have a desire to leave none of this ancient débris on the Tell untouched.

At the present stage of the excavations at Tell Zakariya it is somewhat early to say much about its identification. In his discussion of the site of Gath Dr. G. A. Smith ¹ shows that it must have lain inland, upon the borders of Hebrew territory, on the route of the flight of the Philistines after the battle of Shocoah, and probably near to Ekron. These requirements are about equally balanced in the cases of Tell-es-Sâfi and Tell Zakariya. Both are inland. The Vale of Elah, along which the flight took place, sweeps around the east and north sides of the latter, and enters the plain close to the former. Tell Zakariya is closer upon the border of Hebrew territory; Tell-es-Sâfi is nearer to Ekron. Gath disappeared from history about 750 B.C. The Jewish pottery, which seems to be the latest at Tell Zakariya, with the exception of an infinitesimal proportion of late Greek and Roman types, ranges at Tell-el-Hesy from 1,000 to 400 B.C. This report has confined itself to the excavations. However, Tell Zakariya presents an extraordinary series of rock-cuttings which we have as yet only partially examined. A general description of these has been prepared by Mr. Macalister and is forwarded by this post. I have never examined the caves at Beit -Jibrin, but I gather from the descriptions that some of the rock-cuttings here resemble them in some particulars.

Tell Zakariya, December 3rd, 1898.

The rock-cuttings of Tell Zakariya.

By R. A. Stewart Macalister, M.A.

The remains of rock-working, with which Tell Zakariya abounds, may be considered under three heads: cup marks, miscellaneous rock-cuttings, and chambers.

A. Cup marks.—Of these I have noticed a considerable number, and it is highly probable that more remain to be

¹ "Historical Geography of the Holy Land," p. 174, &c.
found. They are of the characteristic half-melon type which I have observed at El-Mediye also; very different from the flat saucer to which I am accustomed in Ireland. By a happy accident one of our trial-pits on the summit plateau struck upon a cup mark, 10 inches in diameter and 9½ inches deep, cut in the rock-surface. This fortunate discovery supplies us with an indication of the period to which these markings are to be assigned. The débris had accumulated above it to a depth of 10 feet 6 inches, 3 feet 6 inches of which was the dark hard soil that, for the most part, contains early types of pre-Israelite pottery. This fact at least admits the possibility of the cups being the work of a race which in the occupation of Palestine preceded the tribes so often enumerated in the Pentateuch.¹ I carefully examined this specimen, in the hope that, having for so long been protected from the weather, it might preserve some indication of the nature of the tools employed in its formation, but in vain; it is worn as smooth as those which have always been exposed to the air.

I have observed one case only of a cup associated with other rock-cutting. In this example a ring is cut on the stone, not, as usual, concentric with the cup, but so that the cup lies on the circumference of the ring.

b. Miscellaneous rock-cuttings.—Of these there are several capable of being classified as follows:—

1. Scarps.—These are for the most part apparently quarries, though few are as much as 3 feet deep. Their presence in considerable numbers is sufficiently accounted for by the requirements of building material for the large building on the hill-top. Some of them are apparently associated with the chambers to be described presently, but the juxtaposition may be fortuitous.

2. Vats.—Of these there are two, apparently part of the "plant" of an olive or wine press. One is in the rock outcrop west of the main building on the summit plateau; this measures 6 feet 6 inches by 4 feet. The other, which measures 5 feet

¹ I avoid the term "Amorite," commonly applied to these tribes, as being too specific to denote peoples who, though associated geographically, may for all we know have been of widely diverse ethnological affinities. The term "pre-Israelite," though not wholly free from objection, seems to me preferable.
by 3 feet 3 inches, and is 2 feet 6 inches deep, is a little above the col connecting the Tell with the next hill to the south. In the bottom of each is a receptacle shaped like a cup mark.

3. Steps.—I have observed two short flights of steps cut in rock-surfaces. Their purpose is still obscure.

Besides the rectangular vat referred to, the rock outcrop on the plateau contains a large circular vat, about 3 feet in diameter, apparently part of the same system; a semicircular scarp; four conspicuous rectilinear scarps; and three large and several small cup marks. A few trial pits in the neighbourhood of this outcrop will determine whether similar works are covered by the earth in the neighbourhood, and will thus indicate the relative age of the rock-cuttings and the plateau. If there be no working under the present soil, or if the rock rise suddenly to the outcrop (so that the latter was difficult of access before the plateau was formed), then in all probability the plateau is earlier than the rock-cutting, and vice versa.

c. Chambers.—The outline descriptive catalogue here presented must be regarded as merely preliminary to a more detailed account; and I cannot claim even that the list is complete, as others may still await observation. The entrances are rarely conspicuous, and sometimes seem to have been intentionally obscured. As many of them cannot be entered without a crane, and as we have as yet been unable to spare men, time, or material from the important works of the hilltop, I have had to be contented with an inspection through the entrance hole in several cases.

