

THE DECEMBER EXCAVATIONS AT NEMEA

By CARL R. BLEGEN

THANKS to the support of a group of generous Philhellenes and friends of the American School in Cincinnati, it was possible in the late fall of 1925 to resume the excavations begun the preceding year at Nemea. In the work of the first season the possibilities of the site had been tested and found promising. A simple, well-preserved Greek bath, perhaps forming part of a gymnasium or a palaestra of the fourth century B. C., has been brought to light. Immediately adjoining it on the east, buried beneath the ruins of a large basilican church of Byzantine times, had been discovered remains of another spacious building apparently of the same date. Farther to the north a line of wall had been revealed which seemed to mark the boundary of a paved precinct surrounding the temple of Zeus; and among the foundations of the temple itself some evidence had been obtained making it clear that the structure as we now have it had been preceded on the same spot by an earlier sanctuary. Many interesting problems had been raised only to be left unanswered at the conclusion of the campaign. The results therefore established certain definite lines for further exploration.

The new campaign was begun November 30 and continued until December 24. The work was throughout in the charge of the writer, who was ably assisted by Oscar Broneer, Fellow of the Institute. Dr. John Day, Fellow of the School, was present from December 5 and superintended the digging in the stadium. The plans were made by W. V. Cash, Fellow in Architecture. Dr. Hill, Director of the

School, paid two visits during the progress of the work and gave invaluable help, counsel and encouragement.

Operations began with three definite objects in view. The first was to explore the region east of the temple to ascertain whether or not a formal ceremonial approach led up to the sanctuary. Such a "sacred way" lined with monuments and votive offerings is familiar enough at other religious centers in Greece and Asia Minor, and the existence of a similar street at Nemea seemed perfectly possible. The early winter season also gave an especially favorable opportunity for digging in this quarter, since the currants and grapevines cultivated here were no longer in leaf and therefore permitted careful probing between the rows without injury, or even removal if necessary, at a much more reasonable rate of compensation than in the spring when in full leaf and bearing.

The second objective was the further examination of the Greek structure underneath the Byzantine church in order to determine if possible its size, plan and character. It was realized that this, too, involved extending the excavated area eastward into the adjoining currants.

The third object was to establish definitely the position of the stadium where the Nemean games were held. All topographers who have written on Nemea have agreed in placing it some 500 meters to the southeast of the temple in a great curving hollow, apparently artificial, which stretches far back into the hillside, though no excavations have ever been undertaken here to make the identification

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certain. The deposit of earth brought down from the slopes above appeared to be fairly deep in this hollow, a circumstance which gave rise to hopes that if it really was the site of the stadium some remains of the structure might be found *in situ*. In addition, opportunity was found for exploratory soundings in two other directions, each of which yielded a large amount of new, unexpected material. The work in these five separate areas accordingly forms the subject of the present preliminary report.

The first broad trench laid out through the vineyard east of the temple gave almost purely negative results, as nothing was found in it except a silver drachme of Sicyon and a few bronze coins, all of Greek date. A second trench nearer the temple proved much more satisfactory, revealing part of a well-made foundation built of squared blocks of good *poros*. This was subsequently traced in each direction by means of a series of pits until both ends had been discovered. It was not possible to do more in the brief time at our disposal; the complete clearing of the structure had to be deferred until another season. Consequently it is not yet absolutely certain that the whole extent of the foundation, as established by our pits, really belongs to one continuous construction, although it appears so.

The foundation is oriented from north to south in a line parallel to the façade of the temple and 15.2 m. distant from it; the total length as given by the pits is 40.58 m. For a considerable part of this length it is not well preserved, most of the blocks from its east side having been removed, perhaps for use as building material in post-classical times. At the south end, however, the full width may still be

seen in a good state of preservation; it measures only 2.42 m.

The method of construction at this end is worth noting. The east and west faces of the foundation are formed by regular blocks of *poros* laid in a row with very careful jointing. Between these two lines there is now a core of rubble which seems to be composed chiefly of disintegrated *poros*, chips and fragments. But one large block still lying in place at the southeast corner indicates that this middle part of the foundation was also originally built of *poros* blocks rising to a slightly higher level than the exterior lines.

Along the east of the block preserved *in situ*, and returning around the corner along its south face, may be seen the much battered remnants of a row of fairly thin slabs of the same material apparently set on edge. A setting line which is visible on the blocks belonging to the outer rows as revealed in all our pits, indicates that these peculiar slabs once continued all the way along the whole foundation.

