FIRST REPORT ON THE EXCAVATIONS AT TELL ZAKARIYA.

By F. J. Bliss, Ph.D.

For almost six weeks we have been encamped at this place, and I must now submit a general report of the work done. General it must be from the circumstances of the case. Several distinct operations have been taken in hand, and are as yet incomplete; for example, a contoured survey of the Tell, excavation of the large building on its summit, a large clearance to the rock inside the enclosure, &c. I must content myself with outlining the main features of the work, leaving a more scientific account for a later issue of the Quarterly.
First I must inform my readers how we happen to be excavating at Tell Zakariya. After the close of the work at Jerusalem in June, 1897, in accordance with the Committee's instructions, I paid a visit to Tell-es-Sâfi, not to report on that site, as it had already been chosen as the field for the new excavations, but to examine the outlying districts, with a view to including within the 10 square kilometres permitted by the Turkish law on excavations, such ruins as might appear to me to be ancient and important. On referring to the map of the Survey, in Jerusalem, I found the ruins to be very numerous, and by consulting the text of the "Memoirs," I was able to eliminate from the list many which Colonel Conder pronounced to be unimportant, as, for example, those consisting merely of small heaps of stones. In my reconnaissance I was accompanied by our Imperial Commissioner, Shauket Effendi. We took train to Deir Abân, where our horses awaited us. The weather was very hot, and we were glad to stop for lunch in the cool Convent of Deir Jemal. Thence to Tell Zakariya the ride is somewhat over an hour in length. Mounting the steep side to the summit, I was at once struck by the natural strength of the site. The hill stands almost isolated, rising abruptly for almost 350 feet above the Vale of Elah, which, coming west from the ancient Shocoh, sweeps around the eastern and northern sides of the Tell, and continues west through the low hills of the Shephelah till it debouches into the plain at Tell-es-Sâfi, five miles away in a direct line. To the west the fall is also very great, while to the south the Tell is joined by a neck of land (about 100 feet below the summit) to a hill beyond. The summit is about 350 yards long by 150 yards broad. Far away to the west a long line of sea is visible, and between lies almost the whole land of Philistia. The most prominent feature is the bold hill of Tell-es-Sâfi, while the gardens and houses of Ramleh and the sand-dunes near Jaffa are distinct. The position of Ekron, Jamnia, Ashdod, and Ascalon may be made out, and a long part of the way towards Gaza. To the east appears the long line of the Judaean mountains, separated from the Tell by the low hills, sparsely and soberly clad with brush and scrub, which make the Shephelah of to-day a great charcoal country. Immediately below lies the Vale of Elah,
Turning from the view to the Tell itself, I found hardly any superficial traces of building, save for a line of stones cropping out from the surface of a raised mound, which appeared to be an accumulation of some 25 feet of débris above the general level of the summit. The whole surface was strewn with potsherds, and directing my servant to collect me a little heap of pottery, I examined the specimens, while he made a second heap. This operation was continued until I had examined several hundred sherd. Among many pieces which were indeterminate, I was glad to notice the general absence of Roman ware and the presence of Jewish types. Two or three Roman bits did occur, but the slight proportion of these to the other types made me hope that their presence might be merely sporadic. Experience has shown me that on a genuine Roman site the pottery fragments are unmistakable. I quite recognised the possibility that the indeterminate ware might represent some late period during which fragments of Jewish and Roman ware belonging to earlier occupations might have found their way to the surface, but the slight amount of débris appeared to me to be against this view, and with considerable confidence before riding away I marked down Tell Zakariya in my note-book as "an important and ancient site." Colonel Conder had already come to this conclusion. I am glad to say that the inferences drawn from my brief examination of the surface have been justified by the excavations of the last few weeks. After having furnished the world with a key to the pottery of Palestine by his work at the stratified mud-brick mound of Tell-el-Hesy, Dr. Petrie wrote:—"A single glance at a mound of ruins, even without dismounting, will show as much to anyone who knows the styles of the pottery, as weeks of work may reveal to a beginner." I have him to thank for having first placed this key in my hands.