They will be found to fall into several classes, and probably belong to widely different periods; but in the present list I prefer to follow the topographical order, as it might perhaps be found that fuller investigation would shift individual examples from one class to another. I will, therefore, merely indicate the broad lines of subdivision here. Several, being fitted with loculi, are certainly sepulchral, and these fall into two groups in which one contains long loculi for inhumation, the other the small cell loculi of an ordinary cinerary columbarium. One at least was in all probability used for residence, and there is an indication that another was at some time used as a place of Christian assembly. There remain a considerable
number whose purpose must for the present remain undetermined. Only a very few were unquestionably cisterns.

Those who have seen the Royston cave in Hertfordshire will be able to form a good idea of the normal type of these excavations. They are, as a rule, irregularly circular on plan, bell-shaped, and entered by a hole in the roof. Often a staircase runs down from top to bottom, but these are nearly all broken at some point, as though with the intention of rendering entrance impossible—possibly to prevent the cave from being rifled when it was finally closed. A second entrance in the majority of cases gives admission to a narrow creep passage abutting on the staircase at some distance from the top.

In several, narrow creep passages (by no means easy to negotiate) lead from the main chamber to others.

The stone in which these chambers are cut is a white chalky limestone, very friable, except on the outer surface, which has weathered hard. Its disintegration has, in the majority of cases, covered the floors with a thick layer of fine dust, which, combined with the occasional fall of larger stones from the roof or through the entrance, renders the heights of the chambers as given below rather less than was the intention of the original excavators. In all cases "height" or "depth" in the following list denotes present dimension.

I shall describe first those remaining on the hill-top, then in turn those on the southern, eastern, and northern slopes. I have not found any on the western side.

(a) On the Hill-top.

I. In the centre of the main building, a cistern consisting of a chamber about 6 feet high, approached by a vertical shaft, approximately square, in section of about 1 foot 9 inches bore, and 11 feet length. Not explored.

II. Inside the main building, a chamber, dome-shaped, oval on plan, the long axis (west by north and east by south) 11 feet 1 inch long, the cross axis 9 feet 9 inches. Height of chamber 7 feet 7 inches; an oval entrance, 5 feet long, 2 feet across, and 3 feet 11 inches high gives access to it; a flight of steps, five in number, runs down its northern side from the top to within 5 feet 8 inches of the bottom. There is only one other example
of a staircase not reaching the bottom of the chamber. Two Phoenician jars, placed in situ, but empty, were found within the chamber on the floor. It is filled with earth and buried under 13 feet of débris inside the main building; a wall runs partly over the entrance. There are traces of plaster on the east and south sides. (This chamber having been submitted to a careful examination has now been closed again.)

III. A cistern found under the north-western tower of the main building, extending from 14 feet to 21 feet below the present surface of the ground. Footholds have been cut in the entrance hole.

IV. On the summit-plateau, at the bottom of a depression in the ground about 8–10 feet deep; a large irregular conical pit, with rapidly oversailing walls, choked with débris. There is one entrance in the top and another communicating by a creep at the sides. It is marked “cistern” on the accompanying plan, but this indication must not be taken for a final verdict on the purpose of the excavation. Not explored.

V. Close to the northern revetment tower, a cylindrical shaft, well built of masonry set in cement; depth 16 feet 6 inches, bore uniformly about 2 feet 6 inches. The presence of an ancient stone trough, as though for watering cattle, makes it probable that this is the shaft of a well or cistern.

(b) On the Southern Slope.

VI. An oval chamber with one entrance in the top and another in the side. The latter is divided into two by a central pillar, but is blocked by fallen débris, as is the central hole by fallen stones. No staircase and no loculi are to be seen from the top. The chamber is oval on plan. Not explored. A neighbouring rock shows traces of scarping, and there seems to be the remains of a trough, much broken and weathered, about 20 feet away.