We thus appear to have, lying directly before the entrance to the temple, a long, extremely narrow substructure which evidently supported a still narrower monument of like proportions. Its ends projected northward and southward well beyond the lateral lines of the temple. So far as can be judged from our pits, this monument was a unit in itself; no other walls came to light which seemed to have any structural connection with it. The plan seems thus designed for a great sacrificial altar and there can hardly be a doubt that this identification of the monument is correct. The position facing the east end of the temple is peculiarly appropriate and is analogous to the arrangement found at many other Greek sanctuaries. A strik-



NEMEA, SITE OF THE EXCAVATIONS LAST DECEMBER.

ing confirmation of this identification was the observation that the soil surrounding the south end of the structure at approximately the ancient ground level was composed in large part of fine gray ashes and contained also numerous small fragments of burned bones. Without doubt these are the remains of burnt offerings once sacrificed on the altar.

The discovery of this altar at Nemea is of no little interest and importance, since it appears to be the first of its kind and impressive dimensions to become known in the Peloponnesus. Altars of the same general plan, but much smaller in size, have been found in the sanctuary of Artemis Orthia at Sparta, and fronting the temple of Artemis at Orchomenos; but for closer parallels one must turn to the early temple at Corfu and the Hellenic sanctuaries in Sicily.

The building over which the Byzantine church was later constructed, east of the Greek Baths, was examined by means of numerous trial trenches and pits. Its north and south walls were cleared for a considerable distance and

the east and west ends were found. It is of great size, having a width of about 20 m. and a length of some 85 m. The foundations, which have an average thickness of 0.93 m., are built of well-cut blocks of *poros* laid side-by-side as headers. Upon these was laid a *euthynteria* course, about 0.63 m. thick, made of similar blocks placed lengthwise. The next course, consisting of *orthostates*, is preserved in part on the south side; these blocks are about 0.43 m. thick, 0.725 m. high, and from 1 to 1.15 m. long. They are well-worked but were somewhat more carefully finished on their inner (north) face than on their outer. They are meticulously jointed, and the joints are usually marked by a narrow vertical groove or *werkzoll* at the end of one of the contiguous blocks. The bottom of the groove indicates the depth to which the final dressing of the face of the wall was to be carried; but, as was so often the case in buildings of the fourth century and of Hellenistic date, this final dressing was never executed and the grooves were left as a sort of decoration.

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QUARTERS OF THE EXCAVATORS AT NEMEA.

A building so large as this must of course have had internal partitions, and some traces of dividing walls were, in fact, brought to light. One of these latter follows the longitudinal axis of the building, and in it is a well marked doorway with jambs and a threshold. The width of the opening is 1.54 m. Two other walls extend north and south and seem to divide the structure into transverse compartments. All these three partitions appear to be of Roman date, as their foundations are made with mortar. Just east of the Byzantine church traces of a Greek cross-wall were observed. No blocks remain *in situ*, but on the inner face of an orthostate in the south wall appears a regular anathyrosis, a careful dressing of the surface in Hellenic style to receive an adjoining block, which was set here at right angles to the wall.

In the north half of the building two column bases were found, clearly the supports of interior columns. A number of fluted Doric drums, re-used in the construction of the Byzantine church, seem to be of a suitable size to go with these bases—or, if these latter supported columns of the Ionic order, may belong to a corresponding exterior colonnade. No such colonnade

has yet been found. If there was one it must have stood on the north or south side of the building beyond the area excavated.

This building still offers many problems: its interior plan is not known nor the position of the entrance or entrances; furthermore, its relation to the structure containing the bath is still uncertain. Since it is of exactly the same width and its north and south lines continue those of the latter building, it is evident that the two edifices belong to one plan. Perhaps both form parts or separate units of a huge gymnasium. The space between the two measures 8.83 m. Possibly a road may have led through this opening in the direction of the temple. Some of these problems can no doubt be solved by the complete excavation of the east end of the new building, which it is hoped may be undertaken in the next campaign.

During the digging in this area we found a small fragment of a well-cut inscription, apparently a building account, perhaps belonging to the stone found by the French excavators years ago and possibly containing the record of the construction of the temple. It is written in the Ionic alphabet in Doric dialect and exhibits two examples of the letter digamma, which here seems to have been retained to a surprisingly late date.

