definitely by the investigations of the area south and west of the Asklepieion and Lerna (Fig. 1), but some conjecture as to their position is possible. Pausanias evidently considered the Old Gymnasium to be the most prominent, or the first, in the series of buildings, since the others are located by reference to it. Possibly the epithet "Old" indicates that the Gymnasium was originally a structure of the Greek period, rebuilt or repaired in Roman times. To judge from its place in Pausanias' account and the nature of the

<sup>2</sup> Pausanias, II, 4, 5. The translation is adapted from that of W. H. S. Jones in the Loeb edition (London, 1918), Vol. I.

<sup>&</sup>lt;sup>3</sup> Lucian, On the Writing of History, 29. Lucian tells of a man, resident in Corinth, who boasted of his travels in foreign lands and of his wound received at the battle of Sura in Aurelius' Parthian campaign in 165 A.D., but who had really only travelled from Kranion to Lerna: across the city of Corinth. Athenaeus, too, refers to a spring, Lerna, but, since the water of various cities is compared and Peirene had been mentioned, he is probably writing of the more famous Argive Lerna (Deipnosophistae, IV, 156e). The name, Lerna, more properly belongs to the Argive site which is associated with one of Herakles' exploits. The time and explanation of its transference to Corinth are difficult to determine.

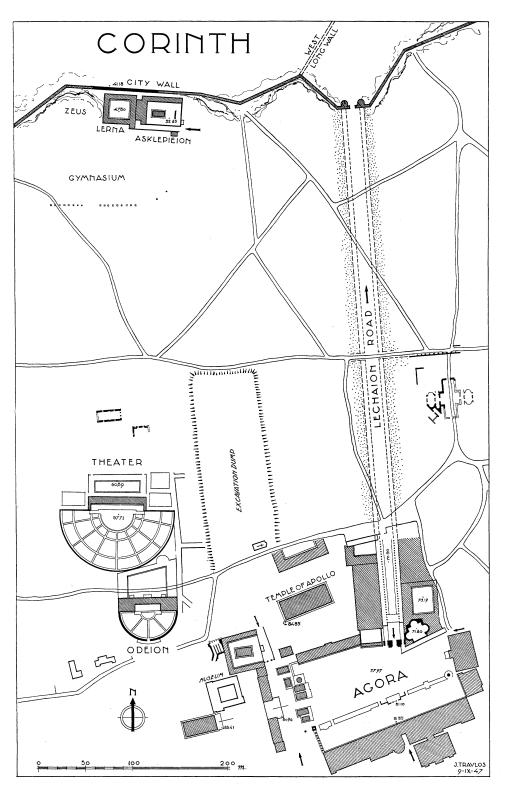


Fig. 1. Plan of Ancient Corinth.

terrain, the building lay to the south of the Asklepieion as marked on the plan (Fig. 1). This conjecture also receives support from the discovery of a fragmentary victors' list in the excavation of Lerna and of others in the area to the south.4 Remains of large structures were found by trenching, but a unified plan can not be made without additional excavation. South of the Asklepieion ramp a very heavy rubble foundation (Plan A), 4.00 m. in depth and 2.40 m. in thickness, was traced for sixty meters to the south. At its north end it made a return to the east where it was built over the rear wall of the Greek fountain house. On the inner side of the return a drain, 0.59 m. in width, with waterproofed walls, extended for ca. 13.50 m. to the east where it was destroyed by later building activity. A lighter foundation, bedded much higher, returned to the west for about forty meters. The construction of both these foundations is obviously of Roman date, but their relation to each other is not clear. The drain, however, is evidently a part of the structure to which the heavy foundation belonged. Near the south end of the heavy foundation two Doric column drums may be seen rising above the surface of the ground (Fig. 1). They were investigated by Richardson in 1896,5 and, while they themselves rest on earth, the stub of a column was found 5.00 m. to the south resting on a stylobate preserved for ca. 3.50 m. The connection of the column and the stylobate to the heavy foundation is not clear. None of these remains seems to have had any connection with the Asklepieion itself, but rather belonged to the structure to the south.

Extending to the west of this fragmentary stylobate, but not in line with it, is a row of seventeen bases running from east to west (Fig. 1). They, too, may not have been a part of the building to which the heavy foundation belonged, for the lines of the two when prolonged form an acute angle. Three of these bases, now visible above the surface, were investigated by Doerpfeld in 1886. They are of poros with a rectangular plinth and circular, unfluted column base, 1.13 m. in diameter, cut from the same block. The bases were found to be bedded on a rubble wall which was flanked on the south, at a distance of ten meters, and on the north, at a distance of six meters, by similar walls built of reused material. Doerpfeld assumed 6 that this stoa-like structure was of Roman or Early Christian date because of the reused pieces. In 1916, Hill investigated the area further and found the remains of bases for five columns to the west, and traces and remains of nine other bases to the east. The identity and nature of this building could not be established. It is likely, however, that some of these remains should be identified as part of the Old Gymnasium which the discovery of the victors' lists indicates was in that area.

Equally indefinite are the results from the search for the Temple of Zeus. It is reasonable to suppose that it occupied the hilltop west of Lerna as marked on the plan (Fig. 1). Such a situation would have given it a commanding position over the coastal

<sup>&</sup>lt;sup>4</sup> Cor. Ins. 1170 (unpublished); B. D. Meritt, *Corinth*, VIII, i, nos. 14-15. All are lists of the Roman period.

<sup>&</sup>lt;sup>5</sup> A. J. A., I (2nd series), 1897, pp. 479-80 (Trench XX).

<sup>&</sup>lt;sup>6</sup> Ath. Mitt., XI, 1886, pp. 306-08.

plain similar to that enjoyed by the Asklepieion. Although two trenches were dug in the area in 1896 <sup>7</sup> and four in 1933, no positive results were obtained. In the first of these were found many fragmentary Ionic and Corinthian column drums reused in a medieval fortification. Some of the graves of the Early Christian Cemetery which covered the area were also discovered. In the trenches dug in 1933 no remains of a building were found in place, but some seventy graves of the Cemetery were excavated. Some finds, however, do indicate that a building stood here: marble roof tiles and a fragmentary statue in the style of the fifth century B.C. (below, p. 145, No. 3) were discovered in a manhole which gave access to the western reservoir of Lerna (Reservoir V).

Then, too, the excavations yielded other remains which may well belong to the very large Doric temple in the neighborhood, reported by Leake when he visited the region. He found an artificial level on the edge of the second plateau with some foundations and fragments of large Doric columns measuring six feet, three inches in diameter and twelve inches in the chord of the fluting.8 Two blocks may still be seen, one a drum with a chord of 0.285 m., in the southwestern part of the area, but they show considerable traces of recutting and weathering and may be far from their original place. Leake identified this building as the Temple of Apollo, finding some support in a Roman inscription which was reported to have been seen by Spon and Wheler 9 in a Turkish house in the area in 1676. Doerpfeld, too, in his investigation of the bases, found 10 Doric fragments built into the northernmost of the three walls mentioned above. He, too, concurred in Leake's identification of the structure as the Temple of Apollo, reported by Pausanias as on the right of the road to Sicyon, 11 noting that it must have been as large as the Temple of Zeus at Olympia. Such an identification would scarcely be possible in the light of the excavations since the time of Doerpfeld, but it may be that these remains belong to the Temple of Zeus. Some additional fragments which may also come from this temple were found in the excavation of the Asklepieion and Lerna: several fragments of large columns (below, p. 147, No. 1) and seven large guttae (below, p. 147, No. 2). All are apparently from a large Doric building outside the Asklepieion since they are too large for any of its large Dorn structures.

To judge from the account of Pausanias, this group of buildings was approached from the Agora by a road leading past the Theater. Since the precinct of Asklepios

<sup>&</sup>lt;sup>7</sup> A. J. A., I (2nd series), 1897, pp. 457-60 (Trenches I, II).

<sup>&</sup>lt;sup>8</sup> W. M. Leake, *Travels in the Morea* (London, 1830), III, pp. 247-49. Curtius (*Peloponnesos* [Gotha, 1852], II, p. 526) repeated Leake's observation; see W. B. Dinsmoor, *Hesperia*, Supp. VIII, 1949, pp. 104-15.

<sup>&</sup>lt;sup>9</sup> Leake, *Peloponnesiaca* (London, 1846), pp. 393-94; A. B. West, *Corinth*, VIII, ii, no. 120. The inscription is cut on an Ionic architrave-frieze block and records the dedication of a temple to Apollo Augustus.

<sup>&</sup>lt;sup>10</sup> Ath. Mitt., XI, 1886, p. 307.

<sup>&</sup>lt;sup>11</sup> Pausanias, II, 3, 6. The road to Sicyon probably left the city by Cheliotomylos Hill where traces of a road have been found (Carpenter and Bon, *Corinth*, III, ii, pp. 59-64).

and the ramp leading down into Lerna were entered from the east, some connection with a thoroughfare running from north to south on the east side of the sanctuary is to be presupposed. In the excavation of the Theater a road terminating in a square was found on its east side. The continuation of the road, however, was not directly to the north, but to the east from the northeast corner of the square.12 Therefore, the course of the road between the Theater and the Asklepieion district is unknown, but two possible routes may be suggested: either an ancient road on the line of the present cart track which bounds the district on the east (Fig. 1) and descends to the plain by cutting through the rock cap of the plateau, or the direct Road to Lechaion, the course of which has been discovered 13 on the plain to the east, near the so-called "Baths of Aphrodite." The former of these would seem to be preferable, but, since the entrance to the Asklepieion and the Greek and Roman levels east of it have been largely destroyed, we have no evidence. On the east side of the cutting for this track the side and floor of a water channel cut in the rock are visible. Presumably, too, in ancient times as at present, this road from north to south would swing to the northwest on the plain and join another running from east to west along the base of the plateau. Its travellers could have taken advantage of the springs in the cliff, particularly of the outlet of the Lerna water system which may well have terminated in a basin.

The relation of the Asklepieion and of Lerna to the city defences is particularly interesting, for their structures are bonded into the fortification wall. The city was protected by an east and west wall which extended from the cliff of Acrocorinth to the north edge of the lower plateau. The steep edge of the plateau was utilized for the north city wall (Fig. 1) from which long walls extended to the sea to protect the Road to Lechaion. The only stretch of the north wall yet discovered is that in the vicinity of the Asklepieion. There, it was built at the base of the hill on which the Asklepieion rested and extended across the north side of Lerna hollow for the filling of which it served as a retaining wall.

Thus, we may visualize the Asklepieion and Lerna in the time of Pausanias as units of a group of monumental buildings at the edge of the city, with the Old Gymnasium to the south and the Temple of Zeus to the west. In the Greek period at least and possibly in the Roman, the great Doric temple would have been standing, but whether it is the Temple of Zeus mentioned by Pausanias, and whether the Gymnasium was there in Greek times can be determined only by future excavations.

The site of the Asklepieion and of Lerna remained unexplored until the excavation of the area in 1929-34. It was then known as Keramidaki <sup>15</sup> from the numerous

<sup>&</sup>lt;sup>12</sup> T. L. Shear, A. J. A., XXXII, 1928, pp. 483-84; XXXIII, 1929, p. 526.

<sup>&</sup>lt;sup>13</sup> A. W. Parsons, *Corinth*, III, ii, p. 92; see the plan of Skias and Mazarakis, Практіка́, 1906, pl. 5 (reprinted in *Corinth*, I, i, fig. 46).

<sup>&</sup>lt;sup>14</sup> Parsons, Corinth, III, ii, pp. 84-127.

<sup>&</sup>lt;sup>15</sup> The cluster of houses in this section of Old Corinth is called Roumeliotika after the families, Roumeliotes, who live there; at the time of Skias' investigations, near the end of the last century,

tile fragments from Christian graves which were scattered about the fields. In 1929-30 trial trenches were dug which uncovered part of the heavy foundation in the area of the Gymnasium, a corner of the fountain house, and sections of the south wall of the Asklepieion ramp. The promise of the area as a possible site for the Asklepieion led to the further campaigns of 1931-34. In 1931 the ramp and the precinct were excavated (Plate 1 <sup>2</sup>) and in 1932 the eastern section of Lerna and the spring house. The excavation of Lerna and its reservoirs was completed in 1933-34 (Plate 2 <sup>1</sup>) and in the same year the trenches on the supposed site of the Temple of Zeus were dug. <sup>16</sup> Some supplementary investigation was carried out in 1947, the most important result of which was the discovery of the city wall.

it was called Palaiopolis, which name, he suggested, might be derived from the former Venetian village near there (Skias, Πρακτικά, 1892, p. 117, note 1).

<sup>16</sup> The preliminary reports of the excavation were published by the excavator, Dr. F. J. De Waele: A.J. A., XXXVII, 1933, pp. 417-51; XXXIX, 1935, pp. 352-59. See also Arch. Anz., XLVII, 1932, pp. 132-38; XLVIII, 1933, pp. 222-23; L, 1935, pp. 642 ff.; Gnomon, VII, 1931, pp. 607 ff.; Pauly-Wissowa, R. E., Supp. VI, s. v. Korinthos, Lerna.

## CHAPTER I

## THE EARLY TEMENOS

THE HILL on which the sanctuary of Asklepios was built originally sloped gently to the south and east, but rather more sharply to the west and north. On its highest point near the northern edge, the traces of the earliest building activity are preserved. They are very scanty since the structures were demolished to the rock level when the elaborate complex of the Asklepieion and Lerna was laid out in the late fourth century B. c. Thus, it is chiefly the remains of this later complex which are visible today, and the arrangements of the early temenos must be conjectured from dressings and cuttings of the rock.

These traces reveal a very unpretentious establishment (Fig. 2). If we may judge from the nature of the terrain, the entrance to the temenos was from the east. It is possible, however, that a path led up the slope at the northwest corner, for traces of a road and some graves were found there on the lower level of Lerna hollow. The most important remains are those of a shrine, and, extending from it to the east, a long rock-cut drain channel. About three meters to the east and slightly north of this early shrine are the cuttings for a building of simple plan, the oikos, against the east wall of which a poros base remains in place. About a meter east of this structure is a shallow, rectangular cutting which contained the earliest <sup>1</sup> Greek deposit of the sanctuary in which were fragments of a vase dedicated to Apollo. The water supply of these early structures was drawn, for part of the period at least, from two wells north of the shrine.

#### THE SHRINE

The traces of the early shrine are visible within the deeper cuttings for the Hellenistic temple (Fig. 3). They consist of a dressed rock surface for the walls and a series of elaborate cuttings for the interior arrangements (Plate  $2^2$ ). The outer edges of the dressings for the walls were destroyed, except for a short stretch of the rear wall, by cuttings for the later temple. Thus, only the length and the inner dimensions of the structure may be restored with fair accuracy. The total length is 7.48 m., and the inner dimensions are ca. 6.30 by 3.90 m. The average preserved width of the dressings for the side walls is ca. 0.60 m., although, at one point on the south side, it

<sup>&</sup>lt;sup>1</sup> Several small deposits of prehistoric pottery were found in pockets on the rock in various parts of the excavated area. The pottery was of the Early Helladic period, containing fragments of typical sauce-boats and shallow bowls covered with red or black paint. In the deposits were cores and blades of obsidian and spindle whorls. No Middle Helladic or Mycenean pottery was found, and only a few sherds of geometric wares. A rock-cut grave of the Geometric period, however, was found *ca*. 50 meters to the east of the Asklepieion.

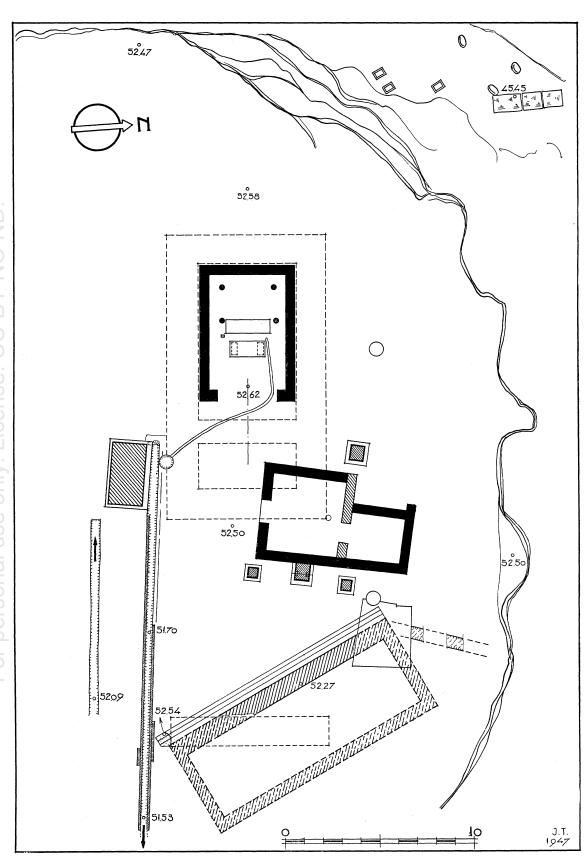


Fig. 2. The Early Temenos. Restored Plan.

measures as much as 1.05 m. where a projection of the rock surface was cut away to provide a more even floor. Thus, the original width of the dressings seems to have been little wider than at present. It seems reasonable to suggest a total original width for the structure of ca. 5.00 m. The walls terminated at the east end in antae between which was an opening 3.20 m. in width.

In the interior at the west end and placed symmetrically from the axis of the building are four well cut circular holes. They are 0.32-0.42 m. in depth and have a diameter of ca. 0.28 m. These holes form the corners of a rectangular space measuring 2.10 by 3.10 m. and were presumably designed to hold wooden posts. Accordingly we may restore a baldachino which would have covered the cult statue placed at the west end of the shrine. Between and to the east of the two easternmost holes is a rectangular dressing of the rock, measuring 2.50 by 0.75 m. It would be suitable to bed a small altar before the statue. At its southeast corner is a small rectangular cutting, 0.38 by 0.41 by 0.09 m., which presumably held a base for a stele or an important votive offering. Before the smoothing for the altar are two smaller rectangular dressings, ca. 0.75 by 0.50 m. which may have held the supports for a sacrificial table. At the northeast corner of the altar a drain channel begins. Within the structure the channel consists of a shallow cutting in the rock which keeps well over to the north side as far as the anta, then makes a return to the south. The width and depth of the channel are ca. 0.15 m. and its preserved length ca. 6.00 m. Outside the structure the channel is largely destroyed, but the orientation of the preserved part indicates that it is to be restored as flowing into a settling basin and long, rock-cut drain extending to the east (Fig. 2). There are no rabbets cut along the top of the shallow channel to hold cover slabs. Thus, it must have been left open, which would indicate that the floor of the shrine was the natural rock surface, or consisted of a thin layer of earth.

Despite the preservation of these rather elaborate cuttings for the interior arrangements, there is no trace of a cross-wall or of interior supports. Further, although the original rock surface is preserved between the antae, no traces remain of the settings for columns. It is possible that the traces left by the columns of a porch to the east were destroyed by the cutting for the east cella wall of the Hellenistic temple. If that were so, the antae would have marked the ends of the cella wall of this early structure. Yet, the inner edges of the cuttings for the antae are clearly defined and indicate an unusually wide opening for a cella.

Should this structure, then, be restored as a simple cella <sup>2</sup> or as an open-air shrine surrounded by a wall with a gate? Such simple rectangular buildings are not uncommon in the archaic and classical periods. For example, there is the rather smaller temple of Zeus and Athena in the Athenian Agora, <sup>3</sup> and the large, richly decorated

<sup>3</sup> H. A. Thompson, "Buildings on the West Side of the Agora," Hesperia, VI, 1937, pp. 84-86.

<sup>&</sup>lt;sup>2</sup> The excavator, F. J. De Waele, was of the opinion that a small naïskos, possibly distyle in antis, is to be restored (A. J. A., XXXVII, 1933, pp. 421-22).

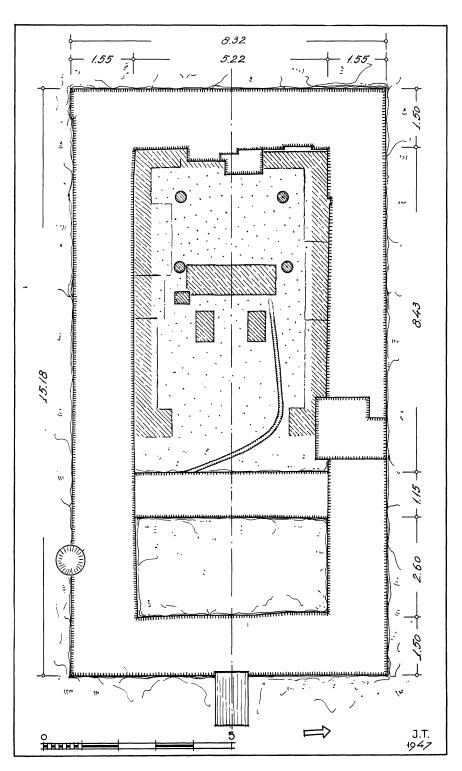


Fig. 3. The Shrine and Cuttings for the Hellenistic Temple. Actual State.

cella surrounded by a peribolos in the Herakleion at Thasos. <sup>4</sup> These, however, seem to have had comparatively narrow entrances and to have held only the cult statues of their gods. The elaborate arrangement of baldachino, altar, sacrificial table and libation drain in the Corinthian sanctuary belongs rather to an open air shrine which was surrounded for the sake of privacy by a wall. A somewhat similar arrangement for a baldachino was discovered within the Peribolos of Apollo at Corinth.<sup>5</sup>

#### THE DRAIN CHANNEL

As mentioned above, the small drain from the sacrificial table emptied into a settling basin. The basin is a tapering pit, 0.50 m. in depth, cut into the rock with its south side open to a larger channel which was traced for *ca.* 21.00 m. to the edge of the excavated area (Plan A). The long channel was constructed more carefully than the section north of the settling basin. In its western part the sides and the floor were formed by hard rock. In the eastern part (Plate 3 ²), however, the hard rock changes to a soft, reddish poros so that it was necessary to cover the floor with cement and protect the sides by a curb of thin slabs which measure 1.20 m. in length by 0.43 m. in height by 0.11-0.14 m. in thickness. A rabbet to bed cover slabs is preserved for 9.00 m. along the north side of the channel. The outlet of the channel was not discovered, but presumably it lay not far to the east of the excavated area, for the channel narrows considerably there. At the western end it is 0.50 m. in width, but at the east only 0.25 m. Its depth is uniformly *ca.* 0.55 m. in the western part and 0.75 m. in the section with curbing.

This channel is much too large to carry only the intermittent libations from the shrine. There are some indications that it drained other structures, the traces of which have almost disappeared. The channel, it is to be noticed, extends for ca. 1.00 m. to the west of the settling basin; a groove is cut in its end at the southwest corner. This must have been designed to drain some structure to the south, the presence of which may be indicated by the shallow cutting preserved there (Plan A). Probably it is the floor of a water basin. The basin was possibly supplied by a pipe which rested in a shallow bedding cut in the rock parallel to and ca. 2.40 m. to the south of the drain channel (Fig. 2).

There are also traces of a gutter made of poros blocks leading to the drain channel from the northwest. Near the eastern end of the drain channel there remains in place a poros slab with a groove cut in its upper surface (Fig. 2). This gutter block (Plates 5 ³; 8 ¹) is 0.80 m. in width and 0.29 m. in thickness. It is set on the line of a shallow dressing extending toward the northwest. Although the southern end of the dressing was destroyed by the cutting for the Hellenistic altar, the dressing is the

<sup>&</sup>lt;sup>4</sup> M. Launey, Études Thasiennes, I, Le Sanctuaire et le Culte d'Héraklès à Thasos (Paris, 1944), pp. 67-76.

<sup>&</sup>lt;sup>5</sup> H. Ess Askew, *Corinth*, I, ii, pp. 5-7. Its vertical supports were carried on bases and it was evidently a much more pretentious structure than the simple baldachino of the Asklepieion.

same width as the gutter block, 0.80 m., and directly on its line. Thus, it presumably held a row of similar slabs which formed the gutter of some structure at the east side of the temenos. Fragments of other gutter blocks were discovered near the east end of the drain channel (Plate 3 <sup>2</sup>). It is probable that the shallow dressing of equal width beside that of the gutter held the blocks of the west wall of this structure (Plate 8 <sup>1</sup>) and it has been so restored (Fig. 2). The drainage from this gutter seems to have entered the rock-cut drain channel, since one of the curbing slabs of the latter is cut with a V-shaped opening in its top directly opposite to the gutter block in place. It is apparent that the gutter of poros blocks went out of use at the time that the rectangular cutting (below, p. 14) was made, since the northern part of the dressing was destroyed in that operation (Plan A).

#### THE OIKOS

About three meters to the northeast of the shrine are the cuttings for the walls of a structure which offers some difficulties of restoration. The cuttings themselves are very clear and indicate the course of its exterior walls (Plan A; Plate 41). Carefully cut into the rock, they measure ca. 0.70-0.80 m. in width and ca. 0.20 m. in depth. The overall length of the building is indicated as 8.10 m., but its northern part was much narrower, 3.40 m., than its southern part, 5.30 m. This might seem to indicate the restoration of two rooms of unequal size with a partition wall dividing them and with an entrance on the south, as on the plan (Fig. 2). The only trace of such a partition wall, however, is the gap left between the cuttings for the returns of the north and south walls on the west side. The rock surface, which is well preserved here, bears no traces of smoothing to bed the blocks of such a partition wall. This is rather surprising, for the beddings for the exterior walls were carefully prepared. Another possible restoration might be suggested. There is a tapering, circular hole, ca. 0.20 m. in diameter and 0.16 m. in depth, cut midway between the walls of the southern part of the structure. This might have held a wooden post used to support a roof over the southern part of the structure, leaving a yard open to the sky at the north. The above mentioned gap would have served as a door. If restored thus, the building bears a resemblance in plan to the neolithic house at Magasa in Crete 6 rather than to any structure of the archaic and classical periods. It is, however, plainly of the Greek period, for its cuttings are well made and in their floor are pry-holes indicating the use of large blocks, ca. 1.30 m. in length. Another puzzling feature is the projection of the north wall beyond its return to the south to form a small exterior corner on the northwest.

The structure, whatever its original plan, is plainly to be identified as a sacred building of the early temenos. Against the east wall are the remains of a well-made base (Plate 41) which evidently carried an important offering. The base is made

<sup>&</sup>lt;sup>6</sup> W. B. Dinsmoor, The Architecture of Ancient Greece (London, 1950), p. 4, fig. 1.

of two blocks of poros joined by double T clamps of iron measuring 0.22 m. in length. The blocks are set in a cutting with their tops level with the surrounding rock surface and held another block for which a square panel, measuring 0.90 m. by 0.04 m. in depth, was cut in their tops. The large size and careful workmanship of the base indicate that some object of importance was placed on it, possibly a statue. Cuttings for other bases (Fig. 2) should also be associated with the building because of their relation to the west and east walls, and to the poros base.

The orientation of the building, however, is quite different from that of the shrine, for it is set across the entrance to the latter. That need not indicate that they were used at different periods, because there is sufficient space between them to permit easy passage. The oikos went out of use in the late fourth century B. C. when the temple was built, for the cuttings for the temple walls were made through its southwest corner.

#### THE RECTANGULAR CUTTING AND WELLS

About one meter east of the oikos is a shallow cutting (Plate 41; Plan A) with sides of varying length. Its floor is not smoothed but presents a rough, irregular surface with a narrow groove along the edges. It seems, then, that the makers of the cutting either trimmed off the sides of a natural hollow for some special purpose or quarried some blocks from the hilltop, leaving this depression. The dimensions and the shape of the cutting bear a close resemblance to those of the archaic temple of Hera on Mt. Kynthos in Delos. It is unlikely, however, that the cutting ever contained walls around its edges since the surface of the floor is so irregular. It was used rather to hold a deposit of a special character; as an inscribed krater rim indicates, this deposit was the discarded votives from an archaic shrine of Apollo.

In the southwest corner of the cutting is the shaft of a well, cut through it at a later date. The shaft is a neatly cut cylinder, with footholds on the sides, measuring 0.86 m. in diameter and 6.60 m. in depth. Its water level was at 6.40 m. The filling of the well consisted of earth and, near the bottom, masses of yellow clay. In the filling were pieces of pottery joining those from the cutting described above. The well was not filled at the same time, however, as it contained pieces of late fifth and fourth century pottery, while the deposit in the cutting was of the sixth century. It seems probable, then, that the well was filled up at the end of the fourth century when the other well to the west, described below, was filled in. Its filling would have consisted of earth removed from the upper part of the deposit and of clay cut out in the building operations carried on at that time. This well, then, served as part of the water supply of the early temenos.

To the west of it and north of the shrine (Fig. 2) another well was excavated

<sup>&</sup>lt;sup>7</sup> A. Plassart, *Délos*, XI, *Les Sanctuaires et les Cultes du Monte Cynthe* (Paris, 1928), pp. 150 ff. The measurements of the Delian building are: 3.40 by 2.85 by 2.77 by 2.87 m.; those of the cutting: 3.60 by 2.55 by 3.20 by 3.10 m. The depth of the cutting varies from 0.35 to 0.45 m.

which had the same function. It was similar in type to that in the cutting and measured 0.75 m. in diameter with a depth of 7.30 m. Its water level was at 6.70 m. This western well was filled with a mass of votive offerings and pottery in the late fourth century B. c. at the time of the renovation of the sanctuary on a monumental scale, as will be discussed below (pp. 113 ff.).

#### THE DEPOSIT IN THE CUTTING

The deposit itself was small and the dedications of little intrinsic worth. They consisted largely of miniature vases, particularly skyphoi. There were, however, a few large skyphoi decorated with friezes of roughly drawn animals, or black-glazed, with a ray pattern at the base; fragments of small kraters and two plastic vases. The figurines were few in number and mostly of types common in Corinth. The vases belonged for the most part to types of the Late Corinthian I period of painting, 575-550 B. c., but there were enough pieces of Middle Corinthian ware and of the later "conventionalizing style" to suggest that the group is an accumulation begun in the first quarter and discarded in the third quarter of the sixth century. As a result of the disturbance of the deposit at the time the well was filled, it contained a few pieces of black-glazed ware of the late fifth and fourth century. The presence of two fragments of terracotta votives—a great toe (V58) and part of an arm (V59)—are probably to be accounted for by this disturbance. Only two lamp fragments were found with the deposit, one of Type I and one of Type III.

Aside from the fragments of the krater (Fig. 4), on the rim of which the dedication to Apollo was scratched, the pottery and figurines are of little importance. Accordingly, only the following representative selection is published. Nos. 30-35 are to be dated in the late fifth and fourth century. As explained above, their presence is to be accounted for by the disturbance of the deposit when the well was filled. All the pieces are Corinthian unless particularly noted.

## CATALOGUE OF POTTERY FROM THE DEPOSIT

**1** (Fig. 4). C-31-348. Small column krater. Estimated diameter of the rim, 0.137 m.

Two fragments from the rim and three from the side (not illustrated) are preserved. The glaze has almost disappeared. The fragments from the side indicate that a band of tongue ornament was painted on the shoulder and a frieze of riders on the wall. Below the scar left by the handle is part of a wing, probably of a siren or sphinx.

The dedication  $A\pi\epsilon[\lambda]\lambda ovos i\mu i$  is scratched on the rim in Corinthian letters. This spelling

with epsilon is the usual Doric form of the god's name. It is found on a Late Corinthian kotyle (H. Payne, *Necrocorinthia*, p. 163, no. 13, bis and p. 309, no. 958). The use of iota for the diphthong,  $\epsilon\iota$ , is unusual, since  $\epsilon$  is normally used for that purpose (Payne, *op. cit.*, p. 158).

**2** (Plate 5 2). C-3196. Large skyphos. Height, 0.129 m.; diameter, 0.178 m.

Pale buff slip; added purple on the shoulders, bellies and haunches of the animals. There are concentric circles on the underside of the foot.

Another similarly decorated large skyphos was found (C-3198).

**3** (Plate 3 1). C-3197. Skyphos. Height, 0.104 m.; diameter, 0.149 m.

The left handle and part of the side are restored. The decoration is similar in type to that of No. 2.

**6** (Plate 3 1). C-3200. Large skyphos. Height, 0.116 m.; diameter, 0.167 m.

The skyphos is black-glazed, decorated with purple lines at the edge of the lip, on the shoulder, and on the lower part of the body. There are concentric circles on the underside of the foot. Several examples of this type, but of slightly later date and with thick lines, not rays,

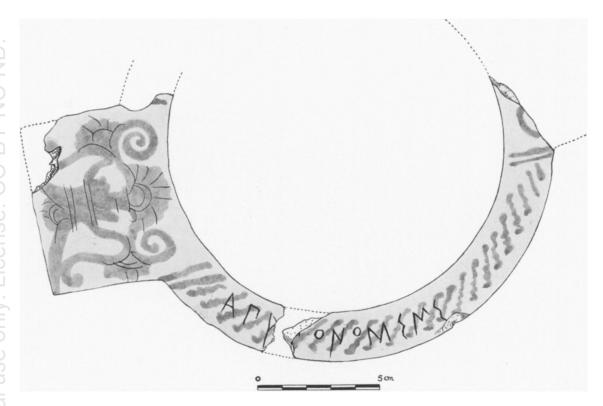


Fig. 4. Krater Rim with Inscribed Dedication to Apollo. No. 1.

4 (Plate 6). C-31-349. Fragment of a large skyphos. Greatest dimension, 0.143 m.

Added purple. The decoration is similar to that of Nos. 2 and 3.

**5** (Plate 3 1). C-3202. Fragmentary small skyphos. Height, 0.063 m.; diameter, 0.095 m.

The main zone, in which there are rows of dots and goats, is enclosed by bands of purple. Several other fragments from skyphoi of this type were found.

at the base were found. The profile is rather more curved and the point of greatest width lower than in the skyphoi of similar type found in a well in the Corinthian Agora and dated in the latter part of the sixth century B. C. (M. Campbell, *Hesperia*, VII, 1938, p. 589, nos. 89-100).

7 (Plate 31). C-31-350. Round aryballos. Height, 0.04 m.

Quatrefoil decoration with a comb above and

petals below. There are concentric circles on the rim. Several other small aryballoi with this type of decoration were found. A later example, probably to be dated in the Late Corinthian II period, was also in the deposit. It contained a very small hatched area between the leaves and a wide space between the solid part and the outline of the leaves. For a better example of the decoration see Plate 3 1, G 1.

8 (Plate 3 1). C-31-351. Round aryballos. Height, 0.052 m.

Decorated with concentric lines and rows of dots. Several other aryballoi of this type were found.

**9** (Plate 6). C-31-352. Kothon. Height, 0.52 m.; diameter, 0.158 m.

There are concentric lines on the interior and on the underside of the foot. The kothon is of the "white style" common after the middle of the sixth century B.C. (Payne, *Necrocorinthia*, p. 335; Campbell, *Hesperia*, VII, 1938, p. 594, nos. 135-38). A few fragments of other "white style" vases were found: skyphoi, pyxides, oinochoai.

**10-18** (Plate 3 1). C-31-353-361. Miniature vases.

The types represented: skyphoi, kalathoi, kraters, amphoras, pyxides, aryballoi have close parallels in the miniature vases from a shrine of the latter part of the sixth century found in the Potters' Quarter in Corinth (A. Newhall, A. J. A., XXXV, 1931, pp. 16 ff.). The decoration consists mainly of concentric lines of glaze. Nos. 10 and 17 are black-glazed. One foot of the tripod pyxis, No. 12, is pierced by two holes for suspension. The fragmentary kalathos, No. 18, has three slits in its side.

**19-25** (Plate 6). C-31-362-68. Miniature vases of the "Conventionalizing Style."

No. 25 is from the side of a pyxis and No. 19 from a lid; the others are from skyphoi. The type of decoration is discussed by Payne (*Necrocorinthia*, pp. 331 ff.) and Campbell (*Hesperia*, VII, 1938, pp. 591-93, nos. 120-27). Many vases of this type were found in the

shrine in the Potters' Quarter mentioned in connection with Nos. 10-18.

**26** (Plate 3 1 and Fig. 5). C-31-369. Fragment of an Attic lip cup. Estimated diameter, 0.172 m.

The palmette at the handle has a red heart. On the zone of the handle the inscription is written in dilute glaze:

#### χαιρ ] ε καὶ πίει εὖ.

For the inscriptions found on little-master cups see J. D. Beazley, J. H. S., LII, 1932, pp. 194-95; for the imperative, πίει, P. Kretschmer, Die Griechischen Vaseninschriften, pp. 195-96.

**27** (Plate 6). C-31-370. Fragment from a skyphos. Greatest dimension, 0.061 m.

The fragment is from the side of a black-glazed skyphos, apparently bearing the name of its dedicator scratched in Corinthian letters near the rim:  $A \dot{v} \tau \dot{o} \phi \iota \lambda$  [os.

**28** (Plate 6). T. F. 8. Plastic ram. Height, 0.059 m.; length, 0.063 m.

The nose and a fragment from the breast are missing. On the top of the head is an opening and on the underside of the belly, a zigzag line painted in glaze. The form of the ram is debased, with the feet and tail represented by ridges of clay. For the general type see Maximova, Les Vases plastiques dans l'Antiquité, pp. 104-05. Our example is similar to the plastic rams found in Grave 105 at Rhitsona which are dated about the middle of the sixth century B. C. (P. N. Ure, Aryballoi and Figurines from Rhitsona, p. 75, No. 105, 1-3; plate X, 105.1). Some rams of rather earlier date were found at Perachora (Payne, Perachora, I, p. 238, nos. 212-14).

**29** (Plate 6). T. F. 7. Plastic bull. Height, 0.07 m.; length, 0.101 m.

The ends of the horns, which curved across the brow, of the ears and of the legs are missing. There are traces of red paint around the opening. The vase is handmade but well modelled. While plastic vases of bull protomes are well known, representations of the whole animal

are rare and those listed by Maximova do not resemble this type (op. cit., pp. 107-08).

**30** (Plate 3 1). C-31-371. Corinthian kotyle. Height, 0.09 m.; diameter, 0.105 m.

The glaze is of good quality. The lower part of the body is covered with a red wash. The under side of the foot has a dot in the center **32** (Plate 3 1). C-31-373. Small kotyle. Height, 0.047 m.; diameter, 0.068 m.

The glaze which originally covered the whole body has almost completely disappeared. For the type see the examples from the Votive Deposits (below, p. 132, No. 9).

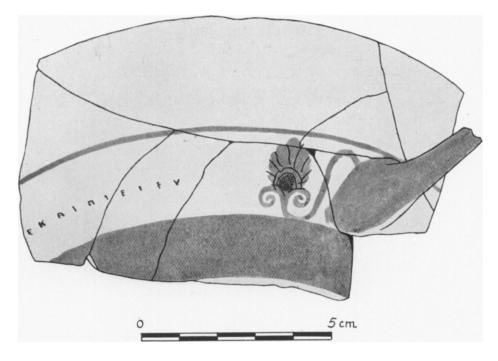


Fig. 5. Little-Master Cup with Inscription. No. 26.

and concentric circles. This example is a little later in date than those published by Miss Pease from the well in the Corinthian Agora filled in ca. 420 B. c. (*Hesperia*, VI, 1937, p. 308, nos. 218-21 and p. 307, fig. 37). The top curves inwards rather more and the point of greatest width is higher. For a discussion of the shape see L. Talcott, *Hesperia*, IV, 1935, pp. 505-06.

**31** (Plate 3 1). C-31-372. Small kotyle. Height, 0.065 m.; diameter, 0.082 m.

The lower part of the body is unglazed. For the type, which was in use in the latter part of the fifth century and in the fourth, see the example from the well in the Corinthian Agora mentioned in connection with No. 30 (op. cit., p. 283, no. 67; fig. 20).

**33** (Plate 6). C-31-374. Fragment from an amphora. Greatest dimension, 0.07 m.

The fragment is from the side of an amphora of buff clay. The letter  $\phi$  is written on it in red paint.

**34** (Plate 6). C-31-375. Fragment from an amphora. Greatest dimension, 0.083 m.

The fragment is from the neck of an amphora of buff clay. The letters AA are written on it in red paint.

**35** (Plate 6). C-31-376. Fragment from an amphora. Greatest dimension, 0.11 m.

The fragment is from the shoulder of an amphora of pale buff clay. The letter  $\Lambda$  is written on it in red paint.

## TERRACOTTA FIGURINES FROM THE DEPOSIT

Most of the figurines from the deposit are of the common type representing a horse and rider. The majority of these are made of buff clay with traces of a white sizing and red paint; a few are of hard, yellow clay decorated with bands of glaze. Two unusual types were found: No. 1, a representation of a bull, and No. 2, which seems to represent a centaur carrying a female figure. The modelling of the second, however, is so crude that it is difficult to identify the subject with certainty. The other types, a standing and a seated female figure, are found in large numbers both at Corinth and at Perachora. Our examples are probably to be dated about the middle of the sixth century.

 ${f 1}$  (Plate 6). T. F. 3. Bull. Height, 0.079 m.; length, 0.072 m.

The ends of the horns, which curved across the brow, the tail and three legs are missing. The ears are very large, and the eye and eyebrow painted on in glaze. The body is decorated with patches of glaze.

**2** (Plate 6). T. F. 5. Centaur. Preserved height, 0.043 m.

There are traces of red paint. The centaur has the forelegs of a horse.

**3** (Plate 6). T. F. 6. Horse and rider. Height, 0.072 m.

The body is decorated with lines of reddish glaze.

4 (Plate 6). T. F. 6a. Horse and rider. Height, 0.086 m.

There are traces of white sizing and red paint.

**5** (Plate 6). T. F. 11. Standing female. Height, 0.076 m.

There are traces of white sizing and red paint. For the type see Payne, *Perachora*, I, p. 225, no. 142, plate 99.

**6** (Plate 6). T. F. 10. Seated female. Preserved height, 0.084 m.

There are traces of white sizing and red paint. For the type see Payne, *op. cit.*, pp. 211 ff.

7 (Plate 6). T. F. 2. Rider. Height, 0.052 m.

The right arm and left leg are missing. This figurine is treated more ambitiously than most of this type: the mouth is open and the tongue indicated by reddish glaze and pierced by small holes.

#### LAMPS

CL. 2461 (Plate 6). Type I. Height, 0.023 m.

The clay is buff and unglazed. The bottom is flat and the nozzle blackened with smoke. This lamp is probably to be dated before the middle of the sixth century (Broneer, *Corinth*, IV, ii, p. 35).

**CL. 2463** (Plate 6). Type III. Height, 0.025 m.

The clay is grey. On the rim are bands of brownish glaze, in which it resembles the first and earliest variety of Type III lamps (Broneer, op. cit., pp. 38-39).

#### ENTRANCE AND APPROACHES

No traces were found which can be definitely identified as indicating the entrance or the boundary of the early temenos, but, as observed above, it was probably on the east side.

The only indication of an approach to the area, if not to the temenos, is furnished by some traces in the hollow of Lerna below the northwest corner of the Asklepieion Hill. The hollow seems originally to have formed an open bay sloping in from the south, east, and west to a low center and opening out to the north at almost ten meters below the top of the hill. In its southeast corner a trickle issued from the rock. When the monumental development of the sanctuary was carried out in the late fourth century, the northern part of the hollow was filled in. Under this filling a few traces of an earlier road were found (Plate 42). A groove, worn in the clay, was traced for a distance of 3.70 m. to the southwest, parallel to the hillside. Its south end was cut by the foundation of the median wall of the later abaton building. Beside it was a shorter groove. They were apparently the ruts of a road leading into the hollow to take advantage of its water supply. On their east side was a short stretch of retaining wall preserved for 3.70 m. Only one course consisting of three blocks, varying in thickness from 0.60-1.03 m., is now preserved (Plan A).8 It would protect the road from the erosion of the slope above to the east. Near the road were three holes cut in the clay, which are probably the bottoms of pits. Three small sarcophagi which contained the bones of small children were found south and east of the ruts (Fig. 2; Plate 51). One cover was preserved, measuring 0.70 m. by 0.38 m. The sarcophagi were of terracotta and were uniform in size, 0.60 m. by 0.35 m. with an inside height of 0.20 m. They contained no objects, but near them were found an aryballos and a skyphos (Plate 31) dating about the middle of the sixth century. These graves seem to have been an isolated group as no other burials of this period were found.

## VASES FROM THE SARCOPHAGI

**G1** (Plate 3 1). C-31-377. Round aryballos. Height, 0.07 m.

Quatrefoil decoration; concentric lines on the bottom and on the upper side of the rim. The aryballos is of the type found in great quantity in the graves of Group C (P. N. Ure, Aryballoi and Figurines from Rhitsona, p. 44) and in the Group A kylix graves at Rhitsona (J. H. S., XXIX, 1909, pp. 309-310; 'Apx. 'Ep., 1912, p. 113). They are dated about the mid-

dle of the sixth century B. C. (see also Payne, *Necrocorinthia*, p. 320, no. 1263).

**G2** (Plate 3 1). C-31-378. Skyphos. Height, 0.061 m.; diameter, 0.093 m.

The cup is squat and badly made with one side of the rim higher than the other. The under side of the foot is reserved. The decoration consists of red and white bands on the lower part of the body and below the handle level.

<sup>8</sup> When the wall was excavated three courses of good masonry of large blocks and two of smaller reused blocks were found resting on the socle as indicated in the photograph (Plate 42). They were removed during the recent war. Since the blocks of the socle were oriented differently from the three courses of good masonry resting on it, the socle seems to belong to an earlier wall. It seems probable, however, that it was reused as the foundation for the underpinning of a stairway to which the three courses of good masonry belong. This stair would have given access to the second floor of the abaton building as described below (p. 51). The small reused blocks of the upper courses were probably added when the drain channel to the east of the socle was cut in the Byzantine period (below, p. 110).

Thus, in the late archaic period a road entered the hollow around the northwest corner of the hill. It would have been convenient to make a path up to the precinct from it, but no traces survive.

There are some indications of buildings in the hollow, which antedate its monumental development in the late fourth century, but a study of them is impossible without the destruction of the floors of the later structures. In the northeast part of the hollow the edge of a cement floor and the end of a wall block may be seen below the preserved floor of the northernmost dining room of the later abaton. A cement floor of similar construction was cut through in the southwest corner of Lerna square when the foundations of its stylobate were laid. The original extent of these floors and the nature of the buildings of which they were a part is obscure, but to one of them probably belonged a manhole and water channel which were found below the gutter and the pavement of the later square. Since its filling is of some importance for the date of the construction of the latter, it will be convenient to describe it below (p. 89). Possibly a few scraps of archaic and classical architectural terracottas of found in the excavation are to be assigned to these early structures or to the small buildings on the hill.

#### DATE AND INTERPRETATION OF THE REMAINS

As we mentioned above, the early structures on the hill were razed to the rock and no evidence survives for the date of their construction. On the other hand, there is considerable material to indicate their period of use and the time of their destruction. Both the early shrine and the oikos were destroyed by the cuttings of the Hellenistic temple. In the small rectangular cutting beside the altar of the shrine were five coins and a small clay dish, apparently swept in when the area was cleared for the temple. Four of the coins were Corinthian bronze pieces bearing the symbol of Pegasos and a trident which are dated to the period 400-146 B. c. The fifth, however, was a coin of Hermione, 370-300 B. c. The vase was a small bowl with fugitive black glaze, of a type common in deposits of the fourth century B. c.

In the cutting for the east wall of the oikos was a small deposit of votive offerings (Votive Deposit VI), presumably placed there when the temenos was being levelled. The long drain channel (Votive Deposit II) and the western well (Votive Deposit V) were packed with votives, pottery, lamps, and some coins of the late fifth and fourth centuries B. c. These latter were filled in the same operation as joining fragments of the terracotta arm (p. 123, No. 50) were found in each. Also joining fragments of the terracotta mask (p. 119, No. 1) indicate that the filling of the drain and of the northeast corner of Lerna hollow (Votive Deposit IV) was carried out at the same time. From the eastern well in the cutting came a few pieces of pottery, already noticed, of the same general period. It will be convenient to discuss the deposits of

<sup>&</sup>lt;sup>9</sup> They will be discussed in the forthcoming publication of the architectural terracottas of Corinth by Mrs. Mary Campbell Roebuck.

votives separately, but it should be observed here that their date is approximately the same as that indicated by the coin of Hermione from the cutting by the altar. Thus, the early buildings of the temenos and of Lerna were destroyed in the late fourth century B. C. to make room for the new sanctuary.

The only other clue to the date and use of the structures is that offered by the deposit in the rectangular cutting. It was made in the third quarter of the sixth century B. C., probably ca. 540, when a shrine of Apollo was cleaned out. The making of the cutting destroyed the gutter of poros blocks which emptied into the rock-cut drain channel. Thus, the gutter, the drain and the open-air shrine would have been in use before the middle of the sixth century. There is no reason to suppose that the drain and the shrine went out of use with the gutter and the building to which it had belonged. It is tempting to identify the shrine as the site of the cult of Apollo attested by the inscription on the krater rim. Most of the votive offerings from the later deposits, however, are plainly dedications to Asklepios. They were made in the period from the late fifth to the late fourth century B. C. Thus, the question is involved with the introduction of the cult of Asklepios into the temenos and is better discussed at length (below, pp. 152-155) in that connection. It seems likely that Asklepios would not replace Apollo entirely, but would share the sanctuary with him at first, as he did at Epidauros, Kos, and elsewhere. Possibly the early "home" of Asklepios was in the oikos, while Apollo continued to be worshipped in the shrine. The only clue to the date of the oikos is the use of double T clamps in the base beside its eastern wall. Such clamps were not in use until the fifth century. If base and structure are contemporary, this building was erected in the fifth century. It is possible, of course, that the base was added later, but, to judge from its relation to the cutting for the wall, at a time when the building was in use. Thus, this structure may have been built for Asklepios when his cult was introduced in the late fifth century B. C., and, perhaps, the poros base carried a statue of the new deity. It is to be remembered in this connection that Asklepios made his way to deification rather slowly and may not have been judged worthy of a temple at first. Then, in the Hellenistic period, by which time he had become a god of major importance, a temple was built for him and the precinct and Lerna laid out on a monumental scale.

## CHAPTER II

## THE PRECINCT OF ASKLEPIOS

#### INTRODUCTION

THE DEVELOPMENT of the Asklepieion hill and of Lerna hollow into the monumental building complex, the remains of which appear today, was carried out in the late fourth century B.C. Although Corinth in the Hellenistic period had only the dangerous political importance which its strategic position and Macedonian interest conferred, it acquired renewed prosperity as one of the ports of transshipment to the west for the trade from the Hellenistic kingdoms. Thus, the city needed and could afford to erect buildings on the scale of the other great Hellenistic cities. The cult of Asklepios, too, attained its full growth in the Hellenistic period, so that it was natural for the Corinthians to enlarge the small temenos in accordance with the increasing importance of their city and of the god of healing.

The primitive structures of the early sanctuary were completely removed in the course of this operation and the physical appearance of the hill and of Lerna radically altered. On the traditionally sacred spot on the top of the hill a new temple, which replaced the earlier shrine, was built for Asklepios (Plan B). Before the temple an altar was made with an offertory box beside it and statues ranged near by. To frame the temple the limits of the precinct were defined on the south and east by walls—the former of which served also as the north wall of a ramp leading from the higher level of the Asklepieion to Lerna; on the north at the edge of the hill a colonnade was built in which the patients and visitors might talk and loiter. The largest and most important building of the sanctuary, the abaton, was erected on the west. It was one storey in height on the edge of the hill and two storeys from the lower level of Lerna (Plan D, Section A-A), and thus made an architectural link between the precinct and the hollow. In the southern wing of the abaton was a lustral room which evidently played an important part in the ritual of the cult. It was supplied and drained by an elaborate system of pipes and channels laid out on the south side of the precinct. In the northern wing of the building it seems likely that there was a stairway to provide private communication between the abaton and Lerna. Somewhat later, probably in the third century B.C., an entrance porch was added to the lustral room and narrow colonnades were built on the south, west, and probably the east sides of the precinct, thus enclosing the temple in a complete framework of colonnades.

The main communication between the Asklepieion and Lerna was made by the ramp (Plan C; Plan D, Section B-B). At first its walls were unbroken, but probably in the third century a small fountain house was built near the eastern end on the south side. The western end of the ramp was closed by a gate which gave access to

an entrance court into the southeastern corner of Lerna. A formal entrance into the resort was made by the erection of an Ionic propylon built across the court, consisting of three columns flanked at each end by half columns set against the wall of the court and at the southwest corner of the abaton.

The hollow of Lerna was converted into an elaborate fountain house and resort (Plan C). The laying out of a rectangular area measuring about thirty-eight by thirty-six meters overall, with its level fixed at four meters below the hill top, necessitated considerable cutting and filling. The rock and clay were cut down in a vertical scarp on the east, south and west sides. The waste from this operation, mixed with discarded votives from the early sanctuary, was used as filling in the central and northern parts of the hollow and against the foundations of the new buildings and over their drain channels.

In the central part of the rectangular area thus made an open, paved square was laid out and surrounded by a continuous colonnade. Opening from the east side was a row of three dining rooms which occupied the first floor of the abaton. Its second floor over the dining rooms rose above the roof of the colonnade (Plan D, Section A-A) and formed the western part of a room which was probably used for the rite of incubation. In the rear of the south colonnade was the main water supply. A spring house was cut into the scarp of the southeast corner to utilize more fully the trickle from the rock. West of it three reservoirs (II, III, IV) were tunneled, from which water could be drawn. Access to the reservoirs was given by a long corridor which was carried around the southwest corner to another large reservoir (V) tunneled under the hill to the west.

The symmetrical arrangement of the structures in the sanctuary and in Lerna is apparently the result of a single building plan. The reservoir (I) under the southwest corner of the precinct was placed directly opposite to that (V) under the hill to the west. The spring house and the reservoirs on the south side are arranged symmetrically. Marking the axis between the precinct and the resort was the abaton building which rose above the roofs of the peristyle of Lerna and the colonnades of the precinct. Along the north edge of the area at the base of the Asklepieion hill and across the former opening of Lerna hollow the city wall was built. In this section the wall was an integral part of the building plan, for it served not only as a retaining wall, but its masonry was bonded with the structures of the precinct and of Lerna.

It is apparent from this planning and also from the evidence of the excavation, that the main structures of the Asklepieion and of Lerna were laid out and built as a single complex. Should we, then, regard the whole area as an Asklepieion, divided into a precinct and a resort for the patients, or was Lerna regarded also as a public fountain which might have served that quarter of the city? Its reservoirs held a very large amount of water, their capacity being approximately 340 cubic meters (p. 106). In addition, the spring house had a constant flow. The cool water, the colonnades, and the open square would have made an admirable place either for loitering in the hot weather or for convalescence. The precinct, however, had its own water supply

for lustral purposes and access to Reservoir I under the hill by a shaft cut through its top. It seems probable that, in view of the unusually large amount of water available in Lerna, it was intended to be a public supply, but, since it was closely linked with the Asklepieion, that patients also made constant use of its facilities.

In the Roman period it seems probable that this public character of Lerna was further emphasized. Over the ramp a building was constructed which used its north and south walls as foundations and cut off the communication from the precinct by a series of cross-walls in its basement (Plate 7 1). Pausanias evidently did not consider the resort of Lerna as a part of the Asklepieion since he does not connect them closely in his account.<sup>1</sup>

Originally, however, it is probable that Lerna was regarded in some degree as the secular part of the establishment. The Asklepieion at Corinth should not be compared with the great establishments at Kos, Epidauros, and Pergamon, but rather with those at Troezen <sup>2</sup> and Athens. <sup>3</sup> Both of these latter were divided into two sections: in one part lay the temple and sacred buildings of the precinct, in the other, buildings for more general use. The establishment at Troezen offers a particularly close parallel. Its "secular" part consisted of a peristyle court surrounded by rooms. On the north, east and west sides were dining rooms arranged similarly to those in the Corinthian Asklepieion. The arrangements on its south side are not clear. The two sanctuaries are also contemporary in date; both were built in the early Hellenistic period. Corinth seems to have followed this general plan, but with the added feature of making its secular part a unit in the city's water supply. It is probable, too, that Lerna was planned to serve the users of the Gymnasium to the south. It has been pointed out above (p. 2) that this building, known as the "Old Gymnasium" in Pausanias' time, may have been a structure of the Greek period. Its users would have found Lerna a pleasant place to rest after their exercise. Its uses as a source of water supply for this sector of the city's defences need no elaboration.

The actual remains of this elaborate complex are very scanty, for almost everything that was above the surface level was demolished. Most of the building blocks were destroyed or removed in subsequent pillaging. Thus, on the hill, little remains except the cuttings in the rock, a few bases of the colonnade, the lustral chamber, and the pipes of the water system (Plate 7 ¹). The ramp and the fountain house fared rather better, for both were sealed over in the early Roman period. Lerna, however, like the sanctuary on the hill, has been sadly pillaged (Plate 7 ²). Its pavements, foundations, and drain complex have survived for the most part, but, except for the couches in the southernmost dining room, everything above the pavement level has been

<sup>&</sup>lt;sup>1</sup> Pausanias, II, 4, 5; above, p. 2.

<sup>&</sup>lt;sup>2</sup> G. Welter, Troizen und Kalaureia (Berlin, 1941), pp. 25-36.

<sup>&</sup>lt;sup>3</sup> A bibliography of the literature dealing with the Asklepieion at Athens is given by W. Judeich, Topographie von Athen (2nd ed.; Munich, 1931), p. 320, note 3. For a recent study of some details, see R. Martin, B.C.H., LXVIII-LXIX, 1944-45, pp. 434-38; J. Travlos has pointed out the similarity of plan between the Asklepieion at Athens and that of Corinth (Ἡ παλαιοχριστιανικὴ βασιλικὴ τοῦ ᾿Ασκληπιείου τῶν ᾿Αθηνῶν, ᾿Αρχ. ὙΕφ., 1939-41, p. 60, note 3; see also p. 61, fig. 18).

removed. While some architectural fragments and terracottas were found in the excavation,<sup>4</sup> attribution of them to particular buildings is somewhat uncertain, so that many of the details of the suggested reconstructions are necessarily conjectural.

#### ENTRANCE AND EASTERN BOUNDARY

It is clear from the arrangement of the structures in the precinct that its entrance was from the east side. The Greek levels, however, were largely cut away in later building activity so that the entrance itself was not discovered. A cutting was found ca. 4.60 m. to the east of the cutting for the altar (Plan A) and traced for a distance of 2.50 m. Since several blocks of a foundation course were found resting in it the cutting was evidently made for the east wall of the precinct and the eastern limit of the precinct can be fixed on this line (Plan B). Unfortunately a fuller investigation was not possible since the cutting lay at the edge of the excavated area.<sup>5</sup>

In the southeast corner of the precinct are the remains of a small Greek water basin. Its presence suggests that the entrance should be restored to the east of it as indicated on the plan (Plan B). The visitor would make a preliminary ablution at the basin, then proceed to the altar to sacrifice. From the altar he would pay a visit to the temple, and, leaving it, walk through the precinct, decorated with votive offerings, to the lustral room in the south wing of the abaton building. There, the rites preliminary to incubation would be performed and he would enter the room designed for the visitation of the god during his sleep. On leaving the abaton he could again walk through the sanctuary to the entrance of the ramp, turn down it, and enter Lerna where he might lounge in the court and colonnades or eat in the dining rooms on the first floor of the abaton building. Following this hypothetical visitor, let us turn to a detailed survey of the remains.

#### THE EAST WATER BASIN

A small water basin was set in the southeast corner of the precinct (Plan A), close to the north wall of the ramp. Only the lower part of the basin, 0.53 m. in depth, is preserved. The large section of floor which extends to the north, supported by modern masonry (Plate 8 <sup>2</sup>), is apparently of earlier date—possibly belonging to the early temenos—and was partially destroyed and covered when the basin was constructed. The remains of the basin seem to indicate that it is to be restored as a small porch-like structure with a rear wall and two columns at the front (Plan B).

<sup>&</sup>lt;sup>4</sup> A considerable number of architectural fragments and terracottas, stored in the excavation, was carried off or broken during the recent war.

<sup>&</sup>lt;sup>5</sup> It would have been desirable to follow out this cutting to its end in the hope of discovering traces of the entrance system, but the field east of the Asklepieion was not available for investigation in 1947.

The basin, which measures 0.98 m. by 0.66 m. on the inside, was cut from a large block of poros set on small blocks bedded in the soft natural rock. At the west end (Plate 8 2) these are placed on either side of a terracotta pipe line encased in cement, from which a lead pipe carried water into the basin. The bedding for this pipe and its twisted end are visible on the west side of the block. Also on the west side, north of the pipe, are traces, indicated by the raised edges of the stucco and a cutting on the face of the foundation block, of a bedding for a stele, measuring 0.35 m. in width. The pipe line passed under the basin and extended to the east where it was broken off by a rubble wall of Roman construction. As described below (p. 49) the construction of this pipe line indicates that water was conveyed in it under pressure to the sanctuary. It was designed primarily to serve the lustral room of the abaton, but evidently carried sufficient water to supply the small eastern basin in passing, forcing the water up through the lead pipe. The short section of pipe, 1.25 m. in length, to the northeast of the basin (Plan A), may have carried off its overflow, but the connection between them has been destroyed by the Roman wall. This pipe was also of lead, 0.045 m. in diameter, encased in cement.

The inside and outside of the basin and the tops of the small foundation blocks on which it rested are covered with a layer of waterproof cement, 0.02 m. in thickness, and finished with a smooth coat of yellow stucco. This stucco gives the only hint of the existence of the wall on the south side of the basin. At ca. 0.10 m. from the west end on the south side it returns to the south indicating that the blocks of a wall have been torn away from the south side of the basin. No traces of the settings for the columns or identifiable fragments of the superstructure of the basin remain.

On the north are the well preserved remains of the above mentioned floor (Plate 8 ³). It originally had a thin curb on its east side, of which only two slabs, measuring 1.54 m. in length by 0.37 m. in height and 0.11 m. in thickness, remain in place. The southern end of this curbing and of the floor was destroyed by the construction of the basin. Thus, it plainly predates the basin. The floor is of the usual waterproof type—a carefully finished layer of cement resting on a bedding of pebbles. Above this earlier floor and flush with the preserved top of the basin on its north side is a small section of flooring which may be contemporary with it, although the destruction caused by the late Roman rubble wall makes it difficult to judge their relationship.

The only clue to the function of the basin is its position near the altar. It was apparently designed for an ablution preliminary to sacrifice and entrance into the inner part of the sanctuary.

There is no specific evidence for the date of the construction of the basin, but its position would seem to indicate that it was part of the original design of the Hellenistic precinct. It shows several traces of subsequent alteration. Possibly it went out of use when the colonnade was built along the south side of the precinct (below, pp. 62-4), for the space formerly occupied by its rear wall is covered with cement of the same type as that between the column bases. In any case the work along the south side of the precinct in the reconstruction of the early Roman period (below, pp. 79-82)

would have resulted in its filling. Later in the Roman period, when some structure was built to the east of the precinct, the east side of the basin was torn out and the above mentioned rubble wall built over it. In the mortar of the wall was a coin of Geta (A.D. 209-12).

## THE ALTAR AND OFFERTORY BOX

North of the water basin and 10.50 m. to the east of the cutting for the temple is a long rectangular cutting in the rock, measuring 8.50 m. in length, 1.60 m. in width and 0.30-0.40 m. in depth (Plan A; Plate 8 1). It presumably was made for the altar of the sanctuary since it is centered on the axis of the temple and is of the same width. No blocks of the altar remain, but, to judge from the shape of the cutting, it would have been a simple rectangular structure with orthostates forming its sides and bearing a crowning course (Plan B).

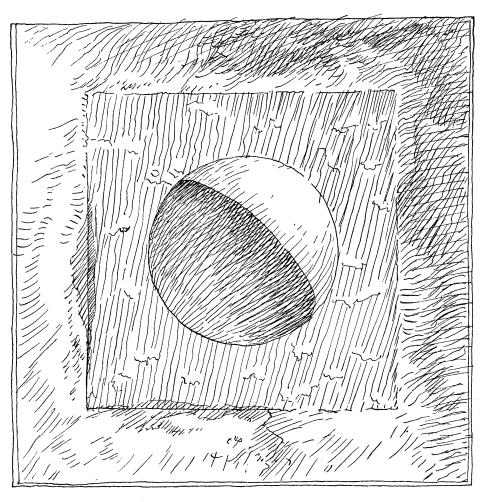
On the west side of the cutting for the altar the two lowest blocks of two small bases are *in situ*, placed symmetrically to the axis of the temple. The block of the northernmost base is a well-cut poros slab, measuring 0.90 by 0.75 m., set in a shallow cutting in the rock. Since its top bears no setting marks it would have supported another block to form the base of a statue or important votive offering. The lowest block of the southern base is rather smaller, 0.69 m. on the side, and equally carefully cut. On the center of the west face is a mason's mark: Z (a reused block with the mark representing a partly inverted N?). Its top, too, bears no setting marks.

The most interesting fact about the altar is its juxtaposition to the offertory box. Only the receptacle of the latter, resting in a shallow bedding, is preserved. It is a large poros block with a hemispherical cutting in its center and a raised edge around the margin to keep a cover stone in place (Plate 8 ¹; Fig. 6). A smoothly dressed band around the sides at the top indicates that the receptacle projected *ca.* 0.15 m. above the paving of the precinct. The cover stone would have had a slit cut through it into which coins could have been dropped. Somewhat similar offertory boxes are known from the Peribolos of Apollo in Corinth and from Thera. They were apparently designed for small monetary offerings from the worshippers and, although called treasuries, thus had quite a different function from the state or sanctuary treasuries usually kept in the opisthodomos of the temples.

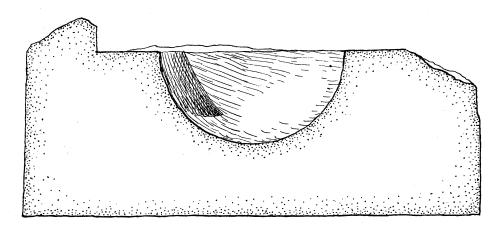
North of the offertory box a badly damaged block rests in a shallow cutting in the native rock (Plan A). Its original surface and north side are destroyed so that

<sup>&</sup>lt;sup>6</sup> The altar of the temple at Nemea is also of the same width as the front of the temple; C. W. Blegen, "Excavations at Nemea, 1926," A.J.A., XXXI, 1927, p. 422.

<sup>&</sup>lt;sup>7</sup> H. Askew, *Corinth*, I, ii, p. 14, fig. 9; F. Hiller von Gaertringen, *Die Insel Thera* (Berlin, 1899), I, pp. 260 ff.; see also H. Graeven, "Die thönerne Sparbüchse im Altertum," *Jahrbuch*, XVI, 1901, pp. 160-61; On *thesauri* in Asklepieia and related sanctuaries see M. P. Nilsson, *A.J.P.*, LXVIII, 1947, pp. 304-07; R. Martin, *B.C.H.*, LXX, 1946, pp. 365-68; for the disposition of such collected money see R. Herzog, "Heilige Gesetze von Kos," *Abh. Ber. Akad.*, 1928, no. 6, p. 37, no. 14.



VIEW FROM ABOVE



·SECTION·

Fig. 6. The Offertory Box.

its dimensions cannot be ascertained. It is apparently the lowest block of another base. At the northeast corner of the altar'is a cutting for a smaller base.

### THE TEMPLE

The temple of the Hellenistic period was centered almost exactly between the north and south limits of the precinct, but set well back at its west end near the abaton building (Plan B). The setting resulted from a happy adaptation of architectural design to the desire felt to keep the building in a traditionally sacred spot. The cuttings for its walls (Fig. 3) were made along the beddings for the walls of the earlier shrine. The longitudinal axes of the two structures were identical. Possibly the shrine remained standing while the temple was under construction and was dismantled only when it was time to install the interior arrangements of the new structure. The traditionally sacred place of baldachino and altar would be preserved in the later temple, but they themselves could scarcely have been used since the floor level of the temple was considerably higher and its construction destroyed the libation drain.

The only block of the temple which remains in place is a foundation block for a ramp set midway across its east end (Plate 9 ²). With the dimensions obtained from the cuttings, however, and some blocks preserved from the superstructure and found near by it is possible to restore the essential elements of the building. The most important of these is an epistyle-frieze block, almost perfectly preserved, which contains, in one piece, the epistyle and two metopes and two triglyphs of the frieze (Plate 10 ¹, ⁶). In addition, an anta from the south cella wall, the almost complete drum of a Doric column, a fragmentary capital, a cornice block from the pediment floor and a section of coffered ceiling may be safely assigned to the building. With their aid we may restore a small Doric temple, measuring 8.32 m. by 14.93 m. on the euthynteria, tetrastyle prostyle, set on a high base consisting of a euthynteria, two steps and a stylobate.

The cuttings in which the foundations of the temple were placed (Plate 9 1) were made only to provide a level bed and guide for the euthynteria since they are quite shallow, but carefully cut, varying in depth from 0.06-0.20 m. depending on the surface of the surrounding rock. The length of those at the east and west ends is 8.32 m. and at the north and south sides 15.18 m.