VII. A shaft, 20 feet deep, blocked with stones. Nothing is known of the nature of this cutting. Near by is a small cup mark.

(c) On the Eastern Slope.

VIII. A large columbarium, 17 feet deep, floor diameter about 17 feet. Six rows of crematory loculi are cut in the
walls, those in the third from the top being triangular, the others square. The plan and section are irregular. There is no certain evidence of passages or auxiliary chambers to be seen from the top. There are two openings, one large and lozenge-shaped, the other small and circular; but (exceptionally) neither has the advantage of the other in providing a convenient approach. Not explored. Close by is a large stone trough.

IX. A very large bell-shaped chamber, 25 feet deep. Two entrances, one originally providing access to a flight of steps (which now, however, stops 10 feet short of the opening), the other a hole in the roof. The entrance of a passage, leading into the hill from the foot of the stairs, can be seen from above; its destination is unknown. Not explored.

X. A small chamber, 22 feet long, 5 to 7 feet high. This is very irregular, and is probably a natural cavern.

XI. A circular chamber, now 8 feet deep; there seems to be one or two crematory loculi. Not explored.

XII. A large pit, 26 feet deep, with one entrance only; there is a staircase, but the top is broken. At some time this has apparently been used as a cistern, as deep rope-marks are cut in the side of the entrance. It is to be noticed that these are on the up-hill side of the entrance, not (as would be expected) on the down-hill side; no doubt because the staircase would prevent buckets reaching the bottom of the well if let down from the latter side. No loculi are to be seen. Not explored.

XIII. A large irregular chamber, 16 feet deep. Much débris in the bottom. No loculi. Not explored. Close by this is a rock with a well-formed cup.

XIV. The shell of a small chamber, the outer side of which has caved in. It is 7 feet 6 inches high, 21 feet across. The small creep passage which gave access to it remains intact.

XV. A passage, 1 foot 9 inches high at the entrance, and 3 feet across, driven obliquely downwards into the hill side for a long distance. Destination unknown. Not explored.

XVI. A chamber, 27 feet 6 inches across, now only 8 feet high, the roof having fallen in. There are a few crematory loculi, one of them triangular, on the eastern side. A stone
with a hole through it is lying among the débris on the floor. The side entrance is 8 feet across and 6 feet high.

XVII. A small chamber, caved in and blocked with débris. Two or three crematory loculi are visible in the exposed part of the wall.

XVIII. A very large cutting, approximately circular, 33 feet in diameter, maximum height 5 feet 6 inches. In the centre is a pillar which has been left as though to support the roof; this is about 5 feet by 4 feet, in cross-dimensions. Pick marks are prominent at the inner end; here there is a shelf or step, 6 feet long and 3 feet wide. That this large chamber was intended as a habitation is indicated by the presence of a water groove in the rock surface, around the entrance hole, designed to prevent the entrance of more rain than was unavoidable.

XIX. A small chamber, 17 feet by 9 feet, height now 5 feet 6 inches, but broken and blocked with débris. No loculi. There was a creep entrance to it, now blocked.

XX. A very remarkable and interesting crematory columbarium. The principal chamber is irregular in plan, but, roughly speaking, 22 feet 3 inches in diameter and about 12 feet high. The original entrance at the top is now blocked; there appears to have been a staircase from it to the floor, but it is destroyed. The present entrance is not original, as is shown by its interfering with three rows of triangular crematory loculi; it is a hole broken through to a small domed chamber, about 8 feet in diameter, which communicates with the open air. Opposite the present entrance another irregular hole gives admission to a second chamber, now for the most part filled with rubbish, but with crematory loculi so far as the sides can be seen. To the left of this chamber an extremely awkward and narrow opening, about 1 foot 3 inches in diameter, gives access to another apartment. Close by the present entrance is a large squared stone bearing the cup and ring already mentioned. There is also lying near a stone, 4 feet 3 inches long, with a reveal (or possibly a shallow cornice) cut upon it.

Further exploration, which would involve the clearing out of débris, would probably reveal fresh facts about the excavation, and might result in the discovery of objects that would throw light on its period. The more easily accessible chambers
in the Tell have long since been rifled, and it is only by excavation in such an example as this that we can hope to find portable antiquities.

(d) On the Northern Slope.