The work done in the stadium this year was mainly exploratory. It was limited to the north end of the stadium below the modern road, since this area lay fallow and could be investigated without compensation, whereas the south end was planted to barley and heavy damages were asked for any destruction caused. The exploration of the north end was also preferable for a test because, due to the slope of

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the ground, the deposit of earth covering possible remains here was clearly far less deep than at the south. This last observation was speedily verified by our trial trenches.

It must be admitted that the actual remains of construction revealed here are of far greater significance than might appear at first glance. No recognizable trace of built seats came to light nor of a wall bounding the race course. But in a series of short cross pits there was uncovered a long water-channel running from south to north, very similar to the channel bordering the stadium at Epidaurus, and here too unquestionably marking one side (the east) of the course. This channel is relatively deep and narrow (width 0.10, depth 0.05); not a broad gutter for drainage, but clearly meant to provide a supply of water for drinking. It is hollowed out in the top of a line of slabs of *poros* set on edge. These blocks are 0.30 m. thick, and 1.725 m. long. At one point was found a large settling basin cut in a rectangular block, roughly a parallelogram with rounded corners. The basin, too, is closely similar to the basins which occur at regular intervals along the water-course at Epidaurus.

The part of the channel revealed by our trenches must have been near the north end of the stadium, since the last preserved block is about 180 m. from the curve of the hollow at the south end; the total length of the stadium was probably not far from the usual 200 m. The channel has a slight downward slope toward the north, not more than 1.5%. At the northernmost preserved end the blocks are only some 0.30 m. below the present surface of the ground; in our last pit toward the south, just below the modern road, the top of the channel is more than

1.50 m. deep. Beyond the road southward the accumulation of soil grows rapidly deeper, so that at the south end of the stadium the water-course must be buried under seven or eight meters of earth. The *poros* blocks apparently projected only about 0.25 m. above the level of the race-course itself; consequently if there was any built portion of the stadium, steps, seats, barriers, etc., something should still be preserved under the thick protective covering of earth at the south end; and it is here that we may hope for valuable results in the next campaign.

An interesting discovery at Nemea this year must be credited to Mrs. Spiro Peppas, the wife of one of our workmen, who brought for our inspection a handful of potsherds and a figurine of terracotta which she stated had been turned up by the plough in her field on the slope of the ridge bounding the valley on the east, in a region called *pezoulia*. She was persuaded to point out the exact spot to us and we immediately began a trial trench. Directly beneath the surface of the ground was uncovered a large mass of pottery, evidently a deposit of votive offerings removed from a shrine. These *ex votos* had clearly not been thrown away