Since the temple was founded on the native rock of the hill, it did not need deep foundations and its euthynteria was placed directly into the cuttings. Although no blocks of the euthynteria itself survive it is possible to derive its height from a base which remains in place at the southeast corner of the temple.<sup>8</sup> This base (Plate 9 <sup>2</sup>)

<sup>&</sup>lt;sup>8</sup> Bases were set at the corners of the temple at Tegea (C. Dugas, J. Berchmans, M. Clemmensen, Le Sanctuaire d'Aléa Athéna à Tégée au IV<sup>e</sup> Siècle [Paris, 1924], p. 65); remains of a base in a similar position were also found at Kalydon (F. Poulsen and K. Rhomaios, Erster vorläufiger Bericht über die dänisch-griechischen Ausgrabungen von Kalydon [København, 1927], p. 16).

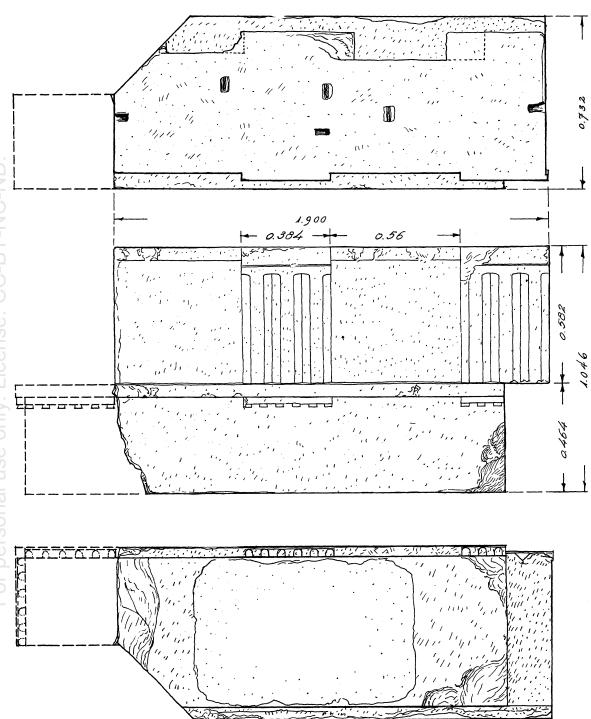


Fig. 7. Epistyle-Frieze Block from the Temple.

has anathyrosis on its west side which is set flush with the edge of the cutting. Thus, it evidently rested against the euthynteria of the temple. The top of the base is 0.45 m. above the floor of the cutting which should indicate the height of the euthynteria. The foundation block of the ramp which is in place on the east side of the temple is undercut on its west face—evidently to rest on the euthynteria. At present this undercutting is 0.41 m. above the floor of the cutting for the temple, but the block is bedded on a filling of clay and has apparently settled. The euthynteria, then, would have been set against the edge of the east cutting and against that of the north and south cuttings.

The restoration of the dimensions of the steps and stylobate rests on calculations as to the frieze in relation to the euthynteria, made from the surviving epistyle-frieze block (Fig. 7). The position of this block on the temple seems certain. It was found lying on the east side at the south end and contains part of an inscription of Roman date. The first three letters of the inscription on the epistyle element are missing (below, p. 39) and the frieze element would have required a triglyph on the corner. Thus, the block is from the east side at the southeast corner; the end of the epistyle which contained the start of the inscription is broken off; the corner triglyph would have been cut on the overlapping end of the corresponding corner block on the south side. The block, then, enables the distance from the south end of the frieze to the center of the second column from the south to be calculated as (0.384 + 0.56 + 0.384 +0.56 + 0.192) 2.08 m. Assuming a like distance at the north end this would indicate a wide central intercolumniation of 3 triglyphs and 3 metopes (3 x 0.944) 2.832 m. Thus, the length of the frieze on the ends of the temple would have been 2.08 + 2.832+2.08 = 6.992 m.—a frieze of 8 triglyphs and 7 metopes. By similar calculations the length of the frieze on the sides of the temple would have been 13.60 m.—15 triglyphs and 14 metopes.

The euthynteria on the east end measured 8.32 m. in length and the frieze 6.992 m. The intervening space (8.32-6.992) of 1.328 m. would have been occupied on each side by the exposed recession of the first step on the euthynteria, by the tread of the steps and by the small difference between the edge of the frieze and that of the stylobate; on one side the space occupied by these three elements would have been 0.664 m. Thus, we may restore (Fig. 8) two steps with a tread of slightly less than 0.30 m. and have a remainder sufficient to take care of the recession of the first step on the euthynteria and of the recession of the frieze from the edge of the stylobate. For steps with such a tread it is probable that a height of ca. 0.30 m. should be assumed. Thus the height of the stylobate from the floor of the cutting would have been (0.45 + 0.30 + 0.30) ca. 1.35 m. From the level of the precinct paving it would have been slightly less—ca. 1.00 m. The dimensions of the stylobate would have been slightly greater than those of the frieze which are 6.992 by 13.60 m.

The block of the ramp which remains in place is apparently from the underpinning, for its surface is not at all weathered. Since the block is centered on the front of the temple (Fig. 3), it is probable that it preserves the original width of the ramp, 0.83 m.

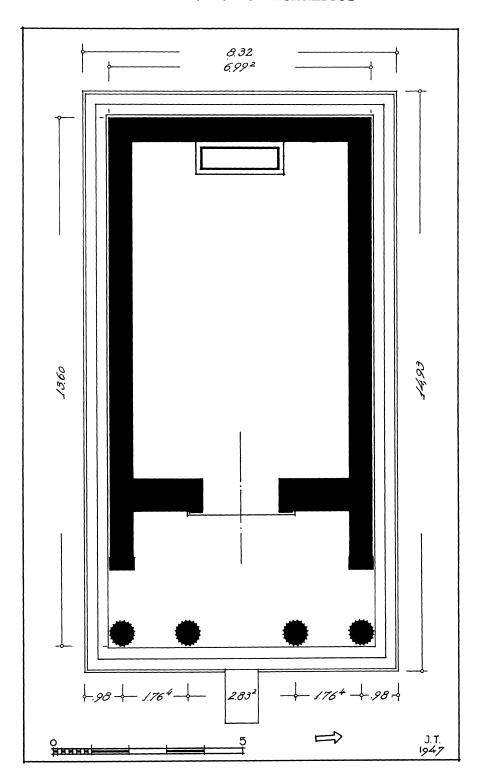


Fig. 8. The Hellenistic Temple of Asklepios. Restored Plan.

Thus, a narrow ramp sloping down from the top of the stylobate to the pavement of the precinct is restored (Plan D, Section A-A).

The cutting for a cross wall in the temple (Fig. 3) indicates that the plan called for a pronaos and cella. There are some indications, too, of the existence of a statue base in the cuttings in the bedrock along the rear wall of the cella. The base was apparently long and narrow and designed to hold two statues—probably Asklepios and Hygieia, if both deities were honored in this early period.<sup>9</sup>

No blocks of the side walls of the cella have survived, but it seems possible to calculate their thickness. The surviving epistyle-frieze block indicates that the walls were slightly less than 0.645 m. which is the thickness of the epistyle member. It is probable that their precise thickness is given by that of an anta block (Plate 10 <sup>2</sup>) which seems to come from the southern anta projecting into the pronaos. It is a carefully cut and well-preserved block, measuring 1.475 m. in length, 0.59 m. in thickness, and 0.48 m. in height. The face of the anta and its north side preserve the same type of hard, white stucco used on the other surviving blocks of the temple, while the south side is roughened to receive a similar coat. A small fragment of a hawksbeak moulding (Plate 10 <sup>4</sup>; Fig. 9 b) found near the temple is probably from the anta crown. The projection of the anta beyond the cross wall of the cella is indicated by this block as 1.475 m., a length which almost half enclosed the pronaos (Fig. 8).

The fluting and the lower edge of the drum (Plate  $10^3$ ) apparently to be assigned to the temple are somewhat damaged, but, since the bottom of the empolion cutting is still preserved, the approximate height may be restored as 0.70 m. Its lower diameter is 0.565 m. and the upper diameter 0.545 m. The number of flutes is 20. The capital (Plate  $10^5$ ; Fig. 10 above) has a height of 0.248 m. and enough of it is preserved to indicate that the upper diameter of the column shaft was 0.53 m. and the length of the abacus ca. 0.68 m. Thus the above mentioned drum was the second from the top of its shaft. The lower diameter and the height of the shaft, however, can be restored only conjecturally. A close analogy is offered by the temple of Dionysus at Pergamon. Its columns have an upper diameter of 0.527 m., a lower diameter of 0.623 m. and a height of 4.50 m. Since the size of the temples is similar, it seems reasonable to assume a like lower diameter and height. The shaft, then, would have had six drums and would have been ca. 4.448 m. in height  $(0.70 \times 6 = 4.20 + 0.248 = 4.448)$ .

The reconstruction of the epistyle-frieze has already been discussed (p. 32). The preserved block indicates that the width of the triglyphs was 0.384 m. and of the metopes, 0.56 m., which would give a frieze unit of 0.944 m. The height of the epistyle-frieze was 1.046 m.

A well-preserved cornice block (Plate 11 <sup>2</sup>), found in the fountain house on the south side of the ramp, has the correct dimensions for this frieze. Its flat top indicates that it was from the floor of the pediment and a weathering line, 0.29 m.

<sup>&</sup>lt;sup>9</sup> Pausanias (II, 4, 5) states that both were worshipped in his own period.

<sup>&</sup>lt;sup>10</sup> Dinsmoor, Architecture of Ancient Greece, Chronological List of Greek Temples.

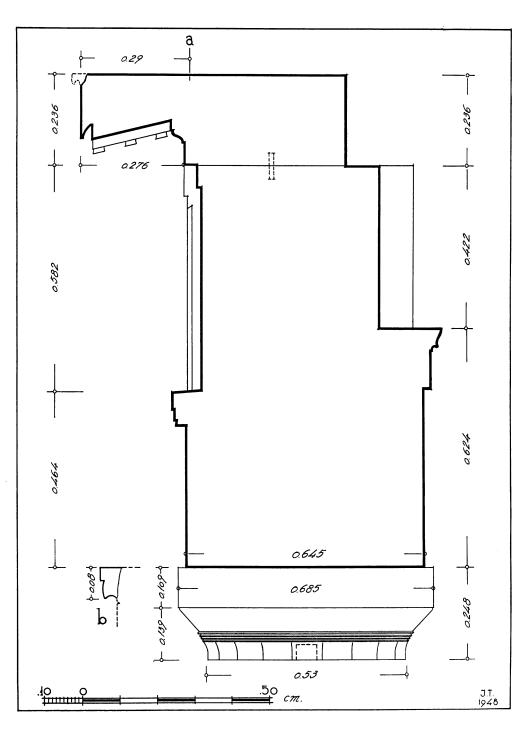


Fig. 9. The Order of the Temple. Section.

from the outer edge, indicates the setting of the tympanum (Fig. 9). The block was probably removed from the temple in the course of some repairs, described below (p. 39), in the early Roman period when the fountain house was covered over. The length of the mutule is 0.37 m. and the width of the via, 0.10 m., which would indicate a frieze unit of 0.94 m., similar to that of the frieze block. Also the width of the lower resting surface, 0.45 m., coincides with a weathered line on the top of the frieze block, which would indicate the original resting place of the cornice. On the top of the cornice block are three lewis holes for lifting, and at one side a cutting for a double T clamp. Not only is the original coat of smooth, white stucco preserved on the exposed surfaces, but the soffit moulding of the block bears traces of a Lesbian leaf in red paint. In addition to this well-preserved block some small fragments were found.

The total height of the order from the stylobate (Fig. 9) may be restored as: column, 4.448 m. + epistyle-frieze, 1.046 m. + cornice, 0.236 m. = 5.73 m. To this a pediment height of ca. 1.25 m. may be added and the height of the stylobate above the precinct paving, ca. 1.00 m. Thus the apex of the temple was ca. 8.00 m. above the level of the precinct (Plan D, Section A-A).

The size and dressing of the cuttings for the ceiling beams in the back of the epistyle-frieze block (Plate 10<sup>1</sup>) indicate that wooden beams were used in the pronaos at least and presumably over the cella as well. A fragmentary coffered ceiling block of poros (Fig. 10 below) is probably to be restored in the ceiling of the cella. It was found reused as the floor of a Byzantine cistern in Lerna, but preserves its full width of 0.985 m. It is like the other blocks of the temple in its careful cutting and coating of hard, white stucco. Such a combination of wooden beams and stone coffers were probably used in the temples at Nemea and Stratos.<sup>11</sup>

In the excavation of the fountain house and of some Roman filling behind the south wall of the ramp, fragments of a small Greek sima (S 433-36) were found, which are to be dated by their style to the latter part of the fourth century. It is probable that, like the cornice block, these were removed from the temple at the time of the Roman repairs and thrown in the filling necessary for the construction of the Roman building over the ramp. The pieces (Plate 11 <sup>5</sup>) are decorated with a plastic acanthus spray ending in volutes; on the upper moulding is an egg and dart and below is a double maeander. The colors are cream and red on a black ground. No completely preserved section was found, but its length may be restored from the preserved ornament as ca. 0.60 m.; its height as 0.18 m.

The temple, although very small like those in the Asklepieia at Athens, on the second terrace at Kos, and at Agrigentum, <sup>12</sup> was carefully built. Its poros blocks are

<sup>&</sup>lt;sup>11</sup> A. K. Orlandos, 'Αρχ. Δελτ., 1923, pp. 27-29; but see also F. Courby and Ch. Picard, Recherches archéologiques à Stratos d'Acarnanie (Paris, 1924), p. 48.

<sup>&</sup>lt;sup>12</sup> The temple in the eastern part of the Asklepieion at Athens measured 6.00 by 10.55 m. The restoration made by Versakis is too uncertain to be used for comparative purposes ('A $\rho\chi$ . 'E $\phi$ ., 1913, pp. 65-69). The older temple at Kos, Temple B, was of the Ionic order, distyle *in antis*, on a

Fig. 10. Doric Capital from the Temple and a Votive Capital (above). Ceiling Coffer Block from the Temple (below).

well cut and all the exposed surfaces were covered with a thin coat of hard, white stucco. Details were added in red and blue, scanty traces of which are preserved on the frieze and cornice blocks. The metopes contained no sculpture and no fragments were found which might be placed in the pediment. The statue base in the cella would probably have held two statues <sup>13</sup> but no identifiable fragments survive. The bearded male head found in the area, already published, <sup>14</sup> was from a herm and is possibly to be identified as representing Zeus rather than Asklepios.

The temple must have presented a striking appearance, not only from the contrast of gleaming white, bright red and blue, but also from its high setting above the floor of the precinct. It may be represented, with some exaggeration, on a coin of Marcus Aurelius.<sup>15</sup> The coin shows a small building on a high podium of six steps beneath which a snake is coiling.

The Hellenistic temple, as mentioned above, was set on the site of the earlier shrine and destroyed its interior arrangements. The space within the cella would have been filled to the desired level, and, although this filling, like the blocks of the building, has largely disappeared, a deposit of five coins was found in the stele bedding at the southeast corner of the cutting for the earlier altar. These coins have been described above (p. 21) and with the evidence of the votive deposit in the rock-cut drain give a terminus post quem for the construction of the temple in the late fourth century and indicate that its construction was a part of the building plan for the whole sanctuary.

The building probably remained in use until the sack of the city by Mummius in 146 B.C. While the sanctuary would have been looted at the time, the buildings would scarcely have been demolished, but remained neglected until repairs were made after the refounding in 44 B.C. Some evidence of the date of this repair may be found in a small deposit of coins in the receptacle of the offertory box. Eleven coins in all were found, seven of which were Spartan, dating from the period 146-32 B.C., two Elean, to be dated after 191 B.C., and two Corcyrean, from 229-48 B.C. With the coins a lamp (CL 2613; Plate 21 4) of Type XVII 17 and some scraps of poros and tiles

stylobate of 15.07 by 8.50 m. (R. Herzog and P. Schazmann, *Kos* [Berlin, 1932], I, pp. 34-39). The Doric temple at Agrigentum was distyle *in antis* on a stylobate of 21.70 by 10.70 m. (P. Marconi, *Agrigento* [Florence, 1929], p. 88).

<sup>13</sup> Pausanias, II, 4, 5.

<sup>14</sup> F. J. De Waele, A.J.A., XXXVII, 1933, p. 439; E. Capps, Jr., "Pergamene Influence at Corinth," Hesperia, VII, 1938, pp. 544-45. Capps dates the head to the second century B.C. It was found in late fill near the heavy rubble wall south of the fountain house. Possibly the herm was erected at the entrance to the precinct or to the ramp.

<sup>15</sup> F. Imhoof-Blumer and P. Gardner, A Numismatic Commentary on Pausanias, Plate F, CXVIII, and p. 25. The structure is there identified as a Heroön.

<sup>16</sup> The seven Spartan coins belong to the autonomous coinage permitted Sparta by the Romans from 146-32 B.C. Three have the head of Apollo on the obverse and an eagle on the reverse; three have the head of Lycurgus and the caduceus. The seventh coin bears the name and portrait head of Atratinus, who was a follower of Mark Antony, but went over to Octavian before 31 B.C. The Spartan coin with his name is dated in 32 B.C. or shortly afterwards (K. M. Edwards, *Hesperia*, VI, 1937, p. 247).

<sup>17</sup> The date of the lamps of Type XVII is the same as that of the third variety of Type XVI—

were found. The nature of the deposit would seem to indicate that the sanctuary was being cleaned and the debris swept into convenient holes of which the receptacle provided one. It would, of course, have been covered over and put out of use. The date of this cleaning was evidently soon after the refounding of the city in 44 B.C.

The temple was involved in these repairs, for the epistyle was restucceed and, in the surface of the second coat, an inscription was cut with letters 0.074 m. in height, painted in red (Cor. Ins. 1039; Plate 11 6). The inscription evidently bore the names of the donors who paid for the repairs. It reads: M. AN]TON[IUS] GLAU[C]I F [.] MILES[I]US · M[.] ANTON[IUS]. Since the inscription began at the end of the epistyle on the front of the temple, it presumably was carried across its whole length. Thus, in addition to the names preserved, three, or possibly four more may be supplied. Below this inscription are traces of smaller letters painted in red, but not incised. Probably they mentioned the specific activity of the donors, but, unfortunately, they are no longer legible. The first mentioned of these donors had a Greek name, Milesius, the son of Glaucus. Nothing is known of him from other sources, but, since his name contained the element, M. Antonius, it is probable that he was a freedman or the son of a freedman, of M. Antonius. The name was, of course, extremely common in the east and it would be unwise to assume that his activity took place in the period of Antony's supremacy. Possibly, if our interpretation of the evidence offered by the coins in the offertory box is correct, it was in the period shortly after the battle of Actium, when more peaceful conditions afforded an opportunity of building.

This repair of the superstructure evidently involved the replacement of some of the blocks of the cornice and repairs to the ceiling of the pronaos. As we have mentioned, a cornice block from the pediment was found in the fountain house. In addition, a few scraps of the cornice, covered with Roman stucco, were found. One of the beddings for the ceiling beams in the back of the epistyle-frieze block was reworked (Plate 10 ¹), possibly at this time. At some time subsequent to this repair, when it was no longer felt necessary to preserve the names of the donors, another coat of stucco was applied to the epistyle concealing the letters. This last coat is the typical, coarse stucco of the Roman period, but no evidence is available as to its date. It is possible that a group of early Roman sima fragments (FS 450, 458, 788-91,800), some of which were found near the temple, is to be associated with the first Roman repair. The sima (Plate 11 ¹) is covered with a light buff wash and its lion's head spouts are painted a deep red. Another group of fragments of later date, discussed below (p. 80), may belong to a renovation of the roof in the second century after Christ.

In the late fourth century after Christ, when the sanctuary was destroyed, the temple was dismantled and its blocks removed. The filling over and in the rock cuttings contained coins dating from the period of Constantius I to that of Theodosius II.

in Corinth, the Augustan period, and the first century after Christ (Broneer, Corinth, IV, ii, pp. 59-61).

### THE PRECINCT

One of the most striking features of the rock surface of the hill on which the Asklepieion was built, as a glance at Plan A will show, is the number of small cuttings in the rock. Its natural surface was very nearly level so that little dressing was needed. Few traces of such an operation remain, except for those already noted within the small shrine of the early period, and, as will be pointed out later, in the porch added to the lustral room of the abaton building. Apparently at all periods only a very thin covering of earth existed so that any permanent construction—even of the lightest type—had to be bedded in cuttings. Leaving aside those which were made to hold the walls of the various structures, and the hackings of the post-classical period, it is noticeable that these cuttings are of several distinct types. There is no evidence as to their date, but it is probable that many were made in the early period of the sanctuary when there does not seem to have been any paving.

The most frequent cuttings are small, circular holes which taper slightly inward to the bottom. They show no regularity of arrangement, but it is noticeable that most of them are set along the sides of the cutting for the temple, or form clusters to the north and south of it (Plan A). These holes are of two sizes: the first, with a diameter of 0.22 to 0.31 m. and a depth of ca. 0.20 to 0.35 m. are very neatly cut; the second are smaller, with a diameter of ca. 0.15 m. and a depth of ca. 0.10 to 0.17 m., and are less neatly made. All seem designed to hold wooden posts. The pattern of the holes in any area is not regular enough to have supported a scaffolding, except possibly along the sides of the temple. A more plausible hypothesis would seem to be that the posts held votive objects of some type—either replicas of human limbs, which were pierced with holes for suspension by a thong or on a spike, or wooden tablets, sanides, recording cures. Such tablets were possibly the source of the cures inscribed on stelai, known from the sanctuaries of Epidauros and Lebena in Crete.<sup>18</sup>

Another type of cutting, consisting of shallow rectangular beddings similar to those which hold the bases now in place, is easier of interpretation. These would have held stone bases for dedications of marble or bronze. Most of them are placed in the eastern part of the precinct, and one pair is given a conspicuous place on either side of the ramp leading into the temple (Plans A, B). A well-cut votive capital (Plate 11<sup>3</sup>; Fig. 10, above) probably comes from a column set up on one of the larger bases. It is of poros, covered with fine, white stucco, and has a plinth cut on the top of the abacus to hold some dedication. The surface of the plinth is destroyed, so that the nature of the dedication cannot be conjectured from its cuttings.

Two large, rectangular cuttings are of particular interest as they are placed symmetrically on each side of the temple (Plans A, B). They are set near its east end *ca*.

<sup>&</sup>lt;sup>18</sup> R. Herzog, "Die Wunderheilungen von Epidauros," *Philologus*, LXVIII, Supp. XXII, 1931, pp. 51-58.

2.60 m. from the north and south walls. The cutting to the south measures 1.25 by 1.20, by 0.60 m. in depth; that on the north, 1.35 by 1.30, by 0.63 m. in depth. Their shape and depth would be suitable for water tanks, but, since no traces of cement remain on the sides, this can hardly have been their purpose. Is it possible, since this was a sanctuary of Asklepios, that the sacred snakes were kept in these pits?

Another group of cuttings placed *ca.* 2.00 m. from the north side of the temple form a row from east to west (Plan A). There are seven of them, spaced at irregular intervals from 1.70 to 2.40 m. apart. The cutting is very crude, but all are approximately the same size, 0.70 by 0.60, by 0.40 m. in depth. They could scarcely have held supports for any structure. The only indication of their date is in the fact that the easternmost was made through the cutting for the oikos, and, in its turn, was cut through by a late limekiln. It seems possible that these were for a row of small trees, as we know that groves were a feature of Asklepieia <sup>19</sup> and there was no possibility of setting out trees on the rock cap except in artificially made holes.

The precinct of the Hellenistic sanctuary was apparently paved over its entire area with a pebble floor, laid on a thin earth filling above the native rock of the hill top. The pavement is preserved only to the south of the east water basin and between the column bases on the west and south sides (Plan A; Plate 12 <sup>2</sup>), but pieces were found in the late filling elsewhere in the precinct. The pavement is strongly constructed of white and blue water-worn pebbles and cement laid in three alternating layers; its total thickness is 0.23 m. The top finish consists of smaller pebbles of uniform size laid without any pattern.

The preserved section of the paving, small as it is, shows one important repair. A layer of coarse cement, 0.02 m. in thickness, was laid over the top of the exposed pebbles. It is best preserved between the bases of the south colonnade (Plates 12<sup>2</sup>; 14<sup>1</sup>), but traces appear on the west side also. Apparently it was designed to bind the pebbles or to provide a smoother surface for cleaning. It is probable that this repair is to be associated with the construction of the colonnades. For this operation, cuttings would have been made through the pavement to bed the column bases. This work, to be discussed below (pp. 60-64), was carried out later in the Hellenistic period.

The level of the precinct was raised, at least along the south side, in the early first century after Christ, when the building was constructed over the ramp, and the south colonnade destroyed. It is not clear how far this change of level would have extended into the precinct. Probably it merely involved placing steps along the front of the new building. Between the temple and the altar a small section of paving survives near a marble column drum set up there (Plan A). This drum had no structural function and may have been used as a small working table for some very late structure. The floor around it is made of the scraps of the earlier paving, broken pieces of poros and tile fragments bound together by cement of very poor quality.

<sup>&</sup>lt;sup>19</sup> A grove is mentioned by Pausanias at Titane (II, 11, 6), and at Epidauros (II, 27, 1; see also *I.G.*, IV<sup>2</sup>, 121, 90-94).

Below a section of it a coin of Constantius II was found; thus, it is of very late date, although at the same level as the Hellenistic paving, and the column is probably even later.

#### THE ABATON BUILDING

At the west end of the hill and below it along the east side of Lerna are the remains of a large building 20 which, it seems, should be identified as the abaton (Plan A). The construction of a building in this place entailed some engineering difficulties because of the difference in level between the hilltop and Lerna hollow and demanded some architectural ingenuity to take care of the needs of the cult. The western edge of the hill was not only higher than Lerna, but it curved around to the northeast so that considerable filling was necessary to obtain a level platform for the north end of the structure. The building which was erected (Plans B; D, Section A-A) solved these difficulties very well; in plan its eastern part was a long narrow hall, measuring 29.70 m. in length overall by 6.30 m. in width, with a separate wing at the north and south ends, 4.50 m. in width. This section of the building, one storey in height, was built on the rock of the hill and on an artificial filling at its north end. The western part of the building was made shorter and slightly broader, 21.00 by 7.00 m. This western section, rising from the lower level of Lerna, was two storeys in height with the floor level of the second storey at the same level as the eastern part, thus forming a single large hall at that level. The median wall of the building rose from the base of the hill at the lower level (Plan D, Section A-A).

In the first floor of the western section of the building three dining rooms were constructed of which the southernmost is still well preserved. North and south of them were small open courts (Plan C), the southern giving access to the ramp leading down from the precinct, the northern probably to a stairway leading up to the northern wing of the building at the higher level. The dining rooms, however, were entered only from the east colonnade of Lerna. In the eastern, higher part of the building, the south wing preserves remains of a lustral room which must have played a special part in the ritual of the cult. In the great hall of the building at the second storey level would have been the abaton <sup>21</sup> proper where the rite of incubation was carried out. It was entered from the precinct and from the lustral room and probably also from the north wing (Plan B).

#### THE WALLS

The walls of the building are very imperfectly preserved (Plan A), but the existing blocks and the cuttings made into the clay indicate that the longitudinal walls of the building on the west and in the center were carried from the entrance court on

<sup>&</sup>lt;sup>20</sup> The excavator, F. J. De Waele, considered that only a portico stood on the west end of the hill (A.J.A., XXXVII, 1933, pp. 426, 431-32). If this were so, however, it is difficult to see how the dining rooms and the east colonnade of Lerna were roofed. Accordingly, the reconstruction proposed above was developed.

<sup>&</sup>lt;sup>21</sup> For a discussion of the term see Edelstein, Asclepius, II, p. 191.

the south through to the city wall which limited the area on the north. Thus, they extended beyond the limits of the abaton building itself and indicate that its construction was carried out as part of the general architectural plan for the precinct, Lerna, and the city defences in this sector. The eastern wall of the building apparently was not carried beyond its north wing. Instead a separate tie-wall was put in to the city wall from the north colonnade of the precinct.

For the east wall a cutting, 1.03 m. in width and 0.20 m. in depth, was made in the rock of the hilltop (Plan A; Plate 12 1). It extended from the north side of the ramp to the northwest edge of the hill. A euthynteria was set in the cutting and its blocks are still preserved for a length of 10 meters from the south end. To support the northern section of the east wall a heavy foundation was built up from the level of the hollow. At the same time the foundation for the stylobate of the north colonnade of the precinct was laid and the two bonded together. After the foundations were in place they were packed with clay, obtained from trimming down the sides of the hollow, mixed with discarded votives of the earlier sanctuary. The foundations (Plate 11 4) are of roughly finished poros blocks, ca. 1.10 by 0.63 by 0.43 m., laid in double courses of headers and stretchers. The foundation of the east wall is preserved beyond its junction with the north colonnade wall for only 1.50 m., but originally would have extended farther to provide for the north wing of the building. The preserved level of the foundations is 3.50 m. below the hilltop, but originally the depth to be filled was ca. 7.13 m. In laying the foundations a circular shaft, the top of which opened in the angle between the abaton building and the north colonnade, was formed by specially cut blocks. It was designed to receive the drainage from the buildings and the northwest corner of the precinct.

The euthynteria of the east wall was made of large, well-cut poros blocks, nine of which are in place (Plates 12 ¹; 13 ²). They measure 1.16 by 0.77 by 0.475 m., are cut with anathyrosis and joined by hook clamps. On the east face of the blocks a smooth band was dressed for 0.05 m. from the top, up to which point the precinct paving came. The southernmost block of the euthynteria is now 0.74 m. from the outer face of the ramp wall. It is not clear whether the two originally bonded together, for this block has been recut to accomodate the present highest course of the ramp wall (Fig. 11), which is probably of early Roman date (below, pp. 79-82). In the angle between the building and the ramp wall is a shaft corresponding to that at the opposite corner. It would carry off the drainage from the building into Reservoir I (Plan C) cut into the hillside below.

On the euthynteria rested a toichobate of which two blocks and part of a third (Plate 12<sup>2</sup>) are preserved at the entrance to the lustral chamber. The blocks measure 1.16 by 0.70 by 0.17 m. and are set in from the edge of the euthynteria 0.07 m. On the top of the blocks may be observed the setting lines for the door of the lustral room (Fig. 11). The width of the door opening was 1.30 m. and of the jambs, 0.20 m.

A stone gutter was originally laid along the east side of the building. Only two of its blocks remain in place by the entrance to the lustral room (Plate 12 <sup>2</sup>) where

they were left to serve as the bases for the rear columns of a small porch which was added at a later date (below, p. 61). This gutter would have carried the drip from the roof to the shafts at the north and south ends. The blocks of the gutter are 0.66 by 0.55 m. and have a trough cut in their top, measuring 0.17 m. in width by 0.07 m. in depth (Fig. 11).

No part of the wall is preserved above the level of the toichobate so that the restoration of its height is conjectural. The abaton building would have communicated directly with the precinct, but no traces remain of its other openings. Probably there were two doorways: one into the lustral chamber at the south and a corresponding one at the north as restored on the plan (Plan B). Presumably, too, the north wing of the building communicated with the north colonnade of the precinct by a doorway. There would have been no need of windows on this side as sufficient light would have entered through the doors and through the windows on the side facing Lerna.

The west wall of the building served also as the rear wall of the east colonnade of Lerna from which the dining rooms were entered. Its foundations (Plan A) were uncovered for ca. 15.00 m. at the north and 8.00 m at the south end. At the south end two blocks are in place and a third remains in its cutting, but is pushed slightly out of position. The natural level of the hollow was higher on the south than on the north; thus, at the south end the foundation is only one course in depth, bedded in the natural clay. The blocks vary in length and width: length, 0.925-1.225 m.; width, 0.73-0.81 m. Following the natural slope of the hollow to the north the foundation is set progressively deeper and packed on each side with clay and discarded votives. At its point of bonding with the partition wall between the second and third dining rooms it is preserved for five of its original seven courses. There, it is a single course in width, built of large well-cut blocks, measuring 1.02 by 0.63 by 0.44 m. This foundation was extended beyond the end of the building to the exterior face of the city wall for which it served as a tie-wall. Nothing is preserved higher than the foundations. The height of the wall is unknown, but in the lower storey three doorways should be restored, opening into the dining rooms; in the upper storey there would have been windows to light the abaton room. Near the north and south corners of the wall, as on the east side of the building, shafts were built which carried the water from the roof into the drain channels below.

The median wall of the building was built against the west flank of the hill cut into a vertical scarp against which the blocks were set (Plans A; D, Section A-A). It was, however, impossible to carry the wall completely across the scarp to the ramp at its full height, for that would have blocked the opening into Reservoir I cut under the southwest corner of the hill. As discussed below (p. 77), an opening was left to give access to a parapet over which water could be drawn.

The south part of the median wall, preserved at the southeast corner of the dining room (Plan A), like the west wall, had a foundation consisting of a single course bedded in the natural clay. Above this course the scarp of the clay was cut for

the blocks. Advantage was taken of the rock cap above the clay to refound the wall (Plan D, Section A-A). A projection, 0.68 m. in height was left at that point which narrowed the wall from its original width of 0.57 m. to 0.47 m. The rock above the projection was cut back to the east to allow a wall thickness of 0.80 m., which was carried up uniformly to the top of the rock cap.

As in the case of the western wall the slope of the hollow made it necessary to bed the foundation more deeply in the northern section. There (Plate 13¹) its blocks were laid in alternate courses of headers and stretchers with a width of ca. 1.40 m. The blocks are similar in type and dressing to those used in the foundation of the east wall of the building. At the north end of the median wall the blocks have been almost entirely removed, but a cutting in the clay and the few blocks left in place indicate that it extended to the city wall. Cuttings indicate (Plan A) that returns were made to the foundation of the east wall, thus enclosing the north wing of the building. It is unknown whether the median wall was carried up solidly beyond the first storey or whether columns were used. On the whole, it seems preferable to restore it with columns (Plans B; D, Section A-A), thus making for the rite of incubation a wide hall with two central columns.

The wall of the building closing the south side of the dining rooms (Plate 14 <sup>4</sup>) was of lighter construction than its side walls. It is preserved for two courses above its foundation although the southeast corner is destroyed. The foundation course, 0.65 m. in thickness, is laid in the natural clay. On it rests a toichobate measuring 0.50 m. in thickness and 0.22 m. in height. A ledge is cut on the inner side of the toichobate to hold the sills on which the couches of the dining room rested. The first regular course of the wall resting on this toichobate measures 0.433 m. in thickness and 0.49 m. in height. The outer face of this south wall, which formed the north side of the small entrance court to the ramp, was covered with a layer of cement and, although no traces remain, was probably finished with blue stucco like the walls of the ramp and the other walls of the entrance court. The cuttings in the clay seem to indicate that this wall bonded with the median wall of the building.

The partition walls between the dining rooms and the wall closing their north end (Plan A) were of light construction similar to that of the south wall. Only the cutting for the partition between the southernmost and the second dining room remains, but the foundation for that between the second and third dining rooms is well preserved. It is bonded with the west wall of the building, using blocks of similar size and dressing. The outer wall of the third dining room was rather better preserved when excavated than at present, for most of its blocks were removed during the recent war. It, too, was bonded with the west wall.

As indicated above, the only course of the wall preserved above the level of the toichobate is on the south side of the southernmost dining room. Thus, the height of the building is a matter of conjecture. It may, however, be ascertained for the first storey. The level of the floor of the abaton room was only slightly higher than the surface of the rock of the hill. Presumably it was set at the level of the toichobate of

the east wall—4.36 m. above the level of the floor of the dining rooms. The height of the second storey (or the first storey on the level of the hill) would be at least as much and very possibly higher for it contained the important abaton room. Accordingly it is restored as ca. 4.80 m. (Plan D, Section A-A).

### Interior Arrangements

Although it had been suggested <sup>22</sup> that the south wing was a structure of the early temenos, it seems probable that it formed an integral part of the abaton building as planned in the late fourth century. The east wall of the building is carried across its front with no signs of an adaptation to an earlier construction; the south wall would have been formed by the north wall of the ramp raised to the required height. The west edge of the hill preserves only traces of the cutting to bed the blocks of its west wall (Fig. 11). A cutting also shows the existence of the partition wall which closed the wing off from the large hall which seems to have been designed for incubation. An interruption in this cutting, 1.31 m. from the east wall, indicates that there was an opening to give access to the hall.

The south wing was itself divided into two small rooms by a partition wall. The cutting for it is preserved for a length of ca. 3.00 m. from the east side, but beyond this point has been destroyed. At some later date the floor of the southern room thus formed was cut down to lighten the weight over the reservoir below (Plate 12 1). A small area of the natural rock, however, preserved in the southeast corner, shows that originally the floor was at the same level as that of the large hall of the building. The only feature of interest in the southern room is a shaft, originally circular, but later cut to hold a square cover slab, into the reservoir below. Apparently, if additional water were needed for the rites, it could be obtained through this shaft. Possibly the room served as a store chamber for cult utensils. It would have had an opening into the more interesting lustral room to the north.

The lustral room was small (Plate 13 <sup>2</sup>; Fig. 11), measuring on the inside, 5.10 by 1.70 m., and constructed by cutting into the rock cap of the hill. From the entrance, the traces of which have been already noticed (p. 43), six steps led down to a small platform separated from a draw basin by a parapet. Possibly the arrangement was designed to give the effect of entering an underground natural spring like the spring house in Lerna.

The four lowest steps are well preserved and the beginning of the riser for the fifth. The first step extends the full width of the room. It rises in height from 0.176 m. at the south end to 0.245 m. at the north end to provide for a drain opening to carry off the water spilled on the platform floor. The second and third steps originally

<sup>&</sup>lt;sup>22</sup> The excavator, F. J. De Waele, considered that the lustral room and the terracotta pipe line which brought water to it were separate structures of the early period of the sanctuary (A.J.A., XXXVII, 1933, pp. 423-24). This early date was questioned by Miss B. Dunkley (B.S.A., XXXVI, 1935-36, p. 181) who dated the basin, from its type, to the latter part of the fifth century B.C. Further study has resulted in the reconstruction proposed above.

extended the full width of the room, but their southern ends are damaged where they were set above the terracotta pipe bringing water to the basin. The second is sufficiently well preserved to indicate that the pipe was continued under it to a ledge

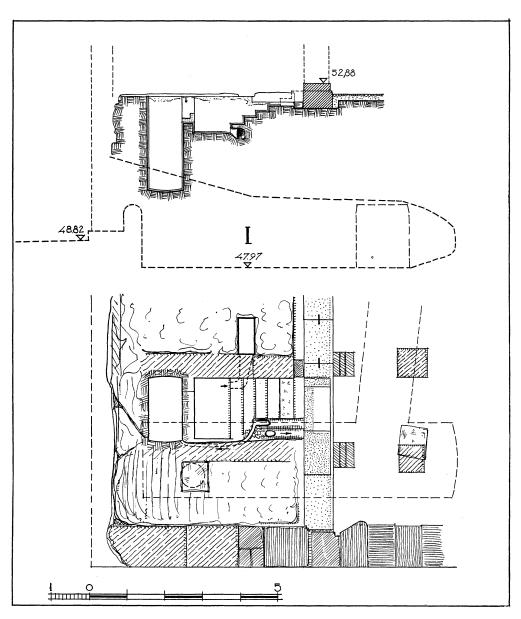


Fig. 11. The South Wing of the Abaton Building. Plan of Actual State and Section.

channel cut along the south side of the room (Plate 15 4). The third step preserves the throat of a drain opening which indicates that drainage was necessary at that level—0.50 m. above the floor of the platform. The fourth step is preserved only to the edge of the channel in which the pipes are laid. Presumably a slab was laid over

the channel with its top at the same level as the top of the fourth step. The risers of the steps vary a little: second, 0.205 m.; third, 0.135 m.; fourth, 0.147 m.; the tread, however, is almost uniformly 0.30 m. The steps were made by cutting into the natural rock and were coated with a layer of cement over which a thin layer of yellow stucco was applied as a finish. Over the pipes where the rock was cut away the steps were made wholly of cement. The fifth and sixth steps must be restored, but their existence is attested by the beginning of the riser of the fifth and a cutting for the sixth step on the west face of the euthynteria of the east wall (Plate 13  $^{\circ}$ ). The space between the riser of the fifth step and the euthynteria is 0.60 m. and the difference in level from the tread of the fourth step to the top of the euthynteria is 0.36 m. Thus, we may restore two steps with a riser of 0.18 m. and a tread of 0.30 m. The toichobate, which formed the threshold of the doorway, would have risen above the sixth step by 0.20 m.

The steps led down to a small platform, 1.70 by 0.95 m., with its floor set 0.95 m. below the surface of the rock. The walls and the floor of this little room were cemented and stuccoed like the surface of the steps. The water spilled in it was drained out by the opening in the northeast corner, mentioned above. This platform was separated from the basin by an elaborately made parapet, the construction of which is shown by the remains at the north edge (Plate 13 ²). From the north wall a spur of the natural rock was left with holes for a metal grille at its top and bottom. A low barrier of rock rose along the edge of the platform to form the lower part of the parapet. Between this barrier and the spur is a space which is 0.22 m. in height (Fig. 11). It seems designed to hold an ornamental sill. If the arrangements on the destroyed south side were similar, we may restore a grille 0.84 m. in length, and 0.43 m. in height.

The basin was cut down into the rock behind the parapet. It is a rectangular tank with the ends cut to curve slightly outwards. On the south it had to be made somewhat shallower than at the north to avoid piercing the roof of the reservoir below. The sides and floor of the basin were waterproofed with cement. The dimensions of the basin are small, 1.78 by 0.91 by 1.80 m. in depth. Its capacity would have been ca. 2.92 cu. m.

The impression that the lustral room played an important part in the ritual of the cult is corroborated by the elaborate system of water circulation of which it was the center. In its present condition the system (Plan E) begins at the east water basin described above (pp. 26-28). Between the basin and the lustral room a channel was cut in the rock in which two terracotta pipe lines were laid, A and B (Plate 14 ¹; Plan E). Line A originally extended east of the basin to draw its water from some source outside the precinct and convey it to the lustral room. Line B, however, sloping sharply from west to east, was laid only in the western part of the channel between the lustral room and a shaft, S, into which it drained. The channel itself is well preserved except for a stretch of 11.00 m. at its east end where the rock is soft and has disintegrated leaving the line A exposed above the present ground level. The channel,

0.63 m. in width and 0.80 m. in depth in its western section, was apparently designed from the beginning to carry the two lines. Its floor was cut uniformly level and the required slope given to each line by bedding it on a pounded fill of broken rock and earth. There are no traces of cutting along the upper edges for cover slabs. Thus, the channel, after the pipes were laid, was probably filled with broken rock and earth and sealed over by the precinct paving.

The lines, particularly line A, are very carefully laid. This latter is constructed of terracotta tubes (Fig. 12) encased in a heavy coating of cement and evidently carried its water under pressure, for the slope from east to west is only 0.04 m. over its preserved length. Line A ended at the back of the second step above the platform

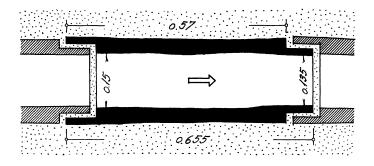


Fig. 12. Section of Terracotta Drain Pipe, A.

in the lustral room. From this point its water was carried under the step by a channel lined with a lead sleeve (its end may be seen protruding from under the step in Plate 15 4). This emptied into a ledge channel which was cut along the south wall of the room to the southeast corner of the draw basin of which it seems to have been the sole supply. This ledge channel was left open, to judge from the traces of cement extending over its lip.

Line B was laid along the south side of the channel from its opening on the riser of the fourth step to the shaft, S, midway along the south side of the precinct (Plan E). Its tubes were similar to those of the other line, but sealed with cement only at the joints. Its flow depended on the greater slope given to it—ca. 0.30 m. from west to east. The drain opening at the west end of the pipe was an oval, sloping throat formed by cement. At its east end the pipe terminates in a little basin, ca. 0.15 m. in width, which was connected with a small channel, H, to the shaft, S (Plate 14<sup>3</sup>). This channel was 0.26 m. in width at the top, but narrowed to 0.09 m. to provide a ledge for cover slabs. The little basin was apparently covered by a slab or tile.

The shaft, S, was evidently cut at the same time or slightly later than the building of the north wall of the ramp. It is not circular, but straightened on its south side to conform with the straight line set by a block of the ramp wall. This block is set in a course, the outer face of which is stuccoed like the remainder of the original facing of the ramp. Thus, it plainly belongs to the original construction. The present top

course of the ramp wall overhangs the opening of the shaft and would have made its use impossible. Thus, the shaft was apparently made when the ramp was built and went out of use when the present top course of the ramp wall was laid—in the early Roman period (below, pp. 79-82). The shaft, which is neatly cut with footholds, is 0.77 m. in diameter and 3.20 m. in depth. At a depth of 1.80 m. from its top a channel, C, is cut to the northwest. It is 16.50 m. in length. 0.50 m. in width and 1.40 m. in height. Its original end came close to the side of the northern arm of Reservoir I, but there was no original connection. At a later date an opening was hacked through the wall to connect them. At the same level as the northwest channel, another of the same size, D, was cut from the shaft in a southeasterly direction under the ramp. Apparently its function was to tap water in the clay under the rock cap and bring it to the shaft. At present it is dry.

The drainage from the platform of the lustral room completed the system. The water entered an oval drain opening in the riser of the first step. From it a funnel-like passage was cut to the side of a manhole, E, in the large hall. The manhole was placed immediately to the west of the entrance between the lustral room and the hall. It is rectangular with footholds on the sides and is 2.00 m. in depth by 1.00 by 0.47 m. At a depth of 0.70 m. from its top a channel, F, was cut to the east for 3.30 m. The channel is 0.50 m. in width and 1.30 m. in height. This channel terminated in another funnel-like passage which was cut down to the channel, C. None of these channels bears any traces of waterproofing and their sides show little trace of water deposit.

Thus, the water was brought by line A to the lustral room; from the lustral room it was carried back to the shaft, S, by line B from the level of the tread of the third step, and by the channels E, F, and C from the platform of the room. Possibly additional water was obtained from the Reservoir I by hauling it through the opening, G, in the floor of the south room. Evidently it was found necessary to husband this water carefully, for which purpose it was stored in the shaft, S.

This elaborate system was certainly not used after the Hellenistic period and possibly went out of use in part soon after its construction. At present there is a crack in the rock running through the basin to the opening into the reservoir. It is unknown when this occurred. The filling found above the steps and over the platform of the lustral room and in the manhole, E, consisted of masses of yellow clay, stones and a few discarded votives (Deposit III; p. 114). In it were some sherds of Greek fourth century types and a lamp related to those of Type VIII, dated in the third century B.C.<sup>23</sup> (CL 2554; Plate 14<sup>2</sup>). It is noteworthy that no lamps of Type VIII were found

<sup>&</sup>lt;sup>23</sup> Dimensions of lamp: length, 0.094 m.; width, 0.064 m.; height, 0.035 m. The body is deep with slightly curving sides and has no handle or lug. The base is small and raised. The clay is grey and covered with a yellow slip, but the interior is unglazed. The fabric, shape and the grooves around the rim resemble those of lamps of Type VIII. As on them, the wick hole is very small, but on this specimen it is in the shape of a slot. The lamp is probably a variant of Type VIII and is to be dated in the third century B.C. (Broneer, *Corinth*, IV, ii, p. 47). Dimensions of skyphos (C-31-379): height, 0.053 m.; diameter, 0.07 m. The skyphos is Corinthian and was originally covered with black glaze which has flaked off almost completely.

in the deposits made at the time of the construction of the abaton building and temple. This deposit, unlike them, contained only a few votives. Probably, then, the strain imposed on the edge of the rock by the construction of the building and the tunneling of the reservoir was too great; it cracked, putting the basin out of use. The lustral room was filled up and sealed by two large blocks found resting over it. After this accident the whole south wing may have been used only for storage.

It seems probable that the lightening of the rock over the reservoir mentioned above (p. 46) is to be connected with this accident. The rock was dressed down in a slope to the west edge of the hill (Plate 12 1) and the original top of the circular shaft, G, destroyed. Around its edge a rectangular cutting was made to hold a cover slab. At the same time the end of the ledge channel which drained into the basin would have been blocked by the cement of which traces remain in its mouth, and its water deflected through the crevice made by the accident into the reservoir. This rendered the lustral room useless for its ritual practice which may have been transferred to the fountain house on the south side of the ramp. That structure, as described below (p. 70), was not contemporary with the ramp, but probably built in the early third century. The east water basin and the shaft, S, however, could have continued in use (below, p. 62).

The interior arrangements of the large hall north of the lustral room are unknown since the northwest corner of the hill has washed out and the rock surface of the remainder bears no cuttings in this area. It is probable that the patients would sleep on the floor, wrapped in coverings, as the patients did in the Asklepieion in Athens as described by Aristophanes in the *Ploutos*.<sup>24</sup> Possibly pallets were put in for their use, but there is no indication that beds of a more permanent type were used. Probably several small altars should be supplied, around which the sleepers would group themselves.

The north wing has been restored with a staircase which gave access from the open court north of the dining rooms to the abaton room and the north colonnade of the precinct above. Some evidence of this stairway remains in the supporting wall built on the older socle within the foundations of the east wall of the building (Plate 4 2; Plan A). This older socle as already described (above, p. 20), seems to have served in a retaining wall for an earlier street entering the hollow.

The most interesting feature of the building was the row of three rooms on the lower level entered from the east colonnade of Lerna. Their use as dining rooms is indicated by the well-preserved arrangements in the southernmost room (Plan A; Plate 14 4). Five couches and part of a sixth are in place along the sides. Before the couches are rectangular holes in the floor for table supports. In the center of the room is a square block, blackened and cracked by heat, which evidently carried a brazier. The room is paved with a hard, cement floor similar to that of the colonnades around the central square. Traces on the couches and the walls indicate that they were originally covered with red stucco.

<sup>&</sup>lt;sup>24</sup> Aristophanes, *Ploutos*, 663 ff.

The method of construction is shown by the remains in the southernmost room. On the toichobate of its south wall a ledge, 0.03 m. in width, was cut on the inner face. On this ledge, sills, measuring 0.82 by 0.21 by 0.23 m., were placed, extending into the room and bedded in the natural clay. These were designed to support the head and foot of the couches. At the same time, table supports were bedded in the

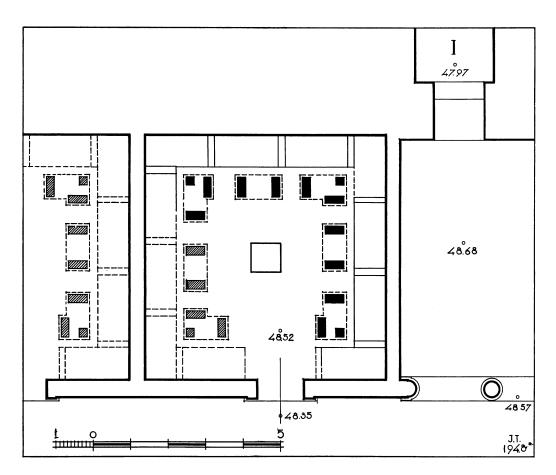


Fig. 13. Dining Room. Restored Plan.

clay in their proper places and the block for the brazier placed in the center of the room. The floor was then laid around the sills, table supports and brazier block.

The couches (Fig. 14) are cut from a single large poros block. On the surface, a flat band was dressed on the inner side and across the foot; a head rest was cut at the other end, and, on the side facing the room, a moulding. The resting surface was concave, hollowed out to a depth of 0.042 m. at the center. The lower part of the block was cut out leaving a leg at each end. The sides, back and floor of this undercutting were coated with yellow stucco and the top of the couch with red. The height of the couches is uniformly 0.365 m. and the width 0.80 m., but their length varies between 1.82 and 1.89 m. The couches in the Corinthian establishment were much

more permanent than those in the dining rooms at Troezen. There, planks laid on stone supports projecting from the walls seem to have served as couches.<sup>25</sup> The Corinthian couches, however, find a close parallel in those found in two rooms near the sanctuary of Hera Limenaia at Perachora.<sup>26</sup>

The width and position of the entrance may be restored (Fig. 13) from the known dimensions and position of the couches. The end of a couch is in place at the south end of the west side. At the north end of this side we should allow for the width of the last couch on the north side, 0.80 m. Thus, for two couches and the entrance, 5.52 m. is left, or two couch lengths of 1.86 m. each and an entrance of 1.80 m. The entrance would have been placed at the end of the first couch from the south, thus

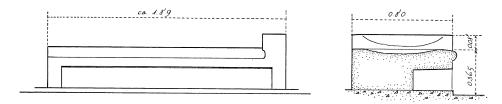


Fig. 14. Couch in Dining Room. Elevation and Section.

setting it a little to the south of the center of the room and leaving one couch length and one couch width north of it. No traces of the doorway remain. The restoration of the door at the end of the first couch finds a parallel in the similarly arranged rooms at the east and west side of the peristyle court in the Asklepieion at Troezen <sup>27</sup> and possibly also in the Hestiatorion at the Argive Heraion as restored by Frickenhaus.<sup>28</sup>

As mentioned above, the blocks for the table supports were set in place and the floor laid around them. The supports have since been cut out in every case, leaving only the openings and a stub to indicate their original position. On the sides with three couches, four supports were put in and there are traces of one before the partly preserved couch on the west side. The supports were set 0.25 m. from the couches and their average length and width was 0.53 and 0.22 m. respectively. Whether the supports were plain or decorated is unknown. In addition to these rectangular supports small square posts, 0.22 m. on the side and 0.18 m. in height, are preserved in the northeast and southeast corners and traces remain of one in the southwest corner. In the center of the top of each a small pivot hole is cut. These were apparently

<sup>&</sup>lt;sup>25</sup> Welter, *Troizen und Kalaureia*, p. 32. The height of the supports was 0.31 m. and they were placed 1.35-1.85 m. apart, with a norm of 1.45 m. Thus, the couches were shorter than those in the Asklepieion at Corinth.

<sup>&</sup>lt;sup>26</sup> Payne, *Perachora* (Oxford, 1940), I, p. 14; benches of a similar shape were also found at Lato in Crete (Demargne, *B.C.H.*, XXVII, 1903, p. 216).

<sup>&</sup>lt;sup>27</sup> Welter, op. cit., pl. 14.

<sup>&</sup>lt;sup>28</sup> A. Frickenhaus, "Griechische Banketthäuser," *Jahrbuch*, XXXII, 1917, p. 129, fig. 8. The preserved supports for the couches are set 1.22 to 1.45 m. apart. Thus, in this room also, the couches were shorter than those in the Asklepieion at Corinth.

designed to offer support in the corner where there was not room for a rectangular support. They would indicate that the height of the rectangular supports was also 0.18 m. It is likely, to judge from the pivot cutting in the top of the post, that boards with cleats on their lower side were placed on the supports to serve as table tops. Permanently fixed slabs are unlikely, for that would have made cleaning very difficult. The position of the cuttings (Fig. 13) indicates that a board would have been placed in each corner resting on the post and the rectangular supports nearest it. Another board would have been set on the two rectangular supports in the central part of the sides. Between the boards sufficient space would have been left to give access to the couches. The two diners in the corners would thus have shared a common table and the one on the central couch on each side enjoyed a table to himself. The type and the arrangement of the supports finds a parallel in those of the dining rooms at Troezen.<sup>29</sup> There, two rectangular supports on which slabs were attached were placed before each couch.

The block which held the brazier was a square poros slab, 0.78 m. on the side, set with its top level with the floor. In the rooms at Troezen <sup>30</sup> the hearths are rectangular pits sunk below the floor, but with a curb projecting above it for 0.20 m. Fires were made in them. Since the block in our dining room shows no trace of a curb it was apparently designed to hold a brazier rather than the fire itself.

The floor is well made of a heavy layer of cement laid on a bedding of pebbles and is 0.10 m. in thickness. Around its edge there is a raised border of fine cement, 0.03 m. in height. The floor has traces of repairs in several places. In the southeast corner a strip, ca. 0.30 m. in width and 1.00 m. in length, was inserted and there is another small patch to the south of the entrance. These repairs aimed at the same effect as the original paving, but they are coarser.

The original arrangement of the dining room seems to have been maintained almost without change throughout its use. The couches *in situ* show no signs of repair or variations in type. Traces of a second coat of stucco over the original red and of repairs to the floor are the only signs of alterations in the room. It is probable, however, that the original stone table supports were taken out and replaced by wood. In all the holes except the first from the west on the south side, the original block has been very carefully cut out to a depth of *ca*. 0.10 m. Extreme care was taken not to damage the side, for, in the second hole from the west on the south side, a thin edge of the original slab was left in place. The last hole on the south side was moved 0.10 m. to the east, possibly to correct a mistake in its original setting (Plate 14 4). Apparently, then, it was felt that the supports were an obstacle in cleaning so that they, as well as the table tops, were made movable. There is no evidence to date these repairs, but it seems probable that they would have been made in the early Roman period, when the sanctuary and Lerna were again put in good order. The rooms

<sup>&</sup>lt;sup>29</sup> Welter, op. cit., p. 32.

<sup>30</sup> Ibid.

seem to have continued in use throughout the Roman period and it is possible that the reference of Pausanias to the *kathedrai* of Lerna refers to these couches.<sup>31</sup>

Since the total width of the southernmost room is preserved, 6.80 m., and there is evidence of the partitions between them, we are enabled to restore two rooms of similar width to the north. Small sections of the floor and several holes for table supports are preserved which indicate that their interior arrangements were the same as those of the room already described (Plans A and C).

The abaton building, then, housed the arrangements of the Asklepieion for the care of its visitors. In the upper storey, entered from the precinct, was the sacred part of the building used for incubation. In the lower storey were the dining rooms opening from the colonnades where the visitors might find rest and refreshment during the day. Possibly, too, visitors from out of town remained in them overnight although there is accommodation for only thirty-three persons. A dining room, of course, implies a kitchen. No traces, however, were found of such a room. It is possible that cooking was done on the braziers, and the open court to the north used to prepare the food.

There is no direct evidence for the identification of this structure as the abaton building, but a consideration of the arrangements of the sanctuary scarcely allows any other conclusion. On the south side of the precinct was a ramp. There is no indication that a structure of the Greek period was built near it on the south side which would have been regarded as an annex to the Asklepieion. The north side of the precinct was occupied by the colonnade. It may have been used to accomodate an overflow of visitors overnight, but is scarcely private enough, when compared to the abaton room, for the rite of incubation. Lerna hollow contained a peristyle court giving access to the reservoirs and open colonnades. Thus, the abaton building, which was a usual part of Asklepieia, was constructed in the only available space readily accessible from the temple area.

There seems to have been no definitely fixed type of building in the Asklepieia used for this purpose, and identifications of such structures are conjectural in every case. The word abaton occurs several times in the inscriptions from Epidauros and is obviously applied to a structure of some type which was used for private cult rites <sup>32</sup>—presumably incubation. The temples could be and, in some cases, <sup>33</sup> were used for that purpose. The temples in Asklepieia, however, were usually very small and, as the evidence from Epidauros indicates, some other structure was probably used where possible. At Epidauros, it is usually assumed that the stoa built on two levels to the east of the temple was used for this purpose. <sup>34</sup> The best grounds for such an identifi-

<sup>&</sup>lt;sup>31</sup> Pausanias, II, 4, 5.

<sup>&</sup>lt;sup>32</sup> I.G., IV,<sup>2</sup> 121, 91; see also Pausanias, II, 27, 2. The Amphiareion at Oropos had an abaton divided into two parts, one for men and one for women (Versakis, *Ath. Mitt.*, XXXIII, 1908, pp. 260 ff.).

<sup>&</sup>lt;sup>33</sup> Pausanias, X, 32, 12. A couch is said to have been near the altar; a case of sleeping in the temple is reported from Athens also (Suidas s.v.  $\Delta o \mu \nu \hat{\nu} vos$ ).

<sup>34</sup> P. Kavvadias, Fouilles d'Épidaure (Athens, 1891), I, pp. 17-18; idem, Τὸ Ἱερὸν τοῦ ᾿Ασκληπίου

cation were the discovery of the inventories of cures at one end of the building. It has been argued, however, that there would be little point in placing inscriptions, designed to be read, in a place where incubation was carried out in darkness.<sup>35</sup> Thus, a building with a central court and a number of rooms, E, has also been proposed as the abaton.<sup>36</sup> The tholos, too, has been suggested as an abaton.<sup>37</sup> On the analogy of building E at Epidauros it has been suggested that a somewhat similar structure on the second terrace at Kos—the oldest part of the Asklepieion—served as the older abaton.<sup>38</sup> No identification was made for the later period of the sanctuary when colonnades seem the best candidates. In Athens, the abaton is usually considered to have been in the east stoa, where the sacrificial pit and the sacred spring were located.<sup>39</sup> This building is a construction of the late fourth century, however, built about a century after the foundation of the cult. Possibly the earlier abaton was the west stoa. It is dated in the late Hellenistic period, but seems rather to have been one of the early buildings of the sanctuary. 40 The sanctuary at Troezen, as has been mentioned, was divided into two parts, one of which consisted of a peristyle court surrounded by dining rooms on three sides and rooms of uncertain use on the fourth side. In the other part of the sanctuary were its more sacred buildings, the temple and a group of rooms, the use of which is not clear. At Pergamon a large room with what appear to be the foundations for benches on the sides and an altar in the center is identified as the abaton.41 Thus, there is considerable variety in the various types of structures proposed as abaton buildings.

Can any help be derived from the literary sources in this problem of identification? The most helpful passage is the well-known description of an incubation in the *Ploutos* of Aristophanes.<sup>42</sup> A group of people are represented as passing the night in quite close proximity on the floor of a building. Priests and cult officials had easy

ἐν Ἐπιδαύρφ (Athens, 1900), pp. 121-28; Defrasse and Lechat, Épidaure (Paris, 1895), pp. 129-41; R. Martin and H. Metzger, B.C.H., LXVI-LXVII, 1942-43, pp. 327-34.

<sup>35</sup> I. Holwerda, "Das Epidaurische Abaton," Ath. Mitt., XXVII, 1902, pp. 289-93.

- <sup>36</sup> In any case, the stoa in its present form is not contemporary with the establishment of the cult in Epidauros. The earliest epigraphical evidence for the cult there consists of the dedications to Asklepios found near the early altar by Building E and dated to the early fifth century B.C. (Holwerda, *op. cit.*, pp. 292-93; Frickenhaus, *Arch. Anz.*, XXVII, 1912, pp. 140-42). Building E seems to have consisted of a central court surrounded by rooms, with an altar at the northwest corner. The altar was subsequently destroyed by the erection of a stoa on the west side. In the Roman period the structure was completely rebuilt.
  - <sup>37</sup> G. Elderkin, A.J.A., XV, 1911, pp. 161-67.
- <sup>38</sup> Herzog and Schazmann, Kos, I, p. 51. Building D, on the second terrace is suggested as the abaton, but there is no evidence to that effect.
- <sup>39</sup> G. Allen and L. D. Caskey, "East Stoa in the Asklepieion," *A.J.A.*, XV, 1911, pp. 32-43; see also R. Martin, *B.C.H.*, LXVIII-LXIX, 1944-45, pp. 434-38; J. Travlos, 'Aρχ. 'Eφ., 1939-41, pp. 35-68.
  - <sup>40</sup> H. Thompson, *Hesperia*, VI, 1937, p. 45, note 1; J. Travlos, op. cit., p. 60, note 2.
  - <sup>41</sup> O. Deubner, Das Asklepieion von Pergamon (Berlin, 1938), p. 40.
- <sup>42</sup> Aristophanes, *Ploutos*, 653-747. There is no reason to assume that the incubation took place in the temple.

access to it. From the nature of the rite we may assume that the abaton was sacred and private. In the case of the Corinthian building we may note several similarities with the above-mentioned structures and with that mentioned in the passage of Aristophanes. The building contained a water basin for which complete privacy could be insured, in which respect it resembled the spring chamber cut into the rock of the Acropolis behind the east stoa in the Asklepieion at Athens. The abaton room was accessible from this chamber and from the precinct, as was the building in Athens. On the other hand, the dining rooms in the lower storey were separate rooms with couches like the rooms in Troezen. Yet it is scarcely likely that they served for incubation since they were not easily accessible from the precinct and there is no indication that taking meals was a part of the ritual of incubation. For these reasons it seems best to identify the room of incubation with the large room at the second-storey level and to regard the dining rooms as designed only for the purpose of feeding visitors to the sanctuary and possibly housing those patients who remained overnight but did not participate in the rite of incubation.

For dating the construction of the building we have the evidence offered by a coin hoard and the objects from the filling used to raise the level of the northern part of the hollow. The hoard was found 0.60 m. below the point where the north door iamb of the entrance to the southernmost dining room would have been placed. It was in a pocket in the clay beside the foundation cutting at that point. Thus, it would seem to have been buried there before the cutting of the foundation trench and luckily missed by the workmen engaged in that operation; then it was sealed over by the construction of the building. The hoard 43 contained 70 coins, 57 of which were legible, a plain ring, a little silver ornament and a bronze plaque, the design of which is illegible. Three of the coins were of silver and closely dateable: 2 Corinthian drachmae bearing the head of Aphrodite, of a type issued 350-338 B.C., and 1 silver obol issued in the same period. Of the bronze coins, 52 were Corinthian of the common type with a representation of Pegasos and the trident, dated 400-146 B.C. The remaining two were a coin of Phlius and a coin of Tegea, both dated 431-370 B.C. Thus, a date post quem of 350 B.C. is obtained for the building. The objects from the filling against the foundations (Votive Deposit IV; pp. 113-114) are of importance as linking the construction of the building to that of the temple and the arrangement of the precinct. Their date is discussed below in connection with the votive offerings, but it is to be observed here that it is slightly later than that of the coin hoard.

# THE COLONNADES OF THE PRECINCT

The remains of bases on the south and west sides of the precinct and of a continuous cutting on the north edge of the hill (Plan A) indicate that the precinct was surrounded by a colonnade. That along the north edge of the precinct was apparently

<sup>&</sup>lt;sup>43</sup> K. M. Edwards, *Hesperia*, VI, 1937, p. 247.

built at the same time as the abaton building. At its western end where it was necessary to build up the foundation for its stylobate from the lower level of Lerna, the courses of the foundation are bonded with those of the east wall of the abaton building as described above (p. 43). The rear wall of the colonnade, built at a lower level along the north flank of the hill, has been uncovered at its western end only. The colonnades on the west and south sides of the precinct seem to have been a later addition to the original building plan. Possibly the entrance porch to the lustral room and the colonnade on the west side were built first; then, the colonnade was extended along the south and probably the east side.

#### NORTH COLONNADE

Along the north edge of the hill a well-made cutting is preserved, now stripped of its blocks and honeycombed with the chambers of Early Christian graves (Plan A; Plate 15 <sup>5</sup>). It is similar in type to the bedding for the east wall of the abaton building; of the same depth, *ca.* 0.20 m., but wider, *ca.* 1.30 m. as opposed to 1.03 m. Thus, it was designed to carry a heavy superstructure, as some of its foundation blocks preserved at the west end on the lower level at the base of the hill indicate. The cutting and the foundation were presumably designed for a colonnade along the north side of the hill.

The construction of a colonnade here entailed some difficulty, for the rear wall had to be founded on the slope of the hill which fell off sharply from the rock cap on which the stylobate was set (Plan D, Section C-C). Four blocks of the lowest course of a foundation have been found, however, and, from their position, they evidently belong to the rear wall of the colonnade. They are set on a shelf cut in the clay ca. 4.00 m. north of the preserved corner made by the foundations of the stylobate and of the east wall of the abaton building (Plan A). The westernmost of the blocks is smaller in size than the others and apparently marks the beginning of the joint with the east wall of the abaton building. The others would show the normal size of the blocks used in the foundation courses: 1.28 by 0.65 by 0.55 m. They are well cut, with a smooth band on the lower part of the face and a slight bevelling at the joint. On the easternmost is a mason's mark,  $\Delta$ , and on that next to the end an anathyrosis for the last block of the tie-wall extending out to the city wall at this point (below, p. 94). The shelf on which the foundation rested was 8.40 m. below the rock of the hill top (Plan D, Section C-C). Erosion has destroyed the western part of the foundation and washed out its upper courses and the original clay of the hill which would in part have filled the space up to the level of the rock cap.

The foundation appears rather light to bed a wall which must have risen *ca*. 15.00 m. from its base to the roof of the colonnade, but it was retained on the outside by the filling under the ramp along the city wall and by the very heavy face of the city wall. Thus, the north colonnade may be restored as *ca*. 5.10 m. in depth, from its stylobate to the inner face of the rear wall, and 37.30 m. in length, from the east wall

of the abaton building to the east wall of the precinct. No trace remains of its interior arrangements, but it would presumably have served for lounging and rest so that a bench may be restored in the interior as on Plan B.

A clue to the restoration of the order is offered by a partially preserved frieze block discovered in the excavation of Lerna. It had been built into a Byzantine wall bedded on the square, but has since disappeared. Fortunately a photograph and drawing (Plate 15 <sup>1</sup>; Fig. 15) were made at the time of discovery and show its state of preservation and dimensions. The frieze unit was 0.866 m. which would allow an intercolumniation of 1.732 m., if two triglyphs are restored between columns, and of 2.598 m., if three are restored. The latter arrangement seems preferable as it permits the restoration of thirteen columns along the front of the colonnade. There is some evidence that the south colonnade was accommodated to this scheme when it was built. It contained thirteen columns and had three triglyphs to an intercolumniation.

It is possible that three small fragments of a cornice (Plate 15 <sup>2</sup>), which was first put together by Miss Shoe,<sup>44</sup> are to be assigned to this frieze. The surviving fragments are of poros covered with good Greek stucco; there are a few traces of red paint above the mutules. The fragments do not give the complete length of a mutule but one piece is sufficiently complete to indicate that its original length was *ca*. 0.33 m. which would be suitable for the frieze block. The fragments of the cornice were found in the late filling over the southeast corner of Lerna square. It is probable that the frieze would have been carried along the east front of the abaton building as restored on the elevation (Plan D, Section C-C).

The north colonnade was probably used again in the earlier Roman period of the sanctuary, but there is some indication of its destruction, or at least alteration, before the final destruction of the sanctuary in the late fourth century after Christ. In the northeast corner of the precinct is a well-preserved drain of Roman date (Plan A) which served some structure to the east of the Asklepieion. Its bedding is cut through the cutting for the stylobate of the colonnade. Thus, at the time of its construction the stylobate must have been removed in part or already destroyed. Also, at a distance of 1.00 m. to the south of the stylobate a deep trench (Plate 15 <sup>5</sup>) is cut parallel to it. The trench probably had no connection with the Asklepieion, but was designed for some building to the east of it. It terminates *ca.* 1.00 m. from the west edge of the hill and continues into the unexcavated area to the east of the sanctuary. The trench is 1.10 m. in width and 0.75 m. in depth with rectangular pits sunk into its floor at irregular intervals. The length of the pits varies from 1.30 to 1.90 m. and their depth is uniformly *ca.* 0.45 m. below the floor of the trench. They are spaced at intervals from 4.20 to 5.00 m. The floor of the trench is not finished smoothly so that

<sup>&</sup>lt;sup>44</sup> Greek Mouldings, pp. 71, 114, 159, 167; pls. LXXV, 6; LV, 18; LXXIV, 16. Of the six pieces mentioned by Miss Shoe (Inv. Nos. 75, 78, 101, 126, 127, 129) four were found in the check of 1947 (Nos. 101, 126, 127, 129). No. 101, however, appears to have been included by mistake, for its dimensions are suitable for the temple of Asklepios, and it is larger than the rest of the series.

it does not seem to have carried a wall. Possibly it represents an unfinished project—a drain channel with settling basins. The filling of the trench was of the late fourth and fifth century after Christ.

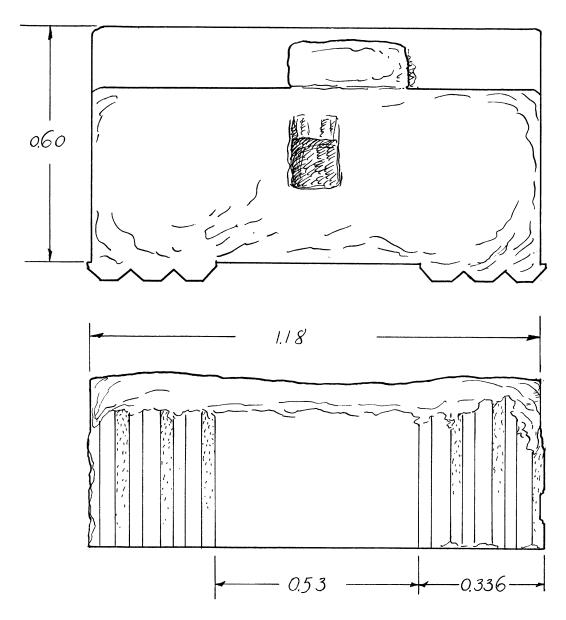


Fig. 15. North Colonnade of Precinct. Frieze Block.

### West Colonnade

The front of the abaton building was originally furnished with a gutter to carry the drainage from its roof to the shafts at the north and south ends. At a later date a small porch was built for the lustral room and, north of it, a colonnade to screen the wall. Evidence of this operation is furnished by the two gutter blocks which remain in place before the doorway to the lustral room and by the remains of the paving (Plan A; Fig. 11). A well-preserved section of paving remains to the north of the gutter blocks in line with their outer edge and extending up to the euthynteria of the east wall. The pebbles of this section, unlike those of the rest of the preserved paving, are laid in rows. Since the gutter blocks are useless in their present position as a gutter, it seems reasonable to suppose that at one time a gutter extended along the front of the building; we may suppose that it was later removed, except for the blocks left to form the supports for the rear columns of a porch, and its bedding filled carefully with a pebble paving similar in type to that of the rest of the precinct.

The small porch was rectangular, 2.50 by 3.00 m., and was supported by a column in each corner. The cuttings for the two front columns were set 1.73 m. in front of the wall of the abaton building. The cutting for the north column base, measuring 0.80 m. on the side, is preserved, as is part of the base of the southern column (Plate 12 <sup>2</sup>). The position of the latter coincided with the channel containing the terracotta pipe lines, so that the base was cut to span the channel. The base was square, measuring 0.63 m. on the side. Within the porch the rock surface was dressed smoothly to bed the paving, a small section of which is preserved between the gutter blocks. Nothing remains of the columns or of the superstructure of the porch. Presumably it had a roof sloping to north and south with the gable set just below the eaves of the abaton building.

As the two bases in place north of the porch indicate (Plan A), a colonnade was built along the west side of the abaton between the porch and the north colonnade. The bases were set only 0.70 m. from the wall, making a very shallow hall. They are similar in size to that of the porch and in type to those of the south colonnade described below (p. 62). The intercolumniation in 2.345 m. and the space between the bases 1.72 m. Between the first base and the side of the porch it would have been 1.70 m. This agrees sufficiently well with the space between the bases to suggest that the colonnade was carried across to the porch. Yet, it would have joined the porch midway along the north side and it is difficult to see how the junction could have been effected, for there is no trace of a support between the front and rear columns of the porch. Thus, the colonnade apparently terminated at the first column north of the porch, leaving the latter free-standing with a space on the north side balancing that on the south side between it and the wall of the ramp (Plan B). On the basis of the intercolumniation of 2.345 m. it is possible to restore seven columns on the west side of the precinct. There are no identifiable fragments from the order of the colonnade, but, since its intercolumniation and the size and type of the bases are the same as those on the south side we may restore it on that model.

# SOUTH COLONNADE

Along the south side of the precinct at a distance of 0.63 m. from the original wall of the ramp are the remains of a row of thirteen bases (Plan A; Plate 14 <sup>1</sup>). Eleven are in place in varying states of preservation and the cutting for a twelfth is preserved. A thirteenth may be restored from the intercolumniation. To the east of the easternmost base a stretch of the precinct paving remains, greater in extent than the intercolumniation and showing no traces of an additional base. Thus, the colonnade apparently terminated before the porch-like construction of the east water basin, which corresponded to that of the porch before the lustral room.

The bases, cut in a single block, consist of a plinth measuring 0.80 m. on the side and 0.145 m. in height, and an upper member, 0.63 m. on the side and 0.13 m. in height. The plinth would have been concealed by the pavement. The bases are of poros and several retain traces of red stucco on their sides. The intercolumniation averages 2.34 m. with a slightly smaller space left between the westernmost base and the east wall of the abaton building. It is probable that the colonnade ended on this last base and was not carried to the wall of the building. This arrangement would permit drainage from the roofs of the building and the porch to enter the shaft in the corner.

Between the bases and to the south of them, sections of the pebble pavement of the precinct remain with a thin layer of cement over them (p. 41). This paving would have extended to the ramp wall which served as the rear wall of the colonnade. When the present top course of the ramp wall was laid, this paving and the colonnade were destroyed. The blocks of this course present an irregular face to the precinct (Plate 14 1) indicating that they were not designed to be visible. They are, however, 0.10 m. above the level of the tops of the bases. Thus, the ground level of the structure for which the top course was laid was higher than the bases and entailed their covering.

A clue to the chronology is given by the relation of the colonnade and the wall to the shaft, S, midway along the south side of the precinct (Plan A). The sixth base from the east was set over the edge of the shaft narrowing the opening, but not putting it out of use, for cuttings to hold a rectangular cover slab are sunk on each side of the shaft from the edge of the base to the original wall of the ramp. Thus, the base was put in position after the shaft was cut, but while access to it was still necessary. The laying of the present top course of the wall, however, put an end to its use, for the top of the shaft was found sealed by a recut cornice block adjusted to fit under the wall course. The filling in of the shaft, then, would give a date *post quem* for this operation. To a depth of 2.00 m. it contained some sigillata ware and three coins. Two of the sigillata pieces (Fig. 16) were fragments from bowls: C-31-380, bearing the stamp M, is Pergamene; C-31-380a was stamped MA; its fabric was grey with a thin brown glaze—possibly some Italian ware. The coins were: one Corinthian bronze, 400-146 B.C.; one of Demetrius Poliorcetes, 304-286 B.C.; one of Athens, 220-93 B.C. From 2.00 m. to the bottom of the shaft the filling was Greek with two coins:

a Corinthian bronze, 400-146 B.C. and one of Phlius, 431-370 B.C. In it were a few small fragments of votive limbs and the representation of the "temple-boy" (p. 140; No. 24). Thus, the shaft seemed to contain fillings of two different periods. In the lower part was some debris from the Hellenistic period of the sanctuary which found its way in during the period of neglect after 146 B.C. The upper part of the shaft would have been filled with sweepings from the sanctuary in the early Roman period when the building over the ramp was constructed. At the same time it was thoroughly sealed by the recut cornice block.

It is likely, in that case, that the cornice block was one from the destroyed colonnade. The block is broken at one end and part of the projecting moulding at the top is

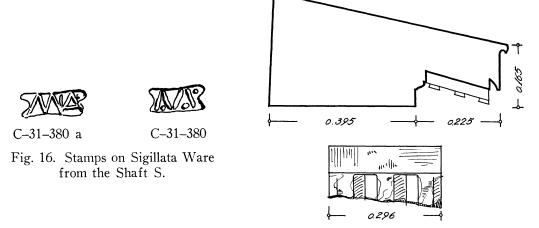


Fig. 17. South Colonnade of Precinct. Triglyph and Cornice Blocks.

cut off to enable it to be fitted over the shaft. The mutule is 0.295 m. in length and the via 0.095 m. in width. These dimensions enable it to be identified as belonging to a set of six other cornice fragments which preserve the complete profile (Plate 15 ³; Fig. 17) and traces of the original stucco and color. The stucco is of good Greek quality and bears no trace of resurfacing. Traces of a leaf and dart design in red are preserved on the moulding at the base of the mutules and of red on the narrow band above them. Most of the fragments were found built into the cross-walls of the ramp, which were a part of the Roman building to which the present top course on its north wall belongs (below, p. 79). The dimensions of this cornice, which was first put together by Miss Shoe 45 and assigned to the stoa, vary a little: the length of the mutules is 0.296 to 0.31 m.; the width of the viae, 0.07 to 0.095 m. Their unit would

<sup>&</sup>lt;sup>45</sup> Greek Mouldings, pp. 112, 159, 167; pls. LIV, 31; XXX, 34; LXXIV, 4. Of the six pieces mentioned by Miss Shoe, four were found in the check of 1947 (Inv. Nos. 41, 106, 112, 148; Nos. 7 and 145 were missing); to this set is to be added the fragmentary block used to seal the shaft, Inv. No. 105, which, in 1947, was found to have been broken in two fragments.

be ca. 0.39 m. which would indicate a frieze unit of 0.78 m. Thus, three triglyphs may be restored to an intercolumniation (2.34 m.). A very weathered fragment of a triglyph (Plate 10 4; Fig. 17), found in the late filling over the ramp, would seem to fit into this frieze. It is 0.296 m. in width. No identifiable fragments of columns have been found so that the height of the order remains conjectural.

Although no traces of the east colonnade remain it seems probable that it should be restored on the analogy of those on the west and south. Not only would it have been necessary to complete the architectural design of the precinct, but, if it is restored using the same intercolumniation of 2.345 m., it is found that nine columns fit into the length of the east side (Plan B). It was also presumably a shallow colonnade, for, if it had been made deep like that on the north, it would have conflicted with the east water basin and the altar.

The most striking feature of these later colonnades is their extremely small depth which is hardly sufficient to permit their use for lounging. They would, of course, complete the architectural border of the precinct and give a uniform setting for the temple. It seems possible, however, that they had a more specific function, namely the display of the votive offerings. In such a position the offerings would attract the attention of the visitors as they walked about and help to prepare them for the rite of incubation, by impressing them with the healing power of Asklepios.

The final appearance of the precinct, then, in the Hellenistic period was that of a small temple and altar set in a framework of colonnades (Plan B). Such an arrangement was found also in the Asklepieion at Priene,<sup>46</sup> on the upper terrace of the Asklepieion at Kos <sup>47</sup> and in the Asklepieion at Pergamon.<sup>48</sup> The arrangement and the building history of the establishment at Priene is very similar to that at Corinth. There, the precinct was bounded on the east by a street and on the north, south and west by the rear walls of market shops, although there was no direct connection with the market. The temple, too, was set well back in the precinct. The colonnade on the south was apparently built at the same time as the temple, in the early third century B.C. At a later date, in the second century, a colonnade was added on the north side. At Kos, the upper terrace was laid out on a monumental scale in the second century when Temple A was built and enclosed on three sides by colonnades. Thus, this thoroughly Hellenistic type of arrangement found an echo in the small sanctuary at Corinth.

<sup>&</sup>lt;sup>46</sup> T. Wiegand and H. Schrader, *Priene* (Berlin, 1904), pp. 136-46. The identification of the sanctuary in Priene as an Asklepieion has been denied by M. Schede who argues that it should be assigned to Zeus (*Jahrbuch*, XLIX, 1934, pp. 103-106).

<sup>&</sup>lt;sup>47</sup> Herzog and Schazmann, Kos, I, pp. 14 ff.

<sup>&</sup>lt;sup>48</sup> O. Deubner, Das Asklepieion von Pergamon, p. 6, fig. 1.

## CHAPTER III

# THE RAMP AND THE ENTRANCE COURT OF LERNA

### THE RAMP

THE VISITOR to the Asklepieion made his way from the higher level of the precinct to the lower level of Lerna by a ramp (Plans A; C; D, Section B-B) which was built along the south side of the sanctuary. This ramp must have been one of its most attractive features. It was open to the sky and the retaining walls on the sides were covered with a light-blue stucco which would form a pleasing contrast to the white stuccoed walls of the precinct and of Lerna. The visitor would stand at the eastern end of the ramp and look down its slope (Plate 16 6) for the full length of the precinct to the gate which closed it off at the west end from the entrance court to Lerna. Both walls were originally unbroken, but in the third century B.C. a fountain house was built on the south side near the eastern end, with its main entrance from the ramp. In the mid first century after Christ the ramp was put out of use by the series of cross-walls which appear in the Plan A and Plate 7 1. At the conclusion of the excavation they were partly taken down to permit the use of the ramp (Plate 17 1).

As already mentioned, the difference in level between the precinct and Lerna was set at ca. 4.00 m. Thus, the construction of the ramp necessitated a cutting made progressively deeper to the west through the rock and clay of the hill. For most of the length of the north side the rock was firm so that the side of the cutting could be utilized as the side of the ramp. Its western and eastern ends, however, needed support. At the west, where the level of the ramp passed below that of the rock cap of the hill into the clay which underlies it, a particularly strong construction was needed. The space between the ramp and the reservoir (I) cut under the hill was only 1.80 m. The clay was removed to a depth of ca. 0.80 m. and in its place was put an underpinning for the rock cap (Plate 19<sup>5</sup>). The blocks for this underpinning were mainly reused orthostates from the early structures on the hill and in Lerna. Near the east end, where the rock changes to a soft, reddish poros, two partial courses of well-cut blocks were set in along the top to provide a firm base for the precinct wall (Plate 16 6). At the extreme east end the rock was removed and a heavy foundation (Plan A) was put in to carry the wall. It was traced for 10.50 m. and is preserved for three courses in depth. The blocks are of roughly finished poros, measuring ca. 1.23 by 0.59 by 0.59 m., and were laid in double courses of headers and stretchers. Their dressing and coursing are similar to those of the foundations of the east wall of the abaton building. The wall which makes a return to the south side of the ramp from the east end of this foundation is of later date. It is built of reused Greek material and is set against the

foundation not bonded with it. It apparently belongs to the Roman building constructed above the ramp (below, pp. 77-82).

On the south side of the ramp it was found necessary to replace the rock for most of its length. A well-built section of masonry which is preserved from one to seven courses in height was laid (Plan D, Section B-B; Plate 16 6). It is one of the best examples of Greek masonry found at Corinth. The blocks are of poros, cut with anathyrosis and neatly jointed. They are uniform in size, 1.13 by 0.70-0.75 by 0.425-0.44 m., and laid in isodomic pattern. The north face of the blocks is smoothly finished, but the south is rough and was concealed from view, at least in the preserved courses. Some of the original clay packing thrown in behind them survives and its objects offered some evidence of the date of construction.

The exterior of both the north and south walls was covered with a fine layer of blue stucco laid on a base of cement. It is preserved only in patches, but the original color is still fresh. There are no *graffiti* on the patches preserved. The walls may, however, have held votive limbs or tablets, for there are nail holes in some of the blocks. These may, of course, date from the period when the ramp was made into a row of cellars.

The reconstruction of the ramp offers several problems for which only tentative solutions can be proposed. It was found impossible, owing to objections from the owner of the adjacent field, to clear its eastern end so that the nature of the entrance and the arrangements to the east remain obscure. The height of its walls is also conjectural. The present top course of the north wall is of Roman date and seems to be contemporary with the series of cross-walls; thus, there is no evidence for its original height. The south wall, however, was probably only one course higher than its present level. No traces of stone paving or of a gutter were found, which raises the question of whether the ramp was roofed to form a cryptoporticus; on the whole it seems probable that it was not.

The entrance of the ramp would presumably have been on the line of the east wall of the precinct, but its form is unknown. Since the entrance to the precinct seems to have been in the southeast corner near the ramp, it is unlikely that there was a connecting entrance between them through the precinct wall.

It is likely that some traces of paving would have survived if there had been a pebble pavement of the type used in the precinct and in the eastern part of the entrance court to Lerna. None was found, however, so the floor of the ramp was apparently made of hard-packed clay and stones, as preserved below the level of the sloping line on the south side of the ramp which marks its original level (Plan D, Section B-B). No drainage channel was made along the side or in the center although the slope is considerable, 0.07-0.09 m. per meter, and the footing would have been extremely precarious after even a light rain. It seems improbable, however, that the ramp was roofed. Its width is 4.70 m. and there are no traces of interior supports. It would have been possible to span it, but it is difficult to see how the roof could have been adjusted to the south side of the abaton building and to the fountain house which

was built later on the south side. The excellent preservation of the blue stucco should be attributed to its own quality rather than to the protection of a roof.

The original height of the north wall is conjectural. Along the precinct its height need have been only sufficient to ensure privacy, but additional courses could have been added when the south colonnade was built in the precinct. It would have been raised, of course, to enclose the south wing of the abaton building.

There would have been no such necessity to maintain the height of the south wall at the same level for there is no indication that it served as the rear wall of buildings to the south. At present the blocks of the highest preserved course have pry-holes

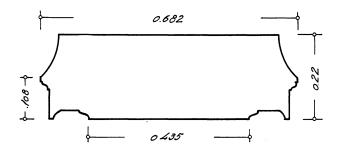


Fig. 18. A Coping Stone, possibly from the Precinct Wall.

indicating that at least one more course rested on it. This course may have been the final one, for it was narrower than those below it, as a drafting line set 0.61 m. from the north edge of the surviving course indicates. Thus, the wall may have terminated with this one missing course and some type of coping. Some support for this conclusion is found in the fact that the line of this supplied course, when extended to the west, is level with the top of the entablature of the gate and of the propylon built across the entrance court to Lerna (Plan D, Section B-B).

A fragmentary coping stone was found built into a Byzantine wall east of the fountain house, but it seems too small to be restored on the south wall of the ramp. The block (Plate 16 <sup>2</sup>; Fig. 18) is of poros and its top bears considerable traces of weathering; the back has been recut so that the original thickness is not preserved. Its lower resting surface shows that it was set on a wall, 0.435 m. in thickness. Possibly it is to be restored on the east wall of the precinct rather than on the ramp walls.

The gate at the western end of the ramp was built on the line of the median wall of the abaton building although its foundations are not continuous with those of the wall. Four blocks of the foundations of the gate remain in place of which that in the center has cuttings for securing the gate doors (Plan A; Plate 16 <sup>1</sup>). On the south side of the ramp a cutting may be seen in the rock scarp, the edge of which is in line

<sup>&</sup>lt;sup>1</sup> The excavator proposed that the ramp was covered with a roof, thus forming a cryptoporticus (A.J.A., XXXVII, 1933, p. 429). This seems very improbable because of the difference in level involved at its east and west end and the difficulties with the roofs of the other structures.

with the edge of the center foundation block. It was evidently made to bed the blocks of the jamb of the gate; it is 0.90 m. in width and 3.70 m. in height.

The gate has left only these traces in place, but the discovery of an Ionic entablature block with mouldings on each side (Plate 16<sup>5</sup>; Fig. 19) suggests that it might be restored on the analogy of the gate in the parodos of the theater at Epidauros. The block was found on the pavement of the fountain house near the cornice block from the temple and, like it, was evidently buried there when the sanctuary was renovated in the early Roman period. The end of the entablature which rested against

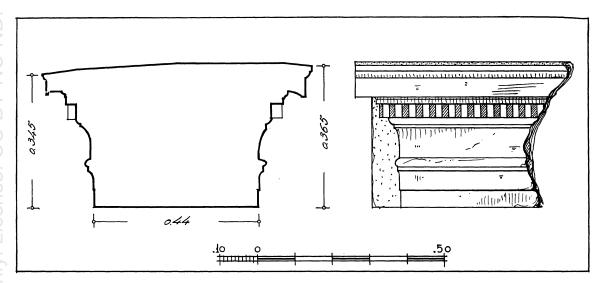


Fig. 19. Fragmentary Entablature Block from the Ramp Gate.

the ramp wall is preserved and, on the side near its joint with the wall, is a patch of cement similar to the base of the blue stucco on the ramp walls. The surfaces of the mouldings are covered with a hard, white stucco with traces of red paint on the ovolo below the dentils and a leaf and dart in red on the moulding above them. There are no traces of later stucco. The height of the block, 0.365 m., added to the preserved height of the cutting for its pilaster on the south side of the ramp, 3.70 m., accords well with the conjectured height of the south wall (above, p. 67; Plan D, Section B-B). The entablature would have been supported by a pilaster on each side and a central pillar as indicated on the plan (Plan C). The cuttings on the center block seem to indicate that the openings could be closed, possibly by a metal grille.

The ramp evidently formed an integral part of the original layout of the sanctuary in the late fourth century B.C. Its north wall served as the south wall of the precinct and of the abaton building. Some confirmation of this dating is furnished by the filling behind the south ramp wall and that next to the foundation for the eastern end of the north wall. The pottery and lamp fragments from these consisted of types of the fifth and fourth centuries B.C. Thus, the filling, evidently contemporary with

the construction of the ramp, agrees in date with that from the packing of the foundation of the abaton building, the rock-cut drain and the well north of the temple. The gate, however, may be of later date since its foundations are not laid continuously with those of the median wall of the abaton building; also, the entablature seems later in style than the end of the fourth century, although, of course, it might be the result of a reconstruction of the gate.

Before describing the use of the ramp after 146 B.c. and the subsequent alterations of the Roman period, it will be convenient to consider the fountain house and the entrance court since they were involved in the Roman reconstruction.

#### THE FOUNTAIN HOUSE

The remains of the fountain house are on the south side of the ramp near its eastern end (Plans A, B). The building is small and rectangular in plan (Fig. 20),

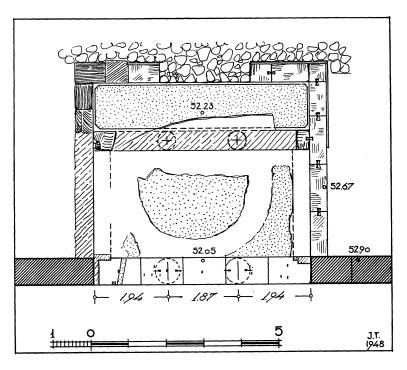


Fig. 20. The Fountain House. Actual State.

measuring 5.64 by 4.50 m. on the inside. It is divided into an anteroom and a narrow draw basin from which water was drawn over a parapet. The anteroom was entered from the ramp through two Ionic columns *in antis*. The water was apparently fed into the basin from a reservoir extending across the south and along part of the west side. The building thus belongs to a type of fountain house common in the Hel-

lenistic period and well exemplified by the two fountain houses in the gymnasium at Sicyon.<sup>2</sup>

Its plan is clear from the remains (Fig. 20; Plate 18 <sup>5</sup>), and a reconstruction of some of its details is possible from the blocks found in it and from the close parallel offered by the Sicyonian fountain houses. The east wall has been destroyed except for the foundation along the side of the basin, but its course is clear from the cutting made for it. The south and west walls, however, are preserved to a height of one course and, for a short stretch at the southwest corner, to a height of two courses, 0.94 m. The stylobate of the façade, which is formed by the lowest course of the ramp wall left in place for this purpose, bears traces of the settings for the two columns and the west anta. In the interior the line of the parapet is indicated by the two stubs projecting from the east and west walls. Their ends have been partially cut away, probably when the parapet was destroyed. The floor of both the basin and the antechamber is well preserved.

The construction of the fountain house involved dismantling the courses of the ramp wall <sup>3</sup> above the course marked by the sloping line which indicates its floor level (Plan D, Section B-B). This course was reused as the stylobate. Plain traces of this operation remain. On the stylobate are the pry-holes spaced for the length of the blocks used in the ramp wall (Fig. 20). A drain channel was cut through the present easternmost block of the stylobate and sealed over with cement to carry off the water spilled in the anteroom. The back of the westernmost block of the stylobate was cut out to bed the end of a bench which extended along the west wall of the anteroom. The end blocks (Plate 183) of the two courses of the ramp wall preserved to the west of the fountain house also show traces of this operation. The east end of the block in the first course above the stylobate was cut off on the line of the inner side of the west wall of the fountain house, thus breaking the regular isodomic pattern of the courses of the ramp wall (Plan D, Section B-B). On the end of the block of the second course a strip, 0.17 m. in width and 0.02 m. in depth, was cut out to hold the coating of cement and stucco which covered the west wall of the fountain house. The edge of this stuccoing corresponds to the edge of the cutting for the bench made in the stylobate block. The relation of the west wall of the fountain house to the stylobate also shows that the former was built later than the ramp. The west wall is set against the inner face of the courses of the ramp wall and is not bonded into them (Fig. 20). The ramp wall plainly extended east of the fountain house, as a cutting for it was traced 1.80 m. to the east. Its blocks, however, have been removed.

<sup>&</sup>lt;sup>2</sup> For a general study of Greek fountain houses see: B. Dunkley, "Greek Fountain-Buildings before 300 B.C.," B.S.A., XXXVI, 1935-36, pp. 142-204; further bibliography is collected by D. M. Robinson, Olynthus, XII, p. 95, note 1. Fountain "A" at Sicyon is published by A. Orlandos, "La Fontaine de Sicyone," A.J.A., XXXVIII, 1934, pp. 153-57; Fountain "B" is not fully published, but some photographs are reproduced in A.J.A., XXXIX, 1935, pp. 407-08; XLI, 1937, p. 336, fig. 2.

<sup>&</sup>lt;sup>3</sup> The excavator considered that the Fountain House was contemporary with the ramp (A.J.A., XXXVII, 1933, pp. 429-30). For the reasons given in the text this seems improbable.

For the reconstruction of the façade we have only the setting lines on the stylobate and a block which may come from the pediment. The setting lines (Fig. 20) which mark the axes of the columns indicate a central intercolumniation of 1.87 m. Between the westernmost setting line and the west end of the stylobate the space is 1.94 m. A similar interval may be assumed for the east end. At the west end the anta was placed against the end of the bench which projected from the wall by 0.48 m. Presumably the width of its base would be similar, which would make the interval between the center of the western column and the edge of the anta base ca. 1.46 m. The width of the shaft of the anta would presumably be similar to the cutting in the stylobate block at the end of the bench (Fig. 20), 0.33 m. This is also the width of the parapet stub projecting from the western wall on which the anta of the parapet would have rested. A similar arrangement is to be restored at the eastern side. The lower diameter of the column bases as indicated by the setting marks along their edges was 0.65 m. Thus, the central opening was 1.22 m. in width and the openings between the columns and the antae ca. 1.13 m.

No identifiable remains of the bases or of the shafts of the columns and antae have been found, but from the cuttings for the bases it is clear that they were Ionic. For each column base two dowel holes and pour channels were cut. A block which may come from the pediment of the fountain house was found in the building (Plate 18 <sup>2</sup>). The fragment is broken at both ends and on the back, but its face preserves traces of good, white stucco. Its dimensions indicate that the slope of the pediment was 1:5 and its height in the center was *ca.* 0.65 m., which is rather too small for the temple.

The parapet, as in the fountain houses at Sicyon, should apparently be restored on the model of the façade, with two columns in antis on the axes of the front columns and antae. The antae would have rested on the stubs which project from the side walls. The barrier which closed the space between them to form the front wall of the water basin was made by a double course of slabs, consisting of a backer which was heavily waterproofed on the side facing the basin, and a course with fine, white stucco which faced the anteroom. This arrangement is indicated by the eastern stub (Fig. 20). Although somewhat obscured by later hacking it seems to have been cut in the form of a T with the horizontal stroke against the basin. Its height was 0.62 m. and its length 0.82 m. The east wall of the fountain house was set in the eastern angle while the western angle held the facing slab of the barrier. Along the horizontal line of the T. a course, 0.27 m. in thickness, was set to form the backer of the parapet barrier. Two fragmentary facing slabs are preserved (Plate 192), measuring 0.62 m. in height and 0.175 m. in thickness. The face is covered with a fine, white stucco and finished at the top by a projecting band and a bevelling. The slabs would have carried a crowning course as indicated by a dowel hole preserved on the top of one piece. On the fragment illustrated a tongue is cut along one end, showing that it was inserted into the column shaft. No identifiable fragments of the columns and of the antae have been found. The columns would, of course, as in the fountain houses at Sicyon, have been smaller than their counterparts on the façade.

Although only part of the foundations of the east wall are in place, three blocks were found, which, by their thickness and the treatment of their exposed surfaces, seem to belong to the wall and to indicate that a doorway is to be restored on that side. Two of the blocks (a, b) were found in the fountain house and one (c) was built into a Roman wall south of the building. All these blocks (b is illustrated: Plate 18 ¹; Fig. 21) have a vertical groove, 0.11 m. in width and 0.023 m. in depth, cut in one end. One side is covered with a coat of cement of the same thickness and type as that preserved on the west wall of the fountain house. This side is presumably the inner face. The other side, which would have been exposed bears a few traces of cement. The surface of the end on each side of the groove and for a return of 0.157 m.

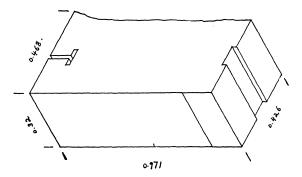


Fig. 21. The Fountain House. Door Block (b) from the East Wall.

on each side bears traces of a fine, white stucco. The blocks were apparently reused from some earlier structure as those found in the fountain house have cuttings for double T clamps, which are useless in their present position, and all have a V-shaped cutting on their exterior face which bears traces of the cement from their later use in the fountain house wall.

The vertical groove in the end of the blocks was presumably made to hold the wooden jamb of a door and the fine stucco on either side of it applied to make an ornamental surface on the jambs. Block (c), measuring 1.10 m. in length, was, to judge from the preservation of the stucco on its inner side, part of the north jamb of the door. Thus, the opening was placed 1.10 m. from the northeast corner as restored on the plan (Plan B). Block (b), 0.97 m. in length, indicates that the south jamb projected that distance beyond the parapet. The width of the opening, then, should be ca. 0.80 m. The thickness of all the blocks, (a), (b), and (c), is ca. 0.43 m. which is the same as that of the blocks preserved on the south and west walls.

The anteroom was paved with the usual type of waterproof flooring: on the levelled surface of the rock a bedding of pebbles was laid, over which a coating of cement, 0.075 m. in thickness, was spread. The surface was a smoothly finished impasto of small pebbles. The water spilled in the room was drained off through an opening in the northeast corner. A channel, cut through the top of the stylobate and sealed

over with cement, carried it to a cement drain which was traced to the northeast for 2.25 m., where it was destroyed by a Roman wall. The walls of the room were water-proofed with cement and covered with a fine, white stucco, best preserved on the west wall. The absence of this coat at the base of the wall (Plate 18 ³) indicates that a bench was originally placed there. Its height above the floor was 0.39 m. and its width, indicated by the absence of pavement along the edge of the west wall, was 0.48 m. The bench extended the length of the anteroom from the parapet to the anta. Presumably, the eastern side of the room would also have been furnished with small benches north and south of its doorway. The floor of the anteroom shows clear traces (Fig. 20) of having been cut through at some time to bed a semi-circular foundation, but the date of this operation and the nature of the structure are obscure.

The basin itself was heavily waterproofed. The cement floor was laid on a foundation of small poros blocks and was made twice as thick as the floor of the anteroom. It was of a similar type, but with a layer of cement below the pebbles as well as above. At the northeast corner of the basin an outlet was made by cutting a circular hole through the east parapet stub and lining it with cement. It is probable that this was plugged and the basin drained only for cleaning purposes since its water depth could be regulated by the depth of water in the reservoir. No trace remains of the inlets by which the water entered the basin, but they would probably have been finished by lion's head spouts set on the wall and centered between the openings of the façade as in the fountains at Sicyon. The capacity of the basin was ca. 4 cubic meters.

The water was apparently stored in a reservoir built around the south and west sides of the fountain house to which it would have been piped from some point to the south. Only scanty traces of the reservoir remain since the area to the south and west was built over by Roman walls. The exterior of both the south and west walls was covered by a heavy layer of cement, traces of which are preserved for 1.95 m. along the west wall from the south end. The floor of the reservoir was found projecting at the base of the walls for ca. 0.10 m. at the southeast and southwest corners, and for ca. 0.40 m. from the west wall. Its outer edges had been destroyed so that its original extension is unknown.

There is no specific evidence as to the date of the fountain house. It was plainly built after the ramp was constructed in the late fourth century B.C. The fountain houses at Sicyon, which it resembles closely in plan, are dated to the period after 302 B.C. A fountain house of somewhat similar plan is to be found in the Asklepieion at Troezen, built ca. 300 B.C.<sup>4</sup> Thus, the building apparently belongs to the third century. It was evidently not used in the Roman period of the sanctuary, for its reservoir was destroyed by the drain from the very heavy rubble wall which we have tentatively identified as part of the Gymnasium. Apparently, when the Roman building was constructed over the ramp, the fountain house, or what was standing after a century of neglect, was demolished to the required level and filled over. Thus, many

<sup>&</sup>lt;sup>4</sup> Welter, Troizen und Kalaureia, p. 30, pl. 17 c.

blocks were sealed over in the first century after Christ and preserved better than those from the buildings in use in the Roman period. Its east wall was completely dismantled in the construction of some Byzantine buildings at a much later date.

As indicated above (p. 51) it is probable that the fountain house was designed to take over the function of the lustral room in the abaton building. Its threshold and floor show very little sign of wear, so that it must have had a restricted use.

It is possible that the fountain replaced some earlier building of the same type south of the ramp. As we have noticed, some of its blocks were reused from a structure in which double T clamps were used. Also, the building of the fountain house involved cutting through a pipe line which was traced for *ca.* 10.00 m. to the southwest (Plan A). Its end was not discovered since the channel made for it continued into the unexcavated area to the south. The pipe line was constructed of terracotta tubes encased in cement like line A in the precinct.

### THE ENTRANCE COURT OF LERNA

The gate at the west end of the ramp opened into a rectangular court (Plans A, C) measuring 11.30 by 9.15 m. The court served as the entrance to Lerna through which the visitor would pass before turning into its colonnades. In its final form the court was divided into an eastern and western part by a propylon of the Ionic order which was built across it on the line of the west wall of the abaton building. The slope of the ramp is continued through the eastern part of the court, but beyond the stylobate of the propylon the floor is level and laid continuously with those of the Lerna colonnades. The south wall of the court was formed by the south wall of the ramp and its north side was partly enclosed by the south wall of the abaton building. The northwest corner of the court was open, allowing access to the south and east colonnades of Lerna. On the east side of the court, north of the gate, was the opening to the reservoir cut under the hill (I).

The walls of the court, like those of the ramp, were covered with blue stucco. There are well-preserved traces on the south and west sides and patches of its cement base are preserved on the south wall of the dining rooms and on the foundation of the parapet built across the opening into the reservoir. The court was paved in its eastern part, which would have been open to the sky, with a pebble pavement, and in the western part under the propylon roof with a smooth cement floor similar to that of the colonnades of Lerna.

In the northern part of the court were cut two shafts which opened into the drainage channels below (Plan A). The westernmost was situated by the southwest corner of the abaton building and carried off the drainage from its roof. This shaft is rectangular and cut with footholds on the sides. Its original top has been replaced by a later lining of small blocks which narrowed the size of the shaft. The top measures at present 0.95 by 0.50 m. To the east and directly in front of the parapet

to the reservoir was a circular shaft, opening into the main drain channel below. Since a considerable volume of water was designed to pass through this channel the shaft may have been made for drawing water from it when the reservoir supply was low as well as to permit entrance for cleaning.

After the laying out of the abaton building and of the ramp, but probably before they had been completed, it was decided to divide the court into two parts by the Ionic propylon.<sup>5</sup> The foundation for its stylobate was laid on the line of the foundation of the west wall of the abaton building, but is obviously an afterthought. The foundation of the stylobate is bedded at a higher level than that of the west wall and the junction of the two was made rather crudely, for the southern end of the first block of the abaton foundation was cut off irregularly. The first block of the propylon foundation was cut to fit the break and, since it was at a higher level, to overlap slightly. At the south end of the stylobate one of the blocks of the ramp wall, while already in position, was undercut to a depth of 0.19 m. to allow the insertion of the last block of the stylobate. Yet, the pavement of the east colonnade of Lerna is continuous along the west side of the stylobate of the propylon with no indication of a later adjustment. That is, it was laid in a single operation. Accordingly, since the stylobate of the propylon was not built with that of the abaton its conception seems to have been an afterthought to the original plan, put into effect before the pavements were laid. That, of course, would have been one of the final phases of the work.

The propylon is sufficiently well preserved to permit of a partial restoration (Plan A). Near the north end two very fragmentary blocks of the stylobate course are in place and at the south end are four continuous blocks. The width of the course is 0.65 m. and its height 0.19 m.; its length is 9.15 m. Against the south wall of the court the base and lowest drum, cut from one block, of an Ionic applied column are in place (Plate 16<sup>3</sup>). North of it the setting line for the next column is preserved on the stylobate. The applied column and the setting line to the north have an intercolumniation of 2.20 m. Accordingly, we may restore another applied column at the north end of the stylobate against the wall of the abaton building and place three columns between them (Plan C). The base in situ (Fig. 22) is of poros and preserves traces of white stucco on its surface. The edges of the base mouldings and of the flutes are worn and one flute has a patch. On its west side are cuttings for a gate hinge. The openings at the side, then, were closed. The base of the northern applied column (Plate 16 4) was found near by, built into one of the Roman cross-walls of the ramp, but is much more worn than the other. The height of the bases is 0.472 m. and the height of the applied column at least 4.00 m., for the mark of its shaft is visible against the rock scarp, here preserved to that height (Plate 16 3). If the column is restored according to the usual proportion of ten lower diameters, its height would have been ca. 4.50 m. This suggests the restoration of an entablature which

<sup>&</sup>lt;sup>5</sup> The excavator considered that the propylon was of the same date as the ramp (A.J.A., XXXVII, 1933, p. 430), but a study of its foundation has led to the following modification of that view.

would rise to the height of the ramp wall, here 5.40 m. above the stylobate (Plan D, Section B-B). Probably a screening wall carried the roof of the propylon as restored on the plan (Plan B).

The top of the scarp at the south and west side of the court (Plan A) has a cutting along the edge to bed the blocks of the ramp wall which increased its height to the desired level. Some traces of the arrangements on the rock to the south of the ramp are preserved here. A cement floor was constructed from the gate along the south side of the court. It is bedded on an earth filling 0.30 m. above the surface of

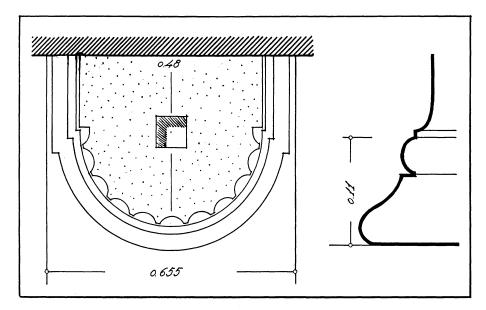


Fig. 22. Propylon. Base of Applied Ionic Column.

the rock. The northern edge of the floor is preserved at two points which indicate that it extended to the inner face of the ramp wall. Its south edge is not preserved, but there are traces of a gutter which may have marked its median point. Since the floor slopes to the west it apparently carried water to one of the reservoirs built along the south side of Lerna although all traces of a connection have been lost.

On the east side of the entrance court is the opening of the reservoir (I) which was made by cutting into the southwest corner of the hill (Plans A, C; Plate 19 5). The reservoir was made by digging an L-shaped cavern into the clay under the rock cap of the hill. The sides, floor, and roof were lined with a coat of cement, 0.04 m. in thickness. The long arm extending parallel to the ramp was 8.30 m. in length and 2.00 m. in width. The arm which returned to the north was 7.20 m. in length and 1.45 m. in width. The height varies, for the roof, formed by the underside of the rock cap, was not dressed smoothly. In the long arm it averages 2.00 m. in height and in the shorter arm, 1.80 m. The south side of the long arm is almost completely destroyed, so that the blocks which were used as underpinning in the north wall of the ramp are exposed (Plate 19 5). The shorter arm is well preserved except for a small

hole broken through its side into the channel, C, belonging to the drainage system of the lustral room above (p. 50). The connection was not original. The reservoir had only one source of supply—the shaft cut down into it at the southeast corner of the abaton building. This shaft, 0.80 m. in diameter, was bisected by the line of the reservoir wall. Thus, it may have been an earlier well reused for the reservoir, but it is probable that the bisection was deliberate, for a shaft into Reservoir V under the hill to the west of Lerna is similarly bisected. In the latter case its sides are cemented continuously with those of the reservoir, but in Reservoir I the connection has been destroyed. The circular opening cut through the roof near the front of the reservoir was apparently made to allow water to be drawn up into the room above.

The parapet and the façade of the reservoir have almost completely disappeared. but their original position may be made out from the surviving traces. The barrier which appears in the photograph (Plate 19<sup>5</sup>) is of late construction, made when the reservoir was no longer used for storing water. The inner line of the original parapet is marked by a raised edge of the flooring in the northwest corner of the reservoir. The line of the parapet foundation is indicated by a cutting in the clay and two blocks in place at the south end (Plan A). The foundations were 1.45 m. in thickness, which is much too thick for the parapet barrier itself. The barrier, of which the inner edge is marked by the raised flooring, was evidently set at the inner edge of the foundation and would have been ca. 0.50 m. in thickness. The remaining space on the foundation would have been occupied by a small platform before the parapet, protected by the roof of the reservoir (Plan C). The roof is cut higher for this purpose at the front, 2.80 m. as compared to 2.00 m. in the interior, and is formed in the shape of a barrel vault. No traces of the frame of the opening remain on the rock scarp, but it is probably to be restored on the model of the entrance into the spring house, with two flanking pillars (below, p. 98).

### THE ROMAN BUILDING OVER THE RAMP

In spite of the attractions which such a link between the precinct and Lerna as the ramp and the entrance court would seem to offer, they were radically altered, probably about the middle of the first century after Christ. Instead of repairing the original arrangement or converting the ramp into a cryptoporticus, both it and the court were made into a row of cellars for a building constructed above them. There are some indications that a vaulted construction, possibly for a cryptoporticus, was started, but it was changed at an early stage in favor of the cross-walls supporting a long rectangular structure. The ground floor of this structure seems to have been approximately at the level of the precinct. The reason for this remodelling is apparently to be sought in the extremely bad state of repair into which the ramp, the south side of Lerna and its colonnades must have fallen during the period of neglect after the destruction of Corinth in 146 B.C.

As the plan indicates (Plan A) a series of six light cross-walls were built across the ramp, one across the former gate and two across the court. The last three, although thicker, are evidently part of the series, for their length and construction are the same as those in the ramp. The north wall of the structure was erected on the north wall of the ramp from the level of the precinct and extended across the court to the entrance to the spring house of Lerna. Thus, the court was bisected from east to west across the former propylon. The only surviving parts of this extension are two large piers (Plate 17 <sup>2</sup>) in the court, built of reused blocks and rubble masonry. The traces of the east end of the extension may be seen, however, on the rock scarp south of the entrance to the reservoir (Plate 17 <sup>1</sup>). The piers seem designed to carry a vault rather than to be incorporated into a wall and are one of the indications discussed further below (p. 79) that such was the original scheme.

The cross-walls divided the ramp and the court into a row of eight rooms of approximately equal size and left a narrow blind alley on the west. It is not certain how far the rooms extended to the east, but it seems probable that the foundation of reused Greek material which extends across the ramp east of the fountain house (Plan A) carried the eastern end of the building. It is sufficiently heavy, for its preserved depth is 2.50 m. and its thickness 0.90 m. For its construction a cutting was made through the floor of the ramp. The south wall of the building would have been carried on the south wall of the ramp and has left some traces of rubble masonry and large blocks (Plan A). The length of the structure was, then, 52.00 m. and its width the same as that of the ramp, 4.70 m. The curving wall which was built across the ramp 6.50 m. to the west of the east end of the building does not belong to it as it is of lighter construction and of dry masonry unlike the other cross-walls (it is omitted in enumerating the walls).

The cross-walls were evidently built after the ramp had experienced a period of neglect. Although the second and third walls from the east were built at approximately the level of the ramp floor those farther down the slope to the west are bedded on ca. 0.30-0.60 m. of accumulated filling. Those across the court were founded on its floor, which offered a firm basis, but a projection 0.80 m. above the floor of the court (Plate 17  $^2$ ) evidently indicates their own floor level. It is the same as that of the walls in the ramp. Also, the cross-walls were built against the ramp walls when the condition of the latter was much the same as when excavated, since the masonry follows the contour of crevices weathered in the rock (Plate 19  $^4$ ).

Of the second and third walls from the east only the socles are preserved and none of the walls retains its original height, which was presumably that of the present top course on the north ramp wall. Those in the ramp are all of similar size and construction (Plate  $7^{-1}$ ): built of rubble masonry with small poros fragments among which were reused architectural scraps and pieces of pebble pavement from the precinct. They are set on a light socle,  $0.60 \, \text{m}$ . in thickness, above which the wall is narrowed to ca.  $0.40 \, \text{m}$ . On the south side of the ramp and the court the walls were founded on blocks pulled from the ramp wall (Plan A). These are found under the

south ends only of all but the second and third walls from the east. Under each of the walls in question one complete and one half-block is set in a cutting in the clay with their tops at the same level as the former floor of the ramp. Such an underpinning was not needed for the walls and it does not appear under all of them. Thus, it seems to represent an incomplete plan. Probably the original design was to span the ramp with arches, of which the south ends would rest on these blocks and the north ends on the north ramp wall and the piers built in the entrance court. For some reason this scheme was given up in favor of the cross-walls and the cellars thus formed.

The finish of their masonry is distinctive (Plate 19 <sup>4</sup>). The walls seem to have been built by setting up a plank form on the west side and building against it from the east with considerable care being shown to get the east face uniform. On that face the mortar is pointed with long curving trowel marks with the edge of the trowel heavily pressed in at the bottom of the stroke. The walls across the gate and the court (Plate 17 <sup>1–2</sup>) are built in the same technique but are thicker. Their thickness from the west is respectively, 0.60, 0.80, 0.90 m.

The rooms formed a row of cellars, but there was no intercommunication between them and no traces of stairways from the structure above. Entry must have been made from a trap in the floor. The general plan of the building which rose above them is indicated by the remains as a long narrow structure with its entrance from the precinct and its rear wall on the south wall of the ramp. Of this rear wall the remains are very scanty. Opposite to the second and third cross-walls from the east are two heavy blocks resting on the Greek masonry of the south wall of the ramp and between them a section of rubble masonry of the same type as that used in the cross-walls (Plate 16 6). It is possible that the heavy blocks were designed to carry the projected arches, but the arches were never made and the blocks were merely incorporated into the wall of the building. Of the north wall of the structure we seem to have the euthynteria and the toichobate resting on the Greek masonry of the north wall of the ramp. The blocks of the euthynteria lie at right angles to the original Greek courses (Plate 16 6) and their south ends are not stuccoed. The south ends of the blocks are smoothly finished and set flush with the ramp wall below them so that they were apparently designed to be visible in the cellar rooms. The north ends are irregular (Plate 14 1) and were not exposed to view. As mentioned previously (p. 62) this course is set 0.10 m. above the bases of the former colonnade along the south side of the precinct. On the tops of the blocks of the euthynteria there is a drafting line, 0.10 m. from their north edge, which would serve as a guide for the toichobate. Six of its blocks are preserved in place near the east end of the euthynteria (Plate 14 1). Their south faces are roughly dressed, but the north sides were designed to be visible. The height of the course is only 0.25 m. The tops of the blocks have pry-holes for the blocks of the first regular wall course. Probably a step was laid in place along the south side of the precinct over the bases of the former colonnade—to which their preservation is owed.

It is not clear to what extent the construction of this building affected the abaton building. Possibly its south wing was demolished although that need not have been

done. In any case, Reservoir I, below the abaton, went out of use, for the new course on the ramp wall covered the opening of the shaft from which its water supply came. The corresponding shaft at the north end of the abaton may have gone out of use at the same time. The communication between the precinct and Lerna was cut off, except for the stair in the north wing. It will be remembered that the passage of Pausanias describing the area does not couple the Asklepieion and Lerna as closely as one might expect.

The interior arrangements of the building are completely unknown. The separate cellars suggest that the first floor was also divided into a row of rooms corresponding in size to the cellars below, ca. 4.00 by 4.70 m. Such an arrangement might be identified as a row of shops, but it is unlikely that shops would have been made opening from the precinct. It seems rather more likely that the building was designed for the accommodation of visitors to the precinct, by way of compensation for the development of Lerna as an independent resort.

It is scarcely possible to suggest a reconstruction of the building's superstructure. Possibly a group (Plate 21 ¹) of sima pieces of the early Roman period found near the ramp should be ascribed to it (FS 448-49, 451-54, 792-93, 795). With them because of their similar style and date may be associated two antefixes (FA 390-91). Another group (Plate 21 ²) of sima fragments of the second century after Christ is made up of pieces from a large (FS 804-5, 807, 815-16) and a small (FS 463, 806, 808, 810-12, 814) sima of identical style. It seems probable that the larger set may come from a renovation of the roof of the Roman building since it was found in the late filling over the ramp. One piece of the smaller set, however, was found north of the temple, so that it may be associated with that building.

For the dating of this structure we have the filling which accumulated in the ramp and in the court during the period of neglect before the partition walls were put in. As mentioned above, the westernmost walls in the ramp were set in the filling and the walls across the court indicated a floor at the same level. Thus, the objects from it should give a date *post quem* for the building. Most important is the evidence of the coins: eleven legible coins are recorded from the excavation of 1931-32 as found below the floor level. Six of these are Sicyonian, three dating 400-300 B.C. and three, 251-146 B.C. Four are Corinthian of which two are the type with Pegasos and the trident, dated 400-146 B.C.; one is of the second century B.C. and one is a duovir coin of the reign of Caligula. The eleventh is Spartan, issued after 192 B.C.

The lamps discovered belong to the same period (Plate 19<sup>1</sup>). Three were found in the westernmost room below the floor level: CL 2585, of Type VIII, which is to be dated in the third century B.C.; <sup>8</sup> CL 2580, of Type X, dated in the second half of the third and second century B.C.; <sup>9</sup> CL 2593, of Type XI, which is roughly con-

<sup>&</sup>lt;sup>6</sup> The only clue to the date of its filling is a fragmentary Arretine plate (C-31-381). It has a clover-leaf stamp in the center with traces of letters, too indistinct to be made out.

<sup>&</sup>lt;sup>7</sup> Pausanias, II, 4, 5.

<sup>&</sup>lt;sup>8</sup> Broneer, Corinth, IV, ii, p. 47.

<sup>&</sup>lt;sup>9</sup> *Ibid.*, p. 51.

temporary with Type X.<sup>10</sup> From the adjoining room came a lamp of Type XVII, CL 2615, the lamps of which type were in use, in Corinth at least, in the early Roman period after the refounding.<sup>11</sup> A stamped amphora handle (C-31-383; Fig. 23, a) was also found in the filling. It is Knidian, similar to a stamped handle found in the Athenian Agora and dated by Miss Grace in the second century B.C.<sup>12</sup> Thus, the lamps and the coins would seem to indicate that the filling accumulated until the early Claudian period before the middle of the first century after Christ, but that most of it was debris from the Hellenistic sanctuary.

Some confirmation of this was obtained by investigation in 1947. In the filling against the second cross-wall from the east, the handle of a Type XXI lamp (CL 3853; Plate 19 ¹) of the first variety was found. The first variety of Type XXI belongs to the transitional period between Hellenistic and Roman times.¹³ The remainder of the filling below the floor level of the fourth room from the west was excavated and in it were found two fragmentary moulds for Type XIX lamps (MF 9015-16; Plate 19 ¹) and the nozzles of a Type XVII and of a Type XIX lamp. Lamps of Type XIX were in general use in Corinth in the early Roman period after the refounding.¹⁴ The pottery in this filling was of late Hellenistic and early Roman types. It also contained many Greek tile fragments. No material of later date than that mentioned above was found.

If the upper course of the north wall of the ramp is correctly connected with this building, the filling in the upper part of the shaft, S, is of some importance. As already mentioned (p. 62) it contained some sigillata ware, among which were two stamped pieces (Fig. 16). Unfortunately their stamps were not particularly helpful, but two fragments of Arretine ware, found in the ramp, afford more information. One (C-31-382) was found at the east end at the level of the sloping line indicating the original level of the floor. It is reported as being in such a position that it could not have fallen from above. The fragment has a stamp of Sextus Annius (Fig. 23, a) whose activity falls in the Augustan period.<sup>15</sup> The other stamped piece (C-47-104) was found in early Roman filling on the floor of the cutting made for the south wall of the ramp, east of the fountain house. It had a stamp of L. Gellius (Fig. 23, a) whose activity is dated to the Tiberio-Claudian period.<sup>16</sup>

Thus, the greater part of the filling below the floor levels of the rooms was Hellenistic, of the late third and early second centuries B.C., but it contained a coin of

<sup>&</sup>lt;sup>10</sup> *Ibid.*, p. 52.

<sup>&</sup>lt;sup>11</sup> *Ibid.*, pp. 59-61.

<sup>&</sup>lt;sup>12</sup> Hesperia, III, 1934, p. 251, no. 132, and p. 241; in the preliminary publication this handle was erroneously published as having been found in Votive Deposit V and described as Rhodian (A.J.A., XXXVII, 1933, p. 437).

<sup>&</sup>lt;sup>13</sup> Broneer, op. cit., p. 74.

<sup>&</sup>lt;sup>14</sup> *Ibid.*, p. 70.

<sup>&</sup>lt;sup>15</sup> J. H. Iliffe, Sigillata Wares in the Near East, p. 44. On the bottom of the fragment is a graffito: AN.

<sup>&</sup>lt;sup>16</sup> Iliffe, op. cit., p. 32; Oxé, Ath. Mitt., LII, 1927, p. 222, no. 11; Oxé dates the activity of the potter to the Tiberio-Claudian period.

Caligula and several Arretine fragments of the Augustan and Claudian periods, as well as types of lamps in use in Corinth after its refounding. Apparently, then, the building over the ramp is to be dated in the second quarter of the first century after Christ.

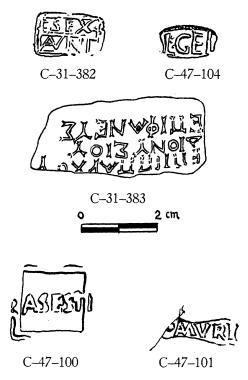


Fig. 23. a) Stamped Amphora Handle and Stamps on Sigillata Ware from Filling over the Ramp.

b) Stamps on Sigillata Ware from Filling over the Foundation of the East Stylobate.

The technique of the wall construction also finds a parallel elsewhere in Corinch. In the Northwest Shops in the Agora the "cross-walls" in the northwest part of the building are finished with the same distinctive type of pointing, and are of the same type of rubble construction with curving courses. They are dated about the end of the first century after Christ.

### THE CART ROAD

A clue to the history of the ramp in the interval between the destruction of the city in 146 B.C. and the refounding in 44 B.C. is furnished by the well-marked wheel

<sup>&</sup>lt;sup>17</sup> R. Stillwell, *Corinth*, I, ii, pp. 112-14. The cross-walls in the ramp in the Asklepieion had been given an Early Christian date (*A.J.A.*, XXXVII, 1933, p. 430).

ruts (Plan A; Plate 193) which were traced from the sixth cross-wall from the east to the southeast corner of Lerna Square. They appear on the top of the foundation blocks of the stylobate of the south colonnade of Lerna as two grooves worn in the blocks to a depth of ca. 0.10 m. with an axial width of ca. 1.50 m. From this point, the ruts curve to the southeast across the entrance court to the former gate of the ramp, passing under the piers of the north wall of the Roman building. The side of one of the blocks of the stylobate of the propylon is worn off in a curve by the passage of traffic along the north rut. At the gate, two grooves, ca. 0.15 m. in depth, are worn into the tops of its foundation blocks. The pebble base of the paving of the entrance court appears in the north rut, crushed down by the weight of the traffic. In the center of the road and the southern rut the metal is very hard—consisting of packed clay, stones, a few tiles and pottery fragments and some small blocks of poros. In the ramp, the ruts kept well to the north side (Plate 18 4), the northernmost being 0.60-1.00 m. from the north wall. Their metal is hard-packed clay as in the entrance court, and they are worn through the original floor of the ramp indicated by the sloping line. Their existence in the ramp was revealed by the removal of the filling in the fourth room from the west, mentioned above, and by trenches dug on the line of the cross-walls.18 These walls and the northern wall of the Roman building bisecting the entrance court are built across the ruts thus putting the road out of use. Since the ruts are worn through the foundations of the gate, the stylobate of the propylon, and the foundations of the stylobate of the colonnade around Lerna Square, the period of use of the ramp as a cart road falls between the date of their destruction and the erection of the Roman building.

The only other feature which it seems possible to associate with this cart road is a small water tank cut through the floor of the ramp near the gate (Plan A). It is rectangular, measuring 1.80 by 1.35 m. and its preserved depth is 0.50 m. The sides were lined with small stones and covered with a coating of cement. A gutter of terracotta tiles, preserved for a length of 1.70 m., led into it from the east. This line was cut by the cross-wall to the east of the tank and no traces of it were found farther to the east. Thus, the tank was put out of use when the Roman building was erected. Its flimsy construction does not seem to accord with the possibility that it may have been a feature of the original plan of the ramp. Probably it was constructed to gather some of the drainage down the road when that was used for cartage and then filled in when the cellars were constructed. Its top was apparently below their floor level.

It seems reasonable to suggest that the propylon and the colonnade of Lerna were destroyed in part in 146 B.c. at the time of the sack of the city by Mummius. The remaining inhabitants of the area cleared the ramp sufficiently to permit traffic and then proceeded to drive down it and across the square, carrying off blocks for their own use. The ruts point to the northwest corner of the square, but its pavement

<sup>&</sup>lt;sup>18</sup> Traces of the ruts were found also at the third, fourth, and fifth cross-walls from the east, but are not indicated on the plan.

bears no trace of them except for breaks at the edge of the gutter on the southeast. Apparently a filling accumulated over the square, as one might expect, when the sanctuary was abandoned. At the northwest corner the earlier levels had been cut out by the graves of the Early Christian cemetery so that no traces of the road's exit were discovered. A ledge of rock here, however, is cut through on a line with the southern wheel rut. Accordingly, the road passed down into the plain from the northwest corner of the square. The deeply worn ruts show that it was in use for a considerable period of time—presumably for almost the whole century after the destruction of the city. It is probable that, after the refounding, traffic was stopped and the sanctuary received a limited amount of repair work, as evidenced by that on the temple, until it was thoroughly cleaned and remodelled in the second quarter of the first century after Christ. In this interval the filling accumulated over the ramp up to the floor level of the new Roman building. The filling was largely of Hellenistic date—consisting of the debris from the sanctuary, but with a few Roman objects in it from the early use of the sanctuary after the refounding.

Some confirmation of this reconstruction is furnished by the filling found in the road metal in the entrance court. In it were two coins and a stamped amphora handle (Plate 19 ¹; C-47-102). One coin is Sicyonian, dated 250-146 B.C., and the other is a coin of Antigonos Gonatas. The amphora stamp is almost illegible, but it appears to be of late Hellenistic date. The pottery, of which only a few sherds were found, was of the same type as that in the accumulation over the ramp. As will be discussed below (p. 90), there is further evidence for the destruction of the colonnades of Lerna in 146 B.C.

<sup>19</sup> The stamp is very worn and the letters difficult to read. Possibly:

ЁЙ .... ΣТ Ё. АТ ..... АП.....

Knidian (?).

## CHAPTER IV

### **LERNA**

THE CHIEF feature of the resort of Lerna was a peristyle court in which the users of the fountain might lounge and pass their time. At the rear of the east colonnade were the dining rooms of the abaton building; on the south side a spring house and the storage reservoirs. Behind the north colonnade was the parapet walk of the city wall, while on the west side the colonnade was built against the rock scarp. As mentioned above (p. 25), the general arrangement is similar to that of the peristyle court in the Asklepieion at Troezen, but with the difference that Lerna provided fountain facilities. Its arrangement as a fountain finds a close parallel in the better known Peirene at Corinth.

## THE SQUARE

The central part of Lerna was occupied by an open, paved square (Plans A; C; Plates 7 <sup>2</sup>; 20 <sup>1</sup>), measuring 18.50 m. from east to west by 15.80 m. from north to south. Around the edge was a wide, shallow gutter, 1.16 m. in width and 0.12 m. in depth at the center (Plate 22 <sup>1</sup>) to which it sloped in a curve from the edges. The paved area drained into a round hole in the center from which a side channel led to a large drain under the east gutter (Plan E). The gutter itself was designed to collect the water from the roofs of the portico around the square and discharge it into rectangular shafts in the southeast and northeast corners, which opened into the main channel under the east gutter. The opening in the southeast corner was crudely rebuilt at a late date, for its shaft is lined with small chunks of poros in contrast to the regular masonry of the shaft in the northeast corner.

The central square was completely paved. Around its edge a band of pebble paving (Plate 20 1), 0.12 m. in thickness, was set. It was built in the usual fashion of alternate layers of cement and pebbles, but the finish of the top layer of pebbles was adjusted to diagonal lines drawn from the corners of the square (Plate 22 3). These lines were marked out by a single line of pebbles laid on edge. The other pebbles of the surface were laid carefully in rows up to the marking lines. The effect was to give each side of the square an individual wedge of paving projecting from its edge (Plan A). All the pebbles of the surface are of uniform size and appearance—small, waterworn stones, white or grey in color. Their tops show considerable flattening from

<sup>&</sup>lt;sup>1</sup> Welter, Troizen und Kalaureia, pp. 31 ff.; pls. 11, 14.

<sup>&</sup>lt;sup>2</sup> R. B. Richardson, A.J.A., IV, 1900, pp. 204-39; H. N. Fowler, Art and Archaeology, XIV, 1922, pp. 200-06.

wear. In the central part of the square this surface of small pebbles is omitted, but the appearance and thickness of the cement bedding is similar to that of the band around the edge. Thus, the central area seems to have been laid at the same time as the outer band, but its surface left smooth to permit of better drainage. The original top of the central opening has been destroyed, but presumably it was flush with the paving and fitted with a grating or a plug which could have been inserted in dry weather.

The band around the edge shows later repairs in several places. Midway across the north side a section ca. 1.00 m. square was repaired with larger pebbles, and in the northeast corner a layer of cement was spread over the pebbles of the surface to hold them in place. Aside from these small repairs the pavement seems to have survived throughout antiquity until its surface began to disintegrate after the destruction of the sanctuary and of Lerna in the fourth century after Christ. Then, several graves of the Early Christian cemetery were cut through it and others used it as a floor (Plan A).

The gutter was evidently laid after the square was paved and the stylobate of the colonnade in place since its cement shows clearly marked joints at both edges. It is of the same type as that used for the central part of the square, but its surface is formed of very small pebbles.

### THE COLONNADES

Around the square a continuous colonnade was built. The foundations of its stylobate are well preserved on the north and east sides and sufficiently so on the south and west to allow of its restoration. The foundation on the north (Plate 20 <sup>2</sup>; Plan A) was made very deep and heavy since the original level of the hollow was here lower and had to be raised by filling. Thus, the foundation served also as a retaining wall for the filling under the square. It is built of poros blocks, *ca.* 1.10 m. in length, 0.59 m. in width and 0.42-0.46 m. in height, laid in double courses of alternating headers and stretchers. A pit was dug to expose both sides of the foundation about five meters from its west end, where it was found to be seven courses in depth (Plan D, Section D-D); towards the east where the original ground level rose in a little ridge the foundation was only two courses in depth.

This heavy foundation made a return to the south to form the foundation of the east stylobate (Plate 22 1). At the north and south ends its top course only is missing, but the blocks of the central section were found to have been removed to the depth of the fourth course. In the southeast corner, however, one block of the top course of the foundation and two fragmentary blocks of the stylobate are in place. Although the original slope of the east side did not necessitate a deep foundation for the complete length of the stylobate, it was made so to support the eastern wall of the drain channel below the east gutter of the square (Plan D, Section A-A). The blocks and coursing of the eastern foundation are similar to those on the northern side.

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Along the south side of the square where the ground level is high and no drain channel was built below the gutter, the foundation was made only one course in depth, but of large blocks (Plan D, Section D-D). The only two blocks of the foundation left in place are those at the southeast corner across the tops of which are the wheel ruts mentioned above (p. 83). The blocks to the west have been plundered, but the filling in their place, between the edge of the paving of the south colonnade and the gutter of the square, was removed for a length of 6.00 m. at the west end (Plate 22 <sup>2</sup>). It was found that a ledge of natural rock existing in this area had been dressed level to bed the foundation course.

Along the west side the foundations were investigated for a length of 10.00 m. from the southwest corner (Plate 22 <sup>4</sup>). The ledge of natural rock continued for 6.00 m. to the north and was dressed level to bed the foundation, one course in depth as on the south. Beyond this point to the north, where the original level sloped downwards, a heavy foundation similar to that on the north and east sides was constructed.

The original construction employed for the top course of the foundation and for the stylobate is shown by the blocks preserved in the southeast corner (Plate 19 ³; Plan A). The two foundation blocks which form the corner make a diagonal joint, the line of which was carried out by the wedge of paving in the square as previously described. This was the case of the stylobate course also. The east side of the partially preserved blocks of this course is set 0.04 m. in from the edge of the foundation. Assuming a similar set-back from the west edge their original thickness may be restored as 0.79 m. The height of 0.23 m. is preserved. The length of the corner block, the edge of which is worn by the wheel rut, may be restored as 1.13 m. Thus 19 blocks of approximately the same length fit into the long side of the square and 17 into the short side. The dimensions of the stylobate course, measuring on the central point where the corner columns would have been set, was 21.61 by 18.91 m.

The original depth of the south colonnade is preserved, for the rock scarp, which preserves traces of a coat of cement and stucco, evidently served as its rear wall. The scarp, however, was not cut in a straight line parallel to the stylobate; consequently, the colonnade was 6.00 m. in depth at the east end as compared with 5.40 m. at the west end (Plan C). It is possible that, as the work of cutting progressed along the south side, it was found that the rock cap did not extend so far to the south at the west end, so that more of it was left to provide a roof for the opening into the reservoirs; or the discrepancy may be the result of miscalculation in the initial stages of laving out the arrangements in Lerna.

The rear wall of the east colonnade was formed by the abaton building so that its depth is preserved, 5.06 m. from the outer edge of the stylobate. Thus, it is rather shallower than the south colonnade. Possibly the intention was to leave sufficient space to hold the three full couch lengths of the dining rooms. The south colonnade would need as much depth as possible since it gave access to the parapets of the reservoirs and probably received more use than the others.

The north colonnade was, in a sense, a double colonnade divided into two parts

by a median wall (Plan A; Plate 202). Its southern part was used as a colonnade, while the northern part, as described below (p. 95), would have been utilized as a parapet walk for the city wall. The wall itself would have retained the filling in the hollow. The median wall was traced from its junction with the west wall of the abaton building for 21.00 m. to the west. A cutting in the natural clay indicates that it extended to the rear wall of the west colonnade, but its blocks have been removed in the western part. In the eastern section there are at present 3 two courses of the foundation, 0.95 m. in depth, in place. The foundation is substantial, but lighter than that of the stylobate, for it consists of only a single course, measuring 0.62 m. in thickness. The wall, however, was packed on the north side by a filling of clay and broken pieces of rock with lavers of poros chips from the final dressing of its blocks as they were laid in place. As described below in connection with the city wall, this median wall is tied to the city wall by a series of tie-walls bonded into each (pp. 92-93). The position of the median wall and of the foundation of the stylobate indicate that the north colonnade is to be restored with the same depth as the east colonnade (Plans A, C).

The west colonnade is very badly damaged, for the rock scarp at its rear has been tilted forward, apparently as the result of an earthquake, and all the blocks from its rear wall have been plundered except two near the north end close to its junction with the median wall of the north colonnade (Plate 22 <sup>5</sup>). These, however, and the line of the cutting made for the foundation in the clay, indicate that its depth was the same as that of the east and north colonnades. On the top of the scarp along the southern part of the colonnade a ledge is cut, evidently to bed a wall which raised the height of the scarp to the same level as on the south for the uniform setting of the roof. Since the original height of the rock on the west side above the floor level of the colonnade was only *ca*. 2.80 m. some such construction was necessary.

There is no trace of a second storey on the rock above the south and west sides. As already mentioned (p. 76), cement floors were laid on the surface of the rock to the south for the purpose of drainage into the reservoirs. Thus, only on the east where the abaton building linked the precinct and Lerna a second storey rose above the colonnades.

The paving of the colonnades is well preserved on the east, south, and west sides, but has disappeared on the north. It was similar in type to that used in the fountain house and dining rooms: a layer of pebbles covered with a heavy layer of cement, finished with a smooth impasto surface. The floor seems to have survived the period of neglect after 146 B.C. very well for there are few signs of repairs visible. Probably it was covered over early so that when the resort was restored in the early Roman period only cleaning and minor repairs were necessary.

The stylobate of the peristyle measured 21.61 m. on the long side and 18.91 m.

<sup>&</sup>lt;sup>3</sup> Four courses were *in situ* at the time of the excavation, but, during the recent war, the two uppermost were removed by farmers living in the vicinity. The photograph (Plate 20 2) shows the appearance of the wall when first excavated.

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on the short side. Assuming that the intercolumniation was even on both sides, the unit should be indicated by the difference between the two—2.70 m. That would allow the restoration of 9 columns on the long sides and 8 on the short sides (Plan C). It is possible that the intercolumniation was half that unit, 1.35 m. If so, 17 columns are to be restored on the long sides and 15 on the short sides. The latter intercolumniation, however, would make extremely small openings and let little light into the dining rooms and the corridor before the reservoirs. Also, the heavy foundations and the thick stylobate were evidently designed to support large columns. Their use would involve a roof of considerable height, but on the east it would be supported by the west wall of the abaton building, on the north by the median wall of the north colonnade, while on the west and south the edge of the rock scarp shows cuttings indicating that its level was raised by a masonry construction, presumably for this purpose.

Unfortunately, no fragments of the columns or of the entablature can be identified, so that the restoration is conjectural (Plan D, Sections A-A, D-D). A fragmentary eaves tile (FT 168; Plate 22 6) found in the drain below the east gutter may be from the roof of the colonnade. It is about two-thirds preserved, measuring 0.455 m. in length, which would indicate an original total length of *ca.* 0.60 m. Its soffit is decorated with an anthemium and on its lower side is a *graffito*, MA≤IΘEO≤. Its date, to judge from the style, would be the latter part of the fourth century B.C.

In addition to the architectural connection of the square and colonnades with the abaton building, the ramp and the entrance court, which would indicate that they were planned and built as a unit, there is some specific evidence of the date of construction. In the investigation of the foundation of the south and west colonnades, a manhole leading into a collapsed drain channel was found in the southwest corner of the square. The opening was directly under the gutter at the corner (Plate 22 3). It was cut through the rock ledge which held the foundations at this point, and, since it was covered by the gutter, was plainly earlier than the construction of the central square and its colonnades. The manhole was rectangular with rounded corners, measuring 1.02 by 0.63 m. It was cut through the shelf of rock and below it into the clay for a depth of 2.65 m. From the bottom of the manhole a channel, 1.00 m. in height and 0.56 m. in width, was dug to the northeast, almost on the diagonal line of the pavement of the later square. The channel was cut through clay for a distance of 2.65 m. At this point the upper part of its sides and roof were formed by a fill of earth, stones and cut blocks lying at various angles and not in situ. Obviously the channel had been destroyed and filled in or had collapsed. This filling was found extending for a distance of 2.25 m., at which point a cement floor was found widening out beyond the sides of the former channel. Apparently this was the floor of a cistern into which the channel led. The blocks noticed, which seemed to be orthostates, would have been from its sides or from some earlier structure above ground level. When the later square was constructed the cistern and the roof of the channel were destroyed and filled in. This hypothesis is supported by the fact that almost all the sherds from the channel were found in the filling on its floor as high as the preserved portion of the sides; they would represent the accumulation of its final period of use.

Thus, the objects from this filling should afford evidence for the construction of the square and of the colonnades. The pottery (Plate 21 ³) was uniform throughout: mostly small black-glazed pieces of local manufacture and fourth century date. No pieces with red-figured decoration were found and none of Hellenistic date. The material is similar in type to that from the Votive Deposits (pp. 129-138), but contained no fragments of votive limbs. One almost whole lamp was found: CL 3829, of Type V, late fifth century in date; two fragments of Type VII lamps of local manufacture with very poor glaze, which would probably date from the latter part of the fourth century. Accordingly, the date of the material agrees with that of the Votive Deposits made at the time of the construction of the precinct and of the abaton building.

Some additional evidence of the date of construction was secured from the packing north of the median wall of the north colonnade. A section of it in the angle between the median wall and the second tie-wall west of the drain was excavated. The pottery was mostly of fourth-century types; a few fragments of late Type IV lamps were in the filling and a small fragment of a votive terracotta limb. Accordingly, the date of construction of the median and tie-wall is contemporary with that of the colonnade and square.

The colonnades would have remained in use and good repair until the sack of the city in 146 B.C. The presence of the wheel ruts across the foundation block in the southeast corner shows, however, that the colonnade here, and presumably in the northwest corner was dismantled. It is probable that part of the city wall was also taken down, as discussed below (p. 96).

When the sanctuary and Lerna were put in order again in the early Roman period, it seems certain that the colonnades were not rebuilt on the east, south, and west sides. There are no indications of repairs to the blocks of the foundation and stylobate in the southeast corner which were worn by the cart ruts. It is perhaps possible that they were filled in by mortar which has since disappeared, but the evidence of the filling which replaced the top course of the foundation of the east stylobate precludes any possibility of rebuilding. Over the southern section of the foundation, where only one course is missing, a considerable amount of pottery and lamp fragments was found. Among them were some pieces of good Arretine ware, including two stamped pieces: a plate fragment with a stamp of C. Amurius 4 (C-47-101; Fig. 23, b), and a bowl fragment stamped A. Sesti 5 (C-47-100; Fig. 23 b). Both were potters of the Augustan period. The other fragments of fine ware were of late Hellenistic and early first century types. One fragment of a Type XVII lamp was found and seven fragments of Type XIX lamps (CL 3853, 3854, 3855) as well as part of the mould (MF 9014) of a Type XIX lamp (Plate 21 4). No lamp fragments of later types were in the filling. Thus, it is of the same period as the accumu-

<sup>&</sup>lt;sup>4</sup> J. H. Iliffe, Sigillata Wares in the Near East, p. 24; H. Comfort, A.J.A., XXXIII, 1929, p. 490, nos. 4-6. On the lower side is a graffito: PI.

<sup>&</sup>lt;sup>5</sup> Iliffe, op. cit., p. 43; Oxé, Ath. Mitt., LII, 1927, p. 220, no. 1. Oxé dates the activity of this potter to the last two decades of the first century B.C.

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lation found over the ramp; the cleaning up of Lerna is evidently to be connected with the construction of the Roman building over the ramp. In the central section of the foundation where the blocks had been removed to the fourth course, the filling was loose, black earth with a large amount of very late Roman pottery and some lamps of Type XXVIII of the fourth century after Christ. Apparently this section of the foundation was removed shortly after the destruction of the area.

Over the remaining foundations of the stylobate on the north, west, and south, the filling had been disturbed by the Early Christian graves and contained a mixture of pottery and lamps of the early Roman period and the fourth century after Christ. In fact, the space left by the removal of the top course of the west foundation served almost as a grave trench, in which tile and jar burials were made (Plan A).

If the colonnades were not rebuilt on the east and south sides, which seems quite certain, it is highly unlikely that they were rebuilt on the west. The case of the north colonnade, however, is rather different. In the Greek period it was, in a sense, a double colonnade, although its northern part was used as a parapet walk for the city wall. It would have been easy to construct a true double colonnade there in the Roman period, which would utilize the exterior facing of the city wall as its rear wall. Thus, in it we may see the columns of Lerna of which Pausanias writes. It is apparent that the square was open and used in the Roman period, for the destruction fill of the late fourth century extended down to the paving, and graves of the Early Christian cemetery were cut through it and through the floor of the colonnades. This would indicate that the area remained open and was cleaned until the final destruction. There are some fragments of marble revetments and of other marble architectural pieces of Roman date, but they are too insignificant to allow a detailed restoration of the resort.

Probably, the ramp from the east along the top of the city wall was maintained throughout the Roman period so that Lerna was accessible from that direction, and from the precinct by the stair in the north wing of the abaton building. We have also restored a small doorway in the northwest corner of the west colonnade of the square. Entrance from this direction would have been desirable at all periods (Plan C).

## THE CITY WALL

The northern side of Lerna was bounded by the fortification wall of the city (Plans A; C; D, Section D-D). The wall formed an integral part of the construction and was built at the same time. Its identification as the city wall seems certain, not only from its position at the base of the plateau which formed a natural line of defence of which advantage should have been taken, but also from its type of construction and its extension to the east and west of Lerna hollow.

The complete stretch of the wall across Lerna and at the base of the Asklepieion hill was not uncovered, but only its junction with the main drain channel, with the

<sup>&</sup>lt;sup>6</sup> Pausanias, II, 4, 5.

rear wall of the west colonnade and two intermediate points as indicated on Plan A. Its course west of Lerna is indicated by a cutting into the natural clay. To the east of the drain channel another short section of the wall was discovered. There, and in the section across Lerna, tie-walls were preserved in part and some of the mud brick core.

Across the opening of the hollow the lower courses of the wall and its core of mud brick are well preserved since a filling washed over them from above soon after the plundering of the blocks from the upper courses of the wall. To bed the foundations a shelf was cut in the natural clay which slopes off sharply to the north. On the shelf a course of headers was laid and the foundation built up in alternating double

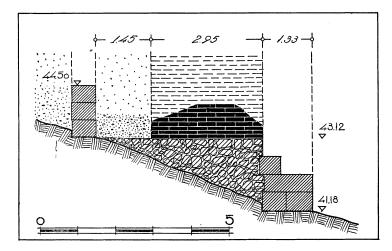


Fig. 24. City Wall. Section.

courses of headers and stretchers (Fig. 24). At the point of junction with the drain channel many blocks are in place and several courses are preserved at points east and west of the channel. The masonry is best shown (Plate 23 1) at a point ca. 10.00 m. west of the drain. The blocks are of poros, roughly finished and measuring ca. 1.10 by 0.65 by 0.47 m. with variations of ca. 0.10 m. in their length and thickness. Thus, provision was made for a heavy wall of ca. 1.33 m. in thickness such as was necessary to contain the filling of the hollow.

The courses of this facing were presumably carried up to the level of the floor of the north colonnade of Lerna, for the blocks preserved on the sides of the drain channel at its north end (Plate 23 <sup>2</sup>) are set in steps and their ends have anathyrosis to bond with the courses of the facing to east and west. Thus, the mud brick within this facing did not form a wall in itself, but was sheathed by double courses of masonry on its exterior.

The wall was further strengthened by tie-walls joining this exterior facing to the median wall of the north colonnade of Lerna. In the section west of the drain, the first of these is made by the prolongation of the west wall of the abaton building, LERNA 93

which was carried through to the outer facing. It is preserved for only 2.35 m. beyond the median wall (Plan A), but the cutting in the clay north of the blocks in place indicates that it was originally carried to the outer wall, like the other tie-walls to the west. These were built at intervals of ca. 4.50 m., to judge from the spacing of the two which were investigated (Plan A). The second from the drain channel was uncovered for its full length. A foundation course of blocks, measuring 1.20 m. in length and 0.50 m. in height, was laid with the long dimension east-west and with the northernmost block resting on the third course of the exterior facing and the southernmost bonded into the median wall of the north colonnade. On this foundation a course of blocks, 0.62 m. in thickness and 0.46 m. in height was laid (Plate 23 ³), thus narrowing the wall. Presumably these walls were not carried up to the floor level of the colonnade, but served only as tie-walls.

The total thickness of the city wall, including the median wall of the colonnade, which serves as its inner facing, and the packing between both faces was 6.38 m. The space between the faces was packed very strongly to provide a core such as was needed to resist the siege machinery developed in the Hellenistic period. This core was of an unusual nature, possibly because of the problems involved in building the city wall and the structures of Lerna as a unit. As shown in the section (Fig. 24), the slope of the natural clay, which falls away sharply to the north, was levelled up to the base of the inner wall with a filling of broken poros pieces and clay packed tightly together. This was pressed in tightly against both the inner and outer walls and the tie-walls. On this filling a coating of clay, 0.10 m. in thickness, was spread to provide an even bedding on which to rest the courses of the mud-brick core.

The core consisted of a wall of mud bricks, 2.95 m. in thickness, laid against the outer wall of masonry. The bricks (Plate 23 4) are made of dark, reddish earth, with small pieces of broken up poros as a binder. The individual bricks are almost square, measuring 0.46 by 0.44 by 0.10 m.—one and one-half Greek feet. They were laid in courses with no mortar between the vertical joints, but between each course a layer of clay, 0.01 m. in thickness, was spread. In the best preserved section of the core eight such courses have survived to a height of ca. 0.90 m. The bricks were laid on the projection of the lowest course of the tie-walls against its higher courses as a well-preserved section indicates (Plate 23 3, 5). Presumably they were also set tightly against the exterior face although in the section investigated the upper courses of the masonry were not preserved. The fact that the bricks rest on and against the blocks of the tie-walls indicates that the laying of the brick work was part of the same building operation as the construction of the masonry. The process would have been: cutting the clay to bed the masonry, laying its courses, putting in the lower packing and the core of brick.

As mentioned above, this brick packing did not extend up to the median wall of the colonnade. Instead, the intervening space of 1.45 m. was filled with a packing of clay and poros chips (Fig. 24). This difference in the types of packing scarcely indicates two different periods. For example, it might be supposed that the brick core

is the core of an earlier city wall incorporated into the later construction and that the masonry is all later than the brick work. This explanation of the different types of packing seems improbable, however, for the courses of the median wall, of the tiewalls, and of the exterior facing are all bonded together and the position of the bricks is such that their laying must have been a final stage of the same operation. Two explanations of the packing may be advanced. The brick work may, for the most part, be a survival of an earlier core, thinner than the later wall. Trenches could have been cut through it where tie-walls were planned. When these walls and the exterior facing were in place, the remaining space in the trenches might have been repacked with clay and poros fragments against the lower courses, and the upper part filled with bricks. If so, some traces of the cutting of the trenches should have survived, but none was noticed. Also, such a careful repacking seems unnecessary. The better explanation seems to be that, if an earlier wall existed in this place, which is probable, it was entirely removed and the new packing made in two sections to facilitate the laying of the courses of brick. The space to the south of the brick core would have been left open temporarily while the brick section was laid, then filled and packed by treading as the brick work rose. As already mentioned, the pottery from this packing is to be dated in the latter part of the fourth century B.C. (p. 90). The sherds found in the mud bricks which were removed in the investigation were not very informative, being merely small scraps of black-glazed and coarse pottery.

East of the drain channel the city wall was less well preserved as the slope here was very steep and the filling had largely washed out. The foundation course of the exterior facing, however, preserved for 4.00 m. east of the drain channel, was also found in a trench dug 5.00 m. farther to the east (Plan A). The construction employed in this section of the wall was similar to that north of Lerna. The median wall of the abaton building was carried through to the exterior facing to serve as a tie-wall. Along the north flank of the Asklepieion hill the rear wall of the north colonnade, as described above (p. 58), served as the inner face of the city wall.

In order to bridge the difference in level between the inner and outer facing at this point a series of four steps was made (Plate 23 6) in the clay. In the two lowest, blocks remain in place. The thickness of the upper courses of the tie-wall is indicated as 0.62 m. by the anathyrosis on the block of the inner facing (above, p. 58), the same thickness as the walls west of the drain. All the original brick work had been washed out in this section, but its existence is attested by the reddish earth over the tops of the preserved blocks.

To the west of Lerna the existence of the city wall is established by a cutting made in the clay to provide a shelf for the outer facing. To the south of this the clay is dressed level for the packing. The blocks had all been removed from the shelf, but some may be seen scattered in the gardens on the slope to the west and built into a late structure some 50.00 meters to the north.

In restoring the upper part of the wall provision must be made for a parapet walk and step along its top to allow the soldiers to man the battlements. In the section LERNA 95

across the north side of Lerna the position of the foundations indicates that the width of the walk may be restored as approximately the same as that of the north colonnade (Plans C; D, Section D-D). The walk would have been open to the sky and along the top of the wall a breastwork, probably ca. 1.50 m. in height, would have been constructed. The total height of the wall thus restored would have been ca. 9.00 m. from its base. If additional height were needed, a *glacis* could have been constructed easily on the slope to the north. Its existence may, in fact, be indicated by the sharp drop of the clay at the base of the wall (Fig. 24).

In the section north of the dining rooms over the main drain channel an open court has been restored (Plan C). It balances the open court on the south side of the dining rooms into which the ramp opened. This northern court would have given access to the north colonnade of Lerna and to the stairway in the north wing of the abaton building by which the higher level of the hill top might be reached. To the east of this court the parapet walk would have continued along the flank of the hill, but, as the hill rises from Lerna, the level of the fortification wall and walk would have risen also (Plan D, Section C-C).

It is apparent that this sector of the city's defences was built as a unit with the structures of the Asklepieion and Lerna. Their north-south walls are carried through to the exterior facing of the wall. The facing is bonded with the courses of the drain channel and the tie-walls are bonded into both the median wall of the north colonnade and into the exterior facing. As will be discussed in detail in connection with the votive offerings (pp. 137-138), the monumental layout of the precinct and of Lerna is probably to be dated shortly after 315 B.C. Probably it was carried out at the same time as an extensive renovation of the city's defences was made.

The construction of the northeast sector of the city wall and of the Isthmian Gate is dated *ca.* 300 B.C. and is possibly to be connected with the schemes of Demetrius Poliorcetes <sup>8</sup> for establishing his control throughout Greece, for which the possession of Corinth was vital. It is probable that parts of the north city wall, such as the sector by Lerna, were built as elements in this plan. Some support may be found for this suggestion in the similarity of construction employed for the two parts of the defences. In both, an exterior facing of stone with a mud-brick core was the type of wall deemed necessary. The size and fabric of the mud bricks are similar in each. At some points the total thickness of the wall in the northeast sector was as much as 6.00 m., which is approximately the same as in the Lerna sector. <sup>9</sup>

<sup>&</sup>lt;sup>7</sup> Such a height is suggested for the breastwork on the walls of Demetrias. Their total height, with the breastwork, is calculated as *ca*. 5.85 m. on the outside. The brick was there laid on a stone socle (F. Stählin, E. Meyer, and A. Heidner, *Pagasai und Demetrias* [Berlin, 1934], pp. 83-84).

<sup>&</sup>lt;sup>8</sup> Parsons, *Corinth*, III, ii, pp. 121-23, 296.

<sup>&</sup>lt;sup>9</sup> Parsons, op. cit., pp. 282 ff. The wall in the northeast sector of the city defences was built with an inner and outer face of ashlar masonry protecting a mud-brick core. Its toichobate was laid as a course of headers, with a height of ca. 0.45 m. The thickness of the toichobate varied from 5.25-5.50 m. with one stretch being as much as 6.00 m. The height of the wall, however, is unknown.

No evidence was discovered of the fate of the wall in the destruction of Corinth in 146 B.C. or of its use during the Roman period. Presumably the breastwork and parts of its course would have been thrown down by order of Mummius. The section of wall, however, immediately to the north of the hollow would have been necessary as a retaining wall in the Roman period. Possibly, a double colonnade was built along the north side of the square at that time, as already suggested. In any case, at the time of the destruction of Lerna, the upper courses of the wall were removed and a filling of reddish earth from the mud brick core, but containing late Roman pottery, lamp fragments and coins of the fourth century after Christ, washed down over it to the north.

### THE WATER SUPPLY

The south colonnade of Lerna square gave access to its copious water supply. The hollow had originally possessed only one small natural spring in the southeast corner. Therefore, elaborate arrangements had to be made for collecting and storing the surface water and enlarging the natural supply so far as possible. The spring was converted into a spring house, the entrance of which is located about three meters to the west of the entrance court (Plan C). To collect and store the water from the high ground to the west and south, reservoirs were made by cutting back into the scarp of the hill. Three of these, Reservoirs II, III, IV, were symmetrically spaced along the south side of the colonnade west of the spring house, and another, Reservoir V, was placed at its west end directly opposite to Reservoir I under the southwest corner of the precinct. Along the front of the reservoirs a narrow service corridor was built. From this corridor water could be drawn from the reservoirs, over a parapet in the case of Reservoir II, and from a small draw basin in the other reservoirs. Beneath the corridor a channel was constructed to carry off the spilled water to the east, where it joined an elaborate network of underground channels (Plan E). This system carried the excess water from the spring house, the supply from long tunnels cut back into the clay, and the surface water from the square to the lower level north of the city wall. There, we may suppose that a basin was built, although destruction and erosion have removed all its traces.

#### THE SPRING HOUSE

The small spring (Plates 24 1, 25 1) seems to have had a longer usage than any other of the features of the Asklepieion or of Lerna. While it was only a trickle from beneath the rock it was apparently in constant use, if we are correct in assuming that the early road, traces of which survive in the northeast corner, entered the hollow for that purpose. No traces remain from that period, however, of any artificial adaptation of the spring.

To construct the spring house of the Hellenistic period (Plan C; Fig. 25) a

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cutting with a barrel vaulted roof was made into the clay and rock of the scarp on the south. The sides and roof were lined with a coating of waterproof cement, 0.03 m. in thickness, which still survives in large part. The cutting extended down to the level of the waterflow and below it, at the back, for 2.25 m. to provide a basin. The length of the spring house was 8.65 m.; its width at the entrance was 1.25 m. and at the rear 2.60 m. At present it bears traces of all periods of its usage. The flight

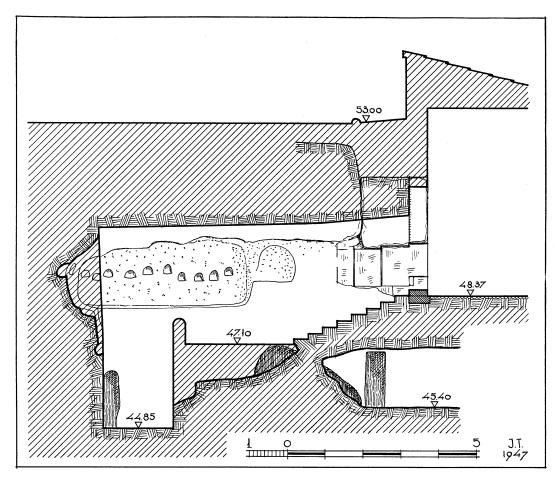


Fig. 25. The Spring House. Section.

of nine steps leading down from the colonnade is part of the original construction and, since they were used, in part at least, at all periods, they are hollowed and worn. Only traces of the original platform and basin survive along the walls. The extension of the entrance into the colonnade (Plan A) appears to be a part of the Roman alterations along the south side of the colonnade. In the early Byzantine period the spring house was converted into a small chapel, the existence of which is attested by the three niches in the east wall and the remains of the altar table in front of them (below, p. 169). Finally, in the mediaeval period, the spring house appears to have been used

as a cave dwelling, the occupants of which cut the round holes and niches high on the sides (Plate 24<sup>1</sup>) to hold their provisions and gear, and enlarged it on the sides and at the back by cutting out the clay.

The original arrangements of the spring house provided for an entrance in the rear wall of the south colonnade. Its lower part was cut through the clay under the rock cap. Here it was strengthened by a lining of blocks (Fig. 25) in the same manner as the sides of the ramp had been strengthened. The top of the blocks appears to have been used to support pillars flanking the entrance. In the rock scarp above them a vertical cutting was made on each side of the entrance, measuring 0.45 by 0.28 m. The original height of these pillars cannot be ascertained, since the upper part of the rock scarp is destroyed, but the cuttings evidently extended higher than the roof of the spring house. The western part of the roof and that side of the entrance have fallen down. On this fallen piece the cutting for the flanking pillar extends above the roof vaulting. Thus, we should probably restore the entrance as flanked by two pillars carrying a lintel.

The flight of steps occupies 3.60 m. of the length of the spring house. They are much worn, but the original tread was 0.40 m. and the riser ca. 0.20 m. No traces of cement are preserved on them, but it is likely that they were originally waterproofed like the steps in the lustral room of the abaton building. The steps led down to a platform 1.27 m, below the level of the floor of the colonnade.

The only trace of the platform is a small stub of flooring which projects from the wall of the spring house at the level of the bottom of the ninth step. The floor was of the usual type of waterproof coating: a heavy layer of cement in which pebbles were set and finished off by a smooth impasto surface. Its thickness was ca. 0.15 m. The platform extended the full width of the spring house and has left a mark on the east side where it broke away from the wall. Its length appears to have been 2.85 m., for at that distance from the lowest step there is a clean break in the mark left by the flooring on the west wall. The parapet has left no traces, but presumably would have been a low stone barrier extending the full width of the platform. When the spring house fell into disuse in the late fourth century, its floor apparently collapsed into the top and side of the drain channel below, so that at present it is at a much lower level than originally (Plate 24 1).

Water trickles out from below the rock cap at the level of the platform in both corners at the back of the spring house. The flow from the southeast corner, which is very slight, is carried across to the southwest corner by a ledge channel cut along the rock. The larger flow from the southwest corner was increased by cutting a little grotto back into the rock. It is not clear whether this was the original arrangement since the rock is waterworn and bears no trace of a spout attachment. The original floor of the basin has been destroyed, but its approximate level is indicated by the floor of a small drain channel which is cut from the southwest corner (Plan E). It is 2.25 m. below the level of the platform. Thus, we may restore the basin as extending the full width of the spring house, 2.25 m. in depth and, if we allow a parapet width

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of ca. 0.35 m., 1.85 m. in width from the parapet to the rear wall. The drain channel led into the main supply channel of the intricate system described below (pp. 107-108).

This type of spring house, a basin reached by a descending flight of steps, is essentially the same as the basin in the abaton building, although in the spring house its water supply was from a natural source. The type is common in Greece <sup>10</sup> and exemplified in Corinth by the much larger spring house of Upper Peirene <sup>11</sup> on Acrocorinth. Another well-known example of the type is the well-preserved basin with steps at Tegea.<sup>12</sup>

The spring house evidently retained this form throughout the Hellenistic period, but, apparently at the time the Roman building was erected over the ramp, its entrance was extended into the colonnade for a distance of 1.32 m. A short corridor was formed with its sides returning to the east and west (Plan A). The returns are built on the line of the north wall of the Roman building and are preserved to a height of three courses (1.575 m.). The blocks of the construction are probably reused from the rear wall of the colonnade, for their dimensions and dressing are similar to a block still in place immediately to the west of the original entrance to the spring house. The face of the blocks preserves traces of a coarse, white plaster unlike the fine Greek stucco.

It is probable that at this time the rear wall of the former colonnade was moved forward both at this point and for a stretch at its west end, where two short sections of wall are preserved to a height of one course (Plan A). They, too, are on the line of the north wall of the Roman building. There is no specific evidence for the date of this operation, but, since the walls are oriented with the north wall of the Roman building, it should probably be regarded as contemporary. Apparently, during the period of neglect after 146 B.C., the south side of the rock scarp, weakened by the undermining for the reservoirs collapsed in part. When repairs were made, it was found necessary to narrow the former colonnade, at least in its eastern and western parts, and to repair the entrances to the reservoirs. It is scarcely possible from the scanty traces to determine in detail what form this repair took.

The spring house, however, would have continued in use until the final destruction of the precinct and of Lerna in the late fourth century after Christ. After a period of comparative neglect it was converted into a small chapel in the seventh century after Christ (below, pp. 168-169).

# THE CORRIDOR AND DRAIN

Between the south colonnade and the reservoirs a corridor was constructed (Plans A; C; D, Section B-B). It extended from the west side of the spring house to the

<sup>&</sup>lt;sup>10</sup> The type is discussed by Miss Dunkley (B.S.A., XXXVI, 1935-36, pp. 175 ff.).

<sup>&</sup>lt;sup>11</sup> Corinth, III, i, pp. 31-49.

<sup>&</sup>lt;sup>12</sup> Dugas, Berchmans, Clemmensen, Le Sanctuaire d'Aléa Athéna à Tégée, p. 69, figs. 26-27; pl. LXXXI.

west end of the colonnade where it made a return to the north as far as the reservoir cut under the hill to the west (V). Its builders utilized the natural formation of the scarp skillfully (Plan D, Sections B-B, D-D; Plate 26 ¹). In this area the rock cap was ca. 2.50 m. in thickness and rested on a layer of clay, ca. 1.70 m. in thickness which, in its turn, rested on a thin layer of rock (Plate 25 ²). To build the corridor the clay layer was cut out from under the rock cap for a depth of 2.50 m. The north and south walls of the corridor were built up to the height of the rock cap with openings left for the reservoirs and the doorways opposite to them. The roof was formed by the under side of the rock cap, cut in a curve, with a height of 1.70 m. at the sides and 2.00 m. at the center. The floor of the corridor was formed by the cover slabs of the drain and the lower layer of rock in which the channel of the drain and ledges for its cover were cut. The total east-west length of this corridor was 24.00 m. and of its return to the north, 5.40 m. The inside width was 1.37 m.

Only the east and west ends of the corridor and the return to the north are preserved, where heavy roof fragments collapsed and protected the walls from complete destruction (Plate 26 1-2). The parapet of Reservoir II and the draw basins of the other reservoirs have, however, left some traces.

Of the north wall of the corridor the only block left in place makes the return to the west from the entrance to the spring house (Plan A). It indicates that the thickness of the wall was 0.60 m. The bedding for the wall, however, is traceable along the edge of the floor of the colonnade for 20.50 m. to the west to a point before the entrance to Reservoir IV. It was destroyed from this point to the corner when the Roman wall narrowing the colonnade was put in. Opposite to the openings of Reservoirs II and III the cutting makes a return to the south for 0.50 m. leaving a step of the natural rock projecting to the edge of the drain channel, which partially closes the corridor. Apparently the wall made a short return to the south to form the jambs of a doorway by which entry might be made from the colonnade (Plans A, C). The door opening was 1.30 m. in width. Presumably a similar arrangement existed before Reservoir IV although the cutting has been destroyed there. The level of this step of natural rock is 0.30 m. below that of the floor of the colonnade so that a slab would have been set in to provide a threshold (Plan D, Section D-D). Similar returns of the south wall of the corridor to the edge of the drain channel are to be restored to make frames for the openings of the reservoirs (Plans C; D, Section B-B). To bridge the drain channel and make a level approach to the parapet barriers floor slabs would have been set in against the threshold (Plan D, Section D-D). These bridges broke the continuous level of the floor of the corridor and made separate rooms in the space between each reservoir (Plan C). There was an additional step to the parapet of Reservoir II and draw basins in front of Reservoirs III, IV, and V as described below in connection with them.

Presumably the height of the entrances from the colonnade was the same as that of the entrance to the spring house, ca. 2.25 m. (Plan D, Section B-B). To make the entrances it would have been necessary to cut the barrel vaulting of the reservoirs

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0.85 m. higher towards the front (Plan D, Section D-D) as in Reservoir I (above, p. 77). The collapse of the scarp along the south side has destroyed the fronts of Reservoirs II, III, and IV. It is probable that a solid wall should be restored between the entrances to provide a solid support for the rock cap rather than a low barrier on which supporting columns would have rested, like the parapet of Peirene where a row of Ionic columns was set on the parapet of the draw basins before the reservoirs. The little rooms between the reservoirs would have been very dark, but they were probably only used for service purposes or possibly for curative baths in connection with the cult (below, p. 158).

The south wall of the corridor is well preserved at both the east and west ends (Plates 26 1-2). At the east end three courses give its original height as 1.70 m. (Plans C; D, Section B-B). Its thickness was 0.45 m. Beyond this preserved section of the wall its course is indicated by a cutting which has been preserved as far as the east side of Reservoir IV (Plan A). At the west end of the corridor, *ca.* 3.50 m. of the south wall is preserved and its return to the north for 2.25 m. The blocks used at the eastern end are well cut with an anathyrosis similar to that of the blocks of the south wall of the ramp. Those of the western end, however, are reused from some earlier structure and preserve a drafting on their edge. The traces of a cutting in front of Reservoir II indicate that the parapet was made on its line, but Reservoirs III, IV, and V seem to have had rather different arrangements as discussed below (pp. 104-105).

The floor of the corridor (Plate 26 1; Plan D, Section B-B) was formed by the cover slabs of the drain below it and by the return of the rock ledge in which the slabs were set. Two of the slabs are in place near the east end of the corridor. They fit very closely into their bedding and would have been rather awkward to remove for the purpose of cleaning the drain. Their dimensions are 1.075 by 0.79 by 0.185 m. Presumably openings would have been made beside the bridges giving access to the reservoirs to carry off the spilled water into the channel below, but no traces survive.

The walls, roof, and floor of the corridor were covered with a coating of cement, 0.03 m. in thickness. On the walls are a few traces of what appears to be blue paint. The presence of the waterproofing on the floor is surprising, for there are traces on the cover slabs also which would indicate that they were sealed over. In view of this it might be suggested that, as in other fountains of this type, such as Peirene and Glauke in Corinth, and that of Theagenes at Megara, the corridor was not intended to give access to the reservoirs, but was rather a long draw basin. It would be fed from the reservoirs and emptied into the drain below by a special opening. It would, then, have had a parapet along the rear of the colonnade. This, however, seems very unlikely, for there are clear traces of individual draw basins before Reservoirs III, IV,

<sup>&</sup>lt;sup>13</sup> Fowler, Art and Archaeology, XIV, 1922, p. 203. This construction is dated in the Hellenistic period.

<sup>&</sup>lt;sup>14</sup> G. Elderkin, "The Fountain of Glauke," A.J.A., XIV, 1910, pp. 19-50.

<sup>&</sup>lt;sup>15</sup> R. Delbrück and K. G. Vollmöller, "Das Brunnenhaus des Theagenes," *Ath. Mitt.*, XXV, 1900, pp. 23-33; see also Elderkin, *op. cit.*, pp. 47-50.

and V. Also, in the floor of the little antechamber to Reservoir V there is an opening into the drain channel. The draw basin would scarcely empty into the drain channel by holes in the floor, for its contents would be emptied very rapidly since there was not a constant flow into the reservoirs. As will be described later, they depended largely on surface water and in the summer the supply must have been scanty. The normal method of draining such a basin would have been by an opening for the overflow placed at its east end. The drain and the corridor are both well preserved at the east end, but show no traces of such an arrangement. It would have been needless to place the drain under the full length of the corridor unless it was designed to take the spilled water from each reservoir separately, not from the draw basin as a whole. Thus, it seems that we should explain the waterproofing of the corridor floor as designed to facilitate its cleaning. This lack of a draw basin extending along the front of the reservoirs, as in other fountains of somewhat similar type, is to be explained by the fact that it was not fed from a constant and natural source, but largely by surface water which required very careful husbanding. Possibly, too, as suggested below (p. 158) the corridor had a special use for baths in the healing practice of the cult.

The drain channel under the corridor starts before Reservoir V. There is at present in the floor there a crudely cut oval pit leading into the drain channel (Plan A). This contained some fragments of Early Christian pottery and lamps and was probably hacked out in that period to facilitate the removal of blocks from the corridor wall. It has destroyed the original opening which would have been set next to the bridge leading from the colonnade to the draw basin of the reservoir. The channel extends southeast across the corridor for 2.50 m. where it returns to the east, passing in front of the reservoirs on the south side. It entered the main drainage system under the west wall of the spring house by a stepped descent (Plan D, Section B-B).

The channel (Plate 26 1-2) of the drain is cut through the second layer of rock and into the clay beneath it. The rock layer thus gave it a firm edge. To insure equally firm sides and floor, poros blocks were inserted as in the walls of the ramp. Along the edge of the drain a ledge was cut to bed the cover slabs, which, as described above, served as the floor of the corridor. The drain widened and deepened towards the east end with the main transition being made at the west side of Reservoir III. Its width up to that point was 0.22 m. and its depth 0.50 m. From Reservoir III to its east end the channel was 0.50 m. in width and 0.80 m. in depth. There are no traces of waterproofing on its sides and floor.

# THE RESERVOIRS

The reservoirs were arranged in two storage units (Plans A, C). Reservoir II was complete in itself and not connected to any of the others, but Reservoirs III, IV, and V formed a single unit with interconnecting side channels. In the channels were barriers to regulate the water level in conformity with the height of the parapets. The height of these barriers was 1.30 m., so that we may assume the height of the parapets

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to have been a little greater, possibly 1.40 m. The reservoirs were designed primarily for the storage of surface water which entered them by shafts cut through their roofs from the ground level above. It is probable that the long channel described below (p. 105), which was dug from the end of Reservoir V, was designed to tap some underground vein of water. At present, however, it is dry.

All the reservoirs were constructed in the same manner. Rectangular shafts were cut back into the clay layer beneath the rock cap of the hill. The sides, roof, and floor were lined with a coating of waterproof cement. In each of them, however, there are certain individual peculiarities, so that a detailed description is desirable.

Reservoir II (Plans A, C) was set *ca.* 5.00 m. to the west of the spring house. Its floor was at the level of the corridor floor and is preserved to its original front edge, indicated by a raised line of cement along the edge of the cutting for the south wall of the corridor. This would seem to show that the parapet was placed on the line of the south wall. Thus, its thickness would have been similar, 0.45 m. Between the returns of the wall on each side of the parapet to the drain channel a step would have been placed to make the drawing of the water easier (Plans C; D, Section B-B). The present barrier which appears in the photograph (Plate 25 <sup>2</sup>) is built almost 1.00 m. inwards from the original parapet on the line of a barrier of reused blocks which had been constructed in the mediaeval period when the reservoir was used as a cave dwelling. The reservoir was originally 9.30 m. in length, 2.80 m. in width, and 2.37 m. in height.

Its roof (Plate 27 ¹) is cut in the form of a vault and, as described above, was probably raised at the end over the corridor. In the floor at the northeast corner beside the parapet was a small settling basin (Plan A), oval in shape and section. It measures 0.63 by 0.35 by 0.16 m. The reservoir drew its water supply from a circular shaft in the roof, 4.00 m. inwards from the opening. The original top of the shaft, which was 0.80 m. in diameter, has been destroyed so that there is no indication of how the water was brought to the opening. Probably the floors built on the top of the rock to the east collected water for it.

The most interesting feature of this reservoir is a staircase (Plate 24 <sup>2</sup>; Plan A) from its rear leading up to the surface above. The flight was L shaped, consisting of nine steps. The tread of the lower steps is 0.33 m. and the riser 0.23 m. The two highest steps, however, were made broader, the topmost serving as a small platform. The long arm of the L, 0.72 m. in width, rose parallel to the rear wall of the reservoir, and the short arm, 0.50 m. in width, returned to the north to form an entrance at the floor level of the reservoir. The flight was very steep and narrow and probably built to enable water to be drawn from the higher level south of Lerna without the necessity of going around into the square.

The southwest corner of the square in which Reservoirs III and IV were placed has been almost entirely destroyed by its collapse in the Byzantine period. The openings which appear in the photograph (Plate 20 1) were rebuilt after the excavation.

The remains of the floor at the entrance, however, indicate that they originally extended out to the corridor like Reservoir II.

Reservoir III (Plate 27<sup>2</sup>), however, had a small individual draw basin instead of simply a parapet barrier (Plans A, C). In the line of the south wall of the corridor instead of a dressing on the rock surface which would have bedded the parapet wall, there are well-preserved traces of a waterproofed floor. Its northern edge is preserved at a distance of 0.45 m. from the edge of the cutting for the drain. The rock which forms the edge of the drain is dressed level to bed a wall which would have formed the front wall of the basin over which water was drawn. The existence of the rear wall of the basin is indicated by two foundation blocks whose top is level with the floor of the reservoir. Thus, a small draw basin, 0.80 m. in width, is to be restored.

The original length of the reservoir was 22.30 m. overall, and 21.40 m. from the rear wall of the draw basin. The roof is preserved over only 9.00 m. of the southern part. Its width was 2.30 m. No opening was discovered in the preserved part of the roof, but there may have been one near the entrance as in Reservoir II. A rectangular settling basin was found near the back wall. Between this reservoir and Reservoir IV to the west was a connecting channel, 5.70 m. in length, *ca.* 0.70 m. in width and 1.70 m. in height. The barrier in the channel was 1.30 m. in height and 0.50 m. in width (Plan A).

Reservoir IV (Plate 28 ¹), the original length of which was 22.10 m., is preserved for only 8.00 m. at its south end. The collapse of the scarp has almost completely destroyed its front part and all traces of the entrance. A small section of water-proofed flooring, however, is preserved on the line of the south wall of the corridor (Plan A), and indicates that Reservoir IV had a separate draw basin like that of Reservoir III. Its length from the rear wall of the draw basin would have been 21.00 m. The preserved part of the reservoir is 2.20 m. in width. It communicated with Reservoir V by a side channel extending 12.30 m. to the west where it makes a return to the north, of 11.50 m., to the side of Reservoir V (Plan A). The width of the channel was 0.60 m. At a distance of 2.70 m. from the side of Reservoir IV was a barrier of the same type as that in the side channel from the third Reservoir. It is possible that there was a shaft through the roof near the entrance although both Reservoirs III and IV may have depended entirely on the overflow from the large Reservoir V for their water supply.

Reservoir V (Plate 28 <sup>2</sup>), placed directly opposite to Reservoir I, was the largest of the group and extended for 31.00 m. under the hill to the west of Lerna. Its width was 2.50 m. and its height 1.75 m. at the entrance, but with a gentle slope downwards to the west. The reservoir is very well preserved, with the arrangements for its individual draw basin being rather clearer than those of the reservoirs on the south side. The roof over the entrance had collapsed and protected it to a certain extent.

The floor of this reservoir was placed 1.00 m. lower than the floor of the colonnade (Plan D, Section A-A) to take advantage of a layer of natural rock at that level. LERNA 105

Thus, to allow sufficient head room at the entrance without putting in steps from the colonnade the underside of the rock cap was cut out. The fallen fragment allows the restoration of its original slope (Plan D, Section A-A) and of the cutting for the entrance.

The preserved cuttings and waterproof flooring (Plan A) shows that a draw basin of a similar type to that of Reservoirs III and IV is to be restored. The rear wall of the draw basin, indicated by the preserved edges of the floor of the reservoir and the basin as 0.50 m. in thickness, was set across the opening of the reservoir. The basin's north side was enclosed by the return into the reservoir of the rear wall of the west colonnade. Its thickness is also given as 0.50 m. by the space between the preserved edge of the floor of the basin and of the north side of the reservoir. The south side of the draw basin was closed by the return of the corridor's wall. The length and width of the basin are indicated by the flooring as 1.30 by 0.70 m. No traces remain of the parapet wall, but it may be restored on the analogy of that of Reservoir III as 0.45 m. in thickness (Plan D, Section A-A).

At present the entrance into the reservoir from the south colonnade is made by a flight of steps cut into the rock. They are of Early Christian date at which time the entrance of the reservoir was used for burials (below, p. 106). Apparently the wall blocks of the draw basin and corridor were pillaged and to get down to the lower level of the reservoir floor the steps were cut. At this time, too, the original drain opening was probably destroyed.

Rather more elaborate arrangements were made for the water supply here than for that of the other reservoirs. It seems to have depended on shafts cut down from the ground surface above and on a long channel cut to the southwest from the rear of the reservoir (lack of space prevented its reproduction on the plan). The first shaft was made ca. 3.50 m. inwards from the entrance. It is bisected by the side of the reservoir (Plan A) like the shaft in Reservoir I, but it is evidently contemporary with the reservoir, for the waterproof cementing around the edge is continuous with the side of the reservoir, and its bottom is sunk 0.80 m. below the floor to serve as a settling basin. There is no natural flow of water into it. The shaft itself is circular with a diameter of 0.80 m.

The channel which extended to the southwest was traced for 32.50 m., but its increasing narrowness made investigation beyond that point impossible. Its height is 1.40-1.65 m. and its width 0.55 m. The sides were waterproofed like those of the reservoir. Shafts were cut down into it from above, two of which were found in the section excavated. They are circular with footholds in the sides, and measure 0.80 and 0.60 m. respectively in diameter. Between the first and second shafts into the channel the floor of the latter was raised 1.20 m. and its height lowered to 0.90 m. Beyond the second shaft the channel was increasingly narrowed although its height was raised to 1.20 m. again. The original arrangements at the top of the shafts were destroyed, but it is probable that, as well as permitting entrance for cleaning, they carried surface water from the structures on the top of the hill to the channel. The channel doubtless tapped some underground source of water, but at present it is dry.

If we are correct in assuming that the depth of the water was designed to be *ca*. 1.40 m., as indicated by the barriers in the connecting passages, it is possible to make an approximate estimate of the capacity of the reservoirs. Reservoir II would have held (9.30 by 2.80 by 1.40) 36.456 cu. m.; Reservoir III (21.40 by 2.30 by 1.40), 68.908 cu. m.; Reservoir IV (21.00 by 2.20 by 1.40), 64.68 cu. m.; Reservoir V (31.00 by 2.50 by 1.40), 108.50 cu. m.; the side channel between Reservoir III and IV (5.70 by 0.70 by 1.40), 5.586 cu. m.; the channel between Reservoir IV and V (23.00 by 0.60 by 1.40), 19.32 cu. m. The total capacity of these storage units would have been 303.45 cu. m. To this should be added the capacity of Reservoir I (8.30 by 2.00 by 1.40 and 7.20 by 1.45 by 1.40) 37.856 cu. m. Thus the total capacity of all the reservoirs of Lerna was *ca*. 341.306 cu. m.<sup>16</sup>

There was, then, a large and easily accessible store of water available in Lerna as well as the constant flow in the fountain house in the ramp and in the spring house. It seems unlikely that all this water was necessary for the Asklepieion. Therefore, we should recognize that Lerna held the public water supply for this quarter of the city.

The reservoirs seem to have remained in use without change during the Hellenistic period. At the time of the alterations in the first century after Christ it is probable that Reservoir I was no longer used for storing water although its entrance seems to have remained open until the destruction of the sanctuary and of Lerna. It is probable that the others continued in use, although, as mentioned above, the south colonnade was dismantled. They were open, but used as caverns in the Early Christian and Byzantine periods. In Reservoir II some burials were made and its parapet was replaced by a wall converting it into a dwelling. In Reservoir IV a mass burial was made in the sixth century after Christ (Plate 28 1) and at an earlier period it seems to have been used as a dwelling. Reservoir V contained some burials and pottery of the Early Christian period at its entrance. Thus, we may suppose that, with the destruction of the sanctuary and the abandonment of Lerna as a fountain, the reservoirs lost their function as storage chambers, but received a limited use as dwelling places and tombs until they were sealed by the collapse and erosion of the scarp above.

# Drainage System

Under Lerna there was an elaborate drainage system designed to collect and carry the surface water, augment it by tap channels and discharge it on the lower level north of the city wall. The channels and their openings are well preserved and the main one still performs part of its original function, since it carries water to the gardens on the lower level at the north.

The drainage was arranged in two related systems (Plan E), one of which, since

<sup>&</sup>lt;sup>16</sup> It has been estimated that the capacity of Glauke was 527 cu. m. and of the fountain of Theagenes at Megara, 305 cu. m. (Elderkin, op. cit., p. 28). Peirene's capacity has been estimated as 100,000-120,000 gallons (Fowler, op. cit., p. 202).

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it received the overflow from the spring house, we may call the lower Lerna system; the other, designed to drain the open square, we may call the plateia system. A third and quite unconnected system, which is largely of later date, is conveniently described here, although its outlet is situated farther to the east.

The lower Lerna system received water primarily from two long tap channels dug to the southeast and southwest below the level of the reservoirs. This was augmented by the overflow from the spring house, carried to the southwest channel by a short curving side-channel from the basin. Below the steps of the spring house the drain under the corridor entered this southwest channel, adding some of the water of the reservoirs to the stock. In addition, the water from the southwest corner of the abaton building was collected by a rectangular shaft and carried to the lower Lerna system by a side-channel entering it to the west of Reservoir I. The water from these various sources was then conveyed to the north by a long channel built of good masonry.

The plateia system, although discharging by a separate channel to the north, was connected to the lower Lerna network. It received a portion of the water from the southwest channel near the steps of the spring house and from that point was joined by a cross-channel to the main north-south channel of the Lerna network. Except for the surface water of the square its only other source was the drainage from the northwest corner of the abaton building.

#### THE LOWER LERNA SYSTEM

The long tap channel dug to the southwest, *abc* (Plan E), was cut through the clay, well below the floors of the reservoirs with which it has no connection. From its end under the spring house steps to its beginning against the rock it measures 79.50 m. in length. The cutting is very irregular, partly as a result of clay slipping from the sides and roof. Thus, its height varies from 1.50-2.10 m. and its width from 0.60-1.00 m. The roof is cut in a curve and the channel is unlined except at a point 18.00 m. from c where the roof is formed by three large blocks—evidently a point where the clay needed strengthening. Along the north side of the channel sixty-three small niches were hollowed out at irregular intervals, spaced 0.35-3.00 m. On the south side were forty-one holes of a similar type, spaced 0.50-5.45 m. They were apparently dug to hold lamps to provide light for the digging or the repair of the channel. The water trickled into the channel at its end and at present flows to a depth of ca. 0.25 m. in the rainy season.

At point b the outlet from the spring house enters the southwest channel. It is a small curving arm, cut in the rock layer at this point with irregularly dressed sides and roof. Its height is 0.90 m. and its width 0.40 m. At point c a short channel leading from the drain under the corridor joined the southwest channel. It is cut into the rock and clay layers and, to break the descent from the higher level of the reservoir drain, two steps were cut into its western end (Plan D, Section B-B). The height of this channel is 2.10 m. and its width, 0.55 m.

From the point c the tap channel to the southeast was cut into the clay under the court and ramp. The section, c-f, however, was cut with its floor sloping to the southeast to carry part of the water from the confluence c and discharge it into the main channel at f. The section, e-f, carried its water from some source to the southeast which is at present dry. The total length of the channel was 28.00 m. It narrows from west to east, 0.95-0.50 m., although the height increases from 1.60-1.80 m. The sides of the channel are heavily encrusted with a deposit and from its roof hang stalactites.

At three meters to the north of c a cross-channel, d-h, is cut to the east to join the main channel. This cross-channel is well cut and its sides better preserved than those of the other clay-cut channels. Evidently it received less usage. Its main function appears to have been to carry the water from the rectangular shaft, i, into the main channel. Its length is 10.75 m., the width 0.80 m. and the height 1.50 m., although it is lowered to 1.00 m. at the east end, in the section, g-h. A short channel, evidently contemporary with the cross-channel, leads from the manhole which, as previously described (p. 74), was designed to catch the water from the southwest corner of the abaton building. Its north side shows considerable deposit from water.

The main north-south channel is constructed in three sections, f-j, j-k, k-l. The section f-k, is cut through the rock and clay and its sides are unlined, but north of the manhole at j the channel was made wider: 0.85 m. as compared to 0.50 m. Its height was uniformly 1.50 m. and the roof was cut in a vault. The circular manhole at j was designed for entry into the system rather than to carry water down into it. It is the only manhole cut into the main channel. The manhole is 1.10 m. in diameter and 3.00 m. in depth to the bottom of the channel.

The section k-l (Plan D, Section A-A), which passes beneath the dining rooms is built of masonry. The level of the hollow originally fell off to the north so that it was necessary to construct a channel of masonry from point k instead of cutting it through the clay. The channel is built of well-cut poros blocks similar to those used in the foundations of the buildings in Lerna. It is  $0.52 \, \text{m}$ . in width and  $1.17 \, \text{m}$ . in height. The sides and floor are not waterproofed, but show considerable water deposit.

#### THE PLATEIA SYSTEM

The plateia system was laid out primarily to collect the water from the square and from the roofs of the colonnades. The main part of its channel passes under the east gutter collecting water from the cross-channel from the center of the square and from the gutter by shafts in the southeast and northeast corners. Like the lower Lerna system, the channel *d*-l is cut through the clay until the level of the slope necessitated a construction of stone. The clay-cut section is similar in size to those already described. At the point where the built section of the channel begins, 1, a manhole was cut down from the southeast corner of the gutter. It is 0.55 by 0.75 by 2.00 m. in depth and, in its present form, is plainly rebuilt. Perhaps the rebuilding is to be

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associated with the Roman repairs on the south side of Lerna. Another manhole of late date was cut through the east gutter ca. 3.00 m. to the north of the shaft in the southeast corner.

The built section of the drain is constructed like that of the main channel, k-l, of the lower Lerna system, although it is bedded slightly lower and needed an additional course of masonry (Plan D, Section A-A). The roof blocks are cut to form a vault. The height of this channel, 1-2, is 1.55 m. and its width, 0.51 m.

The main channel is joined from the east by a short side branch, 3-4, the purpose and date of which are obscure. Its east end is built against the foundations of the west wall of the dining rooms and thus appears to be of later construction. This is also attested by the different type of masonry employed. The sides are built of reused blocks and the under side of the cover slabs is straight, not curved. At 3.00 m. from the eastern end the roof level is lowered by 1.00 m. and the floor level by 0.50 m. to bring its level down to that of the main channel. Even so, it enters the main channel 0.30 m. above the floor. The courses of the main channel were cut through to make this junction. It seems probable that this side branch was built in the Roman period when the eastern colonnade no longer existed, to carry off drainage from the open floor before the dining rooms.

The branch from the center of the plateia to the main channel, 5-2 (Plan D, Section A-A), is built partly of reused blocks. At present the blocks from the eastern end of the branch have been removed for a distance of 3.00 m., so that its junction with the main channel is destroyed. The side-channel was bedded higher than the main channel and is 1.20 m. in height and 0.70 m. in width. The opening into it from the surface in the center of the plateia is circular and measures 0.47 m. in diameter, but its original top is destroyed.

From the point, 2, the main channel, like that of the lower Lerna system, is only two courses in height. At the northeast corner of the square, 6, the channel turns to the east for 9.00 m., 6-8, and then north for 12.00 m., 8-9. In this last north-south stretch it is built along the side of the lower Lerna channel on a course of which its roof slabs rest. At the point where the channel turns to the east, 6, the shaft from the northeast corner of the gutter enters it. The shaft is built of poros blocks which show considerable wear from water on the south and west sides where the water from the gutter ran into them. The depth of the shaft is 3.20 m. It is rectangular, 0.58 by 0.97 m.

The shaft, 7, at the northwest corner of the abaton building is connected with the section, 6-8, by a short channel just as the shaft at the southwest corner of the building was connected with the cross-channel there. The floor of this short channel slopes into the main channel with which its masonry is bonded. The top of the shaft is partly destroyed, but its original depth was *ca.* 2.45 m. to the floor of the sloping channel. It is rectangular, 0.76 by 0.71 m.

The similarity of construction used in all the channels and their obvious connection with the structures of the square indicate that the whole system was planned

and built as a unit. The built sections of the channels are of good workmanship, using blocks similarly dressed and of approximately the same size as those used in the foundations of the stylobate of the colonnades and of the abaton building. The objects found in the filling over and against the northern sections of the drains were of the same type and date as those from the packing against the foundation of the abaton building. Further, the blocks of the partition wall between the second and third dining rooms are adjusted to the courses of the drain construction. Thus, the system was designed and built as a part of the general plan of the late fourth century B.C. It continued in use throughout the Roman period with the small alterations described above.

The third system, which also drained out to the lower level to the north, was connected to the shaft, w, at the northeast corner of the abaton building, but is apparently of much later date. As already mentioned, the upper part of the shaft was built of specially cut blocks in the foundation of the building. The lower part was cut down through the clay and provided with footholds. In Byzantine times a channel, w-z, was tunneled into the north side of the bottom of the shaft.17 Its northern end and most of the roof are destroyed. The channel is 0.60 m. in width and 2.00 m. in height. A barrier of coarse mortar closed the channel off from the shaft which, at that time, could have furnished no water. The main source of the water for this channel was the long channel, x-v, dug to the southwest below the level of the Lerna system. It is a well-cut channel and may have been dug in the Greek period before the monumental layout of the square, or as a miscalculated effort at that time to bring water to the bottom of the shaft. In any case, it seems to have furnished the water for the Byzantine channel which found none in the shaft. The channel still carries a scanty flow of very cold water. Its width is 0.65 m., its height, 1.20 m., and its length, 24.00 m.

The two main water systems, then, discharged their water to the north of Lerna through the city wall at a level lower than that of the square. It is probable that they emptied into basins at its foot. No trace of the original arrangement survives, but it is scarcely possible that the water obtained by such elaborate means was wasted. The water was probably made available for the users of the road which passed along the foot of the plateau and was used for irrigation of the fields and gardens outside the city wall. It is also likely that there was an opening in the floor of the court north of the dining rooms to the drain channels by which water could be hauled up. The cover slabs of the channel are missing over its northern part so that no traces of this arrangement have survived.

<sup>&</sup>lt;sup>17</sup> A coin of Michael IV (1034-1041 A.D.) and some Byzantine pottery were found in the lower part of the shaft. Above this filling was a hollow space and then a filling of the early Roman period (*supra*, p. 80, n. 6), two meters in depth. Apparently the channel was dug into the bottom of the shaft, of which the existence was known, in the hope of tapping a source of water. When this was not obtained, the side of the shaft was closed off to direct the water from the long southeast channel towards the lower level to the north.

# CHAPTER V

# THE VOTIVE OFFERINGS AND MISCELLANEOUS OBJECTS

DERHAPS the most interesting discovery made in the Asklepieion at Corinth was the large quantity of votive offerings dedicated by its patients. They are, for the most part, life-size representations in terracotta of the members of the human body cured by the god. The practice of dedicating such replicas of parts of the body is, of course, well known in many parts of the world, in both ancient and modern times. The Asklepieion at Corinth, however, provided the only large deposits of such offerings which have as yet been found in the sanctuaries of Greek healing deities. Such votives are occasionally depicted on vase paintings 2 and in sculptured reliefs, 3 or mentioned in the literary sources,4 but, in general, they seem to have been taken so much for granted as a normal and minor part of the sanctuary furnishings that they were not specifically treated by artists or writers. The types of objects which might be dedicated are known, in particular, from the inventories of votives from the Asklepieion 5 and the shrine of the Hero physician in Athens, 6 and from the Amphiareion at Oropos.7 From them we know that almost every part of the body might have been represented in a votive offering. Such objects, made of various materials, have been found sporadically at other sites. From a shrine of the Middle Minoan period at Petsofa in Crete come a few small heads and limbs of terracotta.8 In the rich deposits of the early archaic period at the Artemision in Ephesus were some small ears, eyes and feet of gold, silver, and ivory.9 In various sanctuaries of the Greek and Roman periods in Greece stone and bronze votives of this type have been found.10 For example, a number of marble votives were discovered in Athens in the Asklepieion, 11 in the shrine of the Hero physician 12 and in the sanctuary of Zeus Hypsistos. 13 The

- <sup>1</sup> A preliminary report of the discovery appears in A.J.A., XXXVII, 1933, pp. 440-45.
- <sup>2</sup> O. Kern, 'Εφ. 'Aρχ., 1890, pp. 131-42, pl. 7.
- <sup>3</sup> From the sanctuary on the west slope of the Acropolis; A. Körte, *Ath. Mitt.*, XVIII, 1893, pp. 235-38, pl. XI.
  - <sup>4</sup> Aristides, Oratio, VI, 69; XLVIII, 27. Clement of Alexandria, Strom., V, 566D.
- <sup>5</sup> *I.G.*, II<sup>2</sup>, 1532-1539. The long inventory, No. 1534, is particularly important. The lists cover the period from the mid-fourth to the end of the third century B.C.
  - <sup>6</sup> I.G., II<sup>2</sup>, 839.
  - <sup>7</sup> I.G., VII, 303 and 3498.
  - <sup>8</sup> J. L. Myres, B.S.A., IX, 1902-03, pp. 374-75, pl. XII.
  - <sup>9</sup> D. G. Hogarth, The Archaic Artemisia (London, 1908), pls. VII, XLII.
  - <sup>10</sup> See the items collected by M. Bieber, Ath. Mitt., XXXV, 1910, pp. 5-8.
  - <sup>11</sup> See P. Girard, L'Asclépieion d'Athènes (Paris, 1881), pp. 97 ff.
  - <sup>12</sup> A. Körte, Ath. Mitt., XVIII, 1893, pp. 231-56.
  - <sup>13</sup> K. Kourouniotes and H. Thompson, Hesperia, I, 1932, pp. 193-200.

excavations of the Asklepieia have, however, been rather disappointing in this respect. Only a few such objects were found in the great sanctuaries at Kos,<sup>14</sup> Epidauros,<sup>15</sup> and Pergamon.<sup>16</sup> The minor sanctuaries, too, so far as excavated, have yielded only sporadic finds.<sup>17</sup> It could scarcely be expected that the votives of precious metals would survive, and the stone and marble objects no doubt suffered the usual fate of statues and building blocks.

The votives from Corinth, however, were of terracotta. Thus, they had no intrinsic value and their disposal was relatively easy when the accumulation became too great. The reason for the choice of this material probably lies in the fact that good stone for sculpture is not found at Corinth and the terracotta industry there was well established and experienced. Thus, the votives from the Asklepieion have the double importance, not only of being the largest collection of such objects discovered in Greece, but also of giving an idea of Corinthian workmanship for their period. The only similar large finds of terracotta votives of this type are reported from the sanctuaries of Diana at Nemi and Veii, and from the Asklepieion on the Tiber island in Italy. Comparison with these, however, is difficult since they still await full publication.<sup>18</sup>

In addition to these offerings, which are particularly appropriate to Asklepios, minor votives of the normal types were found in some quantity. There were many small vases, terracotta figurines of various types, and lamps. Very few metal objects and little sculpture were discovered. Two classes of votive objects particularly associated with Asklepios were conspicuously absent at Corinth. These are the sculptured relief plaques with scenes of the god receiving patients <sup>19</sup> and the like, such as were found in large quantity in Athens and Peiraeus, and the stelai recording cures, like

no. 75; from the Amphiarieion at Oropos, Herzog, Philologus, Supp. XXII, pp. 89 ff.

<sup>&</sup>lt;sup>14</sup> See K. Sudhoff, Kos und Knidos (Munich, 1927), p. 30, note 2.

<sup>&</sup>lt;sup>15</sup> The most important is the pair of ears cut in relief on a marble plaque with a votive inscription, *I.G.*, IV<sup>2</sup>, 440; Svoronos, *Catalogue of the National Museum in Athens*, pl. LXX, No. 1428.

<sup>16</sup> T. Wiegand, *Abh. Berl. Akad.*, 1932, pp. 34-35, no. 9 (ears). See also *Altertümer von Pergamon*, VII, 2, no. 337.

<sup>&</sup>lt;sup>17</sup> A few are reported from the Asklepieion in Delos, B.C.H., L, 1926, pp. 570-72; a large find is reported from the Asklepieion at Butrinto in Albania, Arch. Ans., XLVI, 1931, p. 690.

<sup>&</sup>lt;sup>18</sup> T. Gautier, Journal of the British and American Society in Rome, II, 1890-98, pp. 448 ff.; L. Sanborn, "Donaria of Medical Interest," British Medical Journal, II, 1885, pp. 146, 216; Rossbach, "Das Dianaheiligtum in Nemi," Verhand 40, Versammlung. Philol. u. Schulmänner, Gorlitz, 1889, 149-64; L. Stieda, Anatomisch-archaeologische Studien, IV, Wiesbaden, 1901; Röm. Mitt., XIV, 1899, pp. 230-43. I have had access only to the last mentioned of these articles. The votives have never been published as a group. Some are discussed in the British Museum Guide to Greek and Roman Life, (London, 1929), pp. 42-44, cases 102-06; a few are in the Danish National Museum at Copenhagen and have been published by N. Breitenstein, Catalogue of Terracottas, Danish National Museum, (Copenhagen, 1941), pls. 103-105.

<sup>19</sup> None were found in Epidauros. Herzog (*Philologus*, Supp. XXII, 1931, p. 55, note 16) rejects Svoronos' identifications (*Catalogue of the National Museum in Athens*, nos. 1358, 1392, 1426). Those from Athens are discussed by Sudhoff, *Archiv. f. Gesch. d. Med.*, XVIII, 1926, pp. 235 ff.; M. Bieber, *Ath. Mitt.*, XXXV, 1910, pp. 2 ff., and *Ant. Skulpt. u. Bronzen in Cassel*,

those from Epidauros, Lebena in Crete and the Tiber island in Rome.<sup>20</sup> It is probable that sculptured marble plaques were not dedicated because of the absence of good marble at Corinth, which would make such offerings very expensive. Marble stelai, too, were possibly not dedicated for the same reason, and tablets of bronze would scarcely have survived because of their intrinsic value or destructability.

# THE DEPOSITS

The larger part of the material was found in closed deposits. Thus, while it is possible to date it with some accuracy to the period between the last quarter of the fifth century and the end of the fourth, it throws light on the history of the cult for only a limited time, and, for the rest, we are dependent on the architectural remains. In the publication of the material it will be convenient to discuss the deposits first and the material found in them; then, to describe the other objects which are of some interest in themselves, or for the history of the cult.

The closed deposits in which votive members of terracotta were found were seven in number, but not all are of equal importance for the study of the material. The main deposits were in the drain channel of the early sanctuary (Votive Deposit II); in the well north of the temple (Votive Deposit V); and in the packing against the foundations of the abaton building in the northeast corner of Lerna (Votive Deposit IV). These deposits contained the bulk of the material—human members, vases, and lamps. They were evidently filled in at the same time, since joining fragments of the mask (No. 1) were found in Deposits II and IV and of the arm (No. 50) in Deposits II and V; in addition, joining fragments of the lamp (No. 6) came from Deposits IV and V. Further, the types of pottery and lamps were similar in each of the deposits. The circumstances of their filling must have been in each case the same—the demolition of the structures of the early sanctuary and the construction of the monumental buildings of the precinct and of Lerna. Thus, the dating of the objects in them is of importance not only for the terracotta votives, but for the history of the sanctuary.

It is probable, but not certain, that Votive Deposits I and VI were made at the same time as those already mentioned. Votive Deposit I consisted of a filling, apparently made in a levelling operation, found in the southeast corner of the excavated area. It was not entirely excavated, but extends into the undug area to south and east. It contained comparatively few votives—mostly feet—, but its pottery and lamp types were similar to those of the main deposits, II, IV, and V. Votive Deposit VI was found in the cutting for the east wall of the oikos. It contained only a few

<sup>&</sup>lt;sup>20</sup> The texts from Epidauros have been thoroughly studied by Herzog, *Philologus*, Supp. XXII, 1931, pp. 1-164; those from Lebena are included in the study. For the "Maffeian" inscriptions from the Tiber Island, see L. Deubner, *De Incubatione*, pp. 44-48.

<sup>&</sup>lt;sup>21</sup> The number of votive members inventoried from each deposit gives a good idea of their relative importance: I—25; II—55; III—10; IV—67; V—100; VI—1; VII—1. Twenty-one small fragments from later contexts were inventoried.

scraps of votives, but, since this structure was demolished when the temple was built, the deposit was probably made at that time in the levelling of the precinct. Its vases, too, were of types similar to those in the above-mentioned deposits. Thus, it will be convenient to treat the material from Deposits I, II, IV, V, VI as a whole.

Votive Deposit III consists of the filling in the basin and over the steps and platform of the lustral chamber in the abaton building. As we have pointed out above (pp. 50-51), this room probably went out of use shortly after the construction of the building. The filling contained very few members of terracotta—the most important being the large realistically modelled leg (No. 83). Votive Deposit VII consisted of the Greek filling in the lower part of the shaft in the south colonnade of the precinct. As indicated above, this probably was filled up in part in the period after the abandonment of the sanctuary in 146 B.C., and the shaft was completely filled at the time of the construction of the Roman building over the ramp. It contained only one interesting votive, the "temple boy" (Figurines, No. 24), and a few scraps of votive limbs.

The majority of the votives published were found in Deposits II, IV, V. They and the few from Deposits I and VI are to be dated in the same period. Those from Deposit III are presumably slightly later in date. Only the large figurine (No. 24) is published from Deposit VII. The dating of the main deposits will be discussed after the votives are described.

# VOTIVE REPLICAS OF HUMAN MEMBERS

The terracotta replicas of the members of the body dedicated by the patients in the Asklepieion include most of the types known from the inventory lists and from similar votive offerings found elsewhere. There are heads, the upper part of a head, ears, eyes and a tongue; a torso and chests, female breasts and male genital organs; arms, parts of arms, hands and fingers; legs, parts of legs and feet. Two interesting individual dedications were a plait of hair and a thigh bone. The legs and feet, arms and hands, breasts and genitals made up the greater proportion of the offerings. Since the deposits probably contain a representative selection of the offerings, it is reasonable to assume that these represent the "specialization" of the sanctuary, or, more properly speaking, indicate the ailments from which the majority of the patients suffered. Such "specialization" seems to have been the practice at the other healing sanctuaries. For example, votive eves appear most frequently in the inventory lists of the Asklepieion in Athens, 22 while at Corinth only three were found; in the Amphiareion.<sup>23</sup> chests were the most frequent item, while at Corinth there were only three such dedications. Some items known elsewhere were not found. For example, the Athenian inventory mentions a jawbone and hearts.24 Representations of internal

<sup>&</sup>lt;sup>22</sup> W. H. D. Rouse, Greek Votive Offerings (Cambridge, 1902), p. 212.

<sup>&</sup>lt;sup>23</sup> *Ibid.*, p. 212.

<sup>&</sup>lt;sup>24</sup> *I.G.*, II<sup>2</sup>, 1534, 53, 82.

organs were lacking at Corinth except for one piece which might represent a stomach (No. 118). In the terracotta votives from the Italian sanctuaries they were found in large numbers.<sup>25</sup>

The clay used for the votives varies in quality depending on their size and importance. For the smaller objects: ears, eyes, some of the breasts and genitals, and one small arm, the fabric is soft, crumbly and warm buff in color, similar to that used for small terracotta figurines. In all the larger objects, however, and the better made breasts and genitals, it is well levigated and fired to various shades of buff, ranging from a light cream to brown and red. A rather small percentage of the objects have a pale green fabric, usually strengthened with grits. The grits are also used occasionally in the buff fabric. A thin clay slip covers almost all the terracottas except a few of the smaller objects. It is normally light buff in color, and of good quality. The hard, light green slip characteristic of the fine terracotta work of the archaic and early classical periods <sup>26</sup> is present only on one small votive foot (No. 104). It is likely that the foot is of earlier date than the other votives. A coarse, thin, pale green slip, apparently a poor, or a cheaper, attempt at the earlier type, is found on several of the large arms and legs, but it is exceptional. The fabric of all the votives is similar to that of other Corinthian terracottas known to have been made in Corinth either at the Potters' Quarter or the Tile Factory. Thus, although no moulds or wasters of these votives have as yet been discovered, it seems certain that they are of Corinthian manufacture.

The votives, with the exception of the ears, eyes, and the curling fingers on some of the hands, were made in separate pieces in moulds, and assembled. The fabric in the smaller pieces, such as the breasts, is thin (ca. 0.003 m.), but in the large arms and legs it is thick (0.01-0.02 m.) built up in as many as four layers. The outermost is usually thin and well levigated, the inner layers thick and coarser. For additional strengthening in some of the pieces, lumps of clay are packed down into the hollow centers. Many pieces show the marks of paring and cutting on the surface, where they were retouched. It was usual also to indicate the joints of the toes and fingers, the lines of the palm of the hand, and the outline of the nails by incisions. In some of the crudely modelled pieces the division between fingers and toes is indicated only by a heavily incised gash. On the heads, too, much of the detail around the eyes, nose and mouth is indicated by later touching up. Hair was rendered naturalistically by incision, grooving, or by adding short, twisted ribbons of clay.

The methods of painting and the colors used on the votives were, with few exceptions, the same as those used on terracotta figurines. After the pieces had been fired they were covered with a white sizing to serve as a base for the paint, although in a few examples this is added directly on the clay slip. The painting was for the most

<sup>&</sup>lt;sup>25</sup> Röm. Mitt., XIV, 1899, pp. 238-40.

<sup>&</sup>lt;sup>26</sup> Compare the group found in a well near Temple E in Corinth. R. Stillwell, "A Terracotta Group at Corinth," *Classical Studies Presented to Edward Capps* (Princeton, 1936), pp. 318-22; Payne, *Necrocorinthia*, pp. 232 ff.

part conventional. Feminine parts were left in white, red was added for the masculine members. On the heads pink was used on the cheeks and the hair colored a deep red. There are a few startling departures from these conventions: the pubic hair of the male genitals might be colored black (No. 32), red (No. 34), yellow (No. 35), or blue (No. 31), and one hand is painted partly black and partly red (No. 64). Gilding is found on only two pieces, the genitals (No. 42) and the eye (No. 15).

The purpose for which the votives were intended—to be exhibited on the walls or to dangle from the ceiling of the building—is apparent in their manufacture. The small objects, breasts, genitals, ears, and eyes, are mounted on thin plaques with holes for suspension in the upper center or corners. They were evidently hung against walls. The lower edge of the necks on the heads is finished off by a flattened rim, so that they could rest on a shelf. Similarly the chests were finished with a flattened lower surface. The arms and hands were evidently designed to dangle, as almost all have holes pierced near the top for suspension. In one (No. 60) an iron grip remains. Very few pieces, however, show signs of oxidation around the holes, so that it is probable that thongs were used rather than iron handles. They might have been suspended from nails, either against a wall or from the ceiling. It is likely that suspension against a wall was normal, for frequently only one side of the hand shows details and some of the arms are flattened on the inner side. The feet and the majority of the legs were suspended by thongs, as their upper end, too, is pierced by holes. A few of the very large legs, however, were apparently designed to stand upright with a supporting brace at the top. Their foot is open on the sole, possibly to fit over a peg or tongue, and in the cap closing the top is a small hole in which a brace extending from the wall might have been fitted. Only one small arm (No. 58) and one foot (No. 105) seem to have been designed with a flat inner side for mounting on a plaque.

Since the sanctuary buildings of the period to which these votives belong were demolished, their original places of display cannot be ascertained. It is likely that similar votives from the later, Hellenistic, period of the sanctuary were displayed on the walls of the shallow colonnades of the precinct and possibly on the walls of the ramp the blocks of which preserve nail holes.

Generally speaking, the modelling and the detailed finish of the votives is incomplete and sometimes very crude. Only a few pieces such as the feet (Nos. 106-107, 110) and the large heads are finely and carefully done, and even they fall far behind the fine Corinthian terracotta work of the archaic and early classical periods. In many cases the makers found it sufficient to indicate the forms of fingers and toes and the swelling of muscles and bones in the most cursory fashion. A few pieces such as the large leg (No. 83), the arm (No. 50), the hands (Nos. 49, 50) and the foot (No. 109) show a taste for exaggerated realism. Since the finish and modelling of the majority of the pieces is so cursory, it seems idle to attempt to arrange them in a chronological sequence. They form a homogeneous group, with two exceptions (Nos. 90, 104) discussed in the catalogue, and only for the large heads might a date in the mid-fourth century be suggested. Possibly the limbs modelled with extreme realism

are among the latest members. The date of the group as suggested by the lamps and pottery would cover the period from the last quarter of the fifth to the latter part of the fourth century B.C.

It is apparent that the votive offerings are products of manufacture on a fairly large scale for general sale and that they were not made to show individual effects of the ailments. On only one piece is there a definite indication of disease. A hand (No. 63) has some growth on the back, probably caused by an infection. Many of the hands have crooked fingers, but it is scarcely possible to argue that they show the effects of rheumatism. The fingers were moulded separately in these cases and may well be intended to indicate the natural curl of fingers when the hand is relaxed. The swollen arteries of the foot (No. 83) are probably an exaggeratedly realistic touch rather than an indication of abnormality. The feet are almost all finished off flat, but that is probably to save additional labor and to give the larger legs greater stability. The chest (No. 17) appears to be that of a hunchback from one angle, but it is quite normal when seen in profile in the position in which it was meant to be exhibited. The genitals, which have been examined by a physician, exhibit no signs of disease. Some of the legs do have a puzzling feature. Their calves are pierced by small holes (No. 97). These, however, in many cases, do not extend through all the layers of the fabric, and they would have been covered by paint. They are probably a technical device to provide vents in those legs of which the tops and bottoms were entirely closed. The legs in which these holes appear, however, are all fragmentary.

The Corinthian votives, then, like most of those from other sanctuaries, are conventional offerings. Their counterparts, on a small scale in metal, may be purchased today in shops in Greece. What then is their significance? Were they offered as a matter of course by any patient of the Asklepieion to signify his ailment in a general way and hopefully draw the god's attention to it, or were they offered only after a cure, which the patient, at least, believed complete, had taken place? A partial answer is perhaps given by the dedicatory inscriptions on some of the marble votives from elsewhere, and by the psychological feeling which motivated the act, expressed in the well-known "cures" recorded at Epidauros. Some of the inscriptions record the fact that the patient was cured, or believed himself cured, and has offered a replica of the part in which he suffered as a thank-offering.<sup>27</sup> Most of them are couched in more general and conventional terms,<sup>28</sup> but are probably to be interpreted in the same manner. They should probably, then, be regarded as thank offerings for the cure of some ailment of which the general nature or location is indicated by the part represented.

It is idle to discuss briefly the actuality of these "cures" or the medical and psychological methods which might have induced them.<sup>29</sup> The example offered by

<sup>&</sup>lt;sup>27</sup> I.G., IV<sup>2</sup>, 440.

<sup>&</sup>lt;sup>28</sup> I.G., II<sup>2</sup>, 4422—only the name of the dedicator and the deity; *ibid.*, 4500—the name of the dedicator and the deity, with the conventional word  $\epsilon \delta \chi \dot{\eta} \nu$ .

<sup>&</sup>lt;sup>29</sup> See the treatment of the Epidaurian cures by Herzog, *Philologus*, Supp. XXII, 1931, pp. 46-64 and the discussion by Edelstein, *Asclepius*, II, pp. 158 ff.

Lourdes today is as pertinent as that offered by the ancient Asklepieia. The "cures" recorded at Epidauros, which are presented as miracles of the god, and were evidently designed to induce a proper attitude of mind in the patient do, however, offer suggestions as to what may have prompted the dedication of the particular type of votive. Whether the "cures" give stories suggested by such votives or by tablets depicting such scenes as are described 30 is beside the point. They record what their authors desired the patients to believe, and there is no doubt that most of them did believe. Among them are cases 31 of the cure of paralyzed fingers, of blindness, dumbness, the removal of blemishes from the face, the cure of wounds, of parasites in the breast, of stones in the kidneys, of lameness, of baldness, of headaches, tumours, ulcers and the like. There are also requests for children by barren women. The dedications made by the cured patients are recorded in some instances 32—mainly as the proper fulfillments of vows made. Those dedications specifically mentioned are usually monetary or of a costly nature, as the dedication of a gold statuette or a silver pig. No votives of human parts are mentioned. It is probable, as suggested previously, that they were regarded as normal offerings and thus are not specifically designated. If this is the case, it is easy to see from the above-mentioned instances of cures how naturally the dedication of the cured part followed. The votive arms, hands, fingers, legs and feet might be prompted by lameness, or by a wound or ulcer on that part; the votive eyes by some cure of an eye ailment, the ears by a return of hearing, the tongue by a return of speech. The votive heads might indicate the removal of blemishes or of headaches; the torsos the cure of a wound or of some internal disease of the breast. It is probable, however, that the female breasts were dedicated in gratitude for the birth of a child. Similar dedications were made elsewhere, rather more pertinently, to Eilythuia.<sup>33</sup> The male genitals, too, probably were dedicated not so much for the cure of an ailment as to indicate a return of potency. The bone (No. 117) may indicate a successful setting of a broken limb. The plait of hair (No. 116) offers a rather more difficult problem. It may have been simply to record thanks for the growth of hair as in the miracle cure or possibly it is the traditional offering of the "first-fruit" of the worshipper.<sup>34</sup> Such offerings were more usually given to Apollo at Delphi and to the great gods, Zeus and Hera, but the statue of Hygieia at Titane was bedecked with offerings of hair.35

<sup>&</sup>lt;sup>30</sup> Herzog, *Philologus*, Supp. XXII, 1931, pp. 51-58; *Herodas* (ed. Headlam, Cambridge, 1922), iv. The visitors in this case made a dedication of a pinax (l. 19), explained by Headlam as a small tablet on which the experiences of the sufferers were depicted.

<sup>&</sup>lt;sup>31</sup> The following references are to the text of Herzog in *Philologus*, Supp. XXII, 1931, pp. 7-35; an English translation of the better preserved *stelai* is given by Edelstein, *Asclepius*, I, pp. 229-237. Fingers, A. 22-33; blindness, A. 34-41, 72-79, 90-95, 120-23, 125-27, etc.; dumbness, A. 41-48; removal of blemishes, A. 55-68; wounds, A. 95-98; parasites, A. 98-104; stones, A. 104-107; lameness, A. 110-12, B. 96-100; baldness, A. 123-25; headaches, B. 50-55; tumours and ulcers, C. 30-33; prayers for children, B. 82-87, 117-18. I have cited only a few of the "cures"; there are, of course, many others, and also non-medical miracles. See Herzog's commentary, *op. cit.*, pp. 65-130.

<sup>&</sup>lt;sup>32</sup> Herzog, *op. cit.*, pp. 130-38. 
<sup>33</sup> *I.G.*, XII, 5, 198.

<sup>&</sup>lt;sup>34</sup> Rouse, Greek Votive Offerings, p. 370; Herzog, op. cit., pp. 108-109.

<sup>&</sup>lt;sup>85</sup> Pausanias, II, 11, 6.

Thus, these votive offerings of terracotta are, in their own fashion, as eloquent a testimonial to the part which the Asklepieion played in the lives of the humbler citizens of Corinth as are their costlier counterparts of gold, silver, and marble and the dedicatory inscriptions found elsewhere.

In the Catalogue of votives which follows, only the better-preserved examples of each type are listed and a few remarks on the types added. The number after the plate reference is the Asklepieion inventory number. The deposit from which the votive came is indicated by the Roman numerals after the inventory number. Where this is not given its absence indicates that the votive has no significant context.

# CATALOGUE OF VOTIVES

# **HEADS**

- 1 (Plate 29). V 40, II and IV. Mask of Asklepios. Height, 0.207 m.
- **2** (Plate 30). V 112, V. Female Head. Height, 0.291 m.
- **3** (Plate 31). V 99, V. Female Head. Height, 0.243 m.
- 4 (Plate 32). V. 228, IV. Fragmentary male head. Preserved height, 0.221 m.
- **5** (Plate 32). V 73, IV. Fragmentary male head. Preserved height, 0.11 m.
- **6** (Plate 32). V 224, IV. Fragmentary male head. Preserved height, 0.098 m.
- 7 (Plate 32). V 102, III. Fragmentary brow with hair. Height, 0.225 m.

There are traces of white sizing on the flesh surfaces of all the heads and of added red on the male heads; the hair of all is deep red. The hair is added as a mass of clay and rendered naturalistically by deep grooves on Nos. 1-3; on Nos. 4 and 5 it is made up of short twisted ribbons of clay and on No. 7 of long grooves. Nos. 1 and 7 were suspended, while the base of the neck of Nos. 2, 3, 4 is extended in a flange to serve as a resting surface. A number of small fragments from other heads was found.

On the mask, No. 1, the central part of the brow with the hair above it, the inner corner of the left eye and part of the lower lip and moustache are restored. The place of the nostril is indicated by a curved groove on the outside and a punched hole for the opening. The mask may represent Asklepios who was usually depicted as a benign and bearded figure. The benignity, however, is lacking in the rather hard modelling of the features.

On No. 2 the lobe of the ear is pierced for a metal ring. On No. 3 the left eye, parts of the cheeks, neck, the lower lip and the tip of the chin are restored. The hair of both heads is similarly and elaborately treated; two braids starting from the nape of the neck encircle the head and meet to form a small crest over the brow. The style of the hairdress and the modelling of the features suggests a date in the midfourth century B.C. (Agnes N. Stillwell, *Corinth*, XV, i, p. 101).

Only the back of No. 4 is preserved. It represented a youthful male head with short curling locks encircled by a taenia. On No. 5 the ear is added above the curling locks. On No. 6 a hole is punched at the end of the lips and a groove indicates their parting.

No. 7 is the only example of its type which was found. It represents the upper part of a face and is mounted on a plaque. The beginning of the projection of the plaque to the rear is preserved at approximately the level of the eyes. Thus, originally, the votive probably represented the eyes, part of the nose between them, the brow and hair. A similar portion of the head is represented in a votive offering to Demeter found at Eleusis ('E $\phi$ . 'A $\rho\chi$ ., 1892, p.

113, pl. V), and part heads, vertically divided, were found among the Italian terracotta votives (L. Stieda, Röm. Mitt., XIV, 1899, p. 235). A marble relief plaque representing the lower part of the face was found in the sanctuary of Zeus Hypsistos on the Pnyx in Athens (A. H. Smith, Catalogue of the Sculpture in the British Museum, I, no. 805). None of the Asklepieion heads shows any trace of disease, as do the stone faces from Golgoi in Cyprus (L. P. di Cesnola, Cesnola Collection of Cypriote Antiquities, I, plate CXXIX, nos. 930, 935).

#### **EARS**

- 8 (Plate 33). V 220, IV. Ear on plaque. Dimensions, 0.065 by 0.07 m.
- $\bf 9$  (Plate 33). V 132, V. Ears on plaque. Dimensions, 0.085 by 0.055 m.
- 10 (Plate 33). V 221, IV. Ears and genitals (?) on plaque. Dimensions, 0.087 by 0.062 m.
- **11** (Plate 33). V 133, V. Small ear. Preserved height, 0.047 m.
- **12** (Plate 33). V 205, V. Small ear. Preserved height, 0.052 m.

Traces of white sizing are preserved on Nos. 8 and 10, and of red paint on No. 10. The lobes of No. 9 are pierced, apparently for a metal ornament. The ears are crudely modelled by hand and mounted singly or in pairs on thin plaques in which holes for suspension were pierced near the top. No. 12, however, shows no signs of breakage from a plaque and may have been dedicated without a mount. Between the ears in No. 10 is the outline left by some member placed between them. The outline resembles that of the genitals. Only these 5 votive ears and some scraps were found.

Dedications of ears are well known from various sites. The usual form seems to have been one ear or a pair of ears mounted on a plaque, sometimes with a dedicatory inscription stating that they are the thank-offering for a cure (cf. M. Bieber, Ath. Mitt., XXXV, 1910, pp. 5-8, pl. I. 2; I. N. Svoronos, Catalogue of the National Museum in Athens, pl. LXX, no.

1428; A. Michaelis, Ancient Marbles in Great Britain, p. 746, no. 193 and Arch. Anz., 1864, pl. A. 1). Gold ears have been found in Ephesus in the foundation deposit of the early archaic temple. They are of foil and were probably attached to wooden plaques or statuettes (D. G. Hogarth, The Archaic Artemisia, p. 108, no. 48, pl. VII). These probably resembled the ears mentioned in the inventory from the Athenian Asklepieion as attached to a wooden tablet ( $\pi \rho \delta s$   $\sigma \alpha \nu \delta \delta \omega i$ ; I.G. II<sup>2</sup>, 1534, 73; the inventory also mentions ears πρὸς πίνακι or πρὸς πινακίωι, 50-51). A stone ear from Golgoi has an ornament in the lobe as No. 9 apparently had (Cesnola, Cesnola Collection of Cypriote Antiquities, I, pl. CXXIX, nos. 931-33). That the ears were sometimes combined with another member is indicated in the Athenian inventory  $(I.G., II^2, 1534, 55: with teeth)$ . The above mentioned ears were probably all thank-offerings for the cure of some ailment, but ears were also dedicated to indicate that the deity was ready to listen to prayers (see Deonna. Délos, XVIII, Le Mobilier Délien, pp. 217-220).

# **EYES**

- **13** (Plate 29). V 135, V. Eyes on plaque. Dimensions, 0.097 by 0.076 m.
- **14** (Plate 33). V 208, V. Eyes on plaque. Dimensions, 0.04 by 0.03 m.
- **15** (Plate 33). V 209. Eye. Length, 0.03 m.

Traces of white sizing are preserved on all the eyes, of pink on No. 13 and of gilt on No. 15. No. 13 preserves traces of some other member on the left of the preserved eye. The outline resembles that of genitals rather than a nose. The eye is crudely indicated by incision. Nos. 14 and 15 are hand made with the lashes on No. 14 and the pupil and iris of No. 15 indicated by incision. No. 15 bears no traces of having been attached to a plaque, and, like the ear No. 12, may have been dedicated singly. Only these three eyes were found.

As in the case of ears, votive eyes are well known as dedications. They are the most fre-

quently mentioned votive in the inventory from the Athenian Asklepieion (I.G., II<sup>2</sup>, 1534). The normal method of exhibition was similar to that used for the Corinthian votives-one or two eyes in relief on a plaque (Smith, Catalogue of the Sculpture in the British Museum, I, nos. 801-02; on no. 801 the eye on the right has a slit, perhaps indicating that an operation had been performed on it; Cesnola, Cesnola Collection of Cypriote Antiquities, I, pl. CXXIX, 924, 926, 934, 936; P. Collart, Philippes, pp. 440-41, pl. LXXVII, 2). Small eyes of thin, gold foil were found in the foundation deposit of the early archaic temple at Ephesus (Hogarth, The Archaic Artemisia, pl. VII, nos. 35, 36, 39-42, 44, 47) and, like the ears, were probably mounted on wooden plagues. Some dedications of eyes, however, may have had an apotropaic significance like those found at Myrina (E. Pottier and S. Reinach, La Nécropole de Myrina, p. 244) and possibly the large marble eye from Delphi (Fouilles de Delphes, V, p. 209, no. 708; fig. 911).

# TONGUE(?)

**16** (Plate 32). V 223, IV. Length, 0.05 m.; width, 0.042 m.

The object is flat with rounded edges and a slight projection at one end. There are no traces of mounting. It bears considerable resemblance to the wedges used for separating tiles in a kiln, but, since it was found in the Votive Deposits, may be a crude representation of a tongue.

#### MALE CHESTS

- **17** (Plate 29). V 116, V. Right arm and chest. Height, 0.258 m.
- **18** (Plate 33). V 45, II. Right arm and chest. Height, 0.355 m.
- **19** (Plate 33). V 134b, IV. Torso. Height, 0.144 m.

There are traces of white sizing on all the items and of added red on Nos. 17 and 19. On No. 17 the nipple is represented by a dab of

clay; on No. 18 incised lines indicate the different texture of the skin around the nipple. Nos. 17 and 19 are finished with a flat resting surface on the bottom; No. 18 was probably suspended, for the lower side of the arm is modelled.

No. 17 represents the upper right arm and about three quarters of the chest. The end of the arm is rounded off, but a small hole is left in the top of the chest, possibly to serve as a vent in the firing. The back of the chest is rounded and projects between the shoulders as if to represent a left arm which was not rendered on the front. This is probably a crudity of modelling rather than the representation of a deformity, for the chest appears normal when seen in profile. It was probably designed to be so seen since the left side is finished off flat.

No. 18 represents only part of the right arm and the right side of the chest. The left edge is finished off flat indicating that the votive was exhibited as in the photograph. The small torso, No. 19, is evidently a votive and not part of a figurine for the bottom is finished with a flat resting surface. To judge from the broken edges it was originally a complete torso with arms and genitals. The back is not finished, but the front is well modelled. It is possibly dedications of this type which are referred to as the "body of a man" in the inventory of the Athenian Asklepieion (I.G., II<sup>2</sup>, 1534, 57), but I do not know of any similar objects having been found elsewhere in Greece. There is a complete torso in the Danish National Museum from Italy (Breitenstein, Catalogue of Terracottas, pl. 103, no. 813).

#### FEMALE BREASTS

- **20** (Plate 34). V 131, V. Single breast. Height, 0.053 m.
- **21** (Plate 34). V 130, V. Single breast. Height, 0.062 m.
- **22** (Plate 34). V 128, V. Pair of breasts. Height, 0.067 m.
- 23 (Plate 34). V 129, V. Left breast. Height, 0.059 m.

- **24** (Plate 34). V 194, V. Right breast. Height, 0.066 m.
- **25** (Plate 35). V 200, V. Fragmentary breast. Preserved height, 0.035 m.
- **26** (Plate 35). V 218, IV. Breast. Height, 0.053 m.
- **27** (Plate 35). V 42. Fragmentary breast. Preserved height, 0.077 m.
- **28** (Plate 35). V 202, V. Fragmentary breast. Height, 0.052 m.
- **29** (Plate 35). V 197, V. Fragmentary breast. Height, 0.071 m.
- **30** (Plate 35). V 204, V. Fragmentary breast. Height, 0.04 m.

There are traces of white sizing on almost all the breasts. Probably most of them were left white with the nipple and its base painted red as the traces on No. 28 suggest. One small uninventoried fragment, however, has traces of pink on the surface of the breast. plagues were probably painted red by way of contrast as the traces on Nos. 22 and 26 indicate. One fragmentary plaque retains some traces of blue. The breasts were mounted singly (Nos. 20, 21) or in pairs (No. 22) on thin plaques suspended by holes pierced near the top. They vary in size from the small immature breasts like Nos. 20 and 30 to full rounded breasts like Nos. 22, 24 and 29. The breasts show little realism in their modelling except in the nipples. Some of them are button shaped, others pointed and on a few the pores are represented by punched holes, sometimes irregularly as on No. 25, sometimes in cruciform pattern. The fabric of most of the breasts is thin, but on a few, like No. 27, very heavy. Its thickness is 0.018 m. Many fragmentary breasts were found.

Such dedications of breasts cut singly or in pairs on marble plaques are well known from other sanctuaries (e. g., from the sanctuary of Zeus Hypsistos on the Pnyx, K. Kourouniotes and H. A. Thompson, *Hesperia*, I, 1932, pp. 193-200; Körte, *Ath. Mitt.*, XVIII, 1893, pp. 241-42, no. 6, fig. 3; in the inventory from the

Athenian Asklepieion, *I.G.*, II<sup>2</sup>, 1534, passim). Terracotta breasts similar in size to those in Corinth were found in Italy (L. Stieda, *Röm. Mitt.*, XIV, 1899, p. 240).

# MALE GENITALS

- **31** (Plate 35). V 190, IV. Genitals on plaque. Dimensions, 0.135 by 0.13 m.
- **32** (Plate 35). V 119, V. Genitals. Height, 0.073 m.
- **33** (Plate 37). V 125, V. Genitals on plaque. Dimensions, 0.122 by 0.125 m.
- **34** (Plate 37). V 127, V. Genitals on plaque. Dimensions, 0.109 by 0.11 m.
- **35** (Plate 37). V 118, V. Genitals. Height, 0.096 m.
- **36** (Plate 37). V 120, V. Genitals on plaque. Height, 0.108 m.
- **37** (Plate 35). V 217, IV. Genitals on plaque. Dimensions, 0.10 by 0.075 m.
- **38** (Plate 37). V 121, V. Genitals on plaque. Dimensions, 0.068 by 0.073 m.
- **39** (Plate 37). V 117, V. Genitals on plaque. Dimensions, 0.076 by 0.092 m.
- **40** (Plate 35). V 126, V. Genitals on plaque. Dimensions, 0.094 by 0.075 m.
- **41** (Plate 35). V 124, V. Genitals on plaque. Dimensions, 0.065 by 0.053 m.
- **42** (Plate 35). V 219, IV. Genitals. Width, 0.056 m.
- **43** (Plate 35). V 122, V. Genitals on plaque. Dimensions, 0.075 by 0.065 m.
- **44** (Plate 36). V 123, V. Genitals. Height, 0.062 m.
- **45** (Plate 36). V 189, V. Genitals. Height, 0.106 m.
- **46** (Plate 36). V 192, IV. Genitals on plaque. Dimensions, 0.072 by 0.071 m.
- 47 (Plate 35). V 239, V. Plaque. Preserved height, 0.074 m.

**48** (Plate 35). V 239a. Pubic hair. Preserved width, 0.066 m.

The usual color scheme seems to have been to paint the genitals red, the pubic hair red and exceptionally black (No. 32) or blue (No. 31). No. 42 is gilded over a white sizing. The plagues were painted white with red (No. 31) or blue borders (No. 47). The usual method of manufacture was to make separate units of the pubic hair, the penis and each testicle by mould (a few are hand made) and assemble them on a plaque (see No. 34). Only two, Nos. 32 and 35, seem to have been unmounted. The pubic hair is sometimes rendered naturalistically by incision, by shallow gouges (No. 48) or by small punched holes (No. 38). In many cases the wrinkled skin of the scrotum is rendered realistically by paring and by gouging shallow grooves. Most of the genitals, however, are purely formalistic and have only a few naturalistic touches, such as rendering the hair by scratches on No. 33 or by the indication of the head of the penis under the foreskin in No. 34 and No. 38.

The type of dedication—genitals mounted on a plaque-is known from the marble plaques previously discovered in the healing sanctuary on the west slope of the Acropolis in Athens (Ath. Mitt., XVIII, 1893, p. 242, no. 7, fig. 4) and from Golgoi (B.C.H., XX, 1896, p. 362, no. 3). Such dedications in terracotta were found in the Italian sanctuaries (Röm. Mitt., XIV, 1899, p. 241), and others have been reported from various Asklepieia (Kos: K. Sudhoff, Kos und Knidos, p. 30, note 2; Delos: B.C.H., L, 1926, p. 571) or are mentioned in the inventory from the Athenian Asklepieion (I.G., II2, 1534, passim). The terracotta penises found in Delos are phalloi rather than thank-offerings (Deonna, Délos, XVIII, pp. 347-49; pl. XCVIII, 873).

# ARMS AND PART ARMS

- **49** (Plate 39). V 160, V. Left arm. Length, 0.80 m.
- 50 (Plate 39). V 55, II and V. Right arm. Length,  $0.615 \, \mathrm{m}$ .

- **51** (Plate 39). V 98, II. Left arm. Length, 0.695 m.
- **52** (Plate 37). V 163, V. Right arm. Length, 0.645 m.
- **53** (Plate 37). V 174, V. Right arm. Length, 0.58 m.
- **54** (Plate 39). V 173, V. Right arm. Length, 0.71 m.
- **55** (Plate 37). V 162, V. Left arm. Length, 0.642 m.
- **56** (Plate 37). V 161, V. Right arm. Length, 0.543 m.
- **57** (Plate 45). V 114. Small arm. Length, 0.129 m.
- **58** (Plate 36). V 268, IV. Fragmentary arm. Length, 0.22 m.
- **59** (Plate 37). V 166, V. Fragmentary arm. Length, 0.51 m.
- **60** (Plate 36). V 165, V. Lower right arm. Length, 0.354 m.
- **61** (Plate 36). V 175, V. Lower right arm. Length, 0.42 m.
- **62** (Plate 36). V 167, V. Upper right arm. Length, 0.272 m.

Traces of white sizing are preserved on most of the arms. On Nos. 49, 50, 54, 56, 57, and 60 are more or less well preserved traces of red paint which probably indicate that they were male. It is probable that the female arms were left white, for No. 52, on which the white sizing is very well preserved, shows no traces of added color. In two cases, Nos. 49 and 50, red paint is applied directly on the clay slip without a base. No. 51 is finished with a very light buff, polished slip and may never have been painted, but left in this almost natural flesh tint.

The arms are mould-made as a tapering tube from shoulder to wrist where the hand was added separately. The flattening and curve of the inner side of the elbow seem to have been made by pressing in the semi-hard clay as the inner side of the fabric shows cracks at this

point. The fabric of the arms is moderately thick (ca. 0.01 m.) and in most cases is not reinforced on the inside. The top of the arm was closed by a cap—sometimes solid, sometimes with a small hole in its center, and holes were pierced through the fabric near the top of the arm for its suspension. The surface of almost all the arms shows paring strokes where retouching was done, and such details as are indicated are made by incision. No. 58, made flat on one side, was attached to a plaque. It is the only arm not completely made in the round.

The complete arms are represented from the shoulder downwards and include the hand and fingers. The part arms might be the lower arm, as Nos. 60 and 61, or the upper arm above the elbow as No. 62. Most of the arms are represented as hanging naturally without tension and with the fingers curling slightly. Nos. 49, 50, and 55, however, are extended stiffly. The arms are apparently intended to be life-size, except for the obviously miniature No. 57. Thus, the arms of men, women and children were represented in the votives.

As the suspension holes, made from the outside to the inside of the arm, and the modelling indicate, the arms were intended to be displayed against a wall. Nos. 49 and 50 are modelled to show either a complete outside or inside, and No. 51, designed to be seen in profile, has its hand set on in profile also, without any indication in the modelling of the torsion involved.

The modelling and the detail of the hands is crude on most of the pieces. Only on Nos. 49 and 50 is the natural soft texture of the flesh on the palm of the hand well rendered, although many of the arms and hands show sketchy attempts at realism. The hollow on the inside of the elbow, the lines of the palm, finger joints and the cuticle on the nail are frequently indicated by rather coarse incision or cutting away of the clay. No. 55 is particularly crude, with the fingers stiffly extended and their division indicated only by grooves.

Votive arms are found rather infrequently in the dedications from other sanctuaries. Two arms are represented on a marble relief plaque from the sanctuary of Zeus Hypsistos in Athens (Catalogue of the Sculpture in the British Museum, nos. 806 and possibly 808), but none is reported among the terracotta votives from the Italian sanctuaries.

# HANDS

- **63** (Plate 40). V 41, II. Left hand. Preserved length, 0.20 m.
- **64** (Plate 40). V 252, IV. Right hand. Length, 0.214 m.
- **65** (Plate 38). V 171, V. Right hand. Length, 0.217 m.
- **66** (Plate 38). V 164, V. Right hand. Length, 0.223 m.
- **67** (Plate 38). V 169, V. Right hand. Length, 0.20 m.
- **68** (Plate 36). V 168, V. Right hand. Length, 0.192 m.
- **69** (Plate 38). V 170, V. Left hand. Length, 0.169 m.
- **70** (Plate 38). V 172, V. Right hand. Length, 0.177 m.
- **71** (Plate 38). V 184, V. Right hand. Length, 0.134 m.
- **72** (Plate 40). V 278, V. Left hand. Preserved length, 0.127 m.
- **73** (Plate 40). V 255, IV. Right hand. Preserved length, 0.095 m.

Nos. 63-71 are from votive hands; Nos. 72 and 73 are fragmentary hands which may be from arms.

The coloring on the hands is similar to that on the arms except that the red is usually placed directly on the clay slip. No. 64 is painted black on the wrist and around the nails, while its palm and the joints of the fingers are red. The hands are made by several methods. Some, with rigidly extended fingers, are mould-made with fingers and hands constructed in a single piece. The usual practice was to make the palm and wrist in one piece and add the fingers separately. These are hand made and represented as

slightly curled. Accordingly, while the fingers may curl, none of the wrists are represented as bent or twisted. The fingers show considerable variety and, as mentioned above, the details of their joints and nails, if represented at all, are indicated by incision.

The hands may include a wrist (Nos. 63-67) or only a hand (Nos. 68-71) with the beginning of the wrist indicated. Most of them have naturally curling fingers, but Nos. 63, 64, and 70 are extended stiffly. On them the modelling does not indicate the tension involved in stretching the fingers. As in the case of the arms, the hands are made to show either the back or the palm. Thus, Nos. 66 and 70 have details indicated only on the back and No. 67 only on the front.

No. 63 is the only votive with a visible sign of disease, the growth on the back. Although complete, it has no holes for suspension, so that it may have been propped on a shelf. The modelling on this hand and on the hands in general is crude and hard. On Nos. 66, 72, and 73 only is the bone structure correctly indicated and the soft texture of the flesh represented.

There were many votive hands among the terracotta votives from the Italian shrines, but they seem to have been crudely made. They are described as flat, showing only the back or the palm; the lines of the palm, and the nails of the fingers were represented. Only one bore any traces of disease (L. Stieda, *Röm. Mitt.*, XIV, 1899, pp. 236-37). One is illustrated in Breitenstein, *Catalogue of Terracottas*, *Danish National Museum*, pl. 105, no. 823.

# FINGERS

- 74 (Plate 40). V 241, IV. Right thumb. Length,  $0.072 \ \mathrm{m}$ .
- 75 (Plate 40). V 242, IV. Left Thumb. Length, 0.067 m.
- **76** (Plate 40). Cor. Sc. 1492. Marble finger. Length, 0.079 m.

There are traces of white sizing on Nos. 74 and 75 and of added red on No. 75. The bases of all the fingers are finished off and No. 74 is

pierced by a suspension hole, while No. 75 shows traces of attachment to a plaque. Thus, they were dedicated as separate votives. No. 76, which was found in Roman filling, is the only marble votive from the group.

Fingers dedicated as separate votives are known from Athens (*Ath. Mitt.*, XVIII, 1893, pp. 242-43, nos. 11 and 12) and from Golgoi (Cesnola, *Cesnola Collection of Cypriote Antiquities*, pl. CXXIX, nos. 927-28).

#### LEGS AND PARTS OF LEGS

- **77** (Plate 43). V 151, V. Right leg and foot. Length, 0.363 m.
- 78 (Plate 43). V 44, II. Right leg and foot. Length, 0.441 m.
- 79 (Plate 41). V 49, II. Left leg and foot. Length,  $0.396 \, \mathrm{m}$ .
- **80** (Plate 43). V 149, V. Right leg and foot. Length, 0.557 m.
- $81\,$  (Plate 42). V 215, V. Left leg and foot. Length, 0.935 m.
- **82** (Plate 42). V 138, V. Right leg and foot. Length, 0.85 m.
- 83 (Plate 39). V 110, III. Right leg and foot. Length, 0.965 m.
- $84\,$  (Plate 39). V 216, V. Right leg and foot. Length, 0.765 m.
- $85\,$  (Plate 42). V 137, V. Left leg and foot. Length,  $0.85\,\mathrm{m}.$
- 86 (Plate 42). V 155, V. Right leg and foot. Length, 0.835 m.
- 87 (Plate 42). V 214, V. Right leg. Preserved length, 0.77 m.
- 88 (Plate 45). V 266. Small leg. Preserved length, 0.12 m.
- $\bf 89\,$  (Plate 40). V 266a. Small leg. Preserved length, 0.14 m.
- **90** (Plate 40). V 266b, VI. Fragmentary knee. Length, 0.175 m.

**91** (Plates 41, 43). V 152, V. Lower left leg. Length, 0.459 m.

- **92** (Plates 41, 43). V 150, V. Lower right leg. Length, 0.405 m.
- **93** (Plate 41). V 147, V. Lower right leg. Length, 0.48 m.
- **94** (Plates 41, 43). V 153, V. Lower right leg. Length, 0.47 m.
- **95** (Plates 41, 43). V 154, V. Lower left leg. Length, 0.46 m.
- **96** (Plate 41). V 148, V. Lower left leg. Length, 0.395 m.
- **97** (Plate 40). V 148a, V. Lower leg. Preserved length, 0.305 m.

The coloring of the votive legs is similar to that of the arms: white to represent feminine legs, red applied over white or on the clay slip to represent the masculine. The legs are mouldmade in separate sections and assembled, with considerable later retouching for details and better shaping as the paring strokes and incisions indicate. The whole legs are represented as complete, including both the buttock and the foot. Parts of lower legs begin from just above the knee. No identifiable upper legs were found. In both the whole and partial legs the hollow upper end was sealed over the top by a clay cap. The caps usually have small, round holes in the center. Almost all the legs are life-size so that a much heavier fabric was necessary for them than for the arms. It varies in thickness from 0.01—0.03 m. and, as already mentioned, is built up in two or more layers, with the outermost of fine, well-levigated clay.

The method of exhibition varied according to the size of the leg. The very large legs (Nos. 81, 82, 83) have no holes for suspension near the top except the single hole in the cap. Probably they rested on the foot and were steadied by a brace. The others have holes through the sides near the top so that they could have been suspended. One fragment, in fact, preserves the stub of an iron grip like that on the arm, No. 60.

Generally speaking, the modelling of the legs

is rather crude and the maker remained content with representing its form correctly, but not the texture of the flesh or the subtle modulation of the bone and muscle structure. The sole of the foot is usually flattened with only slight indication of the instep. In most cases this was apparently only to save labor, as the legs have holes for suspension at the top and did not rest on the foot. In the case of the more sketchily made legs the division of the toes is indicated by incised grooves. In others, however, the articulation of the toes and the sinews of the foot are well modelled.

The most interesting of the legs is No. 83. It is very large and heavy with a broad foot realistically modelled. The veins of the calf and foot and the tendons of the toes are represented—the latter as if under tension, although the position of the foot itself is not strained. The articulation of the toes is prominently rendered, and the little toe is small and curled up. The nails are shown as deeply indented into the flesh. The inner side of the leg, however, is finished off flat so that it was designed to be seen from one side only. No. 85 displays a different solution of the same problem. It is made abnormally wide from front to back to display as much as possible in profile view.

The legs, as in the case of the arms, are apparently intended to represent the limbs of men, women, and children, but the only clues to identification are in the color and size. The softer flesh and different shapes of women's and children's legs are not indicated. Nos. 88 and 89 are obviously miniature.

The legs form a uniform group with the exception of No. 90, which is probably earlier than the others, possibly of late archaic date. Its clay slip is a brownish buff with no trace of color, and the surface is scratched and worn, but shows no trace of paring as do most of the others. The modelling is sharp and clean with well-defined planes and little modulation. It is probably a stray fragment from the early period of the sanctuary.

Votive legs represented on marble relief plaques are known from other sanctuaries. The best known perhaps is the relief from the sanctuary on the west slope of the Acropolis in Athens, which shows a patient dedicating a lower leg which seems to have varicose veins (Ath. Mitt., XVIII, 1893, pp. 235-38, pl. XI; I.G., II², 4387). From Melos there is a marble relief of an upper leg (Catalogue of the Sculpture in the British Museum, I, no. 809). The terracotta votives from the Italian sanctuaries apparently did not include legs, but only separate feet (Röm. Mitt., XIV, 1899, p. 237). Two miniature legs, however, are published by Breitenstein (Catalogue of Terracottas, Danish National Museum, pl. 105, nos. 821-22).

#### **FEET**

- **98** (Plate 44). V 156, V. Right foot. Height, 0.11 m.; length, 0.223 m.
- **99** (Plate 44). V 157, V. Right foot. Height, 0.11 m.; length, 0.211 m.
- **100** (Plate 44). V 158, V. Right foot. Height, 0.11 m.; length, 0.235 m.
- **101** (Plate 44). V 159, V. Left foot. Height, 0.11 m.; length, 0.207 m.
- **102** (Plate 44). V 182, V. Left foot. Height, 0.09 m.; length, 0.197 m.
- **103** (Plate 45). V 105, III. Left foot. Height, 0.042 m.; length, 0.09 m.
- **104** (Plate 45). V 258, IV. Right foot. Height, 0.04 m.; length, 0.077 m.
- **105** (Plate 45). V 178, III. Right foot. Height, 0.134 m.
- **106** (Plate 44). V 179, V. Left foot. Length, 0.215 m.
- **107** (Plate 45). V 183, V. Right foot. Length, 0.207 m.
- **108** (Plate 44). V 180, V. Left foot. Length, 0.21 m.
- **109** (Plate 46). V 71, II. Right foot. Length, 0.236 m.
- **110** (Plate 45). V 248, IV. Left foot. Length, 0.237 m.

- 111 (Plate 46). V 72, II. Right foot. Length, 0.258 m.
- **112** (Plate 45). V 181, V. Right foot. Length, 0.256 m.
- **113** (Plate 46). V 1, I. Left foot. Length, 0.286 m.
- **114** (Plate 45). V 68, II. Right foot. Length, 0.152 m.

Nos. 98-105 are votive feet dedicated singly; Nos. 106-114 are fragmentary feet which may have been broken from legs.

The coloring is the same as that on the votive arms and legs-white for the female feet, red, applied over white or on the clay slip, for the male feet. The technique of manufacture varies. They are all mould-made with later touching up and incision for the outline of the nails and the toe joints. In some cases the top of the foot and the toes are made as a hollow shell of thin fabric and the sole added to seal over the bottom. Occasionally, the bottom is left completely open as on No. 112. In others, the upper part of the foot and ankle are made of heavy fabric leaving a long narrow slot in the sole from the ball of the foot to the edge of the heel; in other cases this is modified to a hole in the ankle continuing that of the leg. Possibly these slots and holes were designed to rest over pegs. A few feet (No. 109) were made solid. The feet are almost invariably flat with a very slight arch to indicate the instep. In the case of the single votive feet the hole at the top of the ankle is covered with a flat cap.

The single votive feet are represented from just above the ankle bone. They were exhibited by suspension. Nos. 100 and 102, however, are pierced by a hole from the top of the ankle through the sole. Since the feet were suspended the soles would have been visible, and it is probable that they were painted to conceal the rough finish. Generally speaking, the upper parts of the feet and toes are well modelled and some care is shown in the details of the nails and toe joints. Some are realistically finished. No. 101, for example, has the little toe curled under and the tops of the nails rounded,

not cut flat as is the usual practice. The small foot, No. 104, like the fragmentary knee, No. 90, appears to be a stray fragment from the early sanctuary. It has the fine, pale green slip of archaic terracotta work and is finely made with sharp, clear modelling. The tendons of the toes are represented as extending to the arch, and the nails are delicately indicated. The foot is made in the same manner as the others, with flattened sole and a hole for suspension through the ankle. Only the lower groove of this hole is preserved. No. 105 differs from the others but in the manner of its exhibition. It is cut off flat on one side, apparently for attachment to a plaque.

Some of the fragmentary feet (Nos. 108-114) are of interest individually. Nos. 106 and 107 are slender, well modelled feet so similar in appearance that they seem to have been finished by the same workman. The smaller ankle of No. 106 is illusive as its inner side has been chipped off. Nos. 109 and 113 are fully and heavily modelled. The Achilles tendon is unduly enlarged and the ankle bones very prominent. The outline of the nails is deeply incised. No. 110 is perhaps the best modelled foot in the group. It is a slender, nervous foot with delicately but strongly modelled toes and ankle and neatly indicated nails. Nos. 108 and 112 on the other hand are extremely crude and careless.

As in the case of the legs, the only indication of the sex is in the size and coloring. No. 104 is obviously a miniature, and No. 114 probably a child's foot.

Dedications of votive feet are well known from other sanctuaries, but only in terracotta from the Italian sanctuaries. As in the case of the feet from the Corinthian Asklepieion, they have no traces of disease (Röm. Mitt., XIV, 1899, p. 237; Breitenstein, Catalogue of Terracottas, Danish National Museum, pl. 104, nos.

814-17). Some, however, are reported to have inscriptions stating that they represent a successfully completed journey. In addition, such votive feet, or more usually, the imprints of feet, indicate the presence of the deity (Deonna, Délos, XVIII, p. 219, A 585-86). Stone feet with suspension holes were found at Golgoi (Cesnola, Cesnola Collection of Cypriote Antiquities, I, pl. XXVIII, nos. 155-59) and probably indicate the cure of some ailment. Silver and ivory feet with suspension holes were found in the early archaic deposits at Ephesus (Hogarth, The Archaic Artemisia, pl. XII, 11; XLII, 10, 11).

#### **MISCELLANEOUS**

**115** (Plate 65 2). V 238, V. Terracotta Base. Dimensions, 0.18 by 0.14 by 0.055 m.

This small raised base evidently carried some votive offering, the traces of which appear on the surface. The outline, edged with red paint, resembles that of the genitals.

**116** (Plate 45). V 230, IV. Plait of hair. Length, 0.13 m.

The surface preserves traces of red and white paint. The votive consisted of braided hair mounted on a plaque. For its significance see above, p. 118.

**117** (Plate 45). V 282, V. Bone. Length, 0.237 m.

There are traces of red paint on the surface and a hole for suspension at one end. A small thigh bone is represented.

118 (Plate 45). V 240. Stomach(?). Length, 0.11 m.

There are no traces of color and the identification is doubtful. The object was found in the Byzantine Chapel (below, pp. 169-171).

# THE DATING OF THE VOTIVE DEPOSITS

For the dating of the main deposits, there are a few coins, a large number of lamps and a considerable amount of pottery. The stylistic evidence of the votive terracottas is perhaps better left aside, for they are unique objects and rather in need of confirmatory evidence than offering it.

# Coins

The types of coins in the deposits were as follows: Deposit I—Corinthian bronze, with Pegasos and the trident, 400-146 B.C.; Deposit II—Corinthian bronze, with Pegasos and the trident, 400-146 B.C.; Thebes, 315-288 B.C.; <sup>36</sup> Deposit V—Corinthian bronze, with Pegasos and trident, 400-146 B.C. Thus, only one useful coin which indicates a date after 315 B.C. was found. It is of interest to note that no coins of types earlier than 400 B.C. were found. It will be remembered that the coins of the hoard by the foundation wall of the abaton building and of the small deposit in the stele cutting of the early shrine were of types dated between 431—300 B.C. All this numismatic evidence would seem to indicate that the early buildings were demolished, and their votives used in the filling for the new structures shortly after 315 B.C.

#### LAMPS

The evidence offered by the lamps found in the main deposits (II, IV, V) supports this. From the three votive deposits (II, IV, V), which were filled in at the same time, one hundred twenty-two complete or fragmentary lamps were inventoried. In Deposit II three lamps were found: one of Type IV and two of Type VIIa. In Deposit IV twenty-nine lamps: twenty-four of Type IV, two of Type V, one of Type VI and two of Type VIIa. In Deposit V, ninety lamps were found: sixty-five of Type IV, four of Type V, five of Type VI, fifteen of Type VIIa and one of Type VIIb. Thus, Type IV was by far predominant in number, with ninety out of the one hundred twenty-two specimens. Of these, however, only eighteen were of the early type with shallow, wide body and the wick hole set close to the rim. They are probably to be dated in the second and third quarters of the fifth century. The others were obviously late, with narrow, high bodies and long nozzles. Most would presumably belong to the latter part of the fifth and to the fourth century. The life of the type extended well into the fourth century B.C. in both Corinth and Athens.37 Only six lamps of Type V were found, of which three were of the second variety, belonging to the first half of the fifth century, and three of the third variety which is probably contemporary with Type VI.<sup>38</sup> The vogue of the latter belonged to the latter half of the fifth century, and is represented only by six examples—all late. Of the twenty specimens of Type VII, only one was definitely early with vertical sides and flat rim. The others were typical specimens of Type VIIa, probably to be dated by their fairly good glaze to the first half and around the middle of the fourth century B.c. The single specimen of Type VIIb 39 would probably date after the middle of the century. The range of time covered by the majority of the lamps would, then, seem to be from the last quarter of

<sup>&</sup>lt;sup>36</sup> Head, Historia Numorum (2nd ed., Oxford, 1911), p. 352.

<sup>&</sup>lt;sup>37</sup> Broneer, Corinth, IV, ii, pp. 41-42.

<sup>&</sup>lt;sup>38</sup> *Ibid.*, p. 43.

<sup>&</sup>lt;sup>39</sup> A number of specimens of this type were found in the early Hellenistic deposit A in the Athenian Agora. It was filled about the end of the century (*Hesperia*, III, 1934, p. 323, fig. 7).

the fifth century to the third quarter of the fourth, with a few earlier examples. The filling in of the deposits, so far as the evidence of the lamps is concerned, would seem to be the third quarter of the fourth century B.C. or a little later.

# CATALOGUE OF LAMPS (PLATE 47)

- 1. CL 2471 (Deposit V). Length, 0.094 m.; width, 0.073 m.; height, 0.022 m. Curving sides merging into a slightly overhanging rim; horizontal band handle; raised base. Buff clay; mottled brown and black glaze. Type IV, early. See Broneer, *Corinth*, IV, ii, pp. 40-42; p. 135, no. 65, fig. 58.
- **2.** CL 2467 (Deposit V). Length, 0.096 m.; width, 0.075 m.; height, 0.023 m. The sides are straighter and the rim overhangs more than on the preceding example. No handle; raised base. Buff clay; black glaze. Type IV, early.
- **3.** CL 2470 (Deposit V). Length, 0.095 m.; width, 0.066 m.; height, 0.03 m. Curving sides; wick hole considerably removed from rim; raised base. Buff clay; black glaze, mostly flaked off. Type IV, later than Nos. 1 and 2.
- 4. CL 2472 (Deposit V). Length, 0.085 m.; width, 0.063 m.; height, 0.027 m. Curving sides with a small opening; raised base. Buff clay; mottled red and black glaze, mostly flaked off. Type IV, later than Nos. 1 and 2. See Broneer, op. cit., pl. II, no. 82.
- **5.** CL 2469 (Deposit V). Preserved length, 0.084 m.; width, 0.066 m.; height, 0.034 m. Curving sides with a small opening; raised base; tip of nozzle missing. Attic clay; black glaze. Type IV, late.
- **6.** CL 2469a (Deposits IV and V). Diameter, 0.108 m.; preserved height, 0.032 m. Tip of one nozzle and most of the other missing. Attic clay; good glaze which is mostly missing. Second variety of Type V; see Broneer, *op. cit.*, pp. 42-43; pl. II, no. 95.
- **7.** CL 2555 (Deposit V). Preserved length, 0.089 m.; width, 0.065 m.; height, 0.037 m. Deep, with sides curving slightly toward the top. The tip of the nozzle and the handle are miss-

- ing. Attic clay; black glaze. Type VI, late. See Broneer, op. cit., pl. III, no. 112.
- 8. CL 2572 (Deposit V). Preserved length, 0.085 m.; width, 0.065 m.; height, 0.039 m. Almost straight sides and flat rim. The tip of the nozzle, handle and chips from the rim are missing. Attic clay; good, black glaze. Type VIIa, early; on the dating of Type VII see Broneer, op. cit., pp. 45-46; H. Thompson, Hesperia, II, 1933, pp. 199-200.
- **9.** CL 2565 (Deposit II). Preserved length, 0.106 m.; width, 0.07 m.; height, 0.044 m. Sides more curving than on No. 8. No handle. Chips from body missing. Attic clay; mottled red and black glaze. Type VIIa, later than No. 8.
- **10.** CL 2576 (Deposit V). Length, 0.09 m.; width, 0.068 m.; height, 0.038 m. Sides have a pronounced curve. Tip of nozzle and handle missing. Attic clay; good black glaze. Type VIIa.
- 11. CL 2570 (Deposit V). Preserved length, 0.083 m.; width, 0.064 m.; height, 0.039 m. Sides rounded. Tip of nozzle, handle and part of base missing. Attic clay; good glaze. Type VIIa. Most of the Type VII lamps are of this size and shape.
- 12. CL 2567 (Deposit V). Preserved length, 0.079 m.; width, 0.068 m.; height, 0.042 m. Sides fully rounded. Tip of nozzle and handle missing. Attic clay; glaze on the interior, but none on the exterior. Type VIIb. See Broneer, op. cit., pl. III, no. 136. Our example, however, has no lug on the side. Lamps of this type are found among the latest examples at Olynthus, the earliest in the Sciatbi cemetery in Alexandria and in an early Hellenistic deposit in the Athenian Agora (Thompson, Hesperia, III, 1934, p. 322, A. 42-44; p. 323, fig. 7. The filling of Deposit A is dated around the turn of the fourth and third centuries).

# POTTERY

The pottery found in the large deposits (II, IV, V) is to be dated for the most part in the same general period as the lamps—from the last quarter of the fifth century to the last quarter of the fourth. There were some fragments of earlier vases, but no quantity of whole ones, such as would indicate a steady accumulation of votives during the late archaic and early classical periods. Also, no Hellenistic sherds were found. The pottery consisted mostly of small vases—black-glazed and unglazed cups and bowls, and miniature vases of various shapes decorated in very late "conventionalizing style." A few red-figured fragments from large vases were found (Nos. 1-5) which are to be placed in the last quarter of the fifth century B.C. The smaller vases find parallels or are developments of the types found in a well in the Corinthian Agora, which was filled ca. 420 B.C., on the pottery from Olynthus, dated in the late fifth and first half of the fourth centuries on the pottery from Olynthus, dated in the late fifth and first half of the fourth centuries of the small vases from the early Hellenistic deposit in the Athenian Agora (A). The greater part of it, however, would appear to belong to the first three quarters of the fourth century B.C.

The dedicatory inscriptions on some of the vases are of particular interest and importance for the cult. Two large mortars, probably used in sacrificial ritual, contained the first part of Asklepios' name (Nos. 65-66). A number of others, but without inscriptions, were found. Another dedication (No. 69) indicates that Podalirios was associated with Asklepios in the cult. This fragment is of particular interest as it is of Attic manufacture and the lettering was apparently painted on before the vase was fired. It was, then, made specifically to be dedicated to Podalirios, and brought from Athens. Podalirios was associated with Asklepios in the Athenian cult in the fourth century B.C., as a dedicatory inscription found on the south slope of the Acropolis indicates.<sup>43</sup> The remaining inscriptions (Nos. 68, 70-82) consist of letters scratched on the bases of skyphoi or on other small cups. Most are presumably the initials of the dedicators of the vases. All these inscriptions on the vases use the developed letter forms of the fourth century—none are in the archaic Corinthian forms.

Only the larger red-figured fragments, the inscribed pieces, and representative specimens of the various shapes in the large amount of pottery which was found are published in the following catalogue (Nos. 1-87).

# CATALOGUE OF POTTERY

1 (Plate 47). C-31-385. Fragment from a krater. Estimated diameter, ca. 0.43 m. The piece is from the rim and upper part of the

side; good glaze; white dots to represent the berries in the garland. The upper part of a winged male figure to left (Eros?), holding twigs (?).

<sup>&</sup>lt;sup>40</sup> M. Z. Pease, *Hesperia*, VI, 1937, pp. 257-316.

<sup>&</sup>lt;sup>41</sup> D. M. Robinson, Olynthus, V, passim.

<sup>&</sup>lt;sup>42</sup> H. A. Thompson, *Hesperia*, III, 1934, pp. 313-30.

<sup>43</sup> I.G., II<sup>2</sup>, 4353.

2 (Plate 47). C-31-386. Fragment from a krater. Greatest dimension, 0.125 m. The fragment is from the lower part of the side. Mottled red and black glaze. The lower part of a draped figure to left.

- **3** (Plate 47). C-31-387. Fragment of an open vase. Greatest dimension, 0.069 m. The fragment is from the side. Thin glaze. Head of a male figure, crowned with ivy leaves, playing double pipes.
- 4 (Plate 47). C-31-388. Fragment of an open vase. Greatest dimension, 0.046 m. The fragment is from the side; good glaze. On the left, the profile and nude shoulder of a figure whose hand seems to be clasping a spear (?).
- **5** (Plate 47). C-31-389. Fragment of an open vase. Greatest dimension, 0.059 m. The fragment is from the side; thin glaze. On the right, part of an arm, drapery, and the fur belt of a figure; on the left, a nude shoulder with curling tresses of hair falling over it.

A few other fragments with ornament and parts of figures from vases of the same period were found.

**6-10** (Plate 48). C-31-390-394. Skyphoi. (6) Height, 0.097 m.; diameter, 0.097 m. (7) Height, 0.099 m.; diameter, 0.103 m. (8) Height, 0.065 m.; diameter (foot), 0.05 m.; (rim) 0.089 m. (9) Height, 0.05 m.; diameter, 0.069 m. (10) Height, 0.036 m.; diameter, 0.054 m.

All are of Corinthian manufacture. Nos. 6 and 7 are deep skyphoi and, in shape, resemble the examples from Olynthus, dated in the first half of the fourth century B.C. (Olynthus, V, pl. 185, nos. 971-980). With these, contrast the later examples with thinner stem and more pronounced bulge from the early Hellenistic deposit in the Athenian Agora (Hesperia, III, 1934, no. A 26, p. 320, fig. 5) and from grave 30 at Rhitsona (P. N. Ure, Black Glaze Pottery from Rhitsona, pl. XVII, 4). Graves 30, 33, and 34 are dated in the second half of the fourth century B.C. The deposits contained many skyphoi both of this and slightly later shape. No. 8 is a common shape of the "con-

ventionalizing style" of the late fifth and fourth centuries. The examples from the deposits, like No. 8, were glazed by dipping which left the lower part of the body unglazed. On the lower side of the foot is a concentric circle near the edge. For the type see nos. 65-75 from the well in the Corinthian Agora, filled in ca. 420 B.C. (Pease, Hesperia, VI, 1937, p. 283). Our examples are much smaller than these and some unglazed examples were found. Many small, completely glazed skyphoi like Nos. 9-10 were found in the deposits. They have false ring feet.

11 (Plates 47, 48). C-31-395. Kantharos. Preserved height, 0.056 m.; diameter, 0.11 m. Attic, with good fabric and glaze. On the interior a central design of stamped palmettes, surrounded by a rouletted band. In shape and type of stamped decoration the kantharos resembles those from Olynthus, dated in the first half of the fourth century B.C. (Olynthus, V, pl. 148, no. 509).

**12-13** (Plate 48). C-31-346-47. Ribbed cups. (12) Height, 0.053 m.; diameter (foot), 0.049 m.; (body), 0.073 m. (13) Preserved height, 0.056 m.

Attic, with good fabric and glaze. No. 12 is slightly later in shape than the example (no. 57) found in the well in the Corinthian Agora filled ca. 420 B.C. (Hesperia, VI, 1937, p. 277, fig. 17). No. 13 is probably from a small kantharos of the type found in Olynthus and dated in the first half of the fourth century (Olynthus, V, pl. 150, no. 529).

**14-15** (Plates 47, 48). C-31-398-99. Small cups. (14) Height, 0.049 m.; diameter, 0.078 m. (15) Height, 0.051 m.; diameter, 0.059 m.

No. 14 is made of pink clay and has a dull glaze. It is elaborately decorated; on each side of the handle is a small boss; on the rim a stamped leaf and dart design; in the interior, stamped palmettes. The lower part of the body and the offset of the foot are grooved. On the under side of the foot are a dot and concentric circles. The stamped design would indicate a date in the latter half of the fourth century B.C.

No. 15 has a central circle and rouletted band in the interior. It is probably to be dated in the latter half of the fourth century B.C.

**16-19** (Plate 48). C-31-400-03. One handlers. (16) Height, 0.043 m.; diameter, 0.087 m. (17) Height, 0.031 m.; diameter, 0.056 m. (18) Height, 0.041 m.; diameter, 0.091 m. (19) Height, 0.032 m.; diameter, 0.07 m.

All are of Corinthian manufacture. On all, the rim curves slightly inwards. For the development of the shape see L. Talcott, Hesperia, IV, 1935, pp. 507-08. Ours resemble most closely the examples from Olynthus dated in the first half of the fourth century (Olynthus, V, pls. 178-181, nos. 895-942). No. 17 is merely a smaller version of No. 16. Nos. 18-19 have false ring feet with grooves on the bottom and the edge. Like the skyphos, No. 8, they are glazed by dipping, and the lower part of the body and foot is unglazed. Similar examples were found in the well in the Corinthian Agora filled in ca. 420 B.C. (Hesperia, VI, 1937, p. 295, nos. 165-171). Several examples of Nos. 16-17 were found, about sixty of No. 18 and about 125 of No. 19.

**20-23** (Plates 47, 48). C-31-404-07. Shallow bowls. (20) Height, 0.03 m.; diameter, 0.089 m. (21) Height, 0.023 m.; diameter, 0.081 m. (22) Height, 0.028 m.; diameter, 0.088 m. (23) Height, 0.026 m.; diameter, 0.087 m.

Nos. 20 and 23 are Corinthian; Nos. 21 and 22 are Attic. About seventy-five examples were found, of which most were Corinthian. A few, like No. 22, have a stamped decoration in the interior of four palmettes around a central circle. No. 20 has an unusual scratched design of a bird, probably a peacock. The fabric in all of them is heavy, and, on the Attic specimens, the glaze is good, although worn. The Corinthian pieces are entirely glazed, the Attic pieces have reserved lines at the base of the foot ring and reserved bands on the under side of the foot. Most of the rims are rounded and curve inwards, but a few are angular with a sharp division at the beginning of the inward curve. Bowls of this type were in common use in Olynthus in the first half of the fourth century B.C. (Olynthus, V, pls. 155-6). A few were found in an early Hellenistic deposit in the Athenian Agora (Hesperia, III, 1934, p. 317, fig. 3, nos. A 14-18; many of ours resemble no. A 18 in shape and size). Some were also found in grave 59 at Rhitsona, dated in the latter part of the first half of the fourth century B.C. (Ure, Black Glaze Pottery from Rhitsona, pl. XII, 4; p. 23).

**24-26** (Plate 48). C-31-408-10. Low bowls. (24) Height, 0.032 m.; diameter, 0.064 m. (25) Height, 0.032 m.; diameter, 0.066 m. (26) Preserved height, 0.033 m.; diameter, 0.068 m.

Nos. 24 and 26 are Attic; No. 25 is Corinthian. Many examples were found, of which most were Corinthian. As in the case of the shallow bowls, the fabric is heavy. The Corinthian examples are entirely glazed, while the Attic pieces have the under side of the foot reserved and decorated with concentric lines. The shape is typical of the fourth century B.C.; examples were found at Olynthus (Olynthus, V, pl. 175, nos. 872-78); in the early Hellenistic deposit in the Athenian Agora (Hesperia, III, 1934, p. 318, fig. 4, nos. A 19-21; the size of ours is similar to A 19); in graves 59-60 at Rhitsona, dated to the first half of the fourth century B.C. (Ure, Black Glaze Pottery from *Rhitsona*, Pl. XII, 3, 5).

**27-28** (Plate 48). C-31-411-12. Salt cellars. (27) Height, 0.026 m.; diameter, 0.058 m. (28) Height, 0.023 m.; diameter, 0.058 m.

Both are Corinthian. These low, reel-shaped salt cellars are a typical shape of the fourth century B.C. One was found on the Pnyx in late fifth century context (*Hesperia*, I, 1932, p. 132, fig. 19, no. 3); many at Olynthus (*Olynthus*, V, pl. 189, no. 1042); in grave 57 at Rhitsona, dated to the late fifth century (Ure, op. cit., pl. XI, 7). They are also found in the polyandria at Chaeronea (338 B.C.).

**29-32** (Plates 48, 49). C-31-413-16. Small pitchers. (29) Height, 0.086 m.; diameter, 0.053 m. (30) Height, 0.101 m.; diameter, 0.067 m. (31) Height, 0.074 m.; diameter

(foot), 0.078 m. (32) Height, 0.061 m.; diameter (foot), 0.067 m.

All are Corinthian. No. 29 is an olpe with a trefoil lip. It was glazed by dipping, leaving the lower part of the body unglazed. The shape is common in the late fifth and fourth centuries B.C. (cf. Hesperia, VI, 1937, p. 287, no. 124). No. 30 is an oinochoe with a trefoil lip. It was glazed by dipping. For the shape see Hesperia, VI, 1937, p. 295, no. 172. On No. 31 the rim of the foot appears to have been deliberately chipped. It had a narrow beaked mouth with incurving lips. No. 32 is a broad bottomed oinochoe with a trefoil lip. It is decorated with a tongue band at the base of the neck and reserved bands with lines on the body. The shape is rather more pyramidal, and probably later, than the example found in the well in the Corinthian Agora filled in ca. 420 B.C. (Hesperia, VI, 1937, pp. 284-85, nos. 89-93, type "B").

**33-34** (Plate 49). C-31-417-18. Squat ribbed aryballoi. (33) Height, 0.068 m.; diameter, 0.086 m. (34) Height, 0.055 m.; diameter, 0.075 m.

The clay is coarse, dark grey in color and reddish at the center. No. 34 and one other example lack the usual grey, metallic glaze and are covered with a reddish clay slip. Earlier examples of the shape and ware were found in the well in the Corinthian Agora filled in *ca.* 420 B.C. (*Hesperia*, VI, 1937, p. 290, no. 138; for a discussion of the ware). Many others were found in the deposits.

**35-36** (Plate 49). C-31-419-20. Unglazed bowl and pyxis. (35) Height, 0.03 m.; diameter, 0.078 m. (36) Height, 0.03 m.; diameter, 0.061 m.

The rim of No. 35 curves slightly at the top. There are two grooves around the upper part of the body. About 160 examples of this shape were found; some with no grooves, some with a deep groove like the piece found in the well in the Corinthian Agora filled *ca.* 420 B.C. (*Hesperia*, VI, 1937, pp. 297-98, nos. 178-79). No. 36 is flanged for a lid. The clay of these

pieces is hard, well levigated and light buff in color—Corinthian.

37 (Plate 49). C-31-421. Pyxis lid. Height, 0.035 m.; diameter, 0.053 m. Corinthian. There is a groove around the edge of the top; traces of linear decoration. A similar lid with its pyxis was found in grave 57 at Rhitsona, dated in the late fifth century B.C. (Ure, Black Glaze Pottery from Rhitsona, pl. XI, 1; p. 23).

**38-42** (Plate 49). C-31-422-26. Miniature skyphoi. Corinthian. Their height varies, *ca*. 0.03 m., and the diameter, *ca*. 0.04 m.; except for the tiny black glazed piece, No. 42, which is 0.016 m. in height and 0.032 m. in diameter. The decoration consists of lines and dots. Many similar small skyphoi were found.

**43** (Plate 49). C-31-426a. Miniature bowl. Height, 0.022 m.; diameter, 0.052 m. Corinthian. The fabric is thin and the vase glazed by dipping. Many similar examples were found.

**44-47** (Plate 49). C-31-427-30. Miniature paterae. The unglazed piece, No. 47, has no boss in the center. Many examples were found similar to this piece and to No. 46. The decoration of No. 44 is typical of the late "conventionalizing style."

**48-50** (Plate 49). C-31-431-33. Miniature kraters. Corinthian. No. 48 is covered with a thin red glaze; No. 49 is black glazed.

**51-55** (Plate 49). C-31-434-38. Miniature kalathoi. Corinthian. No. 51 is decorated with red glaze and has two small lugs on the side. No. 52 had a loop handle. The decoration is linear.

**56-59** (Plate 49). C-31-439-42. Miniature pitchers. Corinthian. Nos. 56 and 57 are oinochoai; No. 58, a trefoil mouthed oinochoe similar to one found in the well in the Corinthian Agora filled in *ca.* 420 B.C. (*Hesperia*, VI, 1937, p. 295, no. 173).

Comparatively little coarse pottery was found in the deposits, for the well (Votive Deposit V) contained no accumulation from its period of use. This pottery was of the usual late fifth and fourth century types, and only those pieces of some interest in themselves are published.

**60** (Plate 50). C-3217. Two handled oinochoe. Height, 0.155 m.; diameter (rim and foot), 0.098 m.; greatest diameter, 0.168 m. The vase has a false ring foot with a groove on the under side. The two handles have each a central ridge. Many other fragments of oinochoai of this type were found. Our example is rather more bulbous than the similar one from the well in the Corinthian Agora filled ca. 420 B.C. (Hesperia, VI, 1937, p. 294, nos. 151-53; fig. 25).

**61** (Plate 50). C-31-443. Mortar with a spout.

A number of vessels of this type were found, two of which (Nos. 65 and 66) bore the name of Asklepios painted on the rim with thin glaze. Possibly they were used in the ritual of the cult, although their use was not thus narrowly specialized, for similar mortars were found in the Potters' Quarter and in the house wells of the Agora region. Their height varies ca. 0.068 m.-0.09 m. and their diameter, 0.278-0.33 m. They are made of buff or greenish clay with grits. The foot is flat, the lip overhangs slightly and they have astragal-like lug handles. For the type see *Hesperia* VI, 1937, p. 299, nos. 193-94.

**62** (Plate 50). C-31-444. Handle of a large basin. Estimated diameter, *ca*. 0.59 m.

Corinthian; hard buff clay. There is a hole through the center for suspension. The decoration consists of incised sprigs. For a similar handle see *Hesperia*, VI, 1937, p. 299, no. 189; p. 300, fig. 32.

**63** (Plate 50). C-31-445. Handle. Width, 0.089 m.

The fragment preserves part of the side of the vessel from which it was broken—evidently a large basin. The fabric is very thin (0.008 m.) for the weight of the handle. The clay is coarse and red in color, shading to grey at the center. The incised decoration may represent a sprig as on No. 62.

**64** (Plate 50). C-31-446. Lid. Greatest dimension, 0.14 m.

Corinthian. The fragment is from the top and side of a large lid. The decoration consists of stamped palmettes, enclosed and linked by tendrils. One of the few pieces of the archaic period in the deposits.

**65** (Plate 51). C-31-447. Fragment from the rim of a mortar.

The inscription is painted on the rim in dilute glaze:  $A \partial \kappa \lambda a \pi [\iota \hat{\varphi}]$ . The name of the god is in its Doric form, but the letter forms are those of the *koine*, not local Corinthian. The god's name might indicate that the vessel was owned by the sanctuary for use in the cult or that it had been a dedication. For the type of vase see No. 61.

**66** (Plate 50). C-31-448. Fragment from the rim of a mortar.

The letters Aἰσκλα- are written on the right side of the spout in dilute glaze. On the left side faint traces of glaze indicate that the inscription was completed there.

**67** (Plate 51). C-31-449. Fragment from a cup. Greatest dimension, 0.068 m.

The graffito is neatly lettered 'Aokha [ $\pi\iota\hat{\varphi}$  or  $\pi\iota\hat{\upsilon}$ ] The various spellings of the god's name are listed by A. B. Cook (*Zeus*, II, ii, pp. 1085-87; III, ii, p. 1182).

- **68** (Plate 51). C-31-450. Fragment of a kotyle base. Estimated diameter, 0.044 m. Five letters of the name of Asklepios are preserved, scratched on the base:  $\chi \lambda a \beta \iota$ . The spelling is in the usual Doric form, found also on an archaic bronze statuette found in Bologna (Cook, *Zeus*, II, ii, p. 1085). This vase, however, would seem to be of late fifth century date. It is Corinthian.
- 69 (Plate 51). C-31-451. Fragment of a kantharos rim. Estimated diameter, 0.08 m. The fabric and glaze are Attic. The inscription, very neatly painted on the rim in purple, apparently before the vase was fired, reads: Ποδαλίριος. Podalirios was one of the sons of Asklepios, evidently associated with his father in the cult

at Corinth. The significance of this will be discussed below in the account of the cult.

**70-78** (Plate 47). C-31-452-60. Graffiti on the bottom of skyphoi.

In the deposits a number of feet from deep skyphoi of the type of Nos. 6 and 7 were found, on which a few letters were scratched. No. 70, however, preserves six letters, Αριστο. These are probably dedications on which the donor scratched his or her initials or a part of the name. All are from late fifth or fourth century. (70) Diameter (foot), 0.056 m. Corinthian. Graffito: Apioto. (71) Diameter (foot), 0.054 m. Corinthian. Graffito:  $\tau \eta \lambda$ . (72) Diameter (foot), 0.048 m. Attic. Graffito: τε. Diameter (foot), 0.06 m. Corinthian. Graffito: s. (74) Diameter (foot), 0.063 m. Attic. Graffito:  $\pi$ . (75) Diameter (foot), 0.062 m. Attic. Graffito:  $\pi$ . (76) Diameter (foot), 0.06 m. Corinthian. Graffito:  $\epsilon$ . (77) Diameter (foot), 0.063 m. Corinthian. Graffito: λv. (78) Diameter (foot), 0.062 m. Corinthian. Graffito: A.

79-85 (Plate 51). Graffiti on other vase fragments. (79) C-31-461. Fragmentary cup rim. Greatest dimension, 0.037 m. Corinthian. Traces of letters: aa? (80) C-31-462. Fragmentary bowl. Preserved height, 0.037 m. Corinthian. On the bottom is scratched:  $\epsilon$ . (81) C-31-463. Fragmentary cup. Preserved height, 0.041 m. Attic. The graffito is heavily scratched: 7a. (82) C-31-464. Fragmentary cup rim. Greatest dimension, 0.029 m. Attic. The graffito is scratched on the outside: ka. (83) C-31-465. Fragmentary rim. Greatest dimension, 0.035 m. Soft buff clay; traces of glaze and the graffito:  $\pi$ s. (84) C-31-466. Fragment of a large open vase. Greatest dimension, 0.057 m. The clay is light pink, very hard and fine in texture. On the exterior is a smooth yellow slip and on the interior brownish glaze with a white band near the top. It is apparently Corinthian for the clay and slip are similar to those of the pinakes found in the Potters' Quarter. In the upper right corner is the start of a fillet; on the left an open hand, painted red, the end of a chin and nose, also red, and a beard in brownish glaze. Painted in glaze under the fillet are the letters  $\lambda v \sigma \epsilon$ . The letter forms do not appear to be archaic although the technique of manufacture would seem to place the fragment in that period. (85) C-31-467. Fragment of a basin rim. Greatest dimension, 0.11 m. Corinthian. Painted in dull glaze is the letter:  $\delta$ .

86-87 (Plate 50; Fig. 26). C-31-468-69. Stamped amphora handles. These two amphora handles with early Thasian stamps were found in Votive Deposit IV and have been published by Miss Virginia Grace (*A.J.A.*, L, 1946, pp. 31-38, nos. 4, 8), who has dated them to the late fifth century. Another handle (No. 87 bis) similar to No. 87 was found in the same deposit.

Nos. 88-90 were not found in the Votive Deposits but are from various contexts.

88 (Plate 51). C-31-470. Fragment of an amphora. Greatest dimension, 0.092 m. The fragment was found in the packing against the foundation of the partition wall between the second and third dining rooms—a filling of the late fourth century. The piece bears a graffito with two lines partially preserved:  $\nu_0 | \epsilon \nu \beta \theta_p$ . The form of the second nu with two diagonal strokes is found on inscribed Greek tiles from the South Stoa in Corinth.

**89** (Plate 51). C-31-471. Base of a pot. Diameter, 0.105 m.

Twelve letters are scratched in a circle from left to right on the bottom:  $\rho u \eta \chi \sigma \sigma a \delta \epsilon \rho \beta s$ .

90 (Plate 51; Fig. 26). C-31-472. Fragmentary Megarian bowl. Diameter of foot, 0.05 m. The bowl is of dark grey clay with a grey metallic glaze. It was decorated with a combat scene for, on the lower side, are preserved parts of seven warriors and a shield. For combat scenes on this type of vase see F. Courby, *Les Vases grecs à Reliefs* (Paris, 1922), fig. 71, a-q. The inscription on the foot was incised before the glazing; possibly it is a part of the maker's name: Φί]λωνος; this name is also stamped on a Corinthian roof tile.

The evidence of the coins, of the lamps, and of the pottery indicates that the accumulation of votives represented in the deposits began in the last quarter of the fifth century and ended in the last quarter of the fourth century B.C., when the precinct and Lerna were rebuilt.

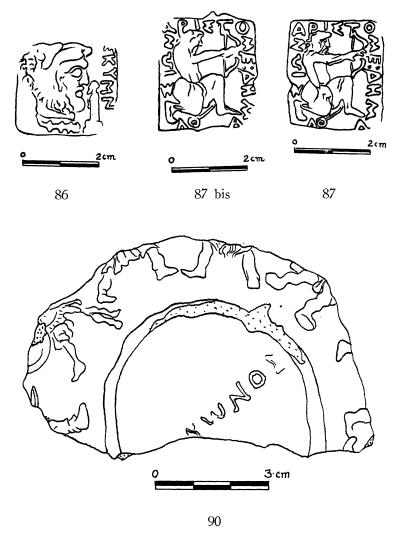


Fig. 26. Inscribed and Stamped Pottery Fragments.

The latest closely dateable object in the deposits was the Theban coin of 315-288 B.C. found in the drain channel. The absence of Hellenistic lamps and pottery, however, indicates that the votives must have been discarded and the new structures erected very soon after 315 B.C. Although this was during the Wars of the Successors, the position of Corinth was not unfavorable to new building enterprises. All the Greek cities were necessary to the Successors as a source of manpower and Corinth additionally so because of its strategic position. Thus, the various leaders made overtures to the Greek cities in one form or another to win their support. Money was

made available in larger quantity than in the past. Since the city wall in this sector was evidently constructed with the building of the sanctuary and of Lerna, it does not seem unreasonable to place the date of building in the years ca. 300 B.C., when Demetrius Poliorcetes was in control of Corinth and anxious to cultivate the good will of its citizens and of the Greeks in general.

### TERRACOTTA FIGURINES

The figurines, with the exception of the large standing female figures from the same mould (Nos. 1-3), the fine male head (No. 15) and the finely modelled goat's leg (No. 38), are a somewhat undistinguished group. Some of them, however, have particular interest for their possible association with the cult. It will be remembered that the earliest cult in the precinct was that of Apollo as the dedication of the krater (p. 15, No. 1) indicates. It is probable that this cult did not die completely with the introduction of Asklepios, but rather faded in importance. Some indication of that may be seen in the male figures among the figurines. It is, of course, rash to argue that such common types indicate the survival of the Apolline cult, or that they are inappropriate to Asklepios. There is too much that is common to all sanctuaries, and to all deities, to assign any figurines but those with very definite attributes to a particular cult. Yet, there is a fairly large percentage of nude standing male figures. The fragmentary No. 6 is the earliest of these; No. 15 is an excellent late archaic piece; No. 8 may be a mid-fifth century representative. Among the later figurines of the deposits are Nos. 9-12, of which type about twenty examples in all were found. These figures with lyre and patera are known in Corinth only from the Potters' Quarter, although a common type elsewhere. It is thus possible that they do have a special significance in Corinth as votives to Apollo. No. 19 may represent a youthful deity associated with the cult of Asklepios. The type resembles the figures identified as Telesphoros, the youth associated with Asklepios in the late Hellenistic and Roman periods.44 It is possible that this is designed to represent some predecessor like Euamerion, known at Titane.45 Three examples (Nos. 24-26) of the type sometimes referred to as "temple-boys" were found. These have been identified 46 as the youthful Asklepios, but, since the type is extremely common, and found in private houses as well as sanctuaries, it probably has no special significance.

The other terracottas are of well-known types—standing and seated female figures, male banqueters, squatting silens, horses and riders, animals and birds. There are a few interesting miscellaneous pieces like the quince (No. 33), the egg (No. 34) and the pine-cone (?) (No. 35). The latter may have some significance as a dedication to Asklepios, since it is mentioned as one of his attributes.<sup>47</sup> The fragmentary

<sup>&</sup>lt;sup>44</sup> A. B. Cook, Zeus, II, ii, pp. 1089-91; III, ii, pp. 1182-83.

<sup>&</sup>lt;sup>45</sup> Pausanias, II, 11, 7.

<sup>&</sup>lt;sup>46</sup> Svoronos, Catalogue of the National Museum in Athens, p. 312.

<sup>&</sup>lt;sup>47</sup> A. B. Cook, Zeus, II, ii, p. 1080; L. Deubner, De Incubatione, p. 45.

plaques with gorgon's heads (Nos. 31-32) may, in this sanctuary, have some apotropaic significance.<sup>48</sup>

The figurines from the deposits are all made of the normal type of clay used for Corinthian figurines of the period—buff, in shades varying from pale to reddish, and rather soft in texture. They present no unusual features of technique or decoration.

### **CATALOGUE**

1-3 (Plates 52, 53). T. F. 34, 35, 36. Standing figures wearing peplos. Height, 0.251 m. The white sizing is well preserved on No. 2; the surface of the lower part of No. 3 is discolored by burning.

Female figures are represented, clad in a peplos with overfold, but with no attributes preserved by which they might be identified. The figures stand on a thin plaque, with the right leg relaxed. The head of No. 2 has a soft mouth with parted lips and deepset eyes. The three figurines are from the same mould, but originally had different heads or at least different styles of hair dressing; the head of No. 2 is sufficiently well preserved to indicate that it did not have added plastic locks such as are preserved on the shoulders of No. 1.

- 4 (Plate 52). T. F. 45. Standing kore with dove and fruit. Preserved height, 0.105 m. About a dozen examples of this type were found, some of which preserve a white slip. The figures are hollow with open backs and the details of modelling are blunt as if from a worn mould. The type is a common one of the late archaic period, but it is probable that these stereotyped figurines were made considerably later.
- **5** (Plate 52). T. F. 101. Seated female holding dove. Preserved height, 0.071 m. The color is well preserved: white on the figure, red on the seat. A number of similar examples were found on some of which the lines of the drapery are indicated. The figurines are hollow with open backs. The type, like No. 4, is archaic, but

these stereotyped examples were probably made much later.

- 6 (Plate 54). T. F. 22. Nude male figure. Preserved height, 0.063 m. Traces of red paint are preserved. The figurine is handmade with a slab-like body, and the navel indicated by a dab of clay. The type is archaic and the figure probably a stray dedication from the shrine of Apollo.
- 7 (Plate 54). T. F. 58. Nude male figure. Preserved height, 0.05 m. Worn surface; mould made with an unfinished back.
- 8 (Plate 54). T. F. 54. Nude male figure. Preserved height, 0.092 m. Traces of white and added pink are preserved on the flesh surfaces and of red in the hair. The figurine is mould made and well modelled.
- 9 (Plate 54). T. F. 14. Standing male figure with lyre and patera. Preserved height, 0.096 m. No. 9 is mould made, hollow and with an open back. A youthful male figure is represented, standing in a relaxed position, with long hair and drapery over the left shoulder. In the left hand is a lyre and in the right a patera. About twenty examples of this type, some with slight variations, were found in the deposits. For the type see Winter, Die Typen der Figürlichen Terrakotten, I, p. 185, 2.
- **10** (Plate 54). T. F. 56. Same type as No. 9. Preserved height, 0.09 m. No. 10 preserves traces of white and added red paint. The youth's body is set off by drapery over both shoulders and he wears a polos-like headdress.
- <sup>48</sup> A somewhat similar disk with a gorgon is in the museum at Trieste (No. 1552). This class of objects is discussed by P. Wuilleumier, *Rev. Arch.*, XXXV, 1932, pp. 26-64, pl. II, 4. Our example appears to be earlier than those treated.

- **11** (Plate 54). T. F. 53. Same type as No. 9. Preserved height, 0.086 m. No. 11 is hollow with unfinished back and preserves traces of white paint.
- **12** (Plate 54). T. F. 13. Same type as No. 9. Preserved height, 0.125 m. No. 12 is mould made, hollow, with open back. Traces of white and added red are preserved.
- 13 (Plate 53). T. F. 50. Banqueter. Height, 0.056 m.; length, 0.066 m. No. 13 is hollow; traces of white and added pink are preserved. A number of examples of this type were found.
- 14 (Plate 53). T. F. 51. Banqueter. Height, 0.063 m.; length, 0.076 m. No. 14 is a rather more elaborate version of the type of No. 13. The youth has long hair and holds a bowl in his left hand. There are traces of white on the drapery and of red on the headdress.
- 15 (Plate 55). T. F. 37. Archaic male head. Preserved height, 0.063 m. There are traces of white on the face, of red on the hair and of blue on the fillet. The features are fine and clearly modelled and the head is, in artistic quality, the best piece from the Asklepieion. Possibly it is a dedication to Apollo. It is published in the preliminary report (A.J.A., XXXVII, 1933, p. 446, fig. 5).
- 16 (Plate 53). T. F. 20. Female head. Preserved height, 0.057 m. There are traces of white on the face and of red in the hair. The strands of hair are indicated by incision. The back of the head is left unfinished.
- 17 (Plate 53). T. F. 21. Female head. Preserved height, 0.056 m. The clay is pale green and the back of the head is left unfinished.
- 18 (Plate 54). T. F. 26. Female head. Preserved height, 0.033 m. The hair is dressed in similar fashion to that of the large terracotta votive head, No. 2, but the knot over the forehead is blurred.
- 19 (Plate 54). T. F. 60. Cloaked squatting figure. Height, 0.068 m. The surface is worn and the figure hollow. A youthful figure is

- represented, squatting, wrapped in a cloak and wearing a pointed hat.
- **20** (Plate 54). T. F. 16. Silen. Preserved height, 0.073 m. The silen is playing double pipes; for the type see Winter, *Die Typen der Figürlichen Terrakotten*, I, p. 216, 6.
- 21 (Plate 54). T. F. 9. Silen. Preserved height, 0.087 m. The folds of the cloak, and fingers and toes are incised—the latter somewhat recklessly, for there are six toes on the left foot and seven fingers on the left hand. The silen is squatting on his haunches with the left hand resting on the knee and the right grasping his penis. For the type see Winter, op. cit., I, p. 215, 7.
- 22 (Plate 54). T. F. 12. Silen. Preserved height, 0.087 m. The ears are added separately. For the type see *Olynthus*, IV, pl. 44, nos. 399-402; VII, pl. 39, nos. 315-19.
- 23 (Plate 54). T. F. 57. Grotesque Figure. Preserved height, 0.06 m. The back is unfinished. A male figure with protruding belly, wrapped in a cloak, is represented. The folds of the cloak are rendered by incision.
- 24 (Plate 55). V 111. Temple Boy. Height, 0.248 m. This large figurine was found in the Hellenistic filling in the lower part of the shaft, S, on the south side of the precinct (above, pp. 62-63). It represents a seated child holding a round object, possibly a ball. The back is unfinished and the lower surface broken, which may indicate that the figurine was originally mounted on a base. The modelling is crude; the locks of the hair are rendered by incision and rough scratching. The figurine has no neck, for the head is set directly on the shoulders. It is probably of later date than the objects from the main votive deposits.
- 25 (Plate 54). V 134. Temple Boy. Preserved height, 0.10 m. Traces of white paint are preserved, and the back is finished. Despite the extremely bad state of preservation the figurine apparently represented a child in the same posture as No. 24. The lower side of the leg is finished with a flat resting surface and the

projection of the stub indicates that the leg was in the same position as that of No. 24. The break on the right side apparently follows the line of division between the body and the right arm and leg.

26 (Plate 54). M. F. 9155. Temple Boy. Preserved height, 0.04 m. No. 26 was found in filling of the fourth century B.C. west of the fountain house. It has a yellowish slip and spreads towards the bottom to form a base.

Figurines of this type are found in many places (Winter, op. cit., II, pp. 266 ff.; Robinson, Olynthus, IV, pp. 78-79, no. 384), and are dated from the fifth century B.C. to the Roman period. Thus, they would seem to have no special significance as representing the infant Asklepios.

- 27 (Plate 56). T. F. 112. Horse and rider. Height, 0.043 m.; length, 0.069 m. The ends of the horse's legs are black; there are brownish stripes on the tail and down the back. The rider, the horse's forelock and a band on the neck are red.
- 28 (Plate 56). T. F. 23. Horse and rider. Height, 0.084 m. The figurine is one of the largest examples of the type to be found in the deposits. It is handmade.
- **29** (Plate 56). T. F. 122. Dog. Preserved height, 0.032 m.; preserved length, 0.066 m. The back is decorated with lines of reddish glaze.
- **30** (Plate 56). T. F. 126. Dog. Height, 0.051 m.; length, 0.085 m. Undecorated; a number of similar examples were found.
- **31** (Plate 55). T. F. 18. Plaque. Greatest dimension, 0.061 m. The fragment is from the upper right corner of a thin plaque with moulded decoration. The surface is blackened by burning. It seems probable, from its position, that the only decoration was the gorgon's head which is preserved.
- **32** (Plate 55; Fig. 27). Ask. Varia 3. Plaque. Estimated diameter, 0.23 m.; thickness, 0.008 m. The fragment is from a plaque with a gor-

goneion in the center enclosed by an open palmette design. There are traces of black discoloration on the front and back. Similar plaques with open work designs were found in the Potters' Quarter.

- **33** (Plate 55). V 237, IV. Quince. Height, 0.09 m. The clay is dark grey with a light buff slip on the exterior. There are traces of white paint. The quince is mould made, hollow, and has a hole in one end for resting on a pin. The wrinkled texture of the skin is rendered by incised lines.
- **34** (Plate 56). V 231, IV. Egg. Height, 0.06 m. The coating of white paint is well preserved. The egg was hollow with a hole at one end like No. 33.
- **35** (Plate 56). V 233, IV. Pine-cone(?). Preserved height, 0.075 m. There are traces of white and of added blue paint. At the base is a knob, pierced by a hole for resting on a pin. From the knob rise three stalks with branching needles. Within these the beginning of another set of three stalks is preserved. It is pertinent to recall that Asklepios was sometimes represented with the attribute of a pine-cone (Cook, Zeus, II, ii, p. 1080; L. Deubner, De Incubatione, p. 45).
- **36** (Plate 56). V 236, IV. Loop. Height, 0.035 m. The small loop terminates in a point. Many have been found in deposits in the Corinthian Agora. Their significance is obscure.
- **37** (Plate 56). V 234, IV. Cock's head. Preserved height, 0.024 m. There are traces of red on the wattles and comb, of blue under the bill. The back is finished flat and not modelled. There is, however, no indication that the head was fastened to a plaque.
- **38** (Plate 56). V 113, V. Goat's leg. Height, 0.24 m. The leg is of hard buff clay and has well preserved, white paint with a few traces of pink. At the top is a peg for insertion into the shoulder of the animal. The surface shows paring marks. The leg is finely made and modelled. Its slant, when the hoof is placed flat, indicates that the leg was stretched forward.

**39** (Plate 56). V 245, V. Goat's leg. Preserved height, 0.066 m. Traces of white and red are preserved. When placed flat on the hoof the leg stands vertically, unlike No. 38.

**42** (Plate 56). T. F. 1. Seated female. Preserved height, 0.11 m. The breast, upper arm and part of the back of the seat are preserved. There are traces of black glaze on the drapery



Fig. 27. Terracotta Plaque with Gorgon. No. 32.

**40** (Plate 56). V 246, IV. Feline paw. Preserved height, 0.067 m. There are traces of white and red. The leg, possibly a lion's, is broken just above the knee.

41 (Plate 56). V 246a. Equine mouth. Greatest dimension, 0.054 m. There are traces of white and red. Only the end of the nose is preserved, with the nostrils and mouth indicated by incision.

Nos. 42-50 are not from the Votive Deposits, but were found in contexts of no significance.

over the breast and of red on the sleeve. The lattice pattern of the seat is in dilute glaze. The fragment is from a very large figurine of the type of No. 5, but of archaic date.

43 (Plate 56). T. F. 77. Male head. Preserved height, 0.054 m. The hair-dress is elaborate with a small knot over the forehead and short side hair. The veil-like object which appears on the head is probably the result of the finishing off of the junction between the mould-made front and the hand-made back. The head

is very similar to one from the Potters' Quarter in Corinth (I am indebted to Mrs. A. N. Stillwell for this information).

- 44 (Plate 46). T. F. 33. Female head. Preserved height, 0.051 m. The clay is dark buff; the flesh surfaces are white and the lips red; yellow is used for the drapery. The head belongs to a type of seated figurine of late Roman date of which a complete example was found in the Corinthian Agora (MF 8).
- 45 (Plate 46). T. F. 30. Female head. Preserved height, 0.058 m. The clay is dark pink; the coloring is similar to that of No. 44 except that yellow is used on the hair and pink on the headdress. The head is from a figurine of the same type and date as No. 44.
- **46** (Plate 46). T. F. 31. Grotesque head. Preserved height, 0.093 m. The clay is pale yellow. The workmanship is crude and the hand held to the ear has six fingers. Possibly a comic actor or slave is represented.
- 47 (Plate 46). T. F. 32. Lion's head spout from a vase. Greatest dimension, 0.085 m. The clay is dark buff with reddish glaze on the ex-

- terior. The spout is from the side of a large basin of which the wall was pierced so that water would run out the mouth.
- 48 (Plate 46). T. F. 29. Seated lion. Height, 0.059 m.; length, 0.072 m. The lion rests on a base the floor of which is pierced by a small hole. The back is unfinished.
- 49 (Plate 46). T. F. 28. Lamp in the form of a buffalo. Height, 0.063 m.; length, 0.135 m. The clay is dark buff with reddish glaze. There are traces of burning on the back, but none on the nozzle. The lamp, probably used as an ornament, is in the form of a water-buffalo. Its front legs hold a spout ornamented with leaves. Late Roman.
- 50 (Plate 56). T. F. 19. Cock. Height, 0.068 m. No traces of color. The figurine is hollow with a small hole in the bottom. The body is of the type usually identified as a dove, but the head is that of a cock. The piece is probably made from two moulds and the hole is a vent rather than for mounting (I am indebted to Mrs. A. N. Stillwell for this observation based on the study of a similar figurine from the Potters' Quarter in Corinth).

### **SCULPTURE**

Few pieces of marble sculpture were found in the excavations, but some are of interest for their association with the cult. Nos. 1-3 seem to be of the Greek period, the others (Nos. 4-13) are of Roman date. No fragments were found which could be identified as belonging to the cult statues of Asklepios and Hygieia mentioned by Pausanias.<sup>49</sup>

Nos. 1 and 2 were found in Votive Deposit III. No. 1 is the fragmentary torso of a boy reminiscent in the curve of the body of the style of Praxiteles. No. 2 is a fragment of a grave stele, to be dated in the early fourth century B.C. It shows a boy's head inclined in mourning. Possibly the fragment was brought from some roadside grave in the vicinity and, with No. 1, used to help fill the lustral room when it went out of use (above, pp. 50-51). No. 3 is in the style of the first half of the fifth century B.C., reminiscent of the figures in the pediment of the temple of Zeus at Olympia. The bad preservation of its surface makes it difficult to decide whether it is of Greek or Roman date. It was found in one of the shafts entering the long channel

<sup>&</sup>lt;sup>49</sup> Pausanias, II, 4, 5.

cut under the hill to the west from Reservoir V (above, p. 105). Thus, it is probably to be connected with the buildings there rather than with the Asklepieion. It is a female figure of rather less than life-size, and was found in very damaged condition—without head, arms or feet, and the surface much worn. The figure is represented with the left knee advanced, but the significance of the pose is not clear. Possibly the right arm was raised as the preserved muscle of the shoulder is tensed. The figure wears a Doric peplos with overlapping overfold, but no girdle. The folds of the drapery are simple and severe, reminiscent of that worn by the figures from the temple of Zeus at Olympia.

A number of the pieces of Roman date are plainly to be associated with the sanctuary. Two very fragmentary statuettes represent a male draped figure leaning on a staff around which a serpent coils (Nos. 4-5). It is the well-known figure of the healing god,<sup>50</sup> and the statuettes may be interpreted as votive offerings. Two other fragments (No. 6-7) are apparently from similar but larger statuettes. The commonly imitated type of the Aphrodite Anadyomene is represented by three semi-draped statuettes (Nos. 8-10). The only large piece of sculpture found was the well-preserved female figure wrapped in a mantle (No. 11). The type is very common in the Roman period and finds a duplicate in a statue in the Corinth Museum (Cor. Sc. 55). Such figures may represent the figure of the dedicator and were used for decorative purposes in the temple or the precinct.

The base (No. 12) of a statue of Asklepios should be mentioned in this connection although it was found some five hundred meters from the sanctuary in the shops west of the Lechaion Road. The traces on the base indicate that it once carried a statue of Asklepios, slightly over life-size, in the usual attitude, leaning on his staff, around which a snake was coiled. It is possible that the base carried another statue on the right, thus representing a group of Asklepios and Hygieia such as is depicted on Corinthian coins of L. Verus and of Plautilla.<sup>51</sup> Its place of finding, however, scarcely allows it to be identified as the base of the cult statues in the temple. It was more probably erected in the vicinity of the Agora.

The most interesting piece of sculpture of the Roman period was a fragmentary relief, No. 13, which was built into the curb of a Byzantine well in the eastern part of the precinct. It represents Zeus seated and holding a thunderbolt, with a goddess standing behind him. The scene is similar to that on the puteal in the Madrid museum the connection of which with the theme of the pediment sculpture of the Parthenon has been discussed by Rhys Carpenter. The piece is probably to be associated with the sanctuary of Zeus to the west rather than with the Asklepieion. The late Hellenistic

<sup>&</sup>lt;sup>50</sup> Edelstein, Asclepius, II, pp. 228-30.

<sup>&</sup>lt;sup>51</sup> Coin of Plautilla: Imhoof-Blumer and Gardner, Numismatic Commentary on Pausanias, p. 25, pl. F, cxvii (B.M.C. Corinth, p. 89, no. 670, pl. XXII, 10). On coins of Sabina and Commodus, Asklepios is represented in his usual attitude, and without Hygieia (B.M.C. Corinth, p. 83, no. 637, pl. xxi. 5). Another coin of L. Verus shows Hygieia alone (Imhoof-Blumer and Gardner, op. cit., p. 25).

<sup>&</sup>lt;sup>52</sup> R. Carpenter, *Hesperia*, II, 1933, pp. 65-66.

head of the Otricoli Zeus type, found to the south of the Asklepieion, has already been published in some detail.<sup>53</sup>

### **CATALOGUE**

- 1 (Plate 59). Cor. Sc. 1450. Fragmentary statuette. Preserved height, 0.145 m. Fine grained marble with a worn surface. The boy's body leans to the left with the left leg slightly advanced.
- 2 (Plate 65 1). Cor. Sc. 1451. Fragmentary grave stele. Preserved height, 0.13 m.; thickness, 0.063 m. Coarse grained, greyish-white marble. Above the head is a portion of the upper moulding of the stele. On the background are well-preserved traces of red. The position and the type of head are somewhat similar to the girl's head on the stele found near Peirene (F. P. Johnson, *Corinth*, IX, *Sculpture*, p. 121, no. 246), but our piece is of later date.
- **3** (Plate 57). Cor. Sc. 1577. Female wearing peplos. Preserved height, 1.00 m. The surface is chipped and worn; on the top of the shoulder and on the upper part of the back are small drilled holes to secure the locks of hair. The marble is coarse grained and white in color.
- 4 (Plate 59). Cor. Sc. 1442. Fragmentary statuette of Asklepios. Preserved height, 0.16 m. Polished greyish-white marble. The fragment is from the lower part of the body, showing a bent knee covered by drapery.
- **5** (Plate 59). Cor. Sc. 1443. Fragmentary statuette of Asklepios. Preserved height, 0.16 m. White marble. Only the right shoulder, upper arm and some drapery gathered under the arm are preserved.
- **6** (Plate 59). Cor. Sc. 1466. Small marble hand. Preserved length, 0.09 m. Polished white marble. The hand is holding a staff. Probably it is from a large statuette of Asklepios.
- 7 (Plate 59). Cor. Sc. 1485. Snake's head. Greatest dimension, 0.08 m. White marble.

- The top of the head has a roughly incised scale pattern; the lower edge is finished.
- **8** (Plate 59). Cor. Sc. 1510. Female statuette. Preserved height, 0.14 m. White marble with a polished surface. The end of a lock of hair is preserved on the right shoulder.
- **9** (Plate 59). Cor. Sc. 1517. Female statuette. Preserved height, 0.09 m. White marble with a polished surface. The ends of locks of hair are preserved on the shoulders.
- 10 (Plate 59). Cor. Sc. 1516 and 1464. Female statuette. Preserved height, 0.30 m. Coarse grained white marble. There are remains of a strut on the right hip and of a knot of drapery. At the base of the neck is a hole for the insertion of the head.
- 11 (Plate 58). Cor. Sc. 1455. Female figure. Preserved height, 1.58 m. White marble. The head was set in separately; the base of its neck, of coarser marble than the remainder of the figure, remains in place. The flesh surfaces are polished. For the type see *Corinth*, IX, *Sculpture*, p. 19, no. 9 and the bibliography cited there.
- 12 (Plate 60). Cor. Sc. 1546. Base of Asklepios statue. Thickness, 0.11 m.; preserved width, 0.555 m.; preserved length, 0.71 m. White marble; broken on the left side and back. On the right side are the tail of a snake and the end of the staff about which it coiled. The statue was slightly larger than life-size to judge by the remains of the feet which measure 0.33 m. in length. There are traces of two dowels for attachment to a lower block.
- 13 (Plate 60). Cor. Sc. 1449. Fragmentary relief slab. Dimensions, 0.47 by 0.36 by 0.15 m. Fine grained white marble. The back and left side of the slab are preserved. The carving is crude.

<sup>&</sup>lt;sup>53</sup> See p. 38, note 14, above.

### MISCELLANEOUS OBJECTS

The following small objects and architectural pieces were found in various contexts in the excavation. Where the context has any significance it is specifically indicated.

### STAMPED LIDS (PLATE 655)

These lids are clay disks, *ca.* 0.01 m. in thickness and 0.09 m. in diameter. In the center of the top is a small knob to serve as a handle. They were probably used for narrow-necked amphorae.

- 1 C-31-473. Red micaceous clay; much worn. It is stamped: L I C. Possibly the initials are those of the Roman colony, Laus Iulia Corinthiensis, and the vessel from which the lid came was public property used in the cult of Asklepios. Early Roman context.
- **2** C-31-474. Yellow clay with grits. Stamped L I C. Early Roman context.
- **3** C-31-475. Soft buff clay. The legible letters of the stamp are:  $\Phi X \Delta I$ .
- 4 C-31-476. Pale gritty clay; much worn. The legible letters of the stamp are: \(\mathbb{X}\tilde{K}\tilde{K}\). There are traces of a fourth letter opposite the X.
- **5** C-31-477. Light micaceous clay; much worn. The letters are obscure; two of them seem to be  $\Lambda E$ .

### MOULDS (PLATE 61)

The number of lamp moulds found in the excavations, particularly for Type XIX lamps, is rather surprising. In addition to those in the following catalogue of which the provenance has no significance, several were found in the early Roman filling over the ramp (above, p. 81) and over the foundation of the east stylobate in Lerna (above, p. 90). Since lamps of this type were in use in Corinth immediately after the refounding, it seems possible that, before the Asklepieion and Lerna were repaired, some lamp maker squatted there and began operations.

- 1 Ask. Varia 5. Thickness, 0.02 m.; estimated diameter, 0.225 m. The fragment is from a flat, circular mould with a design cut on each side. The clay is hard and reddish buff in color. On face A (Plate 61) there are ivy leaves and tendrils in the outer zone and a lyre and flute case in the adjacent band. On Face B (Plate 65 5) there is a laurel leaf pattern in the outer zone and six-pointed stars in the adjacent band.
- **2** Ask. Varia 6. Lamp mould. Diameter, 0.084 m. Soft buff clay. Part of a disk mould. Type XIX.
- **3** Ask. Varia 7. Lamp mould. Greatest dimension, 0.103 m. Hard buff clay. Part of a disk mould. Type XIX.
- 4 Ask. Varia 8. Lamp mould. Greatest dimension, 0.07 m. Soft buff clay. The piece is an impression taken from the disk mould. Type XIX. Possibly it was used in making another mould.
- **5** Ask. Varia 9. Lamp mould. Width, 0.095 m. Soft buff clay. Part of the base mould. Type XIX.
- **6** Ask. Varia 10. Lamp mould. Greatest dimension, 0.095 m. Hard reddish clay. Part of the base mould. Type XIX.
- 7 Ask. Varia 11. Lamp mould. Greatest dimension, 0.065 m. Hard, light buff clay. Part of the disk mould. Type XXVIII.
- 8 Ask. Varia 12. Lamp mould. Greatest dimension, 0.072 m. Soft buff clay. Part of the disk mould. Type XIX.

### METAL OBJECTS (PLATE 61)

M1 Ask. Metal 1. Bronze vase foot. Lower diameter, 0.154 m. The foot is decorated with a tongue design. From Votive Deposit V.

**M2** Ask. Metal 2. Iron dagger. Preserved length, 0.156 m. The fragment preserves part of the blade, the spike on which the hilt was set and a bone washer. From Votive Deposit V.

### STONE OBJECTS (PLATE 61)

**S1** Ask. Varia 1. Amulet(?). Length, 0.08 m. The stone is very hard, purplish-red in color,

possibly a porphyry. Its surface is worn and scratched. The letters, if such they are, are well cut.

**S2** Ask. Varia 2. Amulet(?). Length, 0.05 m. The stone is of marble with blue and white streaks. The surface is smoothly finished and there is a hole at the upper end.

## ARCHITECTURAL FRAGMENTS

- 1 (Plate 62). Ask. Arch. 131, 159. Fragmentary Doric column drums. Chord of the flutes, 0.16 m. Each fragment preserves two flutes. The pieces are of poros and retain traces of Greek stucco. The fluting seems too large for columns from the structures of the Asklepieion or of Lerna. Probably they are from one of the large Greek buildings to the south or west.
- **2** (Plate 62). Ask. Arch. 163. Guttae. Length, 0.052 m.; diameter, 0.07 m. Seven of these poros guttae were found. They are well cut and approximately the same size as those from the temple of Apollo near the Agora.
- **3** (Plate 63). Ask. Arch. 164. Anta Cap. Length, 0.042 m.; width, 0.23 m.; preserved height, 0.19 m. Found in the early Roman filling below the floor level of the fourth cellar from the west in the ramp. The cap is of poros and preserves its original fine stucco. The fragment lay top down in the wheel rut of the road, the traffic of which wore the groove across its lower surface. The cap evidently belonged to one of the Hellenistic structures of the sanctuary, possibly to one of the doors of the abaton building.
- 4 (Plate 63). Ask. Arch. 107. Fragment of a ceiling coffer. Thickness, 0.22 m.; side of coffer, 0.212 m. Four fragments of the coffer block were found, none of which preserve any original dimension except the thickness and the side of one coffer. They are of poros with traces of Greek stucco. On the fragment illustrated are traces of a Lesbian leaf design in red paint on the outer moulding. The center

- of the coffer is open, but on the top of the block is a cutting to bed some type of cover.
- **5** (Fig. 28). Ask. Arch. 38. Fragmentary Stele. Only the upper part of the stele is preserved and its surface is much damaged. It is of poros and preserves some traces of stucco. The block was found reused in the foundations of the gate and thus belongs to the early period of the sanctuary.
- **6** (Plate 62). Ask. Arch. 165. Ionic Capital. Height, 0.54 m.; diameter of shaft, 0.70 m. The capital is of poros and preserves traces of a heavy coat of Roman stucco. The surface of the mouldings and of the volutes is much weathered. Several other fragments of large Ionic capitals were found. They are probably from the large Roman buildings to the south and west of the Asklepieion.
- 7 (Plate 62). Ask. Arch. 166. Wall Crown. Preserved length, 0.92 m.; width, 0.489 m.; thickness, 0.15 m. The fragment is broken at one end. It is of poros and preserves traces of Greek stucco. The groove on the top is the result of weathering.
- 8 (Plate 63). Ask. Arch. 168. Fragmentary Triglyph. The fragment was found in the excavations of 1931-33, but is now missing. It appears to be too large for the structures of the Asklepieion and Lerna.
- 9 (Plate 63; Fig. 28). Ask. Arch. 12. Corner Triglyph. The block is of poros, badly weathered and with no traces of stucco. It is apparently of Greek date, but probably did not

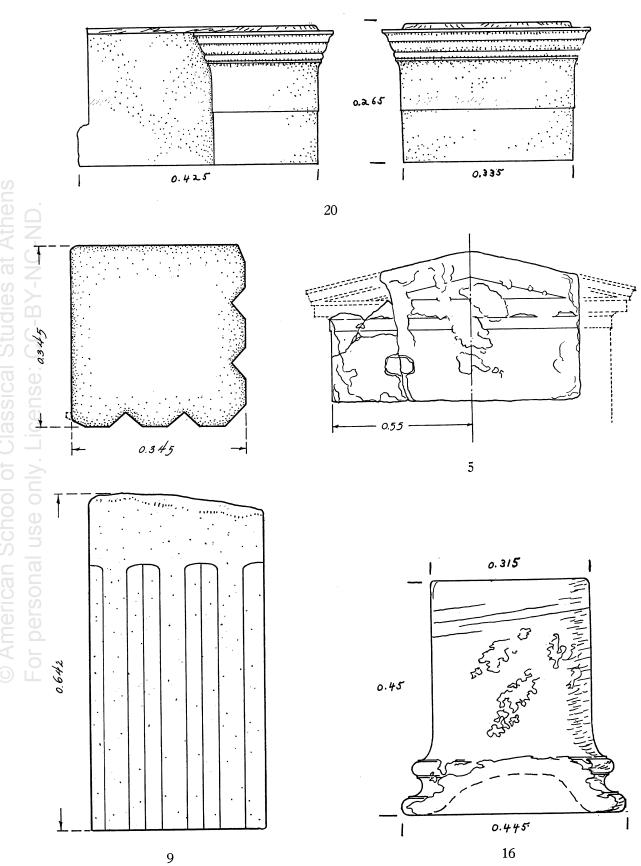


Fig. 28. Architectural Fragments. Nos. 5, 9, 16, 20.

come from any of the structures of the Asklepieion or of Lerna, for it is too large for the temple—the only building on which an exterior corner triglyph would have been required. It was found in a Byzantine wall.

**10** (Plate 63). Ask. Arch. 34, 36, 108, 109, 134, 146. Cornice. The block illustrated is of poros and bears traces of good Greek stucco.

from one of the Greek structures to the south of the sanctuary, destroyed in 146 B.C., for its fragments were found in the early Roman filling over the ramp and built into the crosswalls.

**11** (Plate 63). Ask. Arch. 169. Orthostate Block. Length, 1.65 m.; height, 0.76 m.; thickness, 0.295 m. The block is of poros and bears

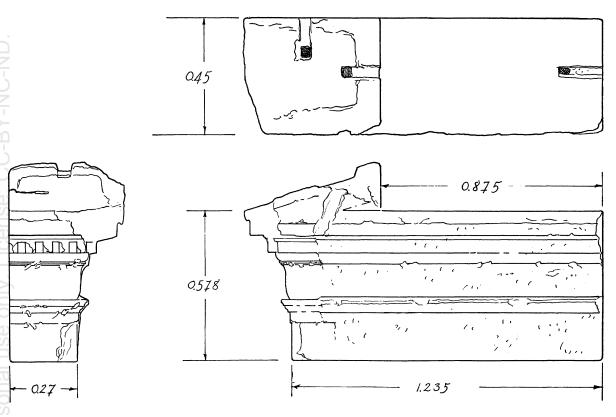


Fig. 29. Ionic Entablature Block. No. 17.

It is one of a set of six fragments assembled by Miss Shoe (*Greek Mouldings*, pp. 73, 109, 158; pls. XXXI, 9, LIII, 36, LXXIII, 21) and dated to the late fifth century B.C. Of the six pieces mentioned by Miss Shoe four were found in the check of 1947 (Inv. Nos. 34, 36, 108, 109). The cornice was from a large building for its mutule is 0.45 m. in length and the via 0.091 m. in width. Its frieze unit would have been 1.082 m.—too large for any structure of the pre-Hellenistic sanctuary. It is probably

traces of good Greek stucco on both faces. At one end there is anathyrosis and at the other, an arc, indicating that the block may have rested against a column. The top has dowel holes at each end and in the center for a crowning member. The block was found in the fountain house, but is too large to be restored on the façade or the parapet of that structure. Possibly it is from the Hellenistic temple and was used to close the ends of the pronaos, then removed at the time of the Roman repairs, as

was the cornice block found in the fountain house.

**12** (Plate 64). Ask. Arch. 153. Small Doric Capital. Height, *ca.* 0.16 m.; diameter of shaft,

14 (Plate 64). Ask. Arch. 43. Ionic Column Drum. Height, 0.42 m.; diameter, ca. 0.32 m. The drum is of poros, much worn with the fluting preserved only part way around the circumference. Possibly the drum is from one

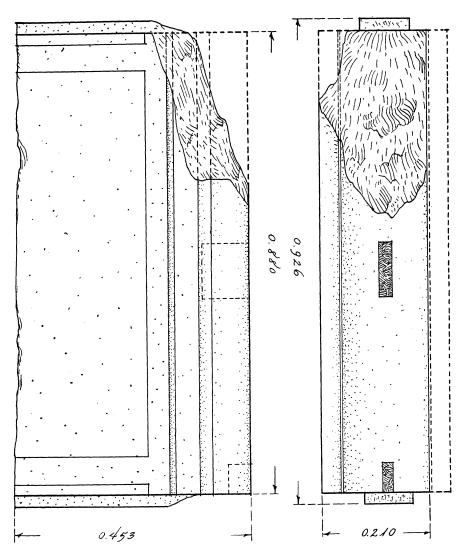


Fig. 30. Parapet Block. No. 19.

0.27 m. The capital is of poros, coarsely cut and preserving no traces of stucco.

13 (Plate 64). Ask. Arch. 77. Ionic Corner Column. Preserved height, 0.66 m.; width of corner joint, 0.165 m. The column is of poros and bears traces of yellow stucco. It was apparently monolithic and had fourteen flutes.

of the columns of the Ionic propylon in the entrance court.

15 (Plate 64). Ask. Arch. 44. Engaged Ionic Column Drum. Height, 0.44 m.; diameter, 0.29 m. The drum is of poros and preserves no stucco. The width of the engaged joint is 0.24 m.

**16** (Plate 64; Fig. 28). Ask. Arch. 157. Small Ionic Base. Height, 0.45 m.; diameter, 0.315 m. The block is of poros and preserves traces of stucco. Its bottom has been cut out to form a small basin. The base and lower part of the shaft are cut from one piece.

17 (Plate 64; Fig. 29). Ask. Arch. 170. Ionic Entablature. The block was found in the exca-

25. Parapet fragment. The fragment is from the end of a parapet slab. Since the photograph was made, it has been broken and only the lower part survives. Since both faces are equally well finished and neither shows any trace of water deposit, it is unlikely that the piece is from any of the reservoirs of Lerna.

20 (Plate 65 6; Fig. 28). Ask. Arch. 18. Anta

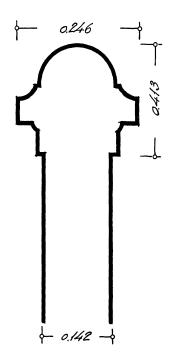


Fig. 31. Parapet Block. No. 19 (section).

vations of 1933-34, but is now missing. It does not seem to be from any of the structures of the Asklepieion or of Lerna.

18 (Plate 62). Ask. Arch. 167. Revetment Slab. Height, 0.19 m.; thickness, 0.06 m. The block is from the end of a low slab of blueish marble with a floral design carved on the face.

19 (Plate 65, 7; Figs. 30 and 31). Ask. Arch.

Capital. This small capital was found in the fountain house, but does not belong to that structure. It is of poros with fine white stucco. On the bottom are two dowel holes, and the bearing surface on the top shows that it supported an architrave 0.40 m. in width. This is apparently the anta capital referred to by Miss Shoe (*Greek Mouldings*, p. 32, pl. XVII, 33) and dated in the second century B.C.

# CHAPTER VI

## THE CULT OF ASKLEPIOS IN CORINTH

LMOST all the evidence relating to the cult of Asklepios in Corinth is of an archaeological nature. Aside from Pausanias' brief notice,¹ which does not even imply that he paid a visit to the Asklepieion, no author refers to it. The inscriptions found in the excavation scarcely more than identify the precinct as the Asklepieion. They throw no light on the ritual of the cult or on the administration of the sanctuary. The evidence afforded by the votive offerings and by the architectural history of the structures of the sanctuary is copious for some periods, very meagre for others. We know little of the buildings before the Hellenistic period, but have a large quantity of votive offerings. On the other hand, the general nature of the buildings used in the Hellenistic period is known, but no distinctive votive offerings were found. In the Roman period we have the added disadvantage of knowing less about the buildings. Out of these materials, then, the history of the cult must be pieced.

The earliest deposit found in the sanctuary contained a dedication to Apollo scratched on the rim of a krater (p. 15, No. 1). The krater is apparently to be dated in the second quarter of the sixth century B.C., but the pottery found with it indicates that the objects in the deposit were collected from early in the sixth century to its third quarter, ca. 600-540 B.C. The scarcity of Protocorinthian and Early Corinthian sherds, not only in the deposit, but in the sanctuary, makes it seem doubtful that the establishment of the cult antedated 600 B.C. There is no indication that Asklepios was associated with Apollo at this early stage. Further, there is no clue as to the nature of the Apollo cult itself, since the offerings were of a purely conventional type—small vases and ordinary figurines. It seems probable that this early cult of Apollo was housed in the open air shrine.

The main votive deposits, in which the terracotta replicas of human members were found, offer the only other important evidence bearing on the early history of the cult. Of the contents of these deposits by far the greater part is to be dated from the last quarter of the fifth century to the last quarter of the fourth. They are plainly dedications to Asklepios, as their nature and the inscriptions on the vases indicate. The deposits, however, contained a few objects evidently to be placed before the last quarter of the fifth century. Some earlier lamps were found, a little pottery, a few figurines, and, in particular, two fragmentary replicas of votive limbs. The small foot (No. 104) is unmistakeably a votive; the fragment of a knee (No. 90) might conceivably be from a large terracotta statue. Should we regard these few objects, which help to bridge the gap between the earliest deposit and the votive deposits, as evidence of an Apolline cult dwindling in importance, or as a few strays from a large quantity of

<sup>&</sup>lt;sup>1</sup> Pausanias, II, 4, 5.

votives which were thrown out in the late fifth century during some reorganization and have not as yet been found? It is of some significance that few objects of late archaic and fifth century date were found elsewhere in the area. Probably, then, the cult was of little importance at that time.

A hint that the cult of Apollo was maintained in the fifth century and even in the fourth is offered by the figurines representing nude standing male figures and those of a male figure holding a lyre and patera. The fragmentary votive foot and knee might perhaps be considered as evidence for the existence of a cult of Asklepios in the early fifth century since such offerings to him were popular at a later date. They might, however, have been equally well offered to Apollo in the capacity of a healing deity. There is, then, no sure information about the time of Asklepios' entry into the sanctuary from the objects themselves, but these acquire more significance when considered in the light of the other cults of Asklepios in the Peloponnesus.

There, three areas had a birth legend of Asklepios and, at various times, stressed their title to the god so that we might expect to see their influence in the foundation of a sanctuary such as that at Corinth without legends of its own and of no great antiquity. They were: Messenia, which venerated Asklepios' son, Machaon, as a hero and seems to have had some connection with Thessaly, the locality of the Asklepios legend, at an early date; 2 Arcadia, which put forward its claims in rivalry to those of Messenia in the fourth century B.C., although its cult may have originally come from Messenia; 3 Epidauros, which became one of the most important cult centers of the god in the ancient world. Of these, Messenia seems to have had some influence in the Argolid,4 although it was not able to develop its claim to Asklepios until after the refounding in 369 B.C. Arcadia, possibly for political reasons, was able to influence the Laconian cult 5 and perhaps that of Titane, 6 near Corinth, where there was a cult statue of the Asklepios of Gortys. The influence of Epidauros was felt in the Peloponnesus, as well as in the Mediterranean region in general, but not to such an extent as might be supposed, because of political animosities at the time when the cult of Asklepios was being spread.

- <sup>2</sup> Edelstein, *Asclepius*, II, p. 21; see also L. Weber, "Asklepios, älteste Zeugnisse aus Thessalien und der Peloponnes," *Philologus*, LXXXVII, 1931-32, pp. 406-17.
  - <sup>3</sup> Edelstein, *op. cit.*, pp. 68-71.
  - <sup>4</sup> Pausanias, II, 23, 4; Edelstein, op. cit., p. 241.
  - <sup>5</sup> Edelstein, *op. cit.*, p. 241, note 12.
- <sup>6</sup> The origin of the interesting cult at Titane (Pausanias, II, 11, 5-8) is puzzling. It is said by Pausanias to have been founded by Alexanor, the son of Machaon, which would imply a Messenian or Thessalian connection, but it had a statue of the Gortynian Asklepios who might have been Arcadian (Edelstein, op. cit., p. 240) or Thessalian (Weber, op. cit., p. 410). It agreed with Epidauros in recognizing Koronis as Asklepios' mother (Pausanias, II, 11, 7) and in certain ritual matters (Pausanias, II, 27, 1). Edelstein sees in this confusion the uncertainty resulting from the various Peloponnesian cult traditions and considers the cult late. It had previously been considered very early. Certainly the conflicting traditions which appear in the cult suggest a late foundation. Thus, it is improbable that Titane had any influence in the establishment of the cult in Corinth as suggested in the preliminary publication (A.J.A., XXXVII, 1933, p. 421).

It has been plausibly argued in a recent study of Asklepios that he was first deified at Epidauros about the end of the sixth century, and from this center made his way throughout Greece as a god, whatever his earlier significance may have been. At Epidauros and many other places also, Asklepios was at first associated with Apollo, had made him the son of Apollo. In most cases, as the cult developed, the son supplanted the father, although at Epidauros a formal association in which Apollo was given first place seems always to have been recognized. From Epidauros in particular the Asklepios cult was disseminated in the latter part of the fifth and fourth centuries and even later. The cult at Rome, for example, was not founded until 292 B.C., while the earliest monumental buildings of the great sanctuary at Kos are to be dated in the first half of the third century.

It is apparent how the evidence of the sanctuary in Corinth fits into this reconstruction. In the archaic period Apollo was worshipped there. We do not know under what epithet, but it is reasonable to suppose that he was a healing deity. His cult dwindled in importance throughout the fifth century while that of the new healing deity in Epidauros became better known. In the latter part of the fifth century Asklepios was probably introduced into the cult of Corinth and quickly attained popularity, as the large stock of votive offerings indicates. It is probable that Apollo was still associated with him, but faded more and more into the background so that when Pausanias mentioned the sanctuary he said nothing of Apollo. Asklepios may have at first been housed in the oikos. At both Epidauros and Kos he received only an altar in his father's sanctuary at first. Possibly, too, the early structures in Lerna were used in the cult, although of them we have little knowledge.

It seems probable, on the whole, that the cult in Corinth was founded from Epidauros as was the cult in the neighboring town of Sicyon. Messenia was a *quasi* slave-state until 369 B.C. while Arcadia, too, was of little political importance in the Peloponnesus until after that date. The cult evidently grew rapidly in importance so that at the end of the fourth century it was necessary to enlarge and remodel the precinct and Lerna.

Some indication of the comparatively late date of the introduction of the cult may be seen in the fact that Asklepios did not come alone, but was apparently accompanied by some of the members of his family. There is definite evidence only for his son, Podalirios, 12 but presumably the other son, Machaon, who was a popular figure in the

<sup>&</sup>lt;sup>7</sup> Edelstein, op. cit., pp. 97-101, 238 ff. This is, of course, in opposition to the older views by which the cult of Asklepios is considered to have spread southwards from Thessaly into central Greece and the Peloponnesus at an early date (cf. Thraemer, Pauly-Wissowa, R.E., II, 1643-1655; Farnell, Greek Hero Cults and Ideas of Immortality [Oxford, 1921] pp. 234-79).

<sup>8</sup> Edelstein, op. cit., pp. 99-100; Thraemer (Pauly-Wissowa, R.E., II, 1655) gives a partial list.

<sup>&</sup>lt;sup>9</sup> I.G., IV<sup>2</sup>, 121, 1.

<sup>&</sup>lt;sup>10</sup> Edelstein, op. cit., p. 99, note 32; Herzog and Schazmann, Kos, I, p. 75.

<sup>&</sup>lt;sup>11</sup> Pausanias, II, 10, 3; Edelstein, op. cit., p. 244.

<sup>&</sup>lt;sup>12</sup> Supra, p. 135, No. 69; for Podalirios see Edelstein, op. cit., pp. 19-20.

Peloponnesus, was venerated also. In the Roman period, there was a cult statue of Hygieia <sup>13</sup> so that she too was probably an object of worship at an earlier date. Possibly one of the minor, shadowy figures of the cult <sup>14</sup> may be recognized in the small figurine of a cloaked squatting figure (p. 140, No. 19).

Little is known of the cult in the Hellenistic and Roman periods except for the evidence offered by the buildings. It was evidently popular from the time of its founding on a grand scale in the late fourth century until the destruction of the city in 146 B.C., for the sanctuary was improved by the construction of the fountain house, and the colonnades of the precinct. There is no reason to suppose that the votive offerings representing human members ceased with the renovation of the sanctuary. Any bronze or marble votives would probably have been carried off in the sack of 146 B.C., or in the following years, and the terracottas smashed and scattered. It is likely that they were cleaned up and buried at the time of the Roman repair work, in some place outside the area of excavation.

The tradition of the cult survived the century when Corinth lay in ruins, for, early in the Roman period, it was re-established in the same precinct. The temple was repaired and the Roman building constructed over the former ramp. The latter probably served as one of the precinct buildings, possibly to house visitors as its division into small rooms suggests. This building, however, cut off the best communication with Lerna and the latter was probably developed as a fountain house and resort in its own right. It could still have been used by the visitors to the Asklepieion, but would not have been devoted primarily to their welfare. It is probable that cures were not performed on such a large scale as previously, for, in the late Hellenistic and Roman periods, the great healing centers of Epidauros, Kos, and Pergamon were fully established and must have drawn many people who hoped that the god would listen more favorably to their prayers in his better-known sanctuaries.

As we have already mentioned, Pausanias noted the sanctuary and the cult images of Asklepios and Hygieia and commented on the amenities of Lerna. Two

<sup>&</sup>lt;sup>13</sup> Pausanias (II, 4, 5) attests the existence of Hygieia for his own period. There seems to be no reason to doubt that she came to Corinth with Asklepios, for, by the fifth century B.C., she was regarded as a goddess (Tambornino, Pauly-Wissowa, R.E., IX, 93-97; Edelstein, op. cit., p. 89, note 51).

<sup>&</sup>lt;sup>14</sup> There were many minor figures associated with Asklepios, such as Akeso, Panakeia, and others, who had various healing functions (Edelstein, op. cit., pp. 85-91). One of the most interesting of these is Telesphoros, who was a deity in his own right, introduced into Greece by the Galatians, and who possibly embodied the procreative power of Asklepios, after he had been adopted into the cult (Cook, Zeus, II, ii, 1089-91). He was usually represented as a Phallos draped to look like a man or boy. The small figurine, p. 140, No. 19, resembles these later figures. The genitals dedicated in the Corinthian sanctuary indicate that this power of Asklepios was recognized there. Thus, it is not unlikely that some youthful predecessor of the later Telesphoros was associated with the cult. At Titane, there was such a figure, Euamerion (Pausanias, II, 11, 7; Edelstein, op. cit., p. 89, note 50).

fragmentary inscriptions found in the excavations are also to be dated to this general period. The better preserved apparently indicates the association of a doctor with the cult.

Cor. Ins. 1040 (Plate 65 4). Thickness, 0.032 m.; preserved height, 0.12 m.; height of letters, ca. 0.023 m. Coarse grained white marble; the back and lower edge of the stone are preserved, although the lower parts of the letters of the last line are abraided. The inscription was cut on a thin slab and preserves parts of three lines. It appears to be a dedication to Asklepios and may be partially restored:

οο Κατ' ἐπιτ] ᾳγὴν 'Ασκλ] ηπιῷ

For the formula "according to injunction" see Ditt., Syll., III, 1153, 1.

Cor. Ins. 1035 and 1134 (Plate 65 3). Height, 0.19 m.; thickness, 0.044 m.; preserved length, 0.255 m.; height of letters, 0.016-0.024 m. Coarse grained greyish marble; two joining fragments of which the right edge is broken. On the back at the top is a projecting band which has been dressed down; thus, the stone was apparently reused for this inscription. The inscription was cut in honor of a certain Gaius Vibius Euelpistus (?), son of Meges, a physician and priest of Asklepios, apparently by order of the Corinthian council.

Γαίον Οὐίβι [ον]

Ἰατρὸν Εὐέλπισ [τον]

Μέγητος ᾿Ασκλ [ηπίου]

Ἱερέα [τέλειον]

Ἡ Κορινθ [ίων βουλή]

In line 2 there are traces of a letter following the iota at the preserved end of the line; they might be part of a delta or a sigma. If the incomplete letter is delta, it is probable that  $\epsilon \dot{\nu} \epsilon \lambda \pi i \delta a$  is to be restored—an adjective describing Vibius as a confident physician. If the traces are part of a sigma, we may restore  $E \dot{\nu} \dot{\epsilon} \lambda \pi \iota \sigma \tau o \nu$ . The name is found as a cognomen (I.G.R.R., I, no. 415; III, nos. 438, 1434) which element would seem to be desirable here.

The full name of the honored physician and priest would be, then, Gaius Vibius Euelpistus. This latter restoration provides a line of similar length to the proposed restorations in lines 3 and 5. The restoration of line 3 seems certain from the traces of the first four letters of the name of Asklepios. That the Corinthian boule is mentioned in line 5 seems probable from a similar method of reference on a Corinthian inscription (Meritt, Corinth, VIII, i, no. 107). Lines 1 and 4 appear to be shorter than lines 2, 3 and 5 from the spacing of the preserved words; each line probably contained only two words. In line 1 were the first two elements of the honored man's name and in line 4 his designation as a priest, with some appropriate adjective. The word τέλειον might be suggested (for its usage see L. Robert, B.C.H., LII, 1928, p. 173, note on 1. 6).

The individual honored is otherwise unknown, although other members of a Vibian family are mentioned in a Corinthian inscription from the Theater (Shear, A.J.A., XXXII, 1928, p. 477; see also Broneer, Corinth, X, p. 134, no. 2 for another possible member of the family). They are a boy, L. Vibius Florus, who had won prizes at various games and his father, L. Vibius Ursulus. The inscription from the Theater is dated by its letter forms to the late first century after Christ. It seems probable that Gaius Vibius Euelpistus is a resident of Corinth rather than a foreign doctor honored for some service to the community since he is described as a priest of Asklepios as well as a physician. His relationship to the other members of the Vibian family, however, is not apparent. The action of a city in honoring one of its priests of Asklepios by a stone set up in the god's sanctuary finds a parallel in Athens (I.G., II<sup>2</sup>, 1163; for similar honors to a foreign doctor see Ditt., Syll.3, I, 335). This association of doctors with the cult is, of course, by no means unusual, for Asklepios was regarded as the patron deity of the medical profession and there seems to have been no antagonism between regular practitioners and the healing of the Asklepieia (Edelstein, *Asclepius*, II, pp. 139-40; see also *I.G.R.R.*, IV, no. 520).

An interesting, but obscure, feature of the inscription is the parallelism of two names, Euelpistus and Meges, with those of famous surgeons active in Rome in the early first century after Christ. Meges, who came from Sidon, enjoyed a considerable reputation in the capital (Raeder, *P.W.*, XV, p. 328, no. 4) and his name is coupled with that of Euelpistus by Celsus (vii, *praef.*; see also, *Philologus*, XIII, 1858, p. 138). There does not seem to be any

incident in the career of either of these physicians, so far as we know it, to connect them with Corinth. Further, there does not appear to be any tradition of a school of medicine at Corinth such as might be established by a famous doctor and his descendants. Thus, it would seem to be unjustified to make any identifications between the names of the inscription from the Asklepieion and the famous surgeons. It might be suggested that a freedman family of doctors, the Vibians, existed in Corinth in the first century A.D., whose successive members used these names famous in the medical world to do themselves and the original bearers of the names honor.

Because of the lack of literary and epigraphical evidence it is scarcely possible to discuss the ritual and the administration of the cult. Presumably, since no comment exists to the contrary, it had no unusual features, but, like other Asklepieia, would retain a staff of priests and attendants, hold services and festivals, and carry out its temple healing.<sup>15</sup>

Something of the procedure of the latter may be deduced from the buildings which have survived and our general knowledge of the practice. Patients could go themselves at any time to the Asklepieia or deputize others in their stead. The ritual was evidently very simple <sup>16</sup>—consisting of sacrifice and purification by bathing, followed by spending the night in the abaton. While the patient slept the god would appear in a dream, either to cure him immediately or to prescribe treatment. The treatment, too, was of a simple nature; drugs might be suggested, or a regimen of diet, bathing, and exercise ordered.

The buildings of the Hellenistic sanctuary and of Lerna seem to provide for all these. Upon entering the sanctuary from the east, a ceremonial ablution, preliminary to sacrifice, would have been performed at the east water basin. Sacrifice of a simple nature would have been made at the near by altar, followed by a visit to the temple in which the cult images of Asklepios and Hygieia were placed. Preparation for the sleep was probably preceded by a ceremonial walk through the precinct to the abaton. The lustral room was evidently designed for a purificatory bath before the sleep. Since the whole room was so thoroughly water-proofed and provision made for

<sup>&</sup>lt;sup>15</sup> An excellent description of the temple healing and cult ritual with ample bibliography may be found in Edelstein, *op. cit.*, pp. 139-213. The most vivid accounts in the source material are those from the *Ploutos* of Aristophanes (lines 653-747) and the *Hieroi Logoi* of Aelius Aristides (A. Boulanger, *Aelius Aristide* [Paris, 1923], pp. 111 ff.). A part of the incubation ritual is preserved in an inscription from Pergamon (*Altertümer von Pergamon*, VIII, 2, no. 264). For a general treatment of incubation see L. Deubner, *De Incubatione* (Giessen, 1899).

<sup>&</sup>lt;sup>16</sup> Edelstein, *op. cit.*, pp. 148 ff. There is no evidence to suggest any undue deceit on the part of the priests.

drainage at two levels, it is likely that the bath was a thorough washing. If we may accept Aristophanes' description of the treatment meted out to Ploutos, such a washing seems to have been the normal practice, and in all Asklepieia water systems were an important feature.<sup>17</sup> The careful husbanding of the water from the lustral room in the shaft, S, along the south side of the precinct may have been designed to provide a sacred well as at Pergamon.<sup>18</sup> Upon completion of the bath the patient would have proceeded into the abaton room to await the visit of the god and awake, feeling sufficiently better to believe himself cured, or with directions for some special treatment.

This treatment might involve exercise, bathing and a special diet. Lerna was provided with a colonnaded court for walking, such as was sometimes prescribed.<sup>19</sup> Its reservoirs contained a very large amount of water and perhaps we may see an indication of special facilities for curative baths in the separate rooms of the corridor before the reservoirs (above, p. 102). Patients could have stood in them while attendants poured cold water over them. If more violent exercise were necessary, in the vicinity was the Gymnasium which, while not a part of the Asklepieion, could no doubt be used by its patients. In the dining rooms a special diet <sup>20</sup> may have been provided for some patients and meals for others.

For treatment of this type to be effective a stay of some weeks or months would

<sup>&</sup>lt;sup>17</sup> Herzog, Philologus, Supp. XXII, 1931, pp. 155 ff. Their use in the ritual of the cult and temple healing is largely a matter of conjecture. The system in Pergamon seems to have been most elaborate, where use was made of water for drinking and bathing in the cures, and for purification in the ritual (O. Deubner, Das Asklepieion von Pergamon, pp. 34-37). The bath preliminary to incubation in the Asklepieion at Athens was referred to as the "sea" (Aristophanes, Ploutos, 656, 658). The term seems to have been used by Aristophanes in the sense of both the container of the water (line 656) and the water used for bathing (line 658), which is described as cold. There seems no reason to suppose that this reference to the "sea" refers to the Asklepieion in the Peiraeus (Wilamowitz, Der Glaube der Hellenen [Berlin, 1932], II, p. 232), and that the scene of the Ploutos was laid there. After all, the well in the Erechtheion on the Acropolis was called the "sea" (Herodotus, VIII, 55; Apollodorus, III, 14, 1). The term "sea" was probably used frequently of the tank containing water, as indicated by a passage of the comic poet Crates (Athenaeus, VI, 268a; I am indebted to Dr. L. B. Holland for the reference), "I, in turn, will first draw, for the benefit of my friends, warm baths from the sea on columns, like those in the doctor's office (Paionion) so that they shall flow of their own accord into every man's basin, and the water will say, 'Stop me.'" Allowing for some comic fantasy one may assume that some type of medicinal shower bath was known to the audience which should flow freely, but often did not. The well-known scenes on black-figured vases showing people taking shower baths in fountain houses may throw some light on the strange phrase, "on columns." (See E. Pfuhl, Malerei und Zeichnung der Griechen, III, figs. 286, 295.) The lustral room in the abaton at Corinth has no such arrangement for showers, but a cold douche by an attendant might have served the same purpose. The intimate connection between water systems and the abaton has been pointed out in connection with the Asklepieion at Gortys (B.C.H., LXIV-LXV, 1940-41, pp. 280-82) and in Epidauros (B.C.H., LXVI-LXVII, 1942-43, pp. 327-34).

<sup>&</sup>lt;sup>18</sup> Aristides, Oratio, XXXIX.

<sup>&</sup>lt;sup>19</sup> Marcus Aurelius, *In Semet Ipsum*, V, 8; see also the cure of M. Lucius Apelles from Epidauros (*I.G.*, IV<sup>2</sup>, 126).

<sup>&</sup>lt;sup>20</sup> For the part of diet in the treatments see Philostratus, *Vita Apoll.*, I, 9; Aelius Aristides, *Oratio*, XLIX, 28; Pliny, *H.N.* XX, 264.

have been necessary. Yet, there do not seem to be any buildings for such lengthy stays in the Hellenistic Asklepieion. The north colonnade would serve for a few nights in good weather, but would have been extremely uncomfortable in the winter months. It is probable, on the whole, that the Corinthian Asklepieion had only a local popularity. The absence of literary references to it and its comparatively small size are evidence of this. In any case, it seems to have played its part in the life of Corinth for almost eight centuries, from its foundation in the late fifth century B.C. until its destruction in the late fourth century after Christ, when the healing functions of the Asklepieia were taken over by the Christian shrines.

# CHAPTER VII

# THE SITE DURING THE EARLY CHRISTIAN PERIOD

THE DESTRUCTION OF THE ASKLEPIEION AND OF LERNA

Asklepios and of Lerna occurred about the end of the fourth century after Christ. On and above the rock of the hill on which the temple had stood was a layer of debris, ca. 0.70 m. in depth, which accumulated there during and after the time the buildings were pillaged of their blocks. In it were layers of burnt material extending over most of the area. The debris contained few blocks, but many chips and small fragments of poros. Apparently some of the stones of the buildings were cut up on the spot for easier transportation to some other area. In the debris and in the cuttings for the former buildings a number of coins and lamps were found. The coins, with few exceptions, were those issued by the emperors from Constantine I (306-337) to Theodosius II, who came to the throne in a.d. 408. The greater number, however, were of types issued 363-408 after Christ. The lamps belonged to the same general period since they were late varieties of Type XXVIII, Type XXIX, and Type XXXI.¹ Apparently, then, the sanctuary was destroyed about the end of the fourth century and its blocks removed shortly afterwards.

In Lerna, the neglect into which the area fell resulted in a rapid accumulation over the pavements. The filling was, in part, the result of a deliberate dumping of refuse, for many animal bones were found in it. The coins and lamps of this accumulation were of the same date as those found on the hill. Coins of Arcadius, of Honorius, and of Theodosius II were found on and near the pavement of the square and of the former colonnades.

The date of the destruction of the Asklepieion and of Lerna accords in general with that of the buildings in the vicinity. The trenches dug on the hill of Zeus to the west and in the supposed site of the Gymnasium to the south revealed that their blocks, too, had been largely removed in the same period. The destruction of the Theater <sup>2</sup> and of the Odeion <sup>3</sup> seems to have taken place then also. In the case of the latter two buildings, the destruction is ascribed to the pillaging and devastation by the Visigoths under Alaric in A.D. 396. This must have given a death blow to the cultural life of the city with its amusements and great pagan festivals, although the market quarter partially revived.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Broneer, Corinth, IV, ii, pp. 113-14, 116, 119.

<sup>&</sup>lt;sup>2</sup> T. L. Shear, A.J.A., XXXII, 1928, p. 486; R. Stillwell, A.J.A., XXXIII, 1929, p. 97.

<sup>&</sup>lt;sup>3</sup> Broneer, Corinth, X, p. 147.

<sup>&</sup>lt;sup>4</sup> F. J. De Waele, A.J.A., XXXIV, 1930, p. 435.

The destruction of the sanctuary of Asklepios, however, may not have been entirely the work of Alaric. It is reasonable to suppose that it was pillaged,<sup>5</sup> but the Visigoth soldiers would scarcely have had the will to pull down the buildings and remove the stones to the rock level. Although the monumental buildings may have suffered seriously by the inroad, the almost complete disappearance of the blocks probably took place in the years immediately following. The comparatively small and easily cut poros blocks would have been as attractive to the Early Christian community as they have been to the Greek peasants subsequently. Possibly, too, in the case of the Asklepieion, some religious animus against the "Saviour" of the pagan religion made the act morally as well as practically desirable.

Some support for this suggestion may be found in the avoidance of the temple area as a burial ground. Very soon after the destruction of the pagan buildings in the area the region became a Christian cemetery. It is significant that the graves on the hill were all placed at some distance from the area occupied by the temple (Plan A). In contrast, the surface of the hill of Zeus was honeycombed with graves. No church was erected on the site of the temple, and it was not until almost three centuries later, when the memory of Asklepios had probably vanished, that a chapel was built in Lerna.

The blocks from the buildings were probably used in new structures to the east and south, but there are few traces of building activity in the Asklepieion or Lerna. Traces of limekilns north of the temple and in the street indicate where much of the marble disappeared. The former cellars of the Roman building in the street soon filled up with the debris from the destroyed Asklepieion. They, or flimsy structures above them, may have been occupied for a short time, for on the south wall of the street is a row of irregularly spaced beam holes. There are also a few traces of habitation along the east side of the precinct (Plan A). A room was found with some storage pits cut in the rock and a hearth. The house to which it belonged extended into the unexcavated area to the east. To this house probably belonged the well on the eastern side of the area. Some of the rubble walls found above the layer of burnt debris over the hill may indicate the existence of other houses of this period, but their traces are too scanty to permit of more than conjecture. In the west colonnade of Lerna a small potter's kiln was built (Plate 66 1) of reused blocks and tile fragments. Only its foundation, measuring 1.40 m. in diameter, and resting on the former pavement, survives. The important remains of the Early Christian period in the area are those of an extensive cemetery.

<sup>&</sup>lt;sup>5</sup> Claudian (*In Rufinum*, ii, 186 ff.) is scarcely to be taken literally; for the inroad of Alaric see Zosimus, V, 6-7; Finley, *Speculum*, VII, 1932, p. 477.

<sup>&</sup>lt;sup>6</sup> Edelstein, Asclepius, II, pp. 132-38; there does not seem to be any evidence that a Christian curative cult was continued on the site as, for example, at Athens (J. Travlos, 'A $\rho\chi$ . 'E $\phi$ ., 1939-41, pp. 56-57; p. 64, note 1).

### THE CEMETERY

The cemetery of the Early Christian period in the neighborhood of the Asklepieion is of some importance for our knowledge of Corinth during that little-known time. Its graves are poor in offerings to the dead and of slight architectural interest in themselves, but many epitaphs were found which make an important addition to those from the other cemeteries of the period of which three in all have been discovered in Corinth. One was located near the eastern side of the Agora, where the extensive Roman remains made its investigation difficult. Another was situated near the Christian Basilica by the Kenchrean Gate. Its tombs, which were built of bricks, were mostly rifled and probably of rather later date than the cemetery near the Asklepieion and that in the Agora. The former is very large, extending over the lower terrace of the city from the hill of Cheliotomylos so to the vicinity of the Asklepieion. Although over three hundred burials were uncovered, the number represents only a fraction of the graves in the cemetery. Most of the graves were excavated during the course of the investigation of the Asklepieion and of Lerna, the remainder by the trenches on the hill of Zeus to the west.

The type of grave was dependent on the condition of the ground in which the burial was made and, of course, on the means at the disposal of the family. It was impossible to establish any chronological sequence of types since the graves were extremely poor; most of them contained no objects at all. The inscriptions were of little aid, for they had strayed from their original setting. Thus, only the general period of the burials is known. They seem to have extended, at least in the area excavated, from the late fourth to the middle of the sixth century.

When the burial was made in the rock surface of the hills the tomb was cut in the rock in the shape of a rectangular box with rounded corners and a vaulted roof, 1.00 m. in depth and measuring *ca*. 1.90 m. by 0.75 m. on the sides (Plate 15 <sup>5</sup>). A square opening of *ca*. 0.70 m. was made at the foot which was covered by a thin poros slab. Fourteen graves of this type were found along the north side of the Asklepieion hill (Plan A) and about sixty on the hill of Zeus to the west.

In the hard yellow clay on the east and west sides of Lerna hollow, the tomb consisted of a gallery tunneled into the sides of the hills. A barrier of clay or of small stones was left at the entrance (Plate 66 <sup>2</sup>). About thirty graves of this type were found. In some cases the gallery was tunneled into the rock cap of the hills. In such cases, instead of making the burial in the gallery, its floor was cut through and two rectangular graves of the type mentioned above were made.

Most of the burials, however, were made in tile graves in the earth. Large tiles were propped against each other to form a saddle roof over the body (Fig. 32). The usual number of tiles used was four or six, although a few small graves used only two. In most cases tiles were placed at the ends and laid across the ridge of the saddle roof.

<sup>&</sup>lt;sup>7</sup> R. Carpenter, A.J.A., XXXIII, 1929, p. 357; inscriptions: Cor. Ins. 907, 908, 911, 914, 917.

<sup>&</sup>lt;sup>8</sup> Shear, A.J.A., XXXV, 1931, pp. 439-41.

The tiles are of coarse red or yellow clay and vary considerably in size. One of the largest tiles, made with sides of unequal length and width, measured 0.83-0.85 m. by 0.30-0.38 m. It is probable that these very large tiles were made especially for graves. About one hundred twenty-five tile graves were found over the pavement of Lerna square and its colonnades (Plan A). Many of them utilized the pavement as a floor, while others were cut through it.

Some of the tile graves were treated more ambitiously. After the burial was made, a vaulted cover of plaster was laid on the grave mound at ground level, ca. 1.00 m. above the burial. Three good examples of this were found over tile burials in Reservoir III. They probably indicate that the general ground level of Lerna during

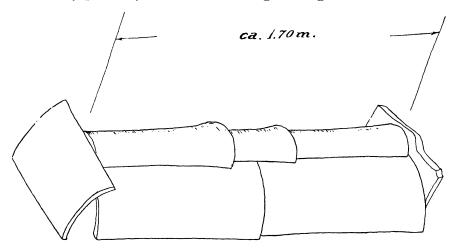


Fig. 32. Early Christian Tile Grave.

this period was ca. 1.00 m. above the level of the pavement. Similar coatings of plaster were found over some of the rock-cut graves on the north edge of the Asklepieion hill.

Among the tile graves about fifteen jar burials were found. These jars (Plate 67 <sup>4</sup>), ca. 0.70 m. in height, were too narrow to allow the entrance of a corpse, even of a child. Accordingly, the top was broken off and laid in place again after the body had been inserted. Probably some, in which no bones were found, were used for cremation burials. A few burials were made in earth without a grave covering of any type.

The tile and jar graves would, of course, be the cheapest type of burial, while the rock and clay-cut tombs would involve some labor and expense. There was no trace of an *ostotheke*, the place of special burial of the bones removed from the first burial place in order to reuse it. Some of the inscriptions, however, clearly mention the purchase of a previously used tomb to so that an *ostotheke* probably existed.

<sup>10</sup> *Infra*, p. 166, note 20.

<sup>&</sup>lt;sup>9</sup> It is a popular belief in modern Greece that a corpse which, after a number of years, is found in an incomplete state of decomposition, has had a blameable past. Accordingly, when it is transferred to the *ostotheke* some simple rites are performed. One of the most famous *ostothekai* in modern Greece is that of Stavronikita on Mt. Athos (F. Spunda, *Der heilige Berg Athos* [Leipzig, 1928], pp. 252 ff.).

In the graves the dead were laid with the head to the west and with crossed hands. Usually the grave contained only one body, <sup>11</sup> but some had two, three, or four skeletons, frequently a mother and children. The funeral offerings were very scanty and poor. Some graves contained four or five small jugs (Plate 67 <sup>5-6</sup>) of unglazed, red clay. A few had finger-rings, earrings, and scraps of textiles. Many lamps, however, were found in the earth above and around the graves. From their frequency, one can imagine the ceremonies of a day of remembrance when the relatives returned to the grave to pray and burn some oil lamps on the tomb, as is still the custom in parts of Greece. These lamps (Plate 67 <sup>1</sup>) should indicate the period of use of the cemetery. They are of the latest varieties of Types XXVIII, XXIX, and XXXI. These were in common use in the late fourth, fifth and sixth centuries after Christ. <sup>12</sup>

The most important chronological point in the history of the cemetery, however, is furnished by a mass burial in Reservoir IV. Before the burial was made, the northern part of the reservoir had collapsed for a length of ca. 14.00 m. A few traces of the use of the southern part of the reservoir as a dwelling after this collapse survived in the form of steps (Plan A). This crude cave-dwelling was used for the burial. The remains of over one hundred skeletons of both adults and children were found (Plate  $28^{\,1}$ ). Some of the latter had been buried in jars. With the bones which covered the floor of the reservoir to a depth of ca. 0.40 m. were a few small jugs of the type found in other graves. The position of the bones indicated that this was not an ostotheke, but a common tomb used for a special burial.

Its date is established by three coins found among the bones: two of Anastasios I (A.D. 491-518) and one of Justinian I (A.D. 527-565). The reign of the latter emperor and of his immediate predecessor, Justin I, was marked by two violent earthquakes and a plague. The first earthquake seems to have occurred in A.D. 522 and the second in A.D. 551, while the plague raged in A.D. 542.18 Procopius describes the results of the first earthquake and of the plague: 14 "These cities had always been most prosperous from ancient times. But now their walls were overthrown by an earthquake, and they were nearly emptied of inhabitants. For the onset of the plague killed a half of the remaining population." It is probable that Lerna shows the traces of these disasters. After the yellow clay under the rock cap had been tunneled out for graves, the collapse of the overhanging rock would have been a natural consequence of earthquake. Some tile graves in front of the spring house and of Reservoir V were found covered by masses of fallen rock. This collapse and the destruction of the dwelling in Reservoir IV may well be the result of the great earthquake of A.D. 522. The mass burial in the southern part of the reservoir probably represents the fate of some of the inhabitants of Corinth in the plague of A.D. 542, and marks the end of the use of Lerna hollow as a part of the large cemetery.

<sup>14</sup> Procopius, *Hist. Arc.*, 18, 43-44.

<sup>&</sup>lt;sup>11</sup> The bones were usually in a very poor state of preservation or had completely disintegrated. <sup>12</sup> Supra, p. 160, note 1.

<sup>&</sup>lt;sup>18</sup> On these events see Finley, Speculum, VII, 1932, p. 478; Broneer, A.J.A., XXX, 1926, p. 53.

#### THE EPITAPHS

The epitaphs, about sixty-five in number, which were found in the excavation, are of importance both for our knowledge of the Early Christian community in Corinth and for their epigraphic and linguistic interest. The latter is commented on at some length in the *Corpus der griechisch-christlichen Inschriften von Hellas*. <sup>15</sup> Accordingly, only some matters of archaeological and historical interest are discussed in the following paragraphs.

The grave stones were, unfortunately, seldom found in or near the grave to which they had belonged. The mortar adhering to the back of some <sup>16</sup> indicates that they were laid flat on the plaster covered mounds of earth covering the burials. Most, however, were probably set upright and, with a wooden cross, marked the place of the burial in the earth below. In the case of the galleries cut into the clay and rock of the hillsides the slabs were probably placed near the entrance to the tomb. The inscriptions were found scattered about the excavated area, sometimes in a group, as in the case of five slabs in a heap before the entrance to Reservoir V. Only three, from their provenance on or in the graves into which they had sunk, can be definitely associated with particular burials.<sup>17</sup>

The epitaphs were cut on broken revetment slabs of white, blue or greenish marble from the buildings in the neighborhood. As the burials started very soon after the destruction of the sanctuary there was a large supply of material at hand. Many small fragments were found in the late accumulation over the area and a large quantity near the former spring house. It is possible that the marble cutters had their shop in that area. Some of the fragmentary slabs were trimmed into a rough rectangle <sup>18</sup> before the cutting of the epitaph so that its letters are spaced on the field. Most of them, however, use the broken slab and fit the lettering into the available space. One inscription is painted in black letters on a tile of yellow clay.<sup>19</sup>

The formulae of the inscriptions are dry statements lacking in feeling for the dead beyond the occasional assurance that their memory was blessed. Often, however,

<sup>&</sup>lt;sup>15</sup> The inscriptions from the cemetery have been published, or are projected for publication in the *Corpus der griechisch-christlichen Inschriften von Hellas* (edd. H. Lietzmann, Nikos A. Bees, and G. Sotiriou), I: *Die griechisch-christlichen Inschriften des Peloponnes* (ed. Nikos A. Bees), Lieferung I: *Isthmos-Korinthos*. This work is hereafter referred to as *C.G.-C.I.*, I, 1. F. J. De Waele has contributed notes for the inscriptions from the Asklepieion area.

<sup>&</sup>lt;sup>16</sup> Cor. Ins. 1135; C.G.-C.I., I, 1, No. 32.

<sup>&</sup>lt;sup>17</sup> Cor. Ins. 1019; C.G.-C.I., I, 1, No. 31; belonged to the rock-cut tomb of Eusebios on the north edge of the Asklepieion hill. The grave contained four skeletons and had been purchased by Eusebios from Leonidas. It was apparently used as a family tomb. Cor. Ins. 1020 (C.G.-C.I., I, 1, No. 33) belonged to the tomb of Andreas which was also rock-cut and covered with a plastered mound in which the inscription was found. Cor. Ins. 1092 (unpublished) belonged to the tile grave of Laurentios into which it had sunk. This grave was ca. 1.20 m. above the ancient pavement of the entrance court of Lerna.

<sup>&</sup>lt;sup>18</sup> Cor. Ins. 1029; C.G.-C.I., I, 1, No. 37; 1141 (unpublished).

<sup>&</sup>lt;sup>19</sup> Cor. Ins. 1045; C.G.-C.I., I, 1, No. 46.

they assert the ownership of the grave and the details of its purchase in the manner of a property marker. A typical formula may be quoted: "Grave belonging to Andreas and to Eugenia. Here rests their daughter, Anastasia. Purchased from Kyriakos, the pheasant breeder. On the fourth day of June, the eighth year of the indiction." Another runs: "Grave belonging to Andreas, the preserve-maker, the hunchback, purchased from Geryon, for one and one-half gold solidi. Consecrated in the month of April." Still another reads as follows: "Grave belonging to Eusebios Anatolikos, the Solite, the cloth-seller, purchased from Leonidas, the whitener. Here rests Noumenis of blessed memory. On the fifth of June, in the sixth year of the indiction." The curses which were often directed against grave robbers and violators of the sanctity of the tomb are rare in the inscriptions from the Asklepieion district. The formulae of purchase could apply, of course, only to the more elaborate and expensive graves cut in the rock of the hills or tunneled into the clay of their sides.

The names on the epitaphs and the occasional designation of their possessor's profession are of considerable historical interest. The dead, whose epitaphs were found, would represent a small cross-section of the population of Corinth in the fifth and sixth centuries after Christ. Thus, the epitaphs throw some light on the society of the city at that period of transition between the Roman and Byzantine cultures.

Accordingly, we find a mixture of ancient and Christian nomenclature. Graecised Roman names <sup>24</sup> and classical Greek names, <sup>25</sup> particularly when they belonged to protagonists and martyrs of the Church, <sup>26</sup> were in use. Along with them, were specifically Christian names, like Paskasia, commemorating the Anastasis, or Eusebios, indicating

- <sup>20</sup> Cor. Ins. 1049; C.G.-C.I., I, 1, No. 34. Despite the precision of these dates it is scarcely possible to ascertain the absolute date, for the number of the indiction is not given. An indiction was a cycle of 15 years in which the taxes were levied after the evaluation and notification (*indictio*) at the beginning of the period.
- <sup>21</sup> Cor. Ins. 1135; C.G.-C.I., I, 1, No. 32. This stone was found in the entrance to Reservoir V and may have belonged to one of the gallery graves cut into the hillside above it.
  - <sup>22</sup> Cor. Ins., 1019; C.G.-C.I., I, 1, No. 31.
- <sup>23</sup> The usual formula runs: "If anyone tries to open this grave without the permission of the owners, let him be accursed." A similar curse seems to have been cut on one stone from the Asklepieion (Cor. Ins. 1086; *C.G.-C.I.*, I, 1, No. 25).
- $^{24}$  Julianus (Cor. Ins.  $1027+1028+1042\,;$  unpublished). Maximus (Cor. Ins. 1077; unpublished). Rufinus (Cor. Ins. 1141; unpublished).
  - <sup>25</sup> Agathokleia (Cor. Ins. 1021; unpublished). Nikias (Cor. Ins. 1137; unpublished).
- <sup>26</sup> Andreas is known as the name of a musician in Corinth in the Roman period (Plutarch, *De Musica*, 21), but the frequent use of the name (Cor. Ins. 1020, 1049, 1135, 1172; *C.G.-C.I.*, I, 1, Nos. 33, 34, 32, 51) is probably inspired by the memory of the apostle. Laurentios, found on one epitaph (Cor. Ins. 1092; unpublished) is the Greek form of St. Laurentius. The classical name Phoebe, known from St. Paul's *Epistle to the Romans* (16, 1-2) may be repeated in Phobia (Cor. Ins. 1021; unpublished). Tryphon (Cor. Ins. 1029; *C.G.-C.I.*, I, 1, No. 37) is the name of a martyr of Nicaea tortured in the reign of Decius and especially venerated in the Arcadian town of Vytinia.

fidelity to a Christian life.<sup>27</sup> In some cases the bearer's geographical origin is indicated by his name.<sup>28</sup> Again, we may see the hopes of parents for a happy life for their children in the names of good omen such as Epagathos and Eutychia.<sup>29</sup>

One interesting development towards a double name is the addition of the place of origin. In the epitaph quoted above, Eusebios is called the "easterling" and "Solite" which indicates that he came from Soloi in Asia Minor. The addition would have been made to distinguish him from other bearers of the same name. Another method of doing this was by the addition of a nickname or descriptive epithet like that of Andreas, the hunchback. Another man is called κατάκρανος which may refer to the shape of his head. Probably the designations of profession were added for the same reason. All indicate humble pursuits: δεκανός, decanus or constable; καμισαγοραστής, cloth-seller; κραμβίτας, gardener; δεκαντής, whitener; πρῶτος, assessor; βαλνικάριος, bath attendant; καλμαγάριος, preserve-maker or seller; σιτιστάριος or σιτευτάριος, provisioner: αἰγιάριος, goatherd; αἰγιάριος, pheasant-breeder.

<sup>27</sup> Paskasia or Paskalia is the Latin form representing the Greek Anastasia or Resurrection (Cor. Ins. 1268; unpublished); Eusebios (Cor. Ins. 1019; *C.G.-C.I.*, I, 1, No. 31); Georgios (Cor. Ins. 1029; *C.G.-C.I.*, I, 1, No. 37); Joannes (Cor Ins. 1021, 1038; unpublished); Kyriakos (Cor. Ins. 1049; *C.G.-C.I.*, I, 1, No. 34) means the "man of the Lord" or the man born on the day of the Lord. Leonidas (Cor. Ins. 1019; *C.G.-C.I.*, I, 1, No. 31) was the name of a bishop of Athens who, with eight companions, suffered martyrdom in Corinth. The apostles' names: Mattheas (Cor. Ins. 1141; unpublished); Loukas (Cor. Ins. 1168; *C.G.-C.I.*, I, 1, No. 35) and Paulos (Cor. Ins. 1091, 1138; unpublished) are found. Maria, too, is used several times (Cor. Ins. 1141, 1175; unpublished).

<sup>28</sup> Athenaios (Cor. Ins. 1045; C.G.-C.I., I, 1, No. 46).

<sup>29</sup> Eutychia (Cor. Ins. 1029; *C.G.-C.I.*, I, 1, No. 37); Epagathos (Cor. Ins. 1037; *C.G.-C.I.*, I, 1, No. 43); Kalliste (Cor. Ins. 1026 and 1136; unpublished); Eugenia (Cor. Ins. 1049; *C.G.-C.I.*, I, 1, No. 34); Kalogennetos (Cor. Ins. 1092; unpublished); Sympheron (Cor. Ins. 1140; unpublished).

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<sup>30</sup> Cor. Ins. 1019; C.G.-C.I., I, 1, No. 31.
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<sup>31</sup> Cor. Ins. 1135; C.G.-C.I., I, 1, No. 32.

<sup>32</sup> Cor. Ins. 1137; unpublished.

<sup>33</sup> Cor. Ins. 1029; C.G.-C.I., I, 1, No. 37.

<sup>34</sup> Cor. Ins. 1019; C.G.-C.I., I, 1, No. 31.

35 Cor. Ins. 1038; unpublished.

<sup>36</sup> Cor. Ins. 1019; C.G.-C.I., I, 1, No. 31.

<sup>37</sup> Cor. Ins. 1045; C.G.-C.I., I, 1, No. 46.

<sup>38</sup> Cor. Ins. 1172; C.G.-C.I., I, 1, No. 51.

<sup>39</sup> Cor. Ins. 1135; C.G.-C.I., I, 1, No. 32 and Cor. Ins. 1172; C.G.-C.I., I, 1, No. 51.

<sup>40</sup> Cor. Ins. 1091, 1138; unpublished.

<sup>41</sup> Cor. Ins. 1029; C.G.-C.I., I, 1, No. 37.

<sup>42</sup> Cor. Ins. 1049; C.G.-C.I., I, 1, No. 34.

## CHAPTER VIII

## THE BYZANTINE CHAPELS IN LERNA HOLLOW

URING the Byzantine period Lerna hollow received a limited amount of use as the site of two small chapels. Both were comparatively unimportant since they were situated at some distance from the Agora which continued as the center of the Byzantine town. Like the wayside chapels of modern Greece, they probably received only a limited amount of use from passers-by and were the scene of occasional services.

The destruction in Lerna had involved the demolition of the platform and basin in the spring house, but the water supply continued in use while burials were made in the cemetery. A small basin was built in the southwest corner, measuring ca. 0.50 m. in length and width. The side channel which had drained the basin from this corner was partially blocked by stones, possibly in an effort to raise the water level. It continued to be used, however, by the people living in the vicinity and visitors to the cemetery, as the lamps (Plate 67<sup>2</sup>) found in it indicate. During this time the level of the accumulation inside the spring house rose to the lowest step of the flight leading down to the basin. Since the level outside the entrance also rose, three steps were added to the top of the flight. Inside the spring house two burials were made, one of which was an unusual type with the sides of the grave built of rough stones and furnished with a cover slab. A good indication of this constant use of the spring house in the fifth and sixth centuries and of its subsequent abandonment is furnished by the many lamps found in its basin. Over seventy in all were discovered, a representative group of which is shown in the photograph (Plate 67 3). They are of the same types as found among the graves, late varieties of Type XXVIII, Type XXIX, and Type XXXI.2

<sup>&</sup>lt;sup>1</sup> In the filling which partially blocked the side-channel many lamps of different types were found: 1 of Type I; 1 of Type III; 1 of Type IV; 6 of Type XVI; 1 of Type XVII; 1 of Type XVIII; many of Types XXVII, XXVIII, XXIX, and a few of Type XXXI. Thus, this "hoard" of lamps represents an accumulation over the Greek and Roman periods. It is probable that this is the result of a general cleaning of some structure where lamps were used and forgotten—presumably of the long channel to the southwest, where niches in the wall show that lamps had been used during the operations of cleaning and putting the channel in order at various times. When the side-channel was blocked the workmen investigated the channel and collected the lamps which they found abandoned in the niches. The very latest examples would have settled in the channel during its last period of use.

<sup>&</sup>lt;sup>2</sup> Broneer, Corinth, IV, ii, pp. 113-14, 116, 119.

### THE CHAPEL IN THE SPRING HOUSE

After a period of abandonment lasting about a century a modest chapel was built in the spring house (Plate 24 1; 25 1). A large central niche flanked by two smaller niches was cut in the east wall (Plan A). Before the central niche a holy table was built, the top of which consisted of a marble slab with a cross cut in it. Since the slab was used upside down, it had apparently been removed from some earlier Christian church in the vicinity. In the central niche are several layers of stucco preserving traces of red and blue coloring. Their surface, however, is too damaged to permit identification of the figures represented. On the blocks supporting the holy table, small holes were cut on the top at the outer end to support the poles of a canopy. Two smaller niches at the same level in the south wall of the spring house presumably belong to the chapel also.

On the west side of the spring house opposite to the table and the central niche a low bench was found, measuring 2.00 m. in length, and 0.40 m. in width. It was built of small, reused blocks. Below its masonry a coin of the emperor Constans II (A.D. 641-668), issued between his accession to the throne and A.D. 651, was found. Two other coins of the same emperor, one issued in the same period as that found under the bench, the other between 663/4 and 665/6, were found in the basin. The latter had apparently been completely filled to make the floor of the chapel level. The coins thus afford a *terminus post quem* for the construction of the small chapel. Its use was probably short,<sup>3</sup> for in the early tenth century another chapel was built outside the spring house over the former entrance court.

#### THE CHAPEL IN THE ENTRANCE COURT

This later chapel (Fig. 33; Plan A) built above the southeast corner of Lerna may have had a longer use than that in the spring house, for it shows clear traces of two periods. By the time it was constructed, the level of accumulation over the pavement of the court had risen to ca. 1.50 m. (Plate 68 <sup>2</sup>). The foundation trench for the south wall of the chapel was dug to the level of the pavement, but on the other sides the foundations rested in the accumulation. In the foundation trench of the apse two coins were found: one of Justin II (A.D. 565-78) and one of Leo VI (A.D. 886-912). Thus, the building of the chapel is probably to be dated in the early tenth century.

The plan of the building was very simple (Fig. 33; Plate 68 1). It consisted of a single chamber with an apse. The remains of the south wall and of the foundation of

<sup>&</sup>lt;sup>3</sup> The latter part of the seventh and the eighth century seems to have been a period of obscure poverty in Corinth. Few coins or other objects of the time have been found in the excavations. For discussion see: Josephine Harris, "Numismatic Reflections on the History of Corinth," *Hesperia*, X, 1941, p. 160; J. Finley, *Speculum*, VII, 1932, pp. 479, 499; Gladys Davidson, *Hesperia*, VI, 1937, pp. 227-39.

the apse indicate the existence of the first chapel, but its length and other details cannot be ascertained since the structure was demolished, except for the parts mentioned, and new foundations and walls were put in when the chapel was rebuilt. Its size, however, was evidently much the same as that of the later structure.

The date of the rebuilding is unknown, but the same simple plan was retained. It measured ca. 4.00 m. in width, overall, by 9.50 m. in length. The masonry of the walls, preserved in the apse to a height of ca. 1.00 m., was very rough. Some large

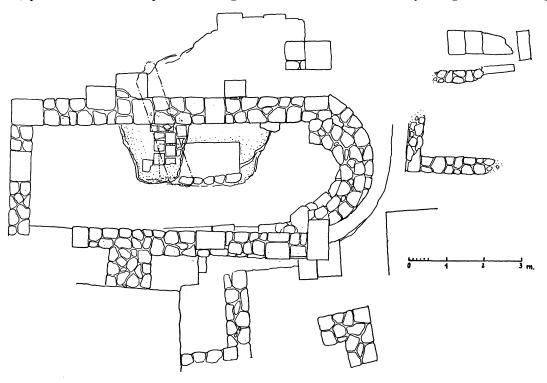


Fig. 33. The Chapel in the Entrance Court.

blocks were reused in the apse and side walls, particularly at the corners, but the greater part of the walls was built of small, rough stones, the joints of which were stuffed with tile fragments. The entrance on the west had been destroyed, but a small section of flooring (Plate 68 <sup>2</sup>), made of square red tiles, was found in place. Beneath this a grave was found which had been made after the construction of the chapel since it utilized the north foundation wall for its side.

Several other burials were found which seem to have been made while the chapel was in use. In two of the rock-cut tombs in the west side of the Asklepieion hill Byzantine burials had been made, reusing the Early Christian graves. In them were two coins: one of Constantine Porphyrogenitus (A.D. 912-59) and one of Michael IV (A.D. 1034-41). Presumably some burials in earth in the hollow at the same level as the chapel were also made at this time. Projecting from the south side of the chapel near its west end was a rubble foundation (Fig. 33), measuring ca. 1.00 by 1.10 m.

apparently contemporary with the second period of the chapel. Possibly it was designed for a small bell tower.

There is no evidence for the identity of the saints to whom the chapels in Lerna were dedicated. There is also no indication that they were the center of a healing cult. In the modern village of Corinth the church of the healing saints, Kosmas and Damian, is situated in the village of Anaploia, about a quarter of a mile to the southwest of the village and far from the site of the former Asklepieion. There would thus appear to be no connection between the two.

#### THE POST-BYZANTINE PERIOD

The date of the destruction of the chapel in the entrance court of Lerna is unknown, but there is evidence of some use of the hollow in a later period. The former spring house became a cave-dwelling. By that time the floor level had risen to the threshold and covered the flight of steps. Its inhabitants left traces of their occupancy in the niches and round holes cut high on the walls (Plate 24 ¹). In these they probably placed their food and gear. Reservoir II was also used as a dwelling, for which use its entrance was narrowed to a doorway, 0.60 m. in width and 0.80 m. in height (Plate 25 ²). The frame of the door contained a slab of greyish marble, 0.06 m. in thickness, with an inlaid mosaic decoration of colored stones (Fig. 34). It had probably served as a wall plaque in some church. The tesserae are of serpentine and of marble, while the circular filling-stones in the corners are of *verde antico*. The preserved length and width are 1.335 m. by 0.85 m. so that its original dimensions were *ca*. 1.72 by 1.60 m. The period of these occupations is unknown, but their primitive character indicates that the area was fast turning into the field which it had become by the time the early topographers visited the site.

A few Venetian coins were found in the excavation, but the area did not form a part of the fortification system of the Venetians as did the fields farther to the west near the hill of Cheliotomylos. Presumably it was abandoned to grazing and agriculture soon after the chapels went out of use.

One of the most interesting finds of the excavation is to be dated in this period of abandonment. The silver treasure of some Greek leader, consisting of military equipment and uncoined silver (Plate 69), was found about one meter below the modern ground level over the southeast corner of the former colonnade of Lerna. The treasure, which has already been published, contained two handsomely mounted flint-lock guns, the hilt of a sword, three round buckles on which the design of an eagle is worked, a rectangular buckle and twenty-two pendants of pyramidal or acorn shape. The uncoined silver consisted of six small pieces of bullion in the form of bars. The

<sup>&</sup>lt;sup>4</sup> A.J.A., XXXVII, 1933, pp. 448-49.

<sup>&</sup>lt;sup>5</sup> The dimensions of the objects are as follows; guns: length, 0.54 m.; sword hilt: height, 0.17 m.; rounded buckles: diameter, 0.058 m.; rectangular buckle: dimensions, 0.042 by 0.048 m.; pyramidal pendants: length, 0.05 m.; acorn pendants: length, 0.031 m.

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type of gun would indicate a date not earlier than the seventeenth century for the concealing of the hoard, but the circumstances of hiding can only be imagined. Pos-

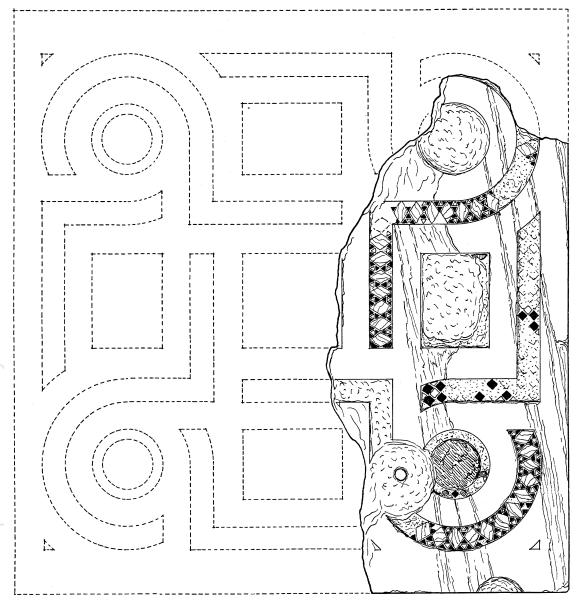


Fig. 34. Wall Slab with Mosaic Decoration.

sibly the owner had to hide his possessions and was never able to recover them. Possibly it is loot from a robbery which was hidden by a thief and never recovered.

Thus, by the time of the excavations the area of the Asklepieion had become a field concealing almost all traces of its former use.

### CHRONOLOGICAL TABLE

All structures suffered from neglect during the interval between the pillaging and partial destruction of Corinth (146 B.C.) and the Augustan period.

Structure	Built	Renovated	Destroyed
Shrine	Са. 600-575 в.с.(?)		Late 4th cent. B.C.
Libation Drain	"		66
Oikos	Late 5th cent. B.C.(?)		"
East Water Basin	Late 4th cent. B.C.		146 в.с.(?)
Temple and Altar	"	Augustan period	Late 4th cent. A.D.
Abaton	"	66	66
Precinct, North Colonnade	"	"	;
" West Colonnade	3rd cent. B.c.(?)		?
" South Colonnade	"		146 в.с.
" East Colonnade	"		?
Ramp, Gate and Propylon	Late 4th cent. B.C.		146 в.с.
Fountain House	3rd cent. B.c.(?)		"
Roman Building over Ramp	Claudian period		Late 4th cent. A.D.
Lerna Square	Late 4th cent. B.C.	Claudian period	"
Lerna, North Colonnade	"	"(?)	"
" West Colonnade	"		146 в.с.
" South Colonnade	"		"
" East Colonnade	"		"
City Wall	"		"
Reservoirs	<b>"</b>	"	Late 4th cent. A.D.
Cemetery	Late 4th cent. A.D.		6th cent. A.D.
Chapel in Spring House	7th cent. A.D.		?
Chapel in Entrance Court	10th cent. A.D.		;

ABATON building, 23, 42-57 (Plans A, B, C, D); date of construction, 57, 173; dining rooms, s.v.; identification, 55-57; lustral room, s.v.; north wing, 51; south wing, 46, 79; stairway in north wing, 20<sup>8</sup>, 23, 51; walls, 42-46 (Plans A, B, D, Plates 11<sup>4</sup>, 12<sup>1-2</sup>, 13<sup>1-2</sup>, 14<sup>4</sup>, Fig. 11).

Aelius Aristides, 111<sup>4</sup>, 157<sup>15</sup>, 158<sup>18, 20</sup>.

Agrigentum, Temple of Asklepios, 36.

Akeso, 15514.

Alaric, 160, 161.

Alexandria, Sciatbi cemetery, 130, No. 12.

Alexanor, 1536.

Altar: Hellenistic, in Precinct, 12, 23, 28, 30, 173 (Plans A, B, Plate 8<sup>1</sup>); in shrine, 10 (Figs. 2, 3).

Amulets (?), 147, Nos. S1-S2 (Plate 61).

Anta: block from Temple of Asklepios, 30, 34 (Plate 10<sup>2</sup>); capitals, 147, No. 3 (Plate 63); 151, No. 20 (Plate 65<sup>6</sup>, Fig. 28); cuttings for, in shrine, 10 (Figs. 2, 3); in fountain house, 71 (Fig. 20).

Aphrodite Anadyomene, 144, 145, Nos. 8-10 (Plate 59).

Apollo: cult of, in Precinct of Asklepios, 22, 138, 152-54; dedication of krater to, 8, 15, 152 (Fig. 4); at Delphi, 118; at Epidauros, 154; at Kos, 154; Peribolos of, in Corinth, s.v.; shrine of (?), 22, 152; Temple of, in Corinth, s.v.

Apollodorus, 158<sup>17</sup>.

Arcadia, cult of Asklepios, 153, 154.

Architectural fragments, 147-51, Nos. 1-20 (Plates 62-65, Figs. 28-31).

Argive Heraion, Hestiatorion, 53.

Argolid, cult of Asklepios, 153.

Aristophanes, 51, 56-57, 157<sup>15</sup>, 158<sup>17</sup>.

Arms, votive, 114 ff., 123-24, Nos. 49-62 (Plates 36-37, 39, 45).

Asklepieia: see under names of sites.

Asklepieion at Corinth; (Plates 1<sup>2</sup>, 7<sup>1</sup>, 13<sup>2</sup>); ancient references to, 2; excavation of, 6-7; identification, 2; location, 1 (Fig. 1); water supply, 2.

Asklepios: cult of in Corinth, 22, 138, 152-59; inscribed dedications to, 131, 135, Nos. 65-68 (Plates 50-51), 156, Cor. Ins. 1040 (Plate 65<sup>4</sup>); mask of, 113, 119, No. 1 (Plate 29); offerings to, 111-47; Precinct of: arrangement, 23-26, 40-42, 64, 157-59 (Plans A, B, D), destruction of, 160-61, structures in, 26-64, Temple of, s.v.; priest and physician of, 156-57, Cor. Ins. 1035 and 1134 (Plate 65<sup>3</sup>); statue of, 2, 34, 38, 143; statue base of, 144, 145, No. 12 (Plate 60); statuettes of, 144, 145, Nos. 4-7 (Plate 59).

Athenaeus, 2<sup>3</sup>, 158<sup>17</sup>.

Athens: Agora, 10, 129<sup>39</sup>, 130, 131, 132, 133; Asklepieion at, 25, 36, 51, 56, 111, 112, 114, 120, 121, 122, 123, 131, 158<sup>17</sup>, 161<sup>6</sup>; Erechtheion, 158<sup>17</sup>; Parthenon, 144; Pnyx, 133; sanctuary of Zeus Hypsistos, 111, 120, 122, 124; shrine of the Hero physician, 111, 123, 125, 126-27.

Baldachino: in Peribolos of Apollo in Corinth, 12; in shrine, 10 (Figs. 2, 3).

Bases: near altar, 28, 30 (Plans A, B); near oikos, 13-14 (Plate 4<sup>1</sup>, Fig. 2); small Ionic column 151, No. 16 (Plate 64, Fig. 28); near Temple of Asklepios, 30, 32, 40 (Plans A, B, Plate 9<sup>2</sup>); votive, of terracotta, 128, No. 115 (Plate 65<sup>2</sup>).

Bologna, 135, No. 68.

Bone, votive, 114, 118, 128, No. 117 (Plate 45). Breasts, votive, 114 ff., 121-22, Nos. 20-30 (Plates 34-35).

Butrinto, Asklepieion at, 112<sup>17</sup>.

CAPITALS: small Doric, 150, No. 12 (Plate 64); Ionic, 147, No. 6 (Plate 62); from Temple of Asklepios, 30, 34 (Plate 10<sup>5</sup>, Fig. 10); votive, 40 (Plate 11<sup>3</sup>, Fig. 10).

Celsus, 157.

Cemetery, Early Christian, 5, 6-7, 58, 84, 86, 91, 105, 106, 162-64, 173 (Plan A, Plates 28<sup>1</sup>, 66<sup>2</sup>, 67, Fig. 32).

Chaeronea, polyandria at, 133, Nos. 27-28.

Chapels, Byzantine: in entrance court to Lerna, 128, No. 118, 169-71, 173 (Plan A, Plate 68, Fig. 33); in spring house in Lerna, 97, 99, 169, 173 (Plan A, Plates 24<sup>1</sup>, 25<sup>1</sup>).

Chests, votive, 114 ff., 121, Nos. 17-18 (Plates 29, 33).

City Wall: construction, 91-96, 138, 173 (Plans A, C, D, Plate 23, Fig. 24); relation to abaton building, 43, to Asklepieion and Lerna, 1, 6, 24, 95 (Fig. 1).

Clement of Alexandria, 1114.

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Coins: from abaton building, 57, 129; from burial in Reservoir IV, 164; from Byzantine chapel in entrance court to Lerna, 169; from Byzantine chapel in spring house, 169; from Byzantine drainage shaft, 110<sup>17</sup>; from cart road, 84; from destruction debris over Asklepieion and Lerna, 39, 42, 160; from offertory box, 38; from Roman building over ramp, 80; from Roman wall, 28; from shaft, S, 62-63; from shrine, 21, 38, 129; from votive deposits, 129, 137; with representations of Asklepios and Hygieia, 144, of Temple of Asklepios(?), 38.

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Coping Stone, 67 (Plate 162, Fig. 18).

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silica, 162; City Wall, s.v.; Early Christian Cemetery, s.v.; Glauke, 101, 106<sup>16</sup>; Gymnasium, 1, 2-4, 6, 7, 25, 73, 158, 160 (Fig. 1); Isthmian Gate, 95; Lerna, s.v.; Northwest Shops, 82; Odeion, 1, 160 (Fig. 1); Peirene, 85, 101, 106<sup>16</sup>; Peribolos of Apollo, 12, 28; Potters' Quarter, 17, Nos. 10-25, 115, 135, No. 61, 136, Nos. 79-85, 138, 141, No. 32, 143, No. 43, No. 50; South Stoa, 136, No. 88; Temple of Apollo, 1, 5, 147, No. 2 (Fig. 1); Temple of Asklepios, s.v.; Temple of Zeus, 1, 4-5, 6, 144, 160 (Fig. 1); Theater, 1, 5-6, 156, 160 (Fig. 1); Tile Factory, 115; Upper Peirene, 99.

Cornice: of fifth century B.C., 149, No. 10 (Plate 63); of north colonnade of Precinct of Asklepios, 59 (Plate 15<sup>2</sup>); of south colonnade of Precinct of Asklepios, 63-64 (Fig. 17); of Temple of Asklepios, 30, 34, 36 (Plate 11<sup>2</sup>, Fig. 9).

Crates, 15817.

Cross-walls in ramp, 65, 75, 78-79, 83 (Plan A, Plates 7<sup>1</sup>, 17, 19<sup>4</sup>).

Delos, 120, 123, 128; Asklepieion at, 112<sup>17</sup>, 123; Temple of Hera on Mt. Kynthos, 14. Delphi, marble eye, 121.

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Epistyle-frieze block: of Temple of Asklepios, 30, 32, 34 (Plates 10<sup>1</sup>, 10<sup>6</sup>, Figs. 7, 9); inscription on, 39 (Plate 11<sup>6</sup>).

Eros(?), 131, No. 1 (Plate 47).

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Fingers, votive, 114, 125, Nos. 74-76 (Plate 40).

Fountain house, 4, 23, 34, 36, 65, 69-74, 149, No. 11, 151, No. 20 (Plans A, B, D, Plate 18, Fig. 20, 21).

Frieze: of north colonnade of Precinct of Asklepios, 59 (Plate 15<sup>1</sup>, Fig. 15); of south colonnade of Precinct of Asklepios, 64 (Plate 10<sup>4</sup>, Fig. 17); of Temple of Asklepios, see epistyle-frieze.

GENITALS, votive, 114 ff., 122-23, Nos. 31-48, 155<sup>14</sup> (Plates 35-37).

Golgoi, votives from, 120, 121, 123, 125, 128. Gortys: Asklepieion at, 158<sup>17</sup>; Asklepios of, 153, 153<sup>6</sup>.

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Lerna: Argive, 2<sup>3</sup>; in Corinth: ancient references to, 2; destruction of, 160-61; excavation of, 6-7; identification of, 2; location of, 1, 20 (Fig. 1); relation to Asklepicion, 24-25, to City Wall, 6, 24, 91-92, 95-96; structures in, 21, 24-26, 74-77, 83, 85-110 (Plans A, C, D); water supply, 1, 6, 20, 24, 96-110 (Plans A, C, D, E).

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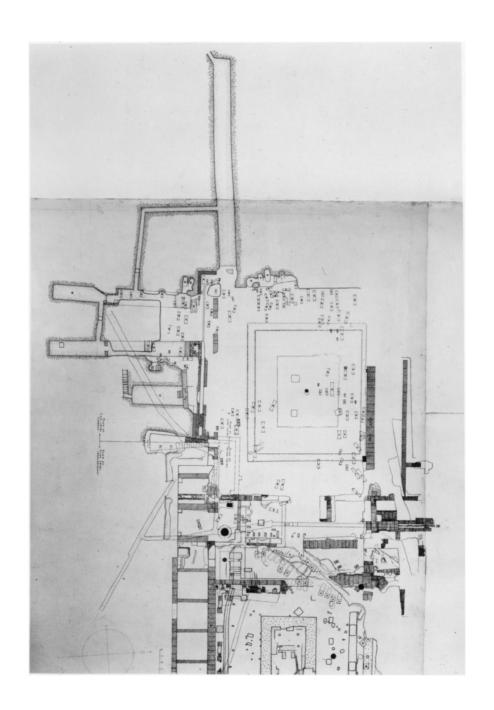
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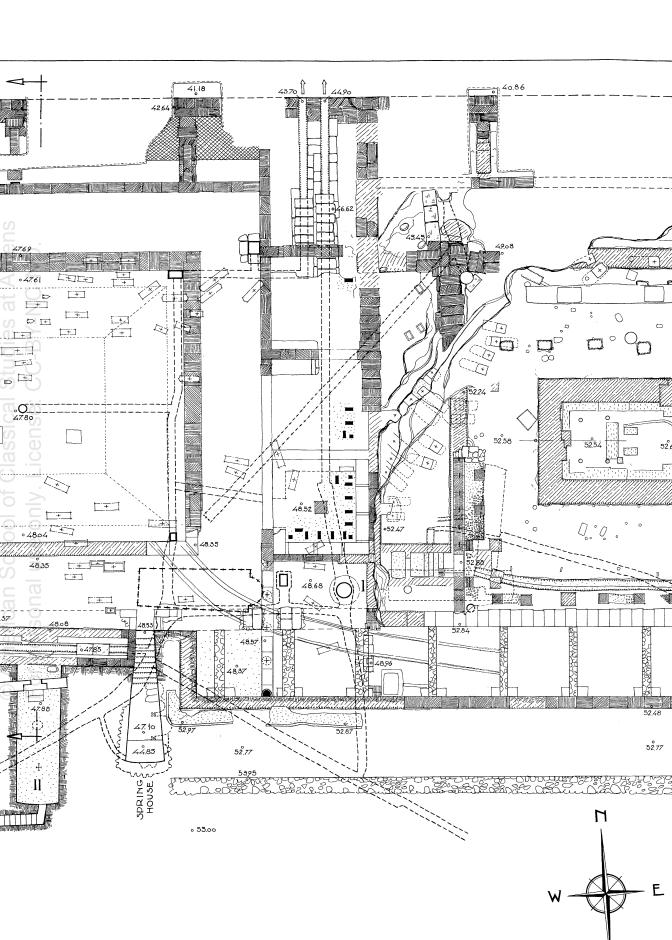
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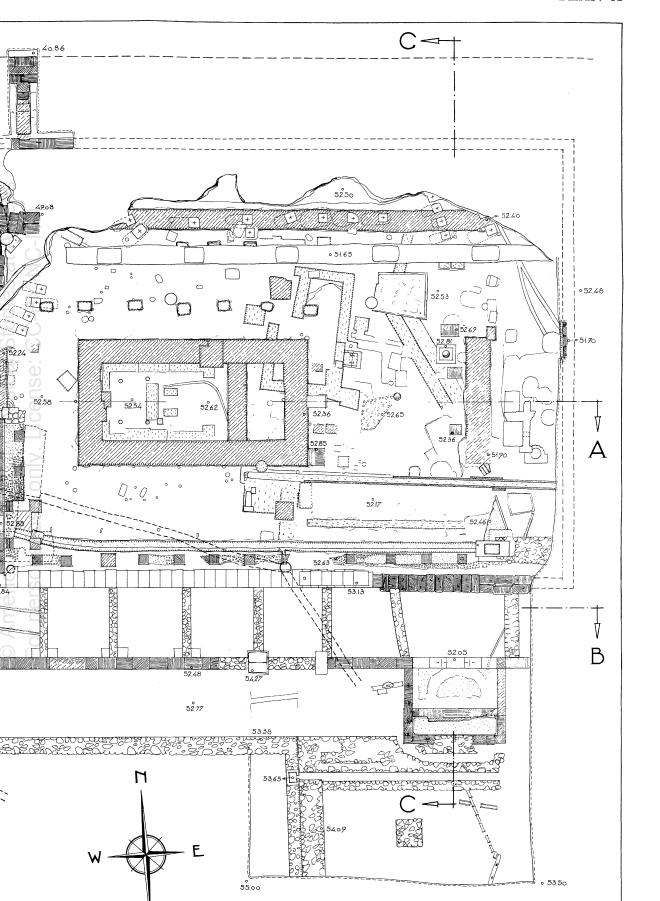
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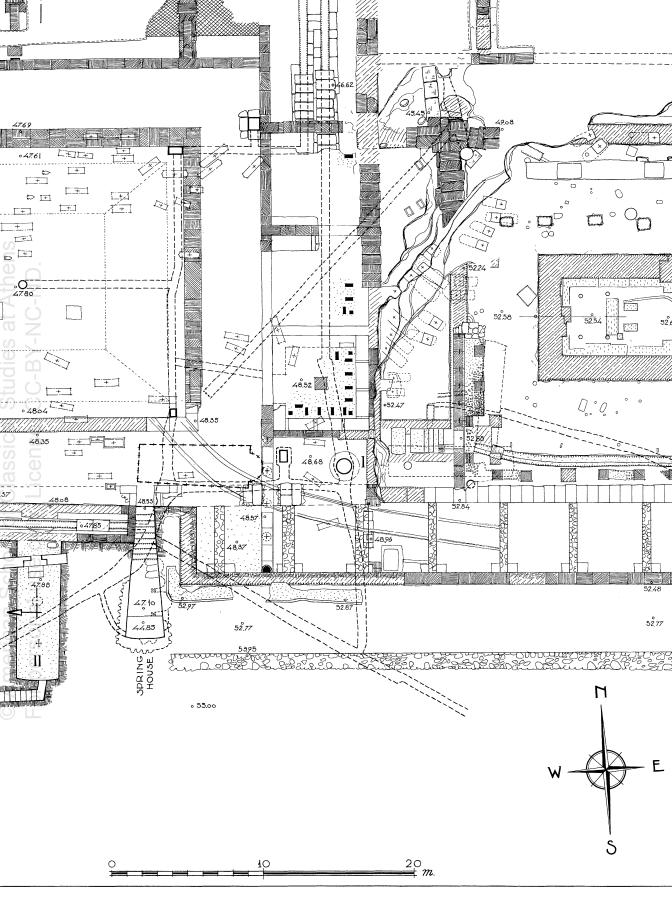
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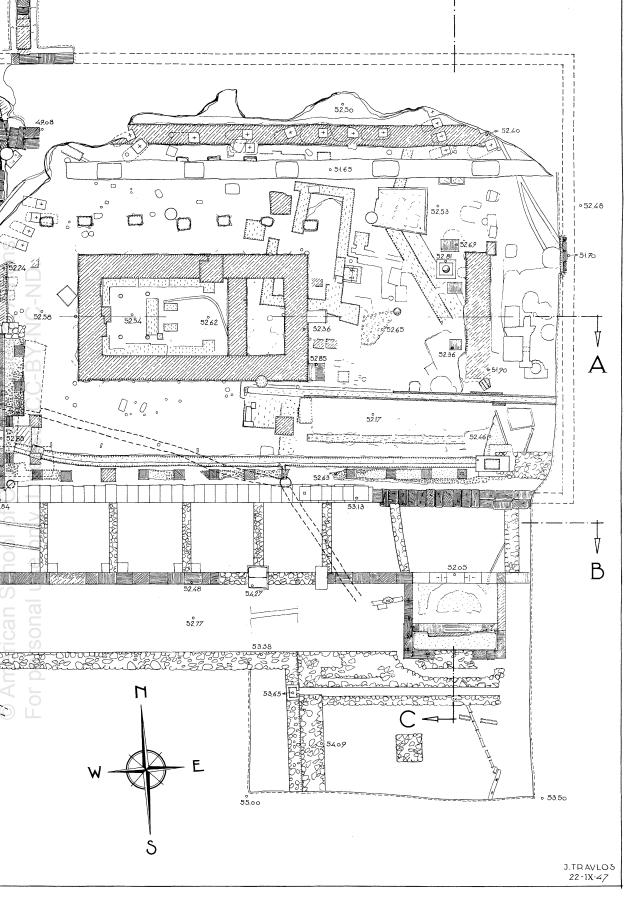


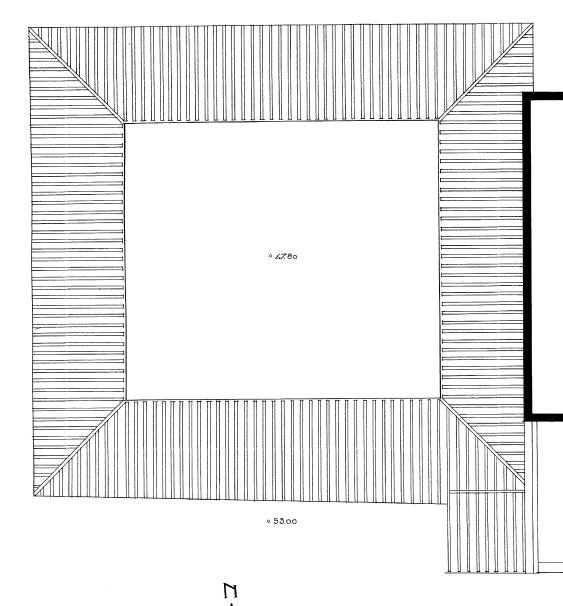




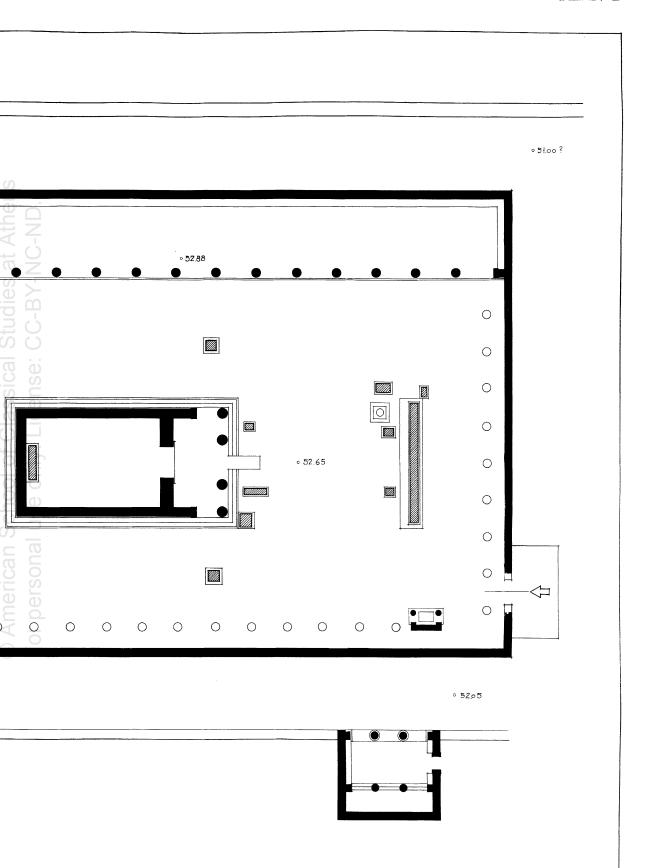


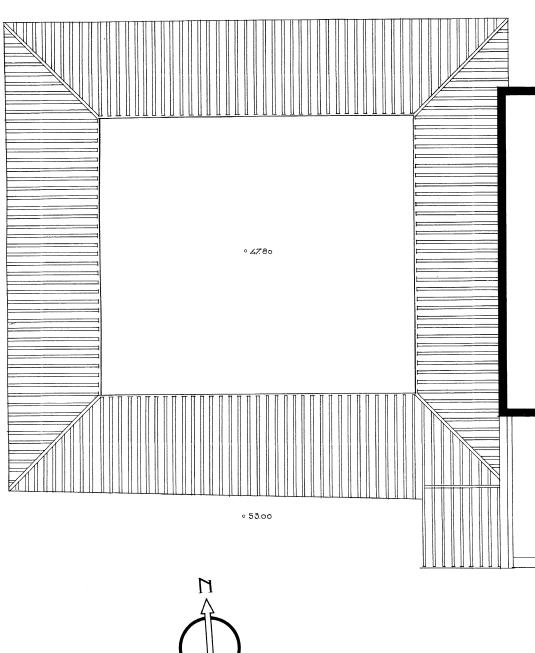
THE ACTUAL STATE OF THE ASKLEPIEION AND LERNA



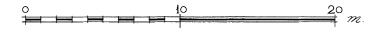


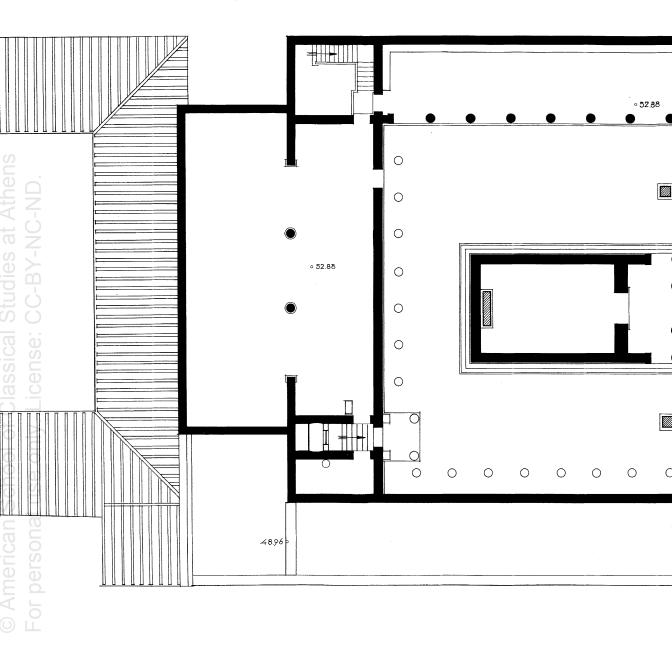


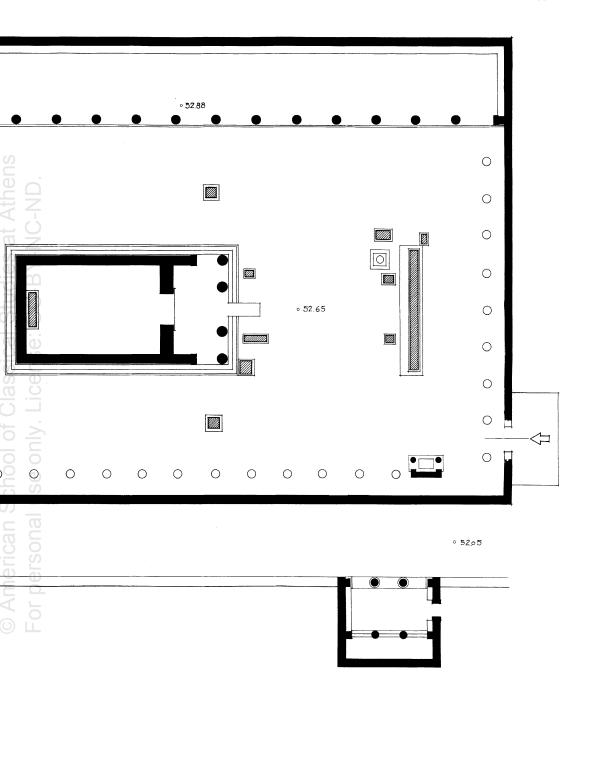




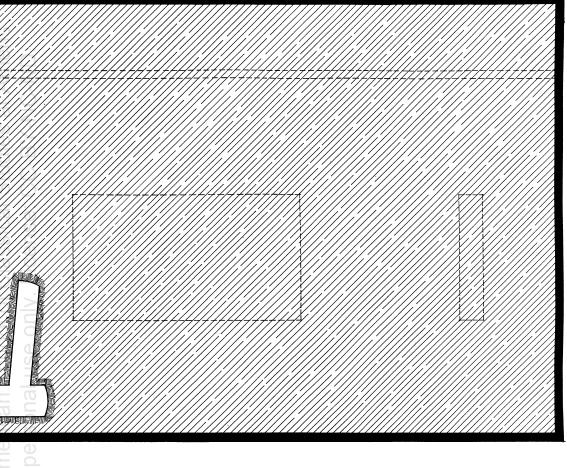








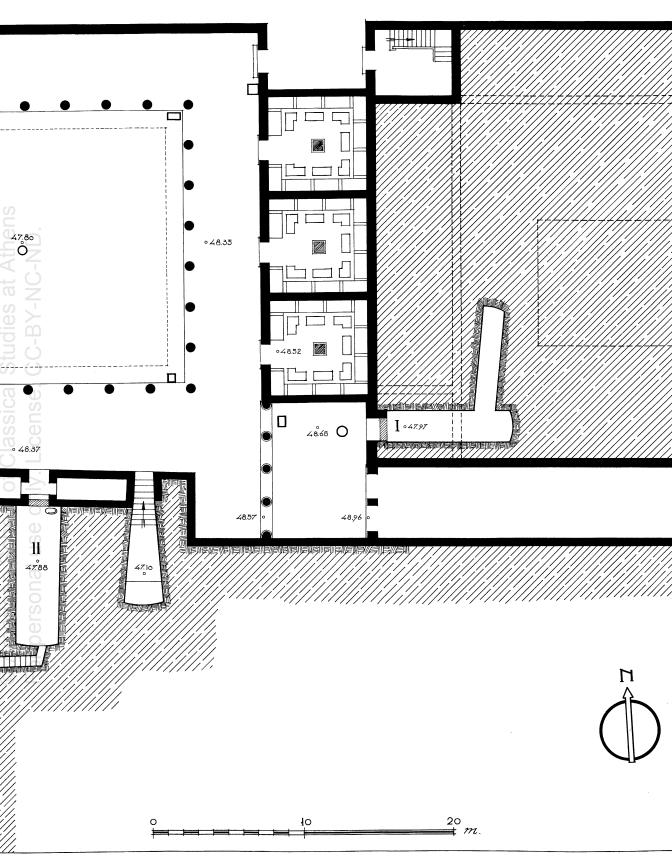
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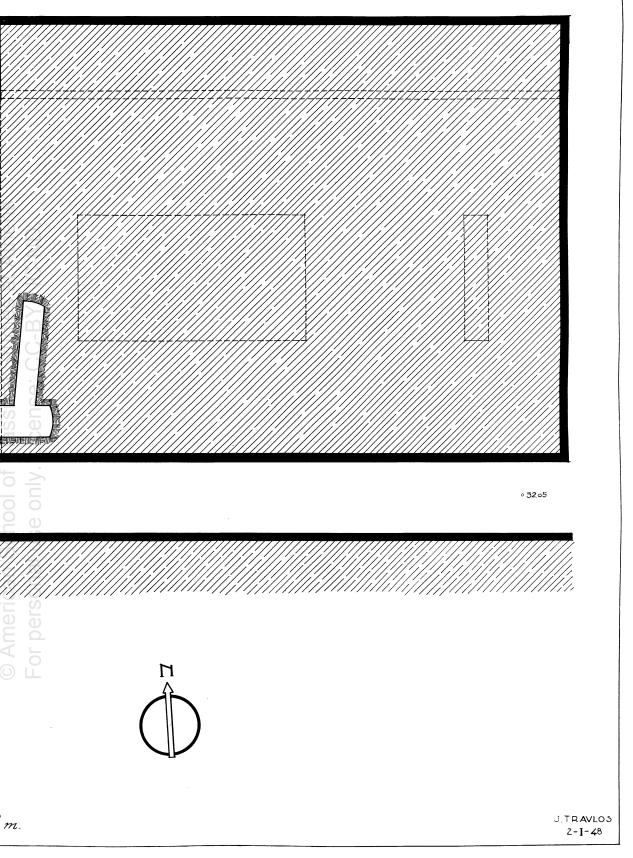


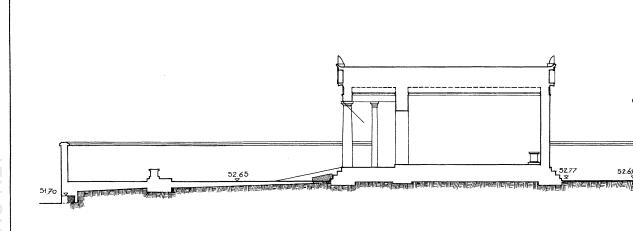
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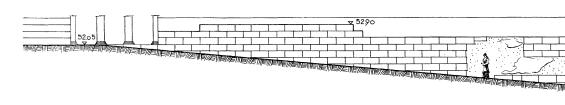


RESTORATION OF LERNA, HELLENISTIC PERIOD

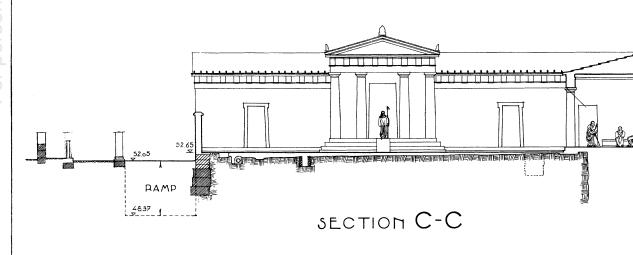


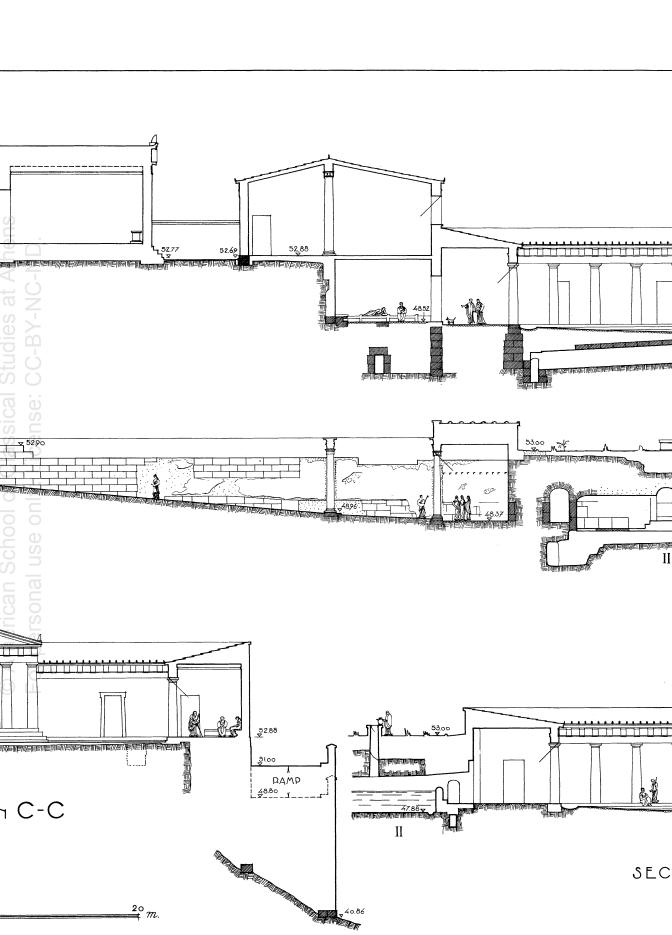


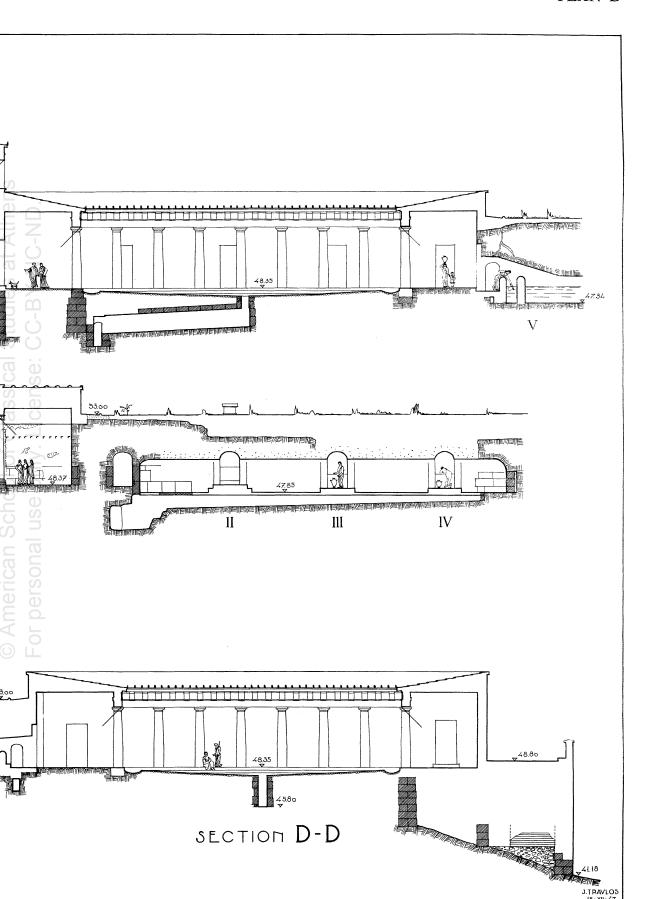
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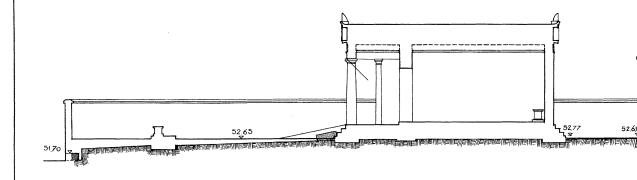


SECTION B-B

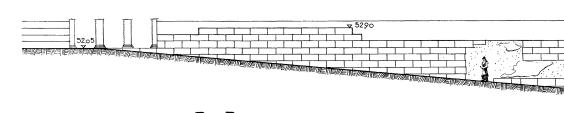




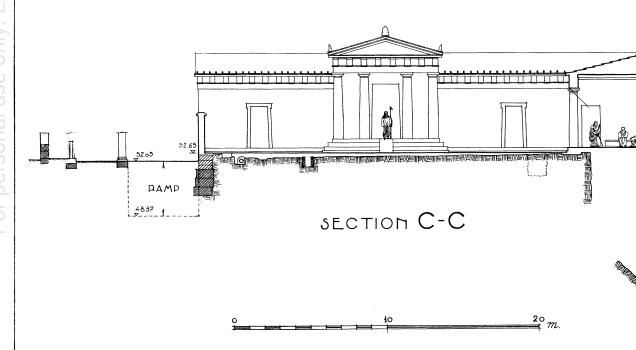




SECTION A-A

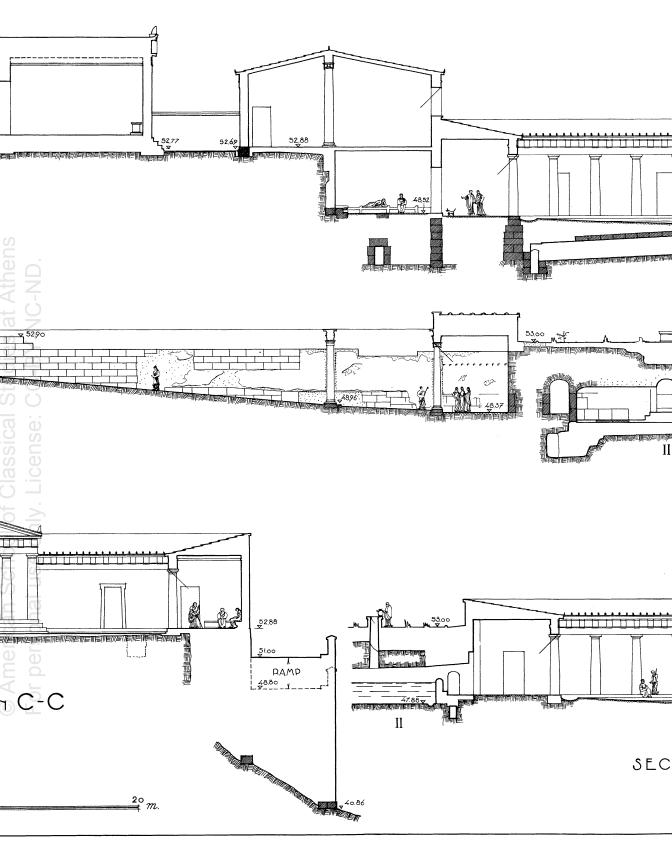


SECTION B-B



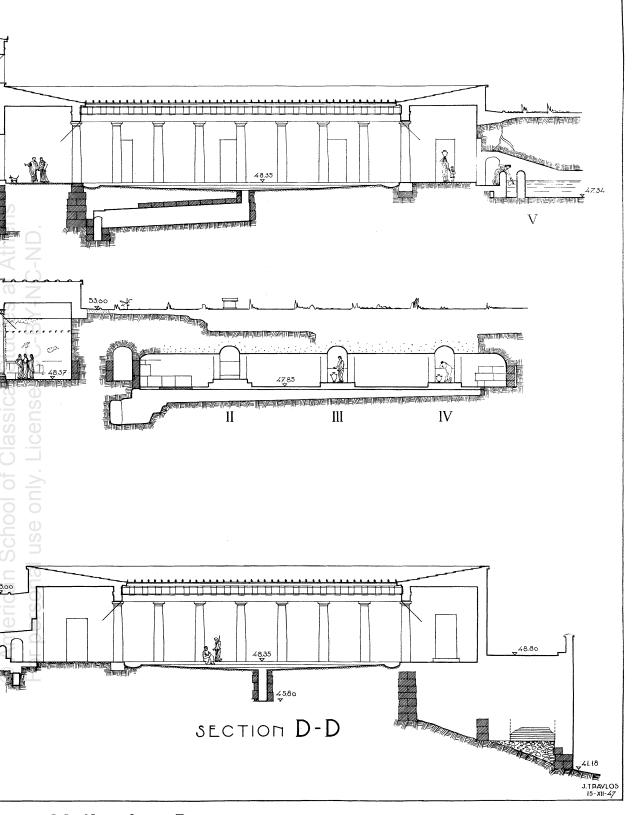
Section A-A: East-Asklepieion and Section B-B: East-

RAMP AND THE CO

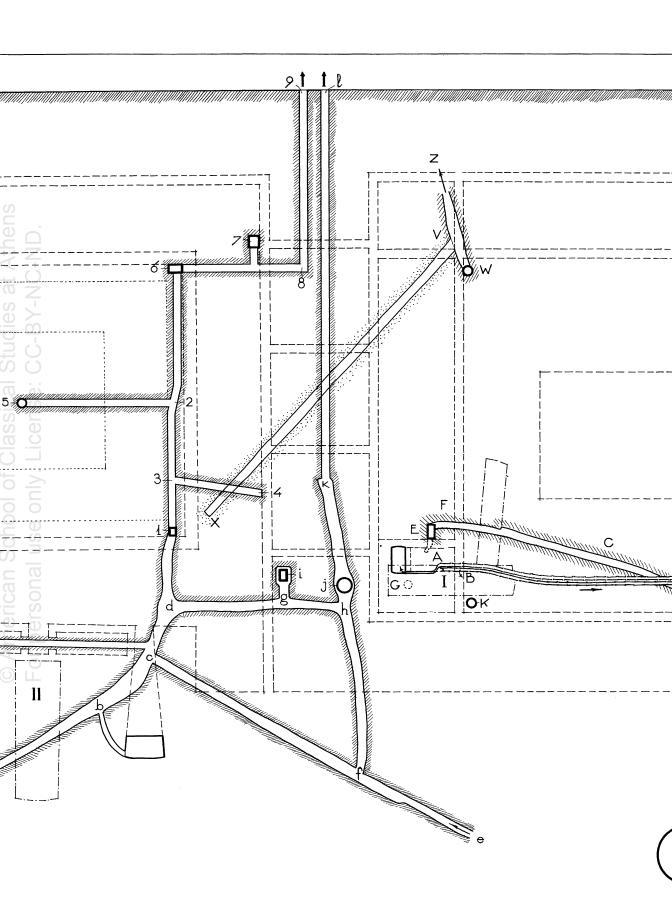


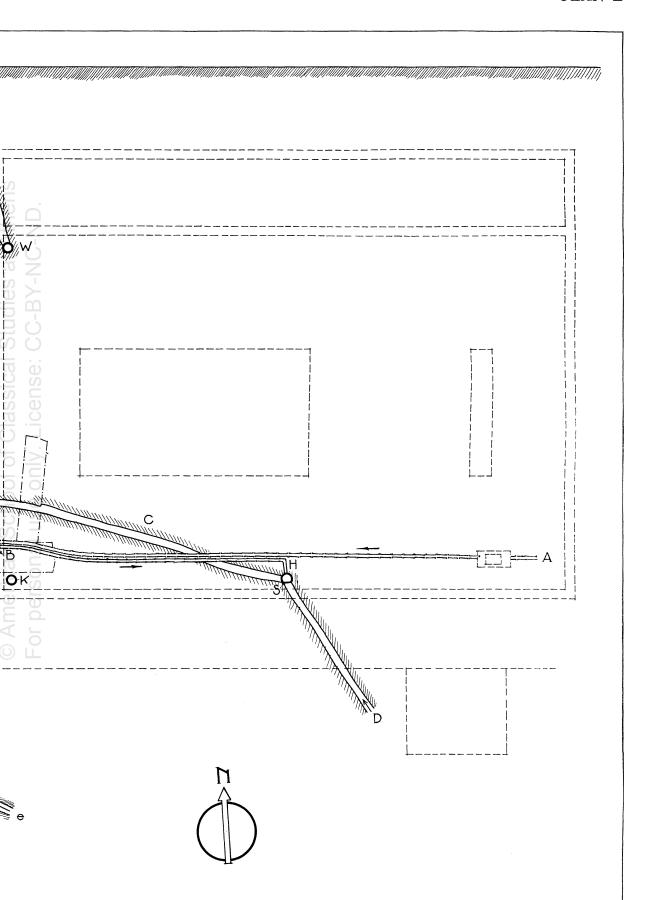
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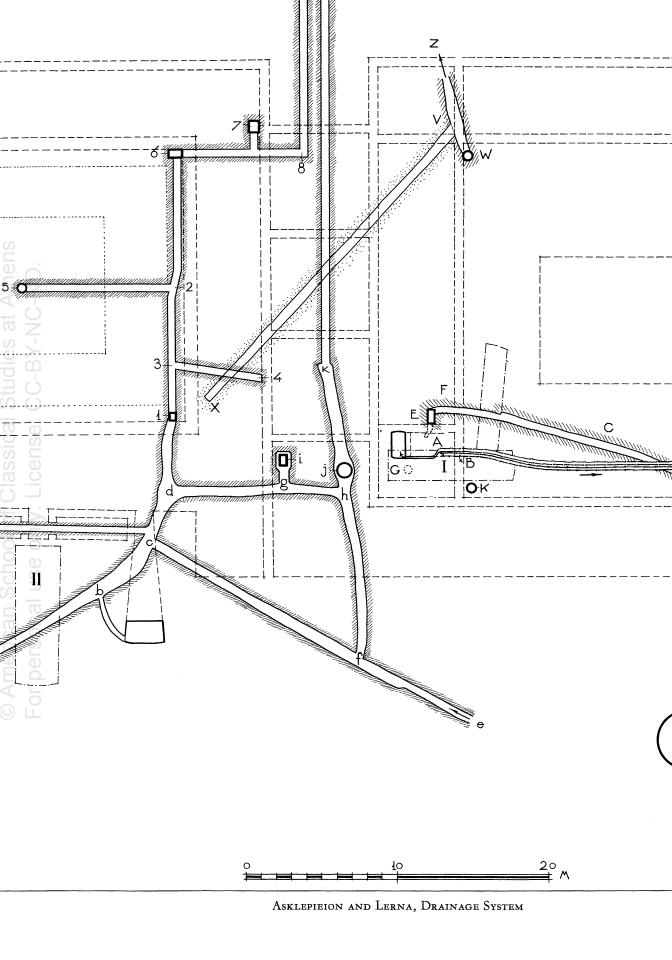
SECTION C-C: NORTH-SOUTH THROUGH RAMP, ASKLEPIEION AND CITY WALL SECTION D-D: NORTH-SOUTH THROUGH R. VOIR II, LERNA SQUARE, AND THE CITY V

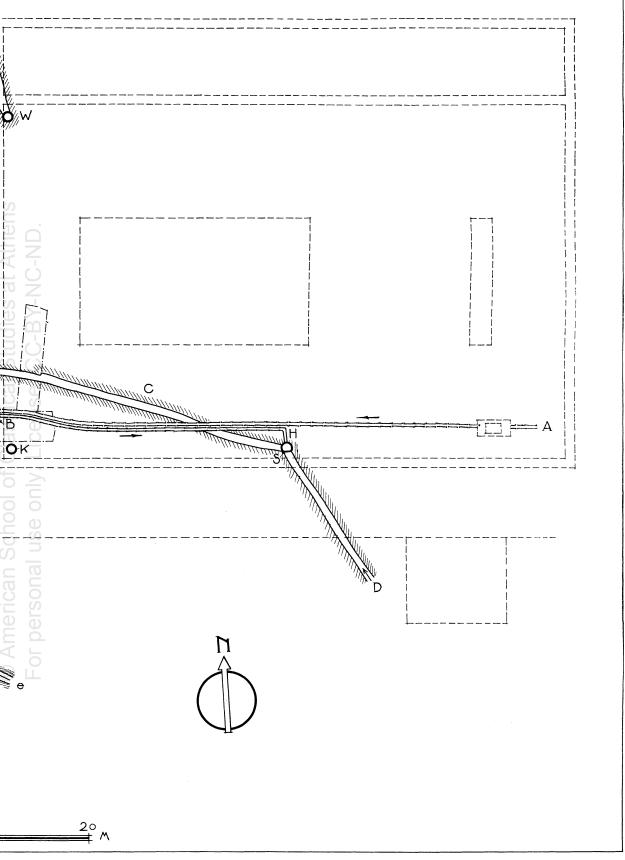


ECTION C-C: NORTH-SOUTH THROUGH THE RAMP, ASKLEPIEION AND CITY WALL ECTION D-D: NORTH-SOUTH THROUGH RESERVOIR II, LERNA SQUARE, AND THE CITY WALL









## **CORRIGENDA**

Plate 10 1,6:

for Epistyle read Epistyle-Frieze.

Plate 10 4:

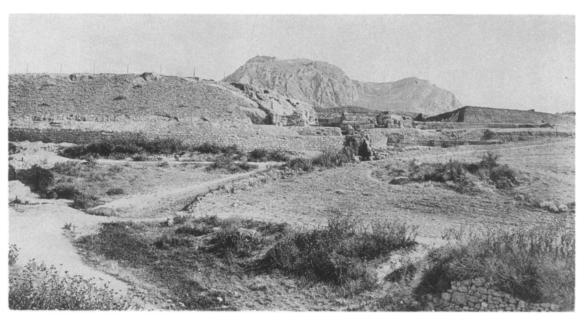
for Hawk's Beak read Hawksbeak.

Plate 116:

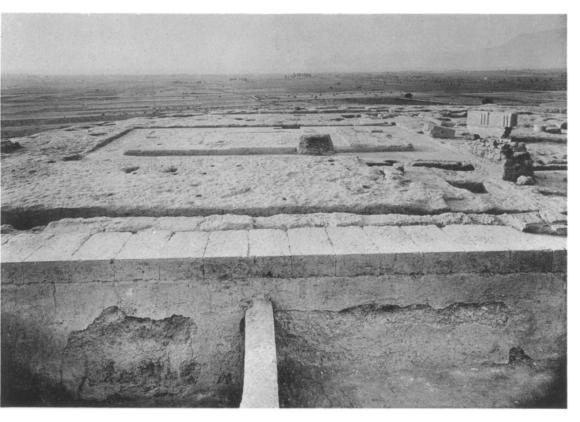
for Epistyle read Epistyle-Frieze.

Plate 64, No. 16:

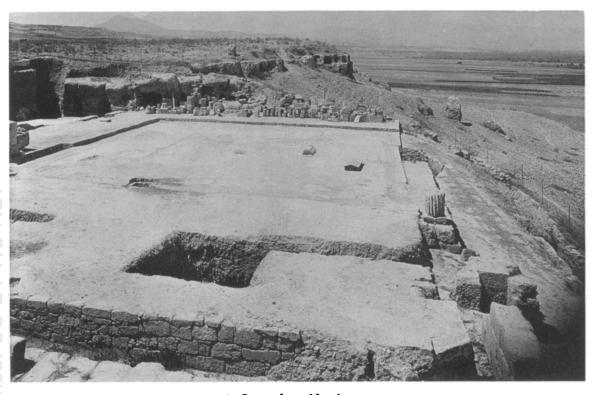
reverse top to bottom.



1. The Asklepieion and Lerna from the North



2. The Precinct of Asklepios and the Coastal Plain

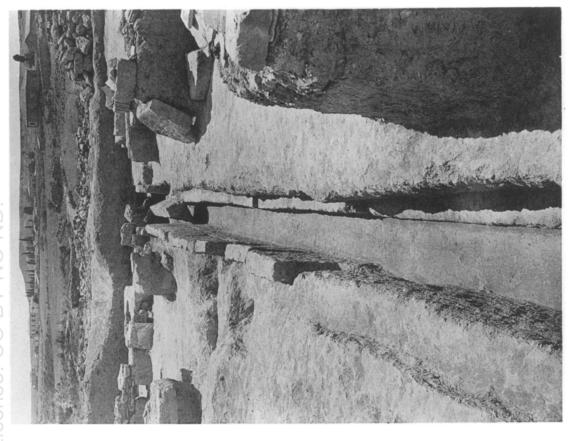


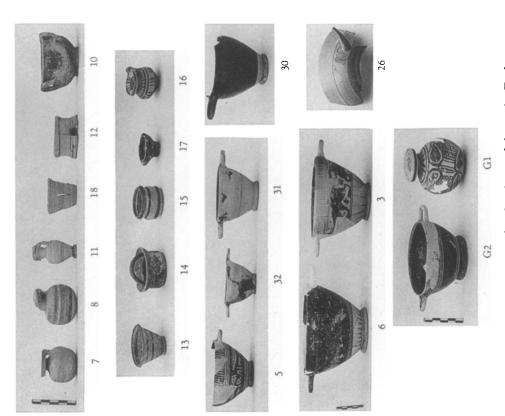
1. Lerna from Northeast



2. Cuttings of the Shrine

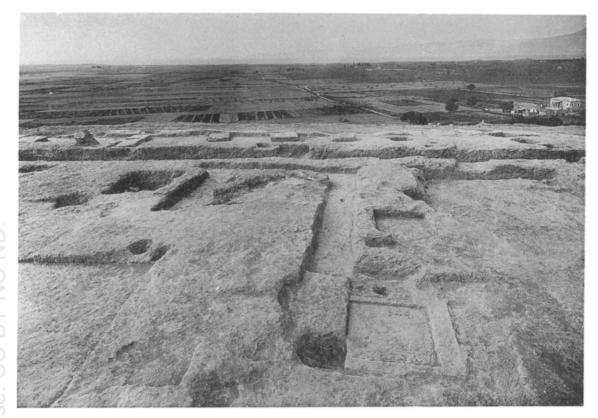
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1. Vases from the Rectangular Cutting and from the Early Graves in Lerna (G1, G2)

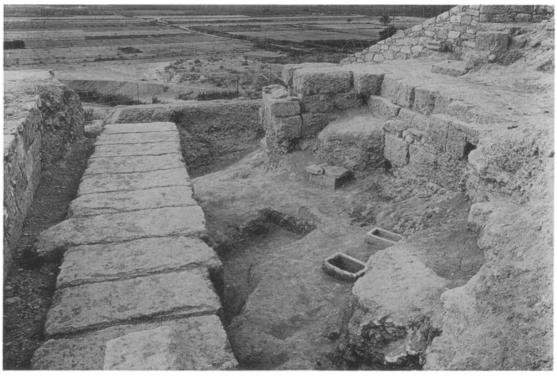
2. The Rock-cut Drain Channel



1. Cuttings of the Oikos. The Poros Base. The Rectangular Cutting



2. Traces of the Early Road into Lerna



1. Early Graves in Lerna. Foundations of the Abaton

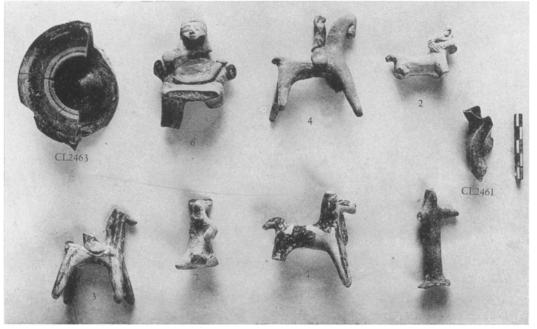


2. Late Corinthian Skyphos

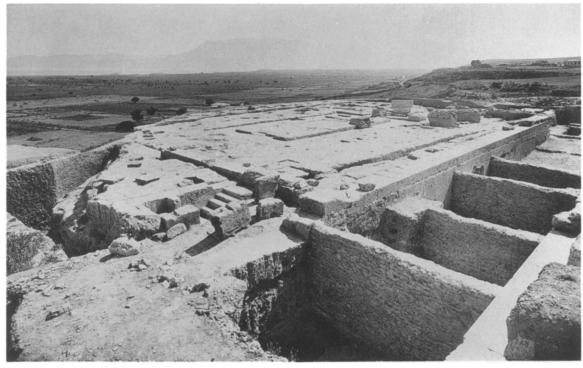


3. Poros Gutter Block

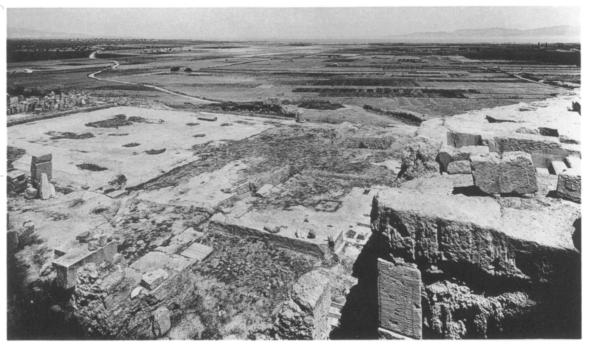




Objects from the Rectangular Cutting



1. Asklepieion, View from Southwest Showing Cross-Walls in Ramp



2. Lerna from Southeast



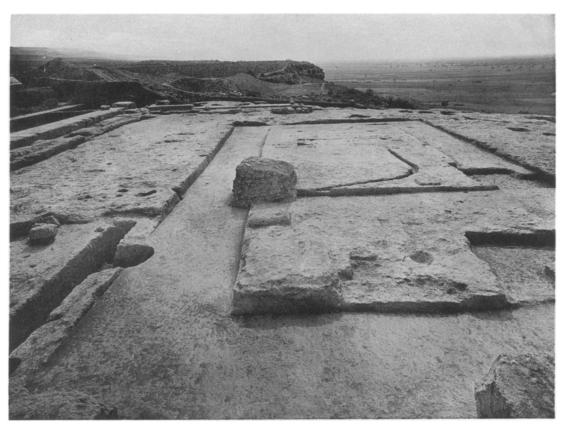
1. Remains of the Altar, Offertory Box, and Bases



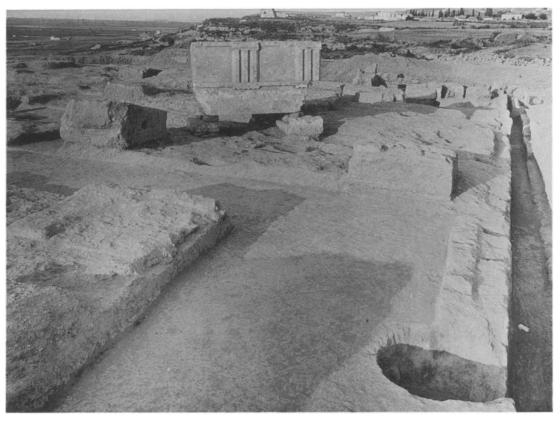
2. East Water Basin, West End



3. East Water Basin, East End



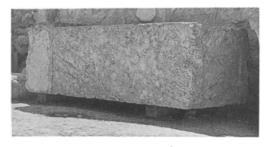
1. Cuttings for the Temple



2. The Southeast Corner of the Temple



1. Epistyle Block, Back



2. Anta Block



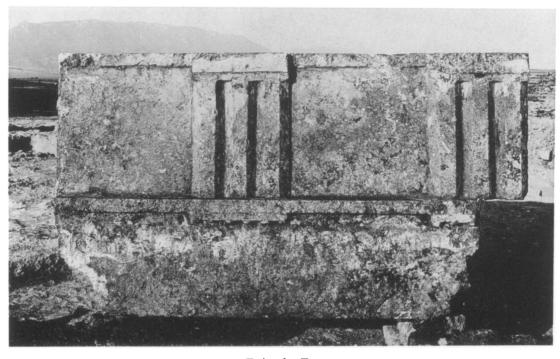
3. Column Drum



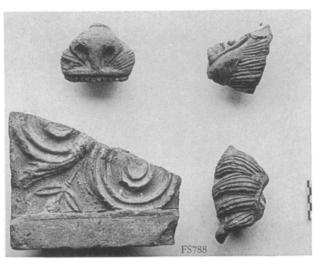
4. Hawk's Beak from Temple, Triglyph from South Colonnade



5. Capital



6. Epistyle, Front



1. Roman Sima, Possibly from Temple



4. Abaton, Foundations of East Wall, North End



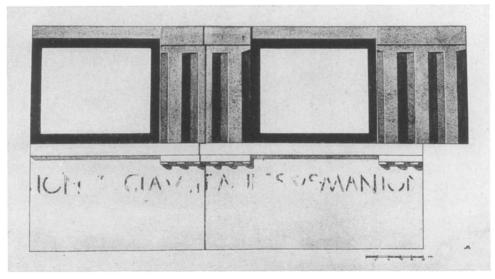
2. Cornice Block from Temple



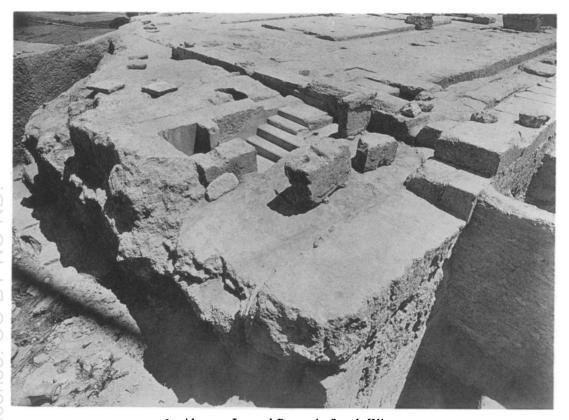
3. Votive Capital



5. Greek Sima, Possibly from Temple



6. Inscription on Epistyle Block of Temple



1. Abaton, Lustral Room in South Wing



2. Abaton, Lustral Room and South Side of Precinct



1. Abaton, Foundations of the Median Wall



2. Abaton, Lustral Room and South Side of Precinct



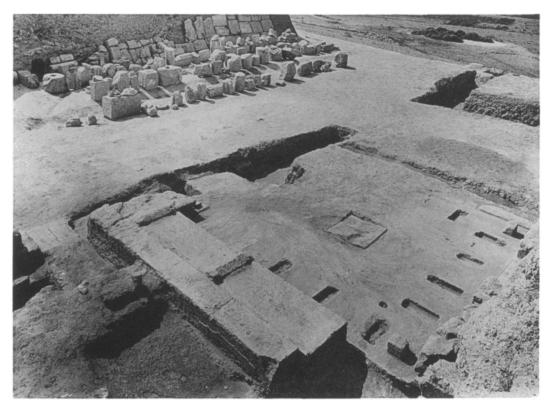
1. Precinct, South Side from East



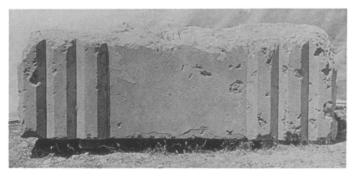
2. From Lustral Room



3. Rock-Cut Channel H to Shaft S



4. Dining Room in Abaton



1. Frieze Block from North Colonnade



2. Cornice Fragment, Possibly North Colonnade



3. From South Colonnade



4. Drain Pipes in Lustral Room



5. North Side of Precinct from East



1. Ramp Gate Center Block



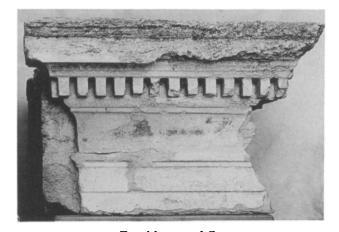
2. Coping Stone



3. Propylon



4. Propylon Column Base



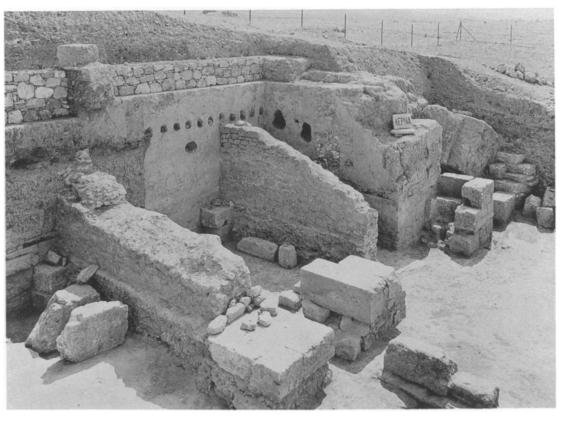
5. Entablature of Gate



6. Ramp from East



1. Ramp from West



2. Roman Piers and Cross-Walls in Entrance Court



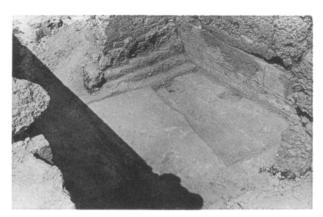
1. Door Block



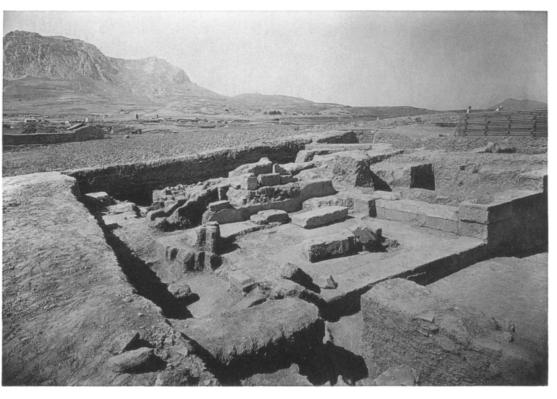
2. Pediment Block



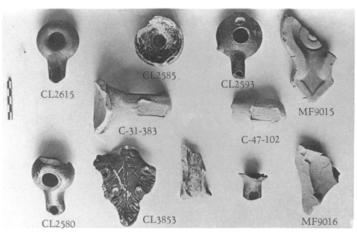
3. NW Corner Fountain House



4. Cart Road in Ramp



5. The Fountain House



1. Objects from Filling Over Ramp



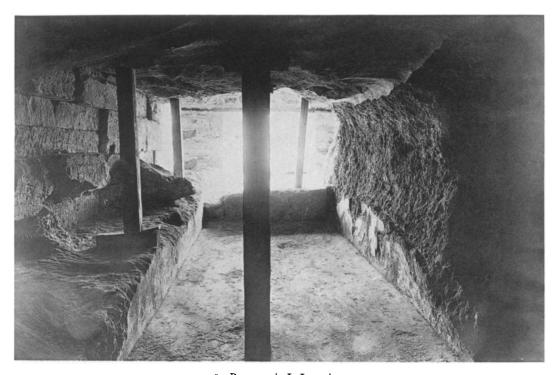
2. Parapet Block



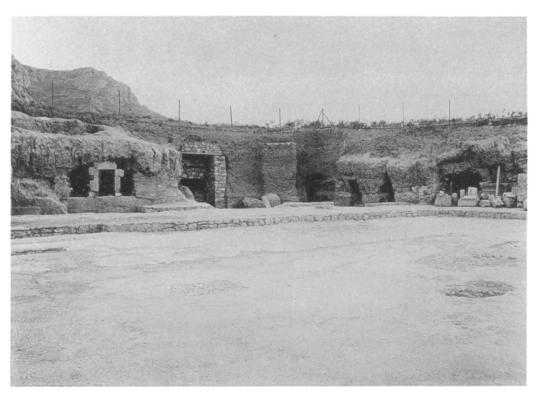
3. Cart Road, Lerna SE Corner



4. Ramp, Cross-Wall



5. Reservoir I, Interior



1. Lerna, Southwest Corner, Showing Rebuilt Openings of Reservoirs



2. Lerna, Foundations of North Colonnade

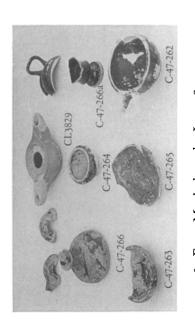
4. From Filling over East Stylobate

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1-2. Architectural Terracottas from Roman Building over Ramp



3. From Manhole under Lerna Square



1. East Stylobate Foundations



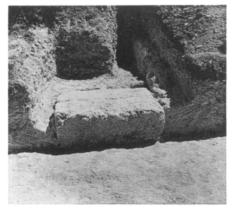
2. Cuttings for South Stylobate



3. Manhole under Square



4. West Stylobate Foundations



5. West Colonnade, Foundation Blocks and Cutting for Rear Wall



6. Eaves Tile, Probably from Colonnade



1. Exterior Facing Foundations



2. Exterior Facing at End of Drain Channels



3. Filling against a Tie-Wall



4. Mud-Brick Core



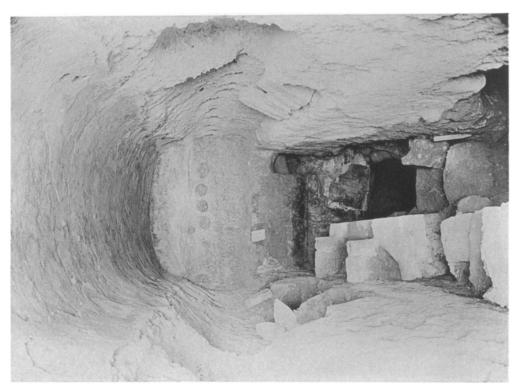
5. Brick Core against a Tie-Wall



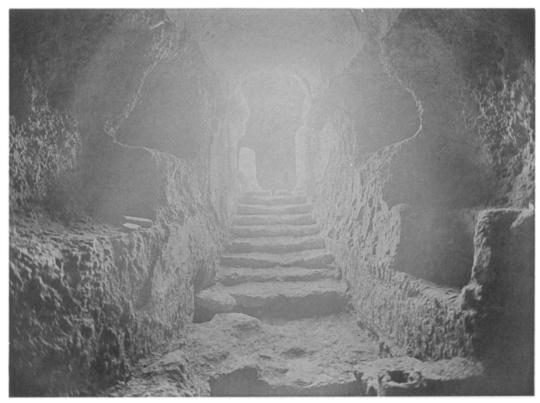
6. Cutting for Tie-Wall East of Drain Channels



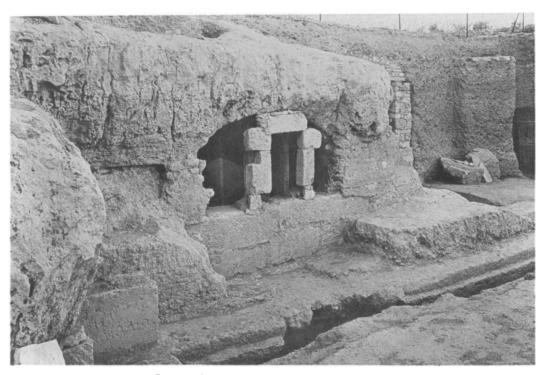
2. Reservoir II, Stairway at Rear



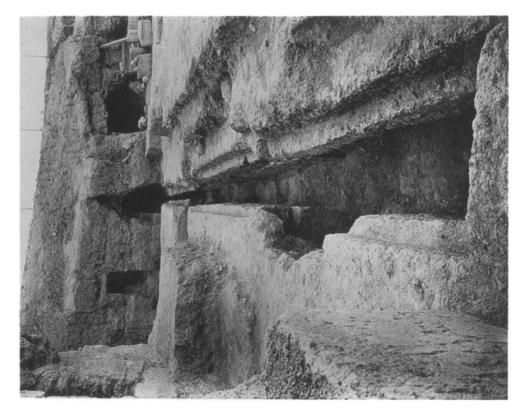
1. The Spring House



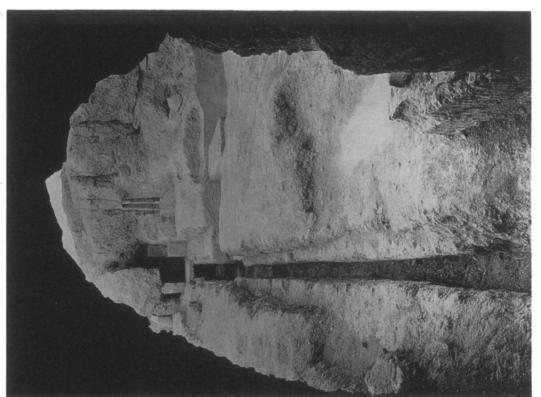
1. The Spring House, Interior



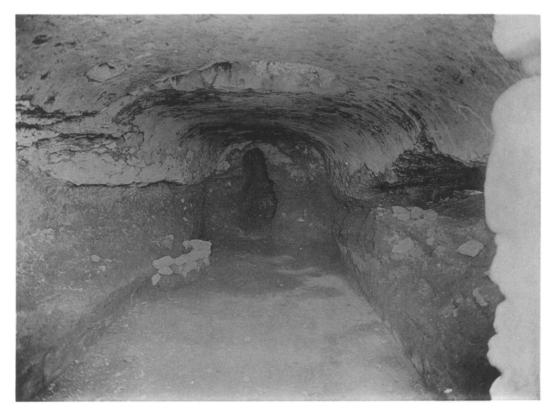
2. Reservoir II, Opening with Rebuilt Entrance



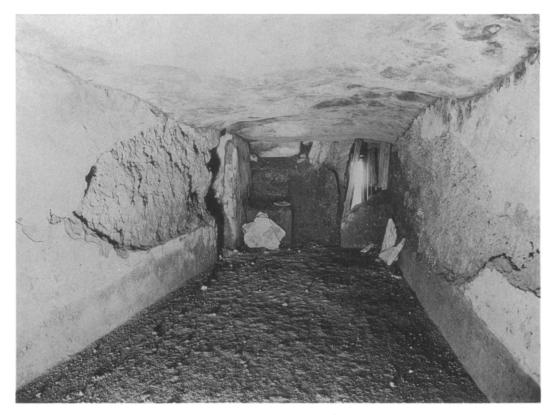
2. Corridor and Drain from East



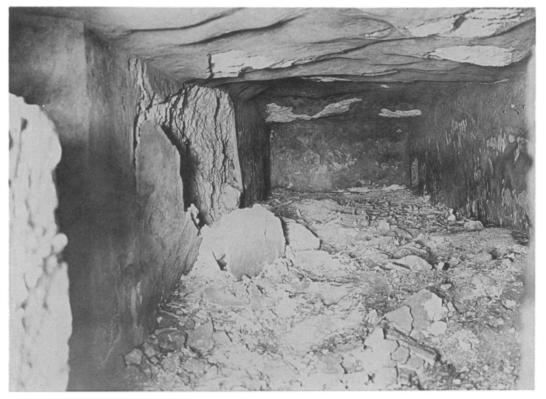
1. Corridor and Drain from West



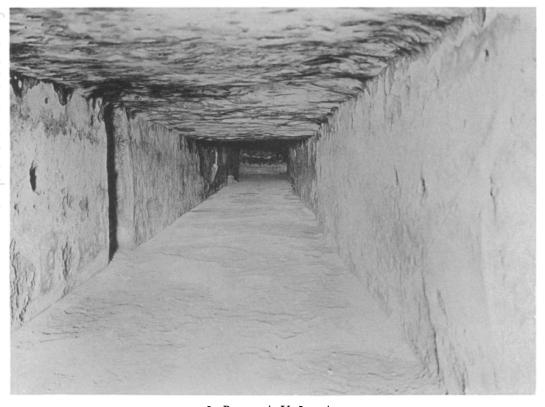
1. Reservoir II, Interior



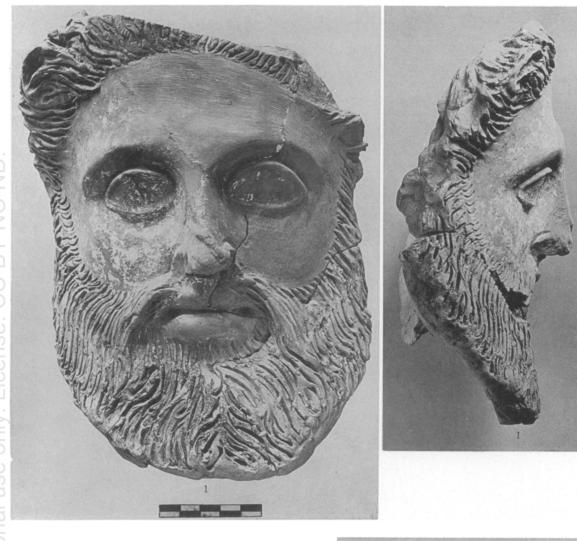
2. Reservoir III, Interior



1. Reservoir IV, Interior, Showing Mass Burial of Justinian's Reign



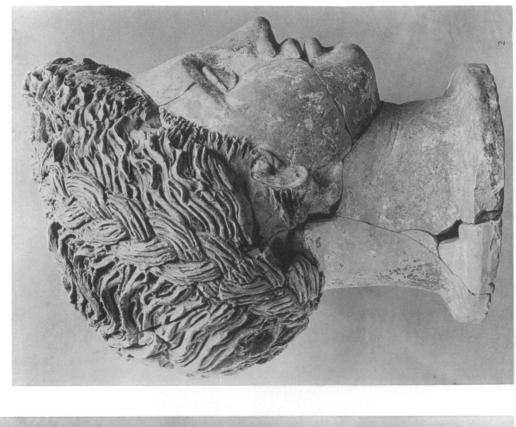
2. Reservoir V, Interior







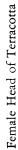
Mask of Asklepios and Other Votive Offerings



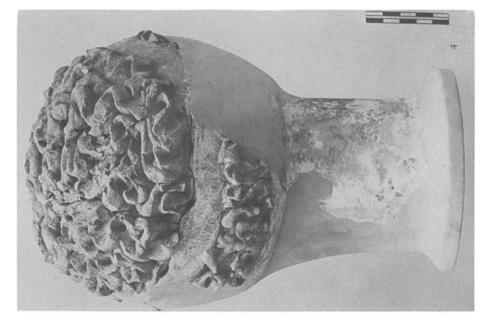


Votive Terracotta Head

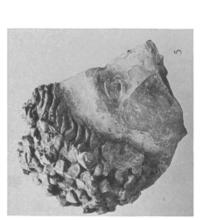


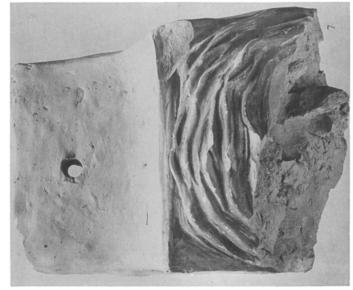












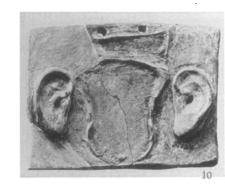
Fragmentary Votive Heads and a Tongue(?)











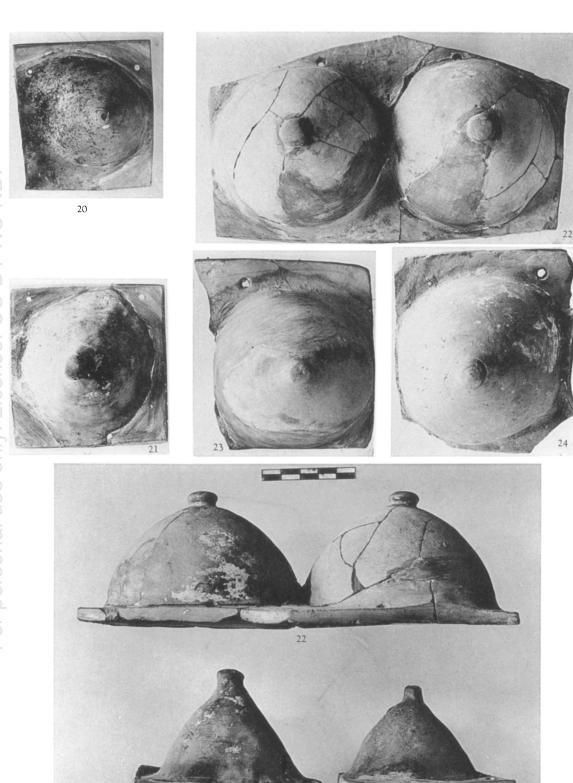






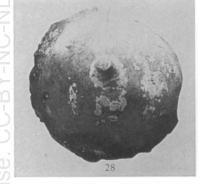


Votive Torsos, Ears, and Eyes

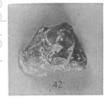


Votive Breasts











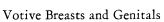




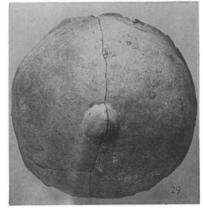












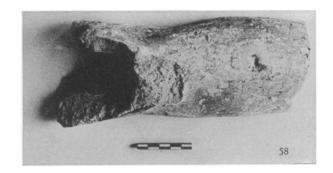




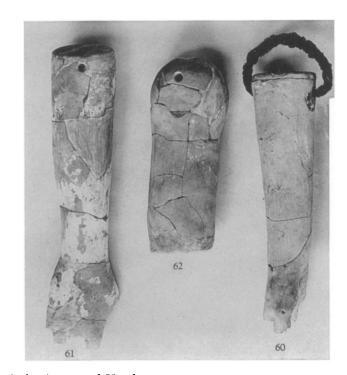




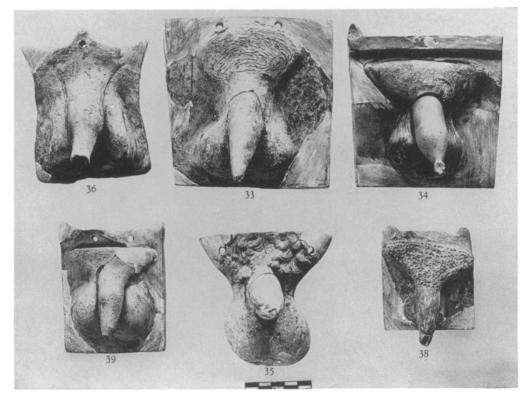






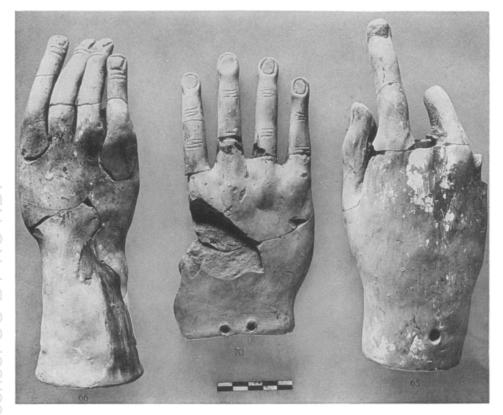


Votive Genitals, Arms, and Hands





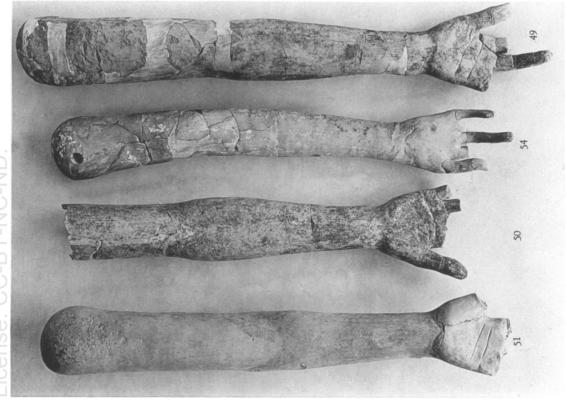
Votive Genitals and Arms

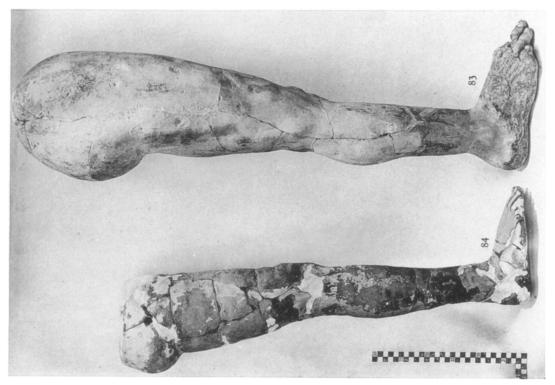




Votive Hands

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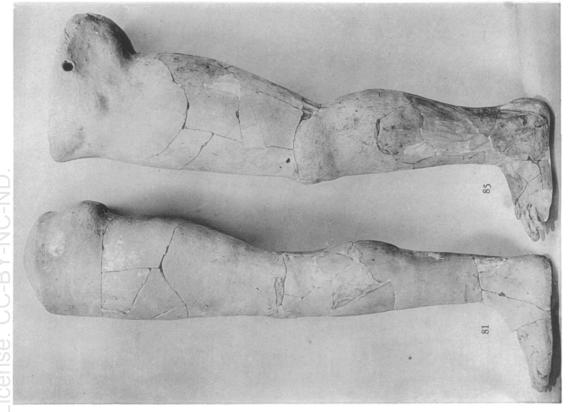


Votive Limbs





Votive Legs

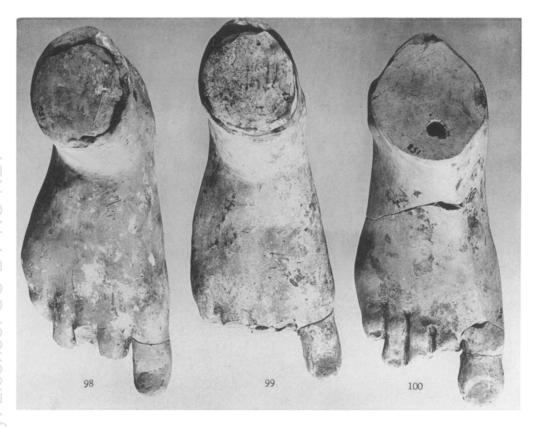


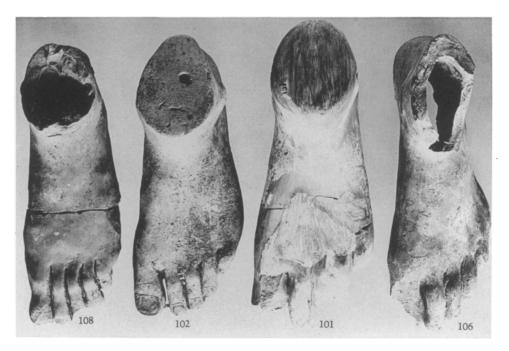






Votive Legs





Votive Feet













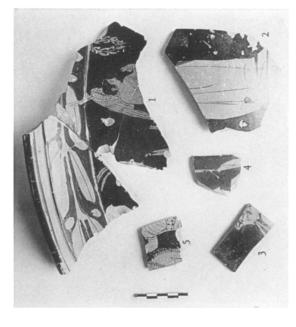


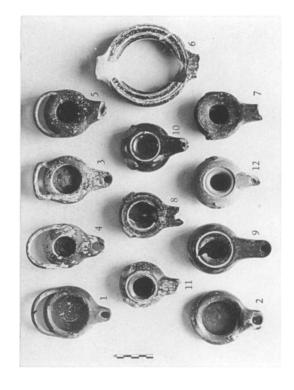
1. Votive Feet



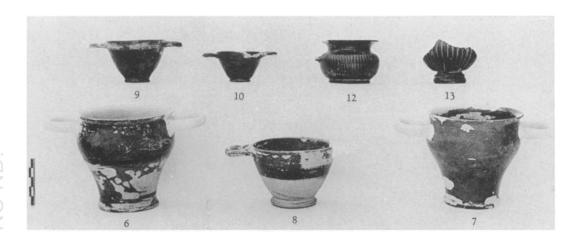
2. Terracotta Figurines





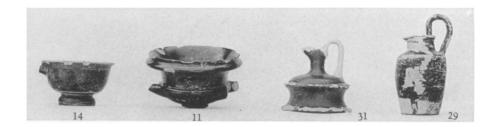


Pottery and Lamps from the Votive Deposits



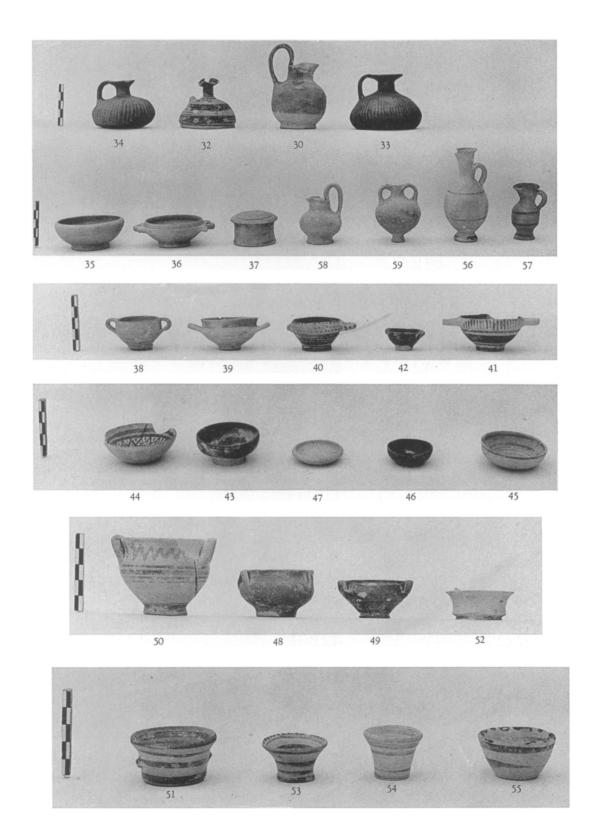




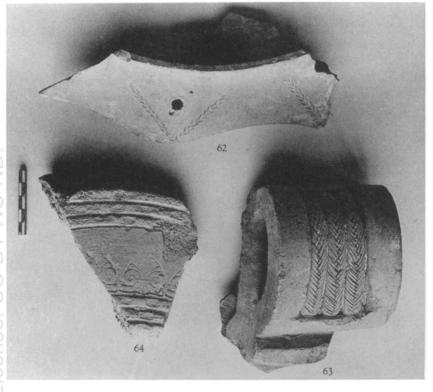




Black-Glazed Pottery from the Votive Deposits



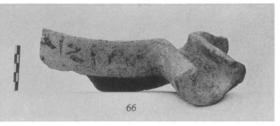
Miniature Vases from the Votive Deposits





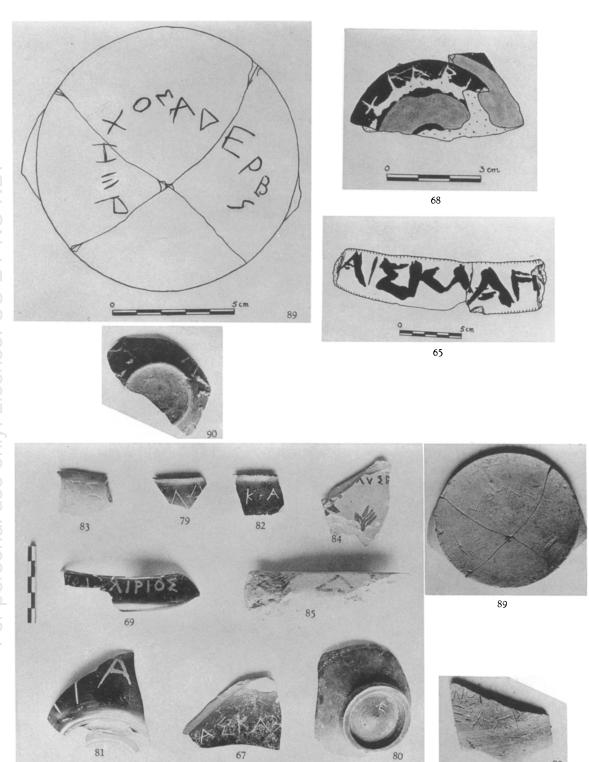








Coarse Pottery from the Votive Deposits



Inscribed Sherds, Mainly from the Votive Deposits









Figurines from the Votive Deposits









Figurines from the Votive Deposits



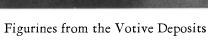
Figurines from the Votive Deposits





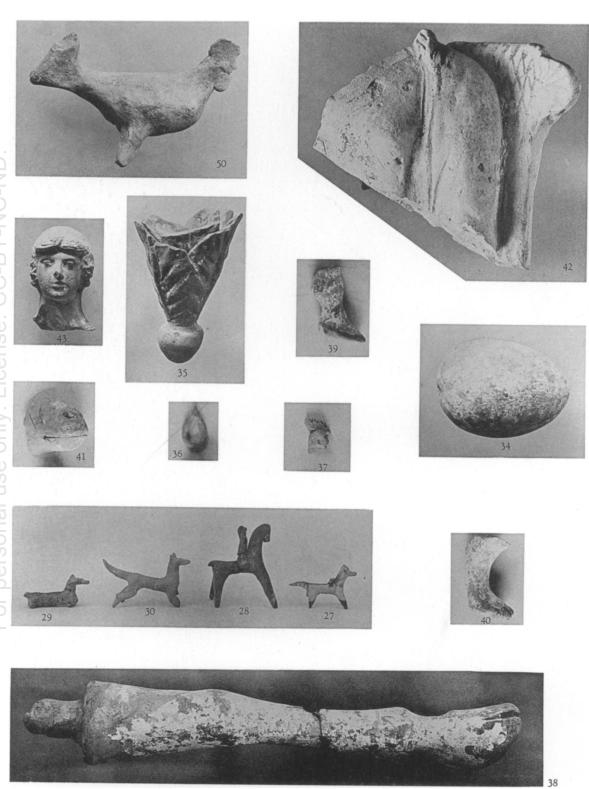












Figurines, Mainly from the Votive Deposits





Female Peplos Figure, Marble





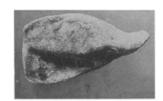
Draped Female Figure, Marble

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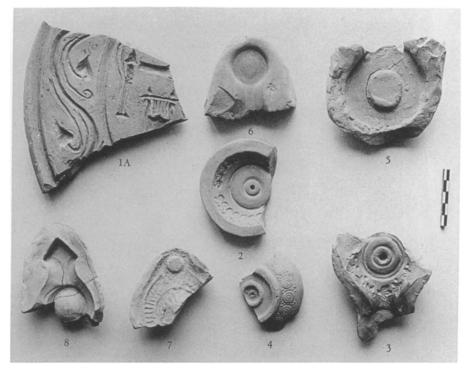


1. Base of a Statue of Asklepios



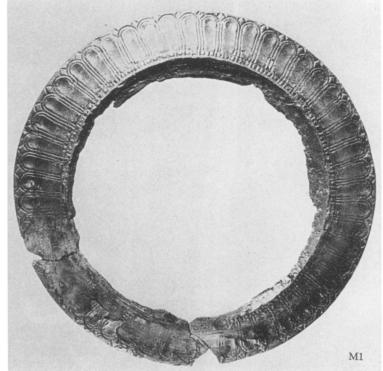
2. Marble Relief, Seated Zeus



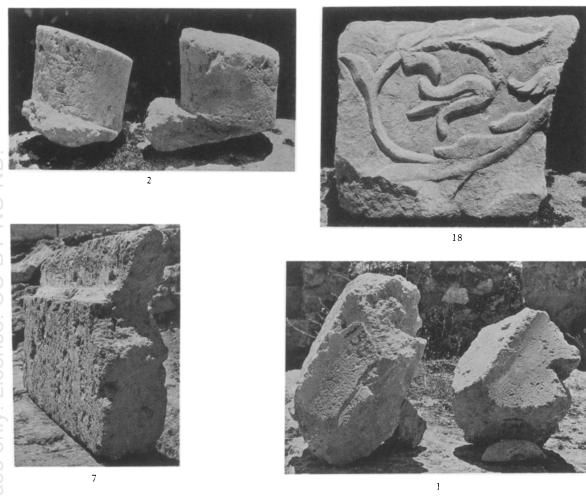








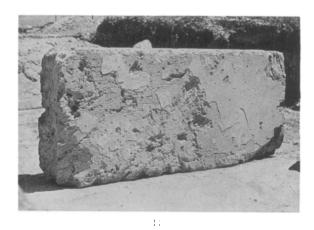
Moulds, Stone and Metal Objects

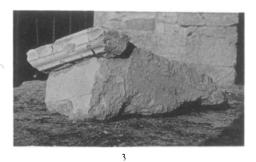


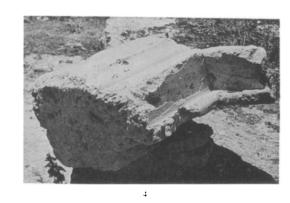


Architectural Fragments





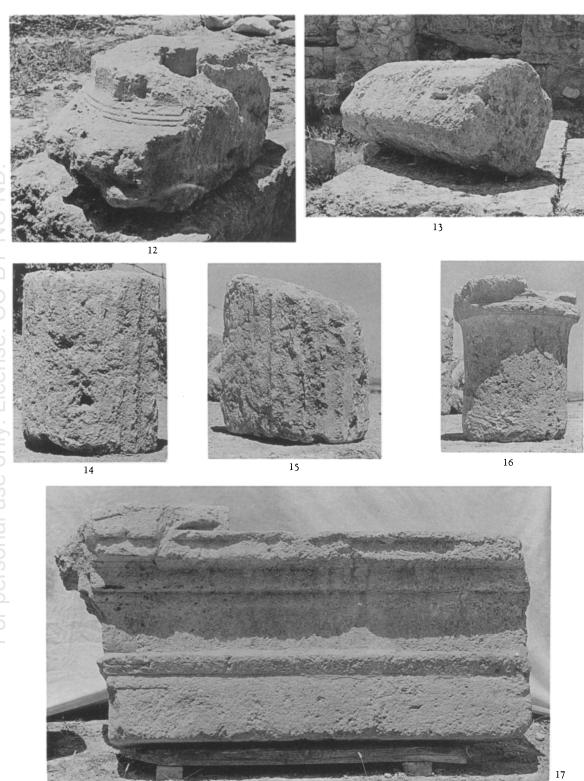








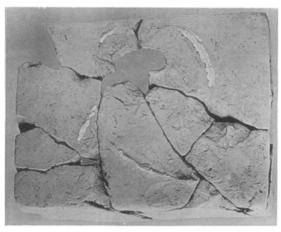
Architectural Fragments



Architectural Fragments



1. Marble Grave Stele



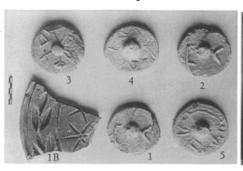
2. Votive Terracotta Base



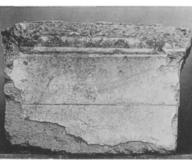
3. Inscription of C. Vibius



4. Dedicatory Inscription



5. Amphora Lids, Mould



6. Anta Capital



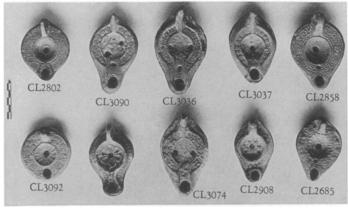
7. Parapet Block



1. Potter's Oven in West Colonnade of Lerna

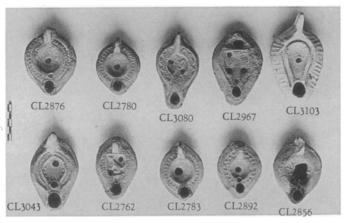


2. Christian Graves Cut in Hill of Asklepios



4. Tile and Jar Burial

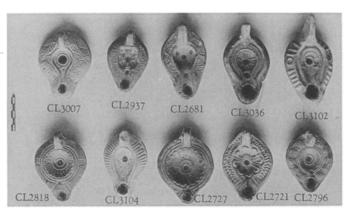
1. Lamps from Christian Graves



2. Lamps from Spring-House Channel



5. From Christian Graves



3. Lamps from Spring-House Basin



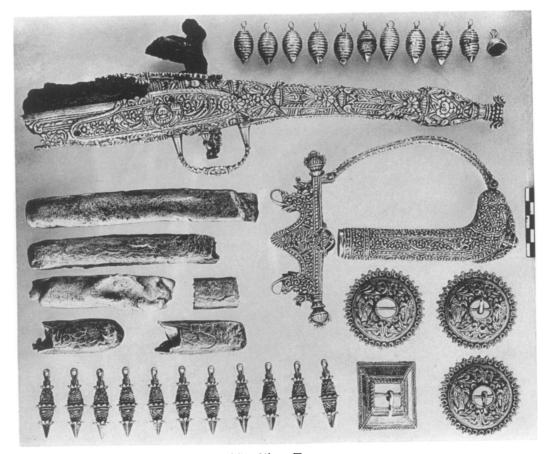
6. From Christian Graves



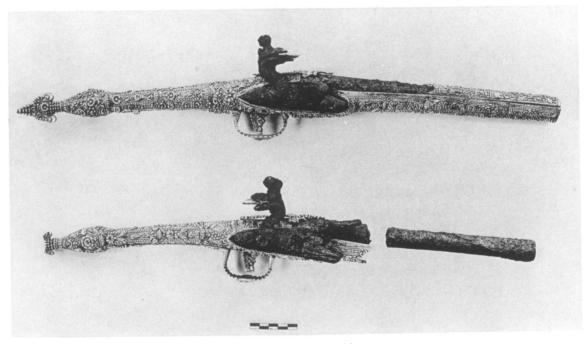
1. Byzantine Chapel from West



2. Byzantine Chapel from East



1. The Silver Treasure



2. Guns from the Silver Treasure