and it descends still deeper into the deposit. A preliminary study of the moulds indicates that there is some hope that we shall be able to mend enough of them to learn something about the form of the statue as well as about the manner of casting bronzes. Part of the sides of the casting pit was lined with large, crude bricks, three of which were found in place, also on the last day of excavation. The bronze foundry may prove eventually to belong with the cisterns and water channels found last year in the West Waterworks. The area had to be recovered to protect the moulds that are still in the earth until we are able to return to the area next summer.

Much of the east end of the south stoa of the gymnasium was excavated and we can now be sure that the stoa did in fact continue at least as far east as we suspected last year ( nearly 160 meters). Although much more is preserved at this end of the building than at its west end, it still had been rather thoroughly razed: only one column drum has been found in place on the stylobate, and even the first step is continuous for only ca. 9.00 m . The interior columns continued to near the end of the building and here at least three of them were connected by a partition wall. The foundation of the back wall of the stoa near the east end had been entirely pillaged in antiquity, but slightly further west part of the foundation was found in place and, continuing its line, six Doric capitals complete with abacus were found, four of them upside down and all arranged in a row ( P 1.81 d ). There is much stucco still preserved on the capitals and both the stucco and the profile of the echinuses indicate that they should be dated to a period in the early history of the Roman colony of Corinth. They are of a size that would be suitable in fact, for the Doric columns of the façade of the gymnasium and may well have been placed in the pillaging trench of the back wall of the building to which they once belonged so that they might help support a later, less grand construction.

A large covered drain, partly clear and running eastwest, can be entered at the northeast corner of our excavation area, which is at about the corner of the stylobate of the east and south stoas of the gymnasium. By crawling into the drain we were able to de-
termine that it passed underground through a foundation that lies on the line we have restored in our drawings as the back wall of the east stoa of the gymnasium.

In a new area of the Lerna Hollow Cemetery a number of graves were found intact and are contributing much new information about the Early Christian community of Corinth (fifth and sixth centuries after Christ). One complete tombstone and fragments of nine others, besides one inscription on bedrock were found. We were fortunate to discover not only several different types of rock-cut tombs with burials still intact, but also in some instances enough of the stuccoed mounds that covered the tombs, and numerous clay lamps that had been lighted over the grave, so that we could restore (on paper) the physical appearance of this part of the cemetery and even follow the procedure of burial. Professor J. Lawrence Angel, Curator of Physical Anthropology at the Smithsonian Institution, examined several skeletons from our graves and has noted the multiracial nature of the burials. Even North African (negroid) is represented in this Early Christian cemetery. We hope to add a physical anthropologist to our staff next summer so that this important work can be continued.
Work continued, or was opened, in several other areas, the most important of which was in the supply tunnel for the main reservoir of the Fountain of Lerna. Here an elaborate distribution area was discovered, as well as two side channels.

JAMES R. WISEMAN

## ISTHMIA

Full-scale excavations at the Isthmian Sanctuary of Poseidon (Plan l) were resumed in the spring of 1967. Oscar Broneer, who had begun his excavations there in 1952, was director, and Paul A. Clement co-director. The excavators were Elizabeth Gebhard of the University of Chicago and Carol Lanham, Judy Allen, James Batcheller, Robert McClure, and Ralph Platz, all of the University of California at Los Angeles. The senior architect was John C. Garner, Jr.; the junior architect was Richard Keating, a student at the University of California at Berkeley. The


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campaign lasted from April 3 to June 10, though major digging stopped on June 3. In August and September, supplementary work was undertaken for a short time properly to investigate and record tombs accidentally discovered in July by workmen digging a trench for a water line across a field immediately west of Kyras Vrysi. This work was done by Margaret MacVeagh Thorne (formerly Bryn Mawr), Margot Campbell Camp (formerly Barnard), John McKesson Camp II (Harvard), and Tania Kaljakin (UCLA) under the supervision of Paul A. Clement.