XXI. A most extraordinary series of chambers, connected by creep passages. They are arranged in two storeys (I suspect excavation will reveal a third), circular holes in the roofs of the lower chambers communicating with apartments above. I shall not here attempt a description of this excavation, which would be unintelligible without elaborate plans and sections: but will content myself by saying that I have already been in 13 of these chambers, and that as from the majority of them creep passages radiate, leading to unknown possibilities, I have no reason to suppose that I have nearly exhausted the series. The inhabitants have stories of the extent of the excavation which one would be inclined to put aside as extravagant were they not so definite. This work merits very careful examination. The entrances to some of the creeps are recessed as though to receive movable doors of wood or stone.

XXII. A composite excavation, much ruined, consisting of the following members:—(1) A chamber, fallen in, 38 feet in diameter, with a blocked creep entrance on the south side. (2) A small domed cell (perhaps merely a natural hole in the rock, but in any case almost entirely ruined). (3) A chamber, 23 feet in diameter, but of irregular plan; three rows of square crematory loculi are visible above the débris, which thickly covers the floor. A blocked creep passage leads off at the side; its destination is unknown. (4) A small domed chamber, 7 feet in diameter. At the entrance to this is a small flight of four steps. (5) A domed chamber, at present inaccessible except through the hole in the roof, 20 feet deep; a passage (destination unknown) can be seen from the top. There is a small hole broken between chambers (4) and (5), but it is too small to have been done with intention. Nothing further is known of the extent of this excavation, which has not been fully explored.

XXIII. A large bell-shaped chamber, 30 feet high, 27 feet in diameter at the bottom, approximately circular. There is a
winding flight of steps, broken at the top, with the normal second entrance abutting on it about two-thirds of the way up. At the bottom is a small inhumatory loculus, L-shaped, and a shallow niche, perhaps an incomplete loculus. From beside the steps a most awkward winding passage leads off—destination unknown; beside it is a loculus, with reveal for a movable door, rather larger than an urn-cell, and rather smaller than a receptacle for a body. In the side of the bell, at a height of about 8 feet from the present floor, is cut a short flight of steps giving access to three creeps of unknown destination (one of them is known to lead through a small domed chamber). There is evidence also of the existence of another creep below these; while yet another, choked with débris, leads off the passage connecting the secondary entrance with the staircase, and possibly uniting this system with the great series of chambers No. XXI.

XXIV. The remains of three chambers arranged round a fourth; the latter has caved in, and, with one exception, all the chambers are much ruined. This is dome-shaped, with a circular hole in the roof, and is about 10 feet in diameter, but the floor is raised by débris. A blocked creep passage, of unknown destination, leads from it. The main chamber is about 40 feet across. Of the other two, one seems to have been square in plan—the only example of this shape hitherto observed. From the other a creep passage leads off, at present impossible to explore. Beside this group is a hole in the ground—the entrance to a fifth chamber, probably associated with the rest, but choked up.

XXV. A hole in the ground, choked up and grown over with weeds. A creep passage, also choked, leads out from it. Not explored.

XXVI. This imposing work consisted of a large chamber, about 110 feet in diameter, which has now entirely caved in. In the centre of the back wall is a large opening giving admission to a creep passage, which, however, does not extend far. To the right is a small domed hole sunk in the ground, with the usual secondary entrance; this is blocked. A passage leads off close to this, and bifurcates, one ending in a hole running up to the entrance and an inhumatory loculus, the
other to a similar loculus, or possibly a creep passage. To the left of the principal chamber is a very complicated group of passages, chambers, and sub-chambers, impossible to describe intelligibly without the assistance of sections. This group of caves is a very conspicuous feature of the north side of the hill.

XXVII. A circular chamber, not of large size, too ruined to be described satisfactorily.

XXVIII. A large crematory columbarium, 30 feet deep. It is entered by a square opening, which communicates on the right with spiral stairs of the usual type: these, however, break short about half way down, and the bottom is not accessible. There is also a hole in the top of the bell. Stairs can be seen rising from the floor, but whether they lead to a creep or not cannot be ascertained without entering the chamber.

The square entrance hole first mentioned also gives admission to a smaller chamber, not easily entered without excavating, but apparently not of much importance.

XXIX. A large crematory columbarium, of irregular plan (approximately rectangular with one semi-circular end). The loculi are for the most part triangular. The secondary entrance is of large size, and its sides are also fitted with loculi. There is a second chamber, with independent entrance, filled with débris and much ruined.

XXX. Below No. XXVI, the entrance to a chamber, completely blocked.

XXXI. A large cuspidal chamber, 33 feet across; there are three inhumatory loculi in it. The floor is much raised by the accumulation of débris.