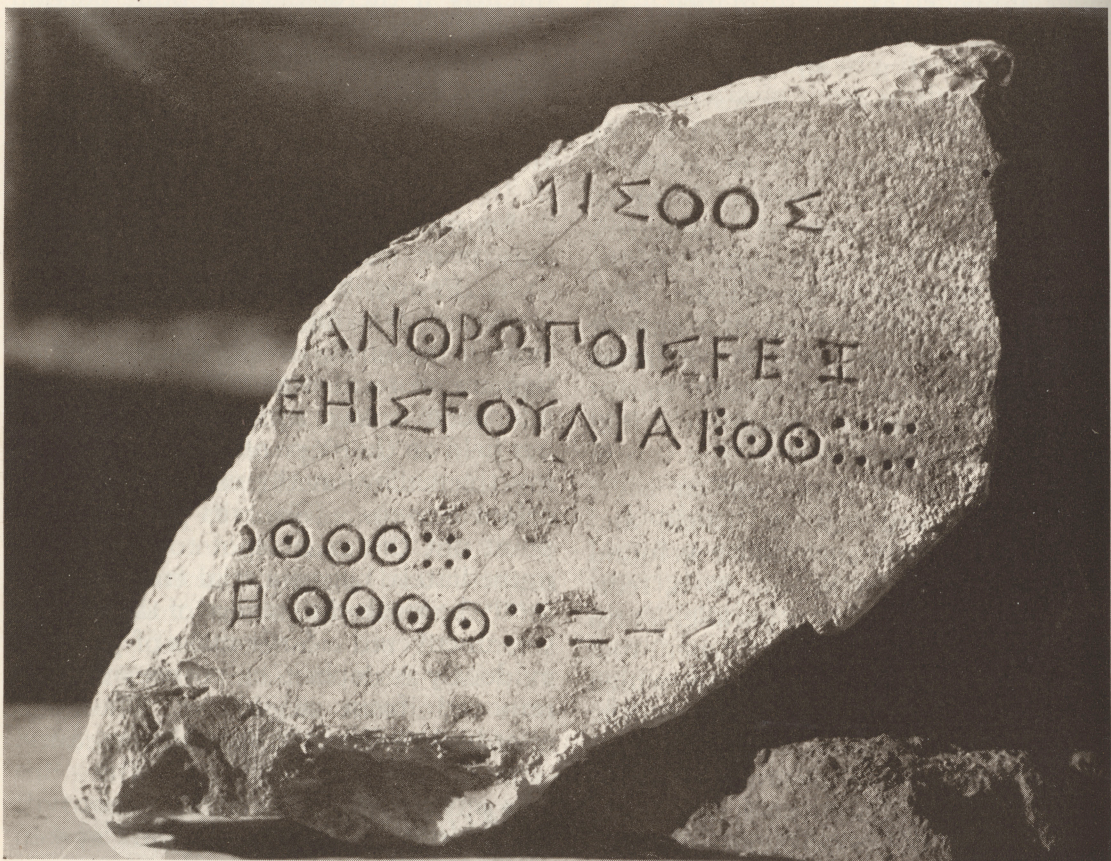


HOUSE COVERING THE GREEK BATH AT NEMEA.

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as worthless rubbish, but had been carefully buried in a small pit hollowed out in *stereo*, or the native rock, for the purpose. The pit was roughly circular with a diameter of about 2.00 m. and a depth at the center of 1.00 m. Most of the vases lay together near the middle of this area, closely packed one

though the bulk of the vases seem to be Proto-Corinthian and Corinthian fabrics; and the main part of the deposit thus appears to belong to the seventh and the sixth centuries B. C. Many of the small pots were removed intact, though the great majority were badly crushed and shattered. As all the



IN THE GREEK BUILDING UNDER THE BYZANTINE CHURCH THIS INSCRIPTION WAS FOUND. IT MAY HAVE BEEN PART OF THE CONSTRUCTION ACCOUNTS OF THE CONTRACTOR.

inside another. The deposit comprised several hundred small vases, cups, *skyphoi*, jugs, *aryballoi*, dishes, etc.; and a number of figurines of terracotta. The latter were chiefly seated female figures of the archaic type known from the Argive Heraeum, Tiryns and elsewhere. The pottery includes a few specimens of the Geometric style,

material was carefully collected these latter can eventually be reassembled and restored. The work of cleaning and mending has not yet been commenced, since the fabric was in all cases very soft and easily dissolved into clay, and the painted decoration was not well enough preserved to stand treatment in acid. When the material

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has thoroughly dried out and recovered its hardness it can be properly cleaned and put together, and will constitute an important collection of pottery of the early Greek period at Nemea.

The fifth and most unexpected discovery of the season was made on the east slope of the hill called Tsoungiza, which rises just west of the village of Heraklion and which in 1924 was found to bear the remains of a prehistoric settlement. Not far above his house at the edge of the village, Costas Koutsouris recently made a circular *aloni* or threshing floor. Owing to the slope of the ground, he first cut a broad, curving incision into the hillside, the earth and stone thus removed being utilized, with the support of a retaining wall, to form a wide terrace on the east which provided space for the eastern half of the circle. The level floor of the *aloni* was thus in part made of earth, in part hewn in native rock, a soft *poros* which everywhere on this hill lies just below the surface of the ground. In the western part of the *aloni* it was observed that the rock terminated in an almost straight vertical line running from east to west, and was succeeded toward the north by a floor of hard packed earth. This earth when examined was found to contain numerous pebbles and potsherds, a circumstance which pointed to the conclusion that it was really an ancient fill and demanded further investigation. The straight line of demarcation between the filling of earth and the rock led indeed to the hope that we had found the *dromos* or entrance of an early rockhewn tomb.

Permission having been obtained from the owner, part of the western half of the *aloni* was accordingly excavated; since the time available was short this first pit was limited to a

space roughly 4 x 5 m. in area. The fill proved to extend to an average depth of 4.40 m. below the platform of the threshing floor, and from its character it became clear that we had come upon a large natural cave, the roof of which had fallen into the chamber, completely filling the cave to the level of the sloping hillside.

The full size of the cave cannot be determined without further digging, but it is certainly of very considerable dimensions. From superficial indications it appears to continue at least ten meters westward beyond our pit, perhaps much more, and broadens out to an unknown distance toward the north; indeed, the small area uncovered by our pit seems to be merely a sort of antechamber to the real cave itself. The complete exploration of this latter, which will be a large undertaking, will have to be resumed in the next campaign at Nemea and may be expected to yield results of very great archaeological and historical value.

Unquestionably the cave had been used by man for a long period both before and after the collapse of its roof. There were no remains of human skeletons. The bones found were all those of animals: among the latter were certainly included sheep, and other larger quadrupeds may be represented. A vast quantity of potsherds was collected, filling more than twenty baskets; the whole of this material appears to belong to the Neolithic period. Owing to its soft, decomposed condition, as a result of the dampness to which it had so long been subjected, it has not yet been cleaned: it seemed wiser to wait until exposure to the air should permit it to dry and harden. The fragments have been kept in separate boxes according to the depth at which found, and when they are in

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satisfactory condition for study may provide important stratigraphic evidence for the development of pottery in the Neolithic Age. In the meantime it may be said that several kinds of ware are represented.

The bulk of the sherds belong to perfectly plain vessels without decoration. The two commonest shapes are

black knobbed ware found at Orchomenos in Boeotia, and to the corresponding red ware so characteristic in the earliest layers at the Neolithic sites in Thessaly.

Another kind of ware, of which many good specimens were found, bears a decoration applied in red paint on a white slip or in red paint on a buff



THE GREEK BATH, SHOWING THE SUBSTANTIAL PROTECTION AFFORDED AGAINST FROST AND HEAT.



NEMEA STILL PRESENTS MANY MYSTERIES TO THE STUDENT.

a very deep bowl with a well-made, narrow, raised base, and a similar, gourd-like vessel with a rounded, conical bottom. Many of these pots are almost coal-black in color; others are buff and some appear to be red. In all cases the surface is smooth, often brightly polished; frequently it bears a few small raised knobs or bosses, sometimes in rows, sometimes irregularly distributed. This fabric, which is very good, is clearly akin to the plain

ground, and is unmistakably related to the similarly decorated pottery also belonging to the First Neolithic Period in Thessaly. The decoration consists for the most part of simple linear geometric figures, often filled with parallel lines or cross-hatching. The shapes are not very different from those represented among the plain wares; the fabric is excellent and the surface smoothly polished.

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south abounds in dolmenic remains, while—rather curiously—middle Portugal has very little of such archaeological treasure.

Our actual knowledge of Celtiberian history is derived mainly from a variety of coins which are inscribed in an alphabet having many points of similarity with the western Greek alphabets, and, in some instances, with the Punic. This is but rarely found in inscriptions, and only a few words of the dominant language of the Iberians or Celtiberians have been preserved. The earliest date we have regarding the Celts is in Herodotus, where he alludes

to the Celts as occupying the south of Cynetes (in Portugal).

So we do not know, and doubtless never shall know, for what purpose the dolmens served; whether they were tombs, or altars, or temples; monuments of the migratory march of races, or the equally migratory march of times and seasons. Yet they still stand as they have stood down through the ages, nearly always opening to the east, and grim, isolated, mute and hoary in their evidence, the most ancient edifices now in existence that have been erected by man in Europe.

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Some fragments bearing incised decoration seem to represent still another kind of ware; but it is still too early for a complete classification and evaluation of the material. It may safely be said, however, that this pottery already constitutes the most important discovery of recent years in the Neolithic field, and when the rest of the rich deposit in the cave has been cleared out the contribution of Nemea toward the history of the civilization of the Stone Age in Greece will be of noteworthy significance.

To complete this preliminary report brief mention should be made of another task undertaken during the campaign; namely, the provision of adequate permanent protection for the Greek bath discovered the preceding

year. It is hardly necessary to state that one of the first obligations of a conscientious excavator should be to take all possible measures for the conservation and lasting preservation of the antiquities he uncovers, and to leave them in such a state that they can be properly seen and understood. The generosity of our supporters in Cincinnati has now enabled us to do this on a particularly satisfactory scale at Nemea. In accordance with plans worked out by Dr. Hill this work was begun in December and has now been carried well along toward completion. The roof will soon be in place and the Hellenic bath at Nemea will thus be assured of the permanent preservation its interest merits.