During the main period of work in the spring, excavations took place in widely separated parts of the Sanctuary of Poseidon and its immediate neighborhood. In areas west and north of the Temple of Poseidon there were traces of a roadway of all periods from archaic to late antiquity; two water channels, one apparently of the 5 th century B.C., the other of Roman date; and building blocks identified as coming from the archaic Temple of Apollo. Immediately west of the old excavation house, a section of wall made with large uncut stones resembling Cyclopean masonry was investigated; this will be the subject of a special report by Oscar Broneer. The rectangular court immediately north of the theatre (P1. 82 a ) was cleared to what seems to have been the ancient floor level. There were no traces of structures and few finds. In the west terrace adjacent to the court and in the theatre itself, work supplementing the investigations of previous seasons was undertaken. All the other excavations in the immediate neighborhood ot the Temple of Poseidon concerned the Trans-Isthmus Wall and its eastern fortress, commonly identified now as constructions of Justinian.

The Northeast Gate to the fortress (Pl. 82 b ), first investigated by Monceaux in 1883 (Gaz. Arch., IX (1884,) pp. 273-285, 354363 ) and further clarified by Megaw in 1932 (BSA 32 (1931-32), pp. 71-73), was completely, or all but completely, excavated by us. Megaw's corrections of Monceaux were confirmed, and in turn we found it to be necessary to correct Megaw's restoration of a semi-circular superstructure on the south tower of the gate. This reasonable restoration he made on the basis of two circular blocks similar to those in the super-
structure of the north tower. The blocks are now lost, but they appear in a photograph of the south central and north central piers of the gate made by W. B. Dinsmoor in 1909 and very generously given by him to Isthmia Excavations for its files. Only the northern half of the superstructure of the south tower was circular (corresponding to the superstructure of the northern tower). The southern half of the superstructure was rectangular (a section of the south wall is preserved and the mortar bedding of the rest of the south wall and the straight part of the east wall; the technique of the wall of the rectangular section of the superstructure is similar to that of the Trans-Isthmus Wall, mortar and rubble fill between cut-stone facings ).

A transverse blocking wall (P l. 83 c) built across the roadway through the gate in some late period was completely cleared. In plan the blocking wall has the form of a rectangular « C ». One of the short returns was based on the north face of the south tower and the east face of the south central pier, and the other short return was based on the south face of the north tower and the east face of the north central pier. There are in the wall some largish blocks of cut stone, but most of the material is small rubble set in a soft and crumbly mortar. Built against the northern end of the transverse blocking wall is the southern end of a great bastion which runs north embracing the north tower, then turns west around the northeast corner, of the fortress along the outer face of the Trans-Isthmus Wall. The north and the east faces of the bastion are reinforced by buttresses, two on each face. The upper part of the relief in Pl. 83 a was found built into the east face of the bastion wall, and the lower part was found in the fill against the east face of the wall at a point some 1.50 m . to 5.00 m . further north. The sculptured head in PI. 83 b also came from the fill in front of the east face of the bastion.

In the north part of the gate complex in a triangular space formed by the north TransIsthmus Wall, which is here coming in at an angle, and a curtain of wall which parallels the axis of the central roadway and so gives the gate complex an appropriate interior north wall, there remain three steps of a stairway to the fighting-platform of the wall.

Built against the stairway ramp is a light rubble wall which serves to mark the northern side of an eastern grave and the southern side of a western grave; the eastern grave is built between the ramp and the curtain wall, and the western grave lies over the conglomerate at the foot of the stairway along the inner face of the Trans-Isthmus Wall, and indeed the bottom tread of the strairway was ripped out when the grave was made. The western grave contained two skeletons and fragments of a third which belonged to a child. The eastern grave contained at least ten skeletons of adults and children together. In the eastern grave several pieces of bronze jewelry were found, a small mug of coarse ware, and eight bronze coins. Two were too disintegrated to inventory, three were inventoried but remain illegible. Of the remaining three, one was issued by the emperor Marcian, A.D. $450-457$, or is a so-called Vandalic copy of that emperor's coinage (IC 888 ), and the two others seem to belong also to «Vandalic» issues (IC 887, IC 889). When these graves were made, presumably the stairway to the fighting-platform of the Trans-Isthmus Wall was abandoned. The evidence for the date of the graves places them in the third quarter of the 5th century A.D. This is a puzzle, for it is anomalous to find evidence for the abandoning of a stairway almost a century before supposedly it was built.
The anomaly was not lessened when we exposed the marble pavement of the central roadway ( P 1.83 c ) which had been exposed also by Monceaux (Gaz. Arch., IX (1884), p. 354 ). The pavement is composed of blocks once used for other structures and monuments. The blocks of the sill, for example, are from the entablature of some building and the southernmost has a beautifully cut VOQVE-- $A \mathcal{N}$ ( IS 524) on its topmost moulding. In cleaning dirt out of the sometimes widely spaced joints between blocks, and in cleaning dirt from the dowel holes and clamp cutting on the top face of many of the blocks, we found in seven deposits eighteen bronze coins which yielded more or less precise identifications. I tabulate the results from the inventory made by Mrs. Carol Lanham:
Jovian, A. D. 363-364 (IC 913)
probably Valens, A.D. $364-378$ ( IC 914) Valentinian II, A.D. 375-392 (IC 915) I