We found our camp pitched above the white cliffs of Tell-es-Sáfi, on the north end of the mound. I had visited the place before and had agreed with Petrie as to the antiquity of the site, but it was a disappointment to note how large a part of the summit is occupied by the modern village with its rich
and extensive tobacco fields. Moreover, in order to reach the lower levels on the knob of the hill, it would be necessary to dig through the crusading remains of Blanche-Garde, the famous fortress, a few traces of which have been recently uncovered by the natives. A crowd of villagers were squatting about the tents, and many expressed wonder that we dared to risk camping for even two nights within reach of the deadly malaria which hangs over the watercourse, filled during the autumn, when the winter rains have been heavy, with dank green pools. They declared that at such times many of the inhabitants migrate for a season, and the rest fall ill. The view from the summit is similar to that seen from Tell Zakariya, but not so extensive as it is 600 feet lower.

The next day we rode south-east, past Khurbet Dhikerin (identified by some with Gath), past the modern village of the same name, with its wonderful system of ancient rock-hewn cisterns, to Tell-ej-Judeideh, a lofty mound near Beit Jibrin (Eleutheropolis). This Tell is similar in form to Tell Zakariya, having a square top (the artificially scarped sides directed to the cardinal points), and a raised mound at one end. The examination of the pottery showed the same results as found the day before at Tell Zakariya. From the summit I could plainly see Tell Bornât, but as it was sufficiently described in the notes at the end of Petrie’s “Tell-el-Hesy” I did not visit it. Like Tell Zakariya, Tell-ej-Judeideh is unencumbered with modern dwellings and graves. That evening and the next day I made further examination of Tell-es-Sâfi and came to the conclusion that, though the modern encumbrances will prevent its ever being exhaustively excavated, it is workable. In his brilliant work at Tell-el-Hesy Dr. Petrie never touched the top of the mound, but dug around its sides only. While my more detailed excavations, of course, greatly supplemented his work they did not materially affect his theories. If work around the unencumbered slopes of Tell-es-Sâfi will yield as good results as those obtained by Petrie at the other Tell they will be worth while, even if we cannot dig into the heart of the mound.

Before proceeding north the next day to the railway station at Sejed we made a detour to the west to examine Tell-et-Turmus, which struck me as unimportant. On studying the
map when I returned to Jerusalem I found that Tell-ej-Judeideh, Tell-es-Sâfi, and Tell Zakariya could all be included in the 10 square kilometres by allowing for a square kilometre around each Tell, and by drawing lines connecting the former with the two latter Tells. Within these lines occurred five ruins: Khârbet Dhikerin, Khârbet 'Askalûn, Khârbet Nuweitih, Khârbet 'Okbur, and Khârbet es Surah. Near Tell-ej-Judeideh is a Khârbet of the same name, bringing the sites applied for up to nine. I may state here that owing to the wording of the permit I am not sure whether all these sites are available, but Tell-es-Sâfi and Tell Zakariya are distinctly granted. The matter, however, is being cleared up.

Owing to the usual routine of business, including correspondence with the Constantinople authorities, who were thus assured that our work in Jerusalem had been conducted satisfactorily to them, the issue of the permit was not announced until within almost a year of our application. At our request
it was dated October 1st, 1898, being available for two years from that date, but in consequence of delay in transmission, arising from the going astray of a letter, the document was not actually in our hands till October 19th. Mr. Macalister and I had been anxiously awaiting its arrival for about seven weeks, and it was a relief to have matters at last begin to move quickly. The permit arrived at the Consulate on a Wednesday. On Friday we were on our way to Hebron armed with a letter from the governor to the Kaimakam of Hebron, who received us very cordially and gave us a letter to the chief men of Zakariya and Tell-es-Sâfi, requesting them to advance our work in every way. On Saturday Yusif, the foreman, moved the camp to Deir Abân by train, whence he transported it on camels to Tell Zakariya on Monday, and on arriving at sunset I found it all in order.

My reasons for starting work at this Tell were both diplomatic and sanitary. In beginning work in a new district it seemed wiser to take first an unincumbered site and work here until the people of this part of the country had got used to us and to our work. In the second place Zakariya is free in the autumn from the malaria which then usually hangs about Tell-es-Sâfi, though since arriving here I find that that place is freer from the poisonous vapours than usual. The village of Zakariya climbs a gentle slope at the north side of the valley. On Tuesday morning the chief men, with their hangers-on, assembled and seated themselves under the olive trees. I handed the Kaimakam's letter to the Efendi, who handed it to the Khatib to be read out. A profound impression was created. We hoped to begin work the next day, but a difficulty arose as to question of wages. As this is a charcoal country we had to compete with that trade, which furnishes work all the year round. Again our arrival was synchronous with the olive-gathering, which made the people quite independent. At Tell-el-Hesy we paid a little over half the Jerusalem rates for labour, but here the rates average about three-quarters.

Work was begun Thursday, October 26th, with only a few labourers, as it was necessary to train them in, so that on Saturday we paid off only 18. By the next Saturday the number had grown to 32, and on the succeeding Saturdays the numbers were 57, 68, and 65 respectively. The men vary
much in intelligence, but we have trained in one first-class miner. On the whole they come under discipline very well, as those who quarrel are instantly turned off. For three days Yusif was on sick leave, and I had charge of 50 men and boys deepening an area 80 feet by 20, with several men at other points. What with boys jostling against each other as they hurried to and fro with their earth-laden baskets, with big stones cast up from the pit, with clouds of dust flying, I wonder such good nature prevailed. The arrival of the water jars brought up from the fountain on a moth-eaten donkey, driven by a gentle old lady, usually caused a sudden dropping of picks and baskets, until, throwing my overcoat over the jam, I declared that they were sealed with my own seal till lunch time. At first the weather was extremely hot, then the temperature dropped, but high winds prevailed, rendering work on the most exposed parts of the hill impossible, then came fierce rain-storms, which interrupted our work three days one week and two days the next, while the soft land on which we were encamped became a plain of mud. But now delightful weather has set in and we have moved our camp to an olive-grove where the soil is firmer.

We may now proceed to a sketch of the work done here this short season. While the survey of the slopes of the Tell is not yet complete, that of the summit has been finished and a plan is submitted. The summit of Tell Zakariya is in the form of a rude triangle, trending north-westwards from its base. It consists of a plateau having a distinct edge, as marked on the plan, below which on every side the land falls rapidly, although here and there the fall is broken by broad terraces, which are proved by the pottery strewn on their surfaces to have been occupied. At the south-east corner of the hill there is a raised mound, rising from 19 to 23 feet above the plateau level. The extreme length of the plateau from Tower I to the “road down hill” is about 1,000 feet; its greatest apparent breadth (along section E—F) is 440 feet; pits sunk in the raised mound have shown that the rock underneath it is not much higher than the general level of the plateau, hence the greatest actual breadth of the latter, in a line taken from Tower II across the “rock outcrop” and along the mound, is 500 feet.
The lowest level of the plateau is at a point on the edge at Tower II, which is taken as the zero point in marking levels. A glance at the plan will show that from the line E—F to the apex of the triangle the summit is fairly level, while south of E—F the surface is more irregular. The relation between the present surface and the rock was determined by a series of 16 shafts: three sunk along the line A—B, five along the line C—D, and eight along the line E—F. It will be seen that the present surface line of débris follows approximately the rock contours, except at the west side, where the débris runs level to the edge while the rock has a gentle slope. The débris is usually in two distinct layers. The first, resting on the rock (except at one point, where the red virgin soil was found), is from 2 to 10 feet thick and consists of hard, dark-brown soil. Above this there is invariably a stratum of light, grey soil, ranging in thickness from 4 to 9 feet. Layers of fallen stones occur at different depths. A careful record was kept of the pottery found at the various depths, and the results are marked on the sections by the initial letters in Lombardic characters:—A, denotes the Archaic ware, called Amorite by Petrie; P, denotes Phoenician; J, Jewish; G, Greek; and R, Roman. In the case of a mixture of styles, indicated by two or more letters, the first letter denotes the predominating element. A prefixed x denotes that only an individual specimen of the type was found; xx denotes two specimens. Two short horizontal lines = denote approximately the level at which the style of pottery was observed to change. The predominant types found in the higher stratum are Jewish and Phoenician. Among thousands of sherds only a dozen bits of Roman ware were found. In the three pits sunk along the line A—B, however, the Archaic types appear to predominate. While Jewish and Phoenician types occur in the hard, brown, or lower stratum, the prevailing types are Archaic, occurring at several points exclusively for several feet above the rock, thus showing an undisturbed stratification. A solitary bit of Greek ware occurred in this stratum.

Remains of buildings in situ were seldom struck in the 16 pits. A rude mud flooring, 4 to 5 inches thick, was found
plainly in situ but broken, at a depth of 5 feet near E, and a somewhat smoother floor, also of mud, above the burned layer to the right. In the midst of section C—D occurred a stone pavement, much settled and cracked by fallen stones, with house-wallings of rude stones. On the pavement were numerous potsherds, Phoenician styles mingling with Archaic types, which predominated. Near the rock in the middle of section A—B a pit-oven built of mud occurred. A very well made cup mark was found in the rock, and several scarp occurred, probably old quarries. Traces of rude foundations crop out from the surface at the north end of the plateau, but an examination of the most important one proved it to be merely superficial, one course of stones laid on earth. From the paucity of building remains in 16 small pits sunk on this large plateau, we cannot infer that buildings do not exist at other points. While sinking several trial pits on the raised mound before opening our large clearance, we were disappointed with the lack of traces of good masonry, but on making the clearance itself we found plenty of remains.

We have noticed the distinct edge to the plateau. This is a feature common to many artificial mounds, whose tops are comparatively flat, such as Tell-el-Hesy, Tell-el-Mutasellim (Lijjûn), &c., and from this fact alone we cannot argue that Tell Zakariya was artificially levelled. The sides of the pits along the edge were carefully examined, but in only one case did the light grey soil show the angle of shot rubbish. However, a study of the three towers found at the south-west inclines us to the opinion that some levelling took place at the latest period of occupation. The lines of the three towers are distinctly traceable in one course of stones cropping out from the slope. These stones are much weathered, but were apparently once well-squared (notably at the tower angles), and are fairly large, ranging at Tower II from 9 to 18 inches in height. On trenches around the walls we found that the masonry below the surface of the slope consisted of rough random rubble, laid in mud, and set so irregularly as to strongly suggest that they must always have been below ground. At Tower II the rubble is distinctly smaller than the stones which appear above the slope. Towers I and II project from the edge, while Tower III projects from
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The slope a few feet below. Their faces vary from 18 to 19½ feet in length. They presumably are set on the rock, as they were found to descend as deep as we dug. From Tower I a rude wall similar in construction to the underground rubble of the tower itself was found running north-west towards Tower II, the roughness of construction preventing our deciding whether there was a bond or not. It is not set in the rock; only a few courses appear, buried under the slope. No wall runs off from the other side of the tower, the latter having a distinct corner. In a long transverse trench between Towers I and II we failed to find a continuation of the wall just mentioned, but struck a rude flight of steps leading into a rudely built chamber through an opening about 4 feet wide, with a rude mud flooring, some 7 feet below the edge of the plateau level. However, from