XXXII. Above No. XXVI, a domed chamber with a hole in the roof, but no other entrance; partially filled up with débris.

XXXIII. A large chamber, an irregular oval on plan (about 24 feet by 38 feet). There are steps all the way from the entrance, which are worn smooth at the top. The depth is 23 feet. A second chamber, 20 feet in diameter, and now 7 feet 3 inches high, breaks into it at the top. There are triangular and square crematory loculi in the latter chamber, which has two entrances, one circular, the other rectangular.
XXXIV. A chamber with an approach to it (?) scarped in the rock, but all is too much overgrown and covered with débris to permit of its being described.

XXXV. A large well-cut circular bell-shaped chamber, 26 feet in diameter, 23 feet deep. Its staircase is practically complete. The entrance is a well-cut rectangle, 9 feet 6 inches by 3 feet, and has apparently been prepared for a door. Beside this chamber is a cavity cut in the rock with water-drains leading to it.

XXXVI. A circular chamber of large size, but so full of débris as not to be worth measuring. It cannot be entered without a crane.

XXXVII. A large oval chamber, 28 feet 6 inches across, 22 feet high. It is provided with a practically unbroken staircase. Two Latin crosses are cut on the side, and also an emblem (?) in a circle, half of which has intentionally been hacked away.

XXXVIII. A small domed chamber with a single hole in the roof. It is too ruined to be worth measuring.

XXXIX. A double-entranced chamber, beside the last-described. This is 13 feet across and 12 feet deep, but the ground is raised considerably by the accumulation of débris. There is a series of crematory loculi of unusually small size in this chamber.

XL. A bell-shaped single-entranced chamber of the ordinary type, 30 feet deep and 30 feet across. Handholds are cut in the wall along the line of the staircase, which is practically uninjured.

The above completes the series so far as it is known to me as yet. As we pass the chambers in review several problems confront us for solution. Are we to believe, for instance, that the gigantic well (No. XXIII) was cut merely to provide admission to two loculi and five narrow passages whose united apertures do not occupy one-hundredth part of the whole wall surface? How are we to reconcile the early date, indicated by the occurrence of an undisturbed stratum of pottery dated 1500 B.C. above No. II, with the late date suggested by the columbaria: are the crematory loculi secondary additions or are
the chambers containing them entirely later works? Why was
the awkward creep passage system of communication adopted,
and how were the enormous and obvious difficulties of excav­
ation attending their use surmounted? These and other
questions demand solution. Sufficient material has not yet
been accumulated to justify us in attacking the problems thus
indicated; but I have, I think, said enough to show that, even
did Tell Zakariya not possess the archaeolological attractions set
forth by Dr. Bliss in the foregoing report, its extraordinary
series of rock-cut chambers would imperatively call for scientific
attention.

NOTE.—The library available in a camp is necessarily too
limited to enable questions of identification to be entered into
thoroughly: but for various reasons, which I hope to be able to
develop later, there seem to be grounds for equating Tell
Zakariya, the site of our present excavations, with the Azekah
of Joshua x, 10. It is as well to mention that, in suggesting
this identification, I attach little or no importance to the
superficial similarity of the names Azekah and Zakariya! Dr.
Bliss has already written on the possibility of identifying
the site with that of Gath.

REPORTS BY DR. CONRAD SCHICK.

1. Deir ed-Dose, or the former Convent of Theodosius.—The ruins of this
convent are situated on the range of mountains to the right of the
Kidron Valley south-east of Jerusalem and about 5½ miles distant. In
1879 when travelling to and fro in the Wilderness of Judea, east and
south-east of the Holy City, to find out as much as possible all the
sites of former eremites or anchorites, I came to this ruin, which I
have described in the “Zeitschrift” of the German Palestine Society,
1880, p. 34, No. 22, and put down on the map added to the descriptions
of 29 places. I furnished also a plan of Deir ed-Dose (Plate II), called
on it “Ubedieh,” as the Bedawin call the place. This is the name of
their tribe, which they give to the ruins because they use them for store­
houses, and have near a place of worship, “Sheikh Khalife,” a Moslem
Makam.

In the “Name Lists,” p. 303 (Survey of Western Palestine), the
place is mentioned as “the Ruins of the Monastery of the Son of Obeid;
also called Mar Theodosius,” and in “The Memoirs,” vol. iii, p. 111,