Less well preserved but attributable to the 4th century A.D. on the showing of fabric, types, legends (IC 908, IC 909, IC 910, IC 911, IC 912, IC 916, IC 921, IC 923) 8 perhaps Arcadius, A.D. 359-408 (IC 920) 1 Less well preserved but attributable to the 5th century A.D. on the showing of fabric, types, legends (IC 917, IC 918, IC 919, IC 932 )
Illegible, but presumably Roman on the showing of fabric (IC 922, IC 933)

This evidence certainly suggests to me that the roadway was in use in the second half of the 4 th century A.D., unless we can assume that Monceaux too cleaned out the crevices, dowel holes, and clamp cutting in the road bed; in this event it would be possible to assume that the eighteen coins were washed into the places we found them by the flow of water and of dirt that filled up again Monceaux's excavations after his departure. Let it be noted that Monceaux says nothing of cleaning out the crevices, the dowel holes, and the clamp cutting in the road bed, nor does he speak of coins, except only to note that in the topmost meter of the upper fill on the site he found Byzantine coins (which he does not further identify).

Lying on the surface of the ground south of the gate at the beginning of our excavations were parts of two Ionic columns, which are apparently the columns noted by Monceaux and attributed by him to the Temple of Palaemon (Gaz. Arch. IX (1884), p. 362 ). Other parts of the two columns were recovered from the debris within the area of the gate complex. We have two capitals with the elements sufficiently preserved to make possible a complete restoration (Plan 2) (canted Ionic with four faces), half of one base (torus-scotia-torus over plinth ), and eleven of what we assume to have been an original fourteen drums. The total height of the columns as restored is 7.806 m ., excluding the stylobate on which they are placed. Mrs. Elizabeth Gebhard in her earlier excavations in the theatre found in the vicinity of the two bases in the orchestra fillets of Ionian fluting like in size to the fillets of the shafts of these two columns. And she believes, as do we all, that the two columns originally stood on the bases in the orchestra of the theatre, which are


Plan 2. Ancient Isthmia. Restored columns

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indeed of appropriate size. Other architectural pieces from the fill in the gate complex include voussoirs, blocks from an Ionic entablature, and archivolts doubtless from the Roman arch which was the earliest structure in the complex. And still other architectural pieces, including entablature blocks, are used as building material in the later elements of the gate structure.

Tower 14 (P 1. 84 a) in the western wall of the fortress was another major area of excavation. The break in the west fortress wall immediately north of Tower 14 is in fact a small western gate to the fortress. In the fill over the passageway about 1.50 m . west of the gate was found part of a statue of a running woman (Pl. 85 b ). Of the small one-room structures which abut both faces of the fortress wall at Tower 14 and the westgate roadway, two were completely excavated. In the room on the inside of the fortress behind Tower 14, slotted window-jambs were well preserved. The room that abuts the outside face of the wall south of Tower 14 seems to have been abandoned before the Turkish conquest. Of the fourteen coins which came from the fill approximately 0.75 m . above the floor level of the room, ten are Venetian or Frankish of the 14th or 15th century (the latest precisely datable is A.D. 1400-1413, Levantine Venetian, Michael Sten); one is Byzantine (perhaps Alexius I, A.D. 10811118 ); one is Roman (Crispus, A.D. $317-$ 326 ), and two are illegible.

In Tower 14 itself at a very late period, a doorway was broken through the west wall of the structure and a larger doorway through the east wall and the rubble and cement core of the fortress wall behind it. From both sides of the fortress wall and from inside the tower, many building blocks were recovered. These include a block of the horizontal cornice preserving a mutule from the Temple of Poseidon.

Underneath the military architecture and its appendages there lies the wall of a much earlier structure ( P l. 84 b ) not parallel with the west fortress wall, but swinging slightly west of north. The wall is built of large wellcut blocks of stone supported on a heavy footing of rubble. The western face of the cut stone blocks is set to a straight line, the eastern face is uneven. In the loose fill over this wall at a point some 12 m . south of Tower 14
was found a marble head (IS 437) (P 1. 85a), perhaps from the statue of an athlete which was a casualty of the period of the construction of the fortress. At a point about 18.50 m . south of Tower 14, the wall seems to turn eastward to continue under the fortress west wall. From this point northward the western wall of the structure has been traced for something more than 50 m ., either as rubble footing with one course of cut stone lying over it, or as rubble footing alone.

The lowest strosis of the fill against the western face of the rubble footing of this wall is dated by two coins of Corinth struck in Nero's time in A.D. 67/68 (IC 870, IC 871). This strosis was exceedingly rich in finds. I illustrate a Barbotine jug (IP 3784) ( P l. 86 b ), a two-handled cup with a vitreous greenish glaze (IP 3671) (PI. 86a ), a Pergamene bowl with (DIONYE) in raised letters (IP 3788 ) (Pl. 87 b ), and the puzzling discus of a lamp with three men carrying some large object (IP 3762) (Pl. 87 a). The fill also included a well-preserved bronze lamp (IP 3576 ) ( P 1. 87 c ). The chain for hanging the lamp was too badly disintegrated to be preserved. In this strosis too were many small pieces of painted plaster from a wall. Two of these had scraps of figure drawing: a torso (IM 3579) (P1.88a) and a larger fragment showing part of the heads of two long-haired figures, one of whom is extending a wreath to the other (IM 3578) (P1.88b).

Toward the end of the campaign, work was resumed in the difficult area of the North Drain (Pl. 89) which in a previous campaign had been uncovered inside the line of the Trans-Isthmus Wall at a point northwest of Tower 14. The deep compartments and massive masonry indicate a structure of some size. The swallow-tail clamps cuttings are similar to those found in the piers of the Roman arch at the northeast gate and in the first period of the Odeon at Corinth, which Oscar Broneer dates at the end of the lst century after Christ. More digging will be necessary in this section before the nature of the building and its precise relationship with the TransIsthmus Wall can be understood.

In the field west of Kyras Vrysi, nineteen sarcophagi were investigated. Both Corinthian and Attic pottery of the 6th and 5th centuries B.C. were recorded in the finds.

Among the early pieces are forty-four fragments of a Komast cup by the KY Painter, 580-570 B.C. (P 1. 90 b) (largest group, IP 3869A). An unbroken oinochoe (IP 3822) (P1.90a) recovered from the July diggers belongs to the second half of the 6th century B.C. A lamp (IP 3846) found in Grave 9 together with two vases (pyxis, IP 3845 ; oinochoe, IP 3847 ) ( P 1.90 c) seems to belong to Howland's type 23c. A coin of Probus (A.D. 276-282, IC 976 ) found in the plunderers' deposit from Grave 7 may date the first plundering of the grave, but not the grave itself, for the pottery includes animalstyle Corinthian too. Full exploration of this cemetery must be added to our program of work in coming seasons.

PAUL A. CLEMENT

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## ARGOS

Les fouilles, qui se sont déroulées en mai, juin et septembre, avec la participation d'Yv. Garlan (revenu en mission), Fr. Croissant, J.-Fr. Bommelaer, J.-P. Sodini et de Mlle H. Sarian, s'inscrivaient dans un programme qui comprend l'exploration de l'Agora antique ( secteur $\alpha$ ) et de la région située au Sud de l'Odéon (secteur $\delta$ ). Dans ce dernier secteur a été d'autre part effectué, à la demande de l'Ephorie des Antiquités, un sondage d'urgence sur un terrain privé (Su 85). Tony Hackens a procédé à un premier examen des monnaies.

Agora antique (secteur $\alpha$ ) (cf. BCH 91 (1967), Chronique, fig. 1)

Poursuivant les recherches amorcées en 1966, la fouille a porté sur la partie Sud-Est du terrain actuellement disponible (carrés $\alpha$ BP/BR. 85/87), juste au Sud de la branche Est du portique en $\pi$.
En bordure du portique, une succession de sols atteste la continuité de l'occupation depuis l'époque hellénistique jusqu'à celle de la domination turque. Au-dessous, sans transition, on rencontre une couche épaisse, faite de plusieurs niveaux, qui repose directement sur le sol vierge et ne contient que de la cerramique géométrique.
Plus au Sud, cette stratigraphie a été cou-
pée par un système d'égouts de proportions monumentales: un égout en briques, large de 2.50 m , haut d'env. 2.40 m avant l'effondrement de sa voûte, datant de l'époque impériale, rejoint et réutilise un égout plus ancien, en pierres, à double canal et couvert de deux rangées de grosses dalles (cf. BCH 91 ( 1967 ), Chronique, p. 1012, fig. 16 ).

Enfin, au Sud de l'égout romain a été dégagée la façade d'un petit édifice prostyle, qui se poursuit dans le champ voisin, malheureusement occupé par une maison moderne (P 1. 91a). La fondation, faite de quatre assises de pôros, dont les blocs proviennent apparemment d'un monument plus ancien, porte deux assises de calcaire, dont une au moins semble constituée de remplois. Les quatre colonnes, distantes d'axe en axe de 1.55 m aux ailes, de 1.72 m au millieu, paraissent avoir été faites d'un fût de bois revêtu de stuc. Le contexte stratigraphique de la fondation, gravement perturbé par l'installation de l'égout romain, semble indiquer cependant la fin de l'époque hellénistique.

## Quartier Sud (secteur $\delta$ )

## a) Abords Sud de l'Odèon

Intégrée au quadrillage mis en place en 1966, la fouille a porté cette année sur la place publique qui borde l'Odéon au Sud ( zone $\delta \mathrm{AZ} / \mathrm{BB} .31 / 34$ ). L'occupation, qui remonte ici au moins à l'Helladique Moyen, paraît s'interrompre du Submycénien aux débuts de l'archaisme, pour être ensuite à peu près continue jusqu'à l'époque byzantine.
La découverte la plus intéressante est celle d'un petit mur de péribole, que l'on a pu dégager sur une vingtaine de mètres. Construit au IIe siècle av. J.-C. avec des blocs de calcaire soigneusement travaillés, qui sont sans doute des remplois, il est conservé sur une ou deux assises. Les couches contemporaines de sa construction ont été en majeure partie arasées, mais il circonscrit un remblai plus ancien, contenant un riche matériel votif: figurines ( cf. BCH 91 ( 1967 ), Chronique, p. 1033-1034, fig. 16-21 ), protomes et reliefs de terre cuite, petits objets de bronze, d'ivoire et d'or (cf. BCH 91 ( 1967 ), Chronique, p. 1036, fig. 28 ); la céramique, abondante, est malheureusement très fragmentaire. Mais plusieurs tessons inscrits, portant dédicace à Aphrodite, ont été recueillis, et l'existence du


Isthmia: a. Theatre from the south, b. Northeast Gate, Trans-Isthmus Wall East Fortress from the northwest


Isthmia: a. Relief IS 438 and 438A, b. Sculptured head IS 435, c. Northeast gate, central roadway and blocking wall from the east
P. CLEMENT

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Isthmia : a. Tower 14 from the northwest, b. Tower 14, long Roman wall at lower level, from south


Isthmia : a. Tower 14, Marble head IS 437, b. Running woman IS 432


Isthmia: a. Vitreous glazed cup IP 3671, b. Barbotine jug IP 3784


Isthmia: a. Lamp discus IP 3762, b. Pergamene bowl IP 3788, c. Bronze lamp IP 3576


Isthmia : a. Mural IM 3579, b. Mural IM 3578


Isthmia. North Drain from the east
P. CLEMENT


Isthmia : a. Corinthian oinochoe IP 3822 , b. Komast cup by the KY Painter IP 3869 A, c. Grave 9, IP 3846, IP 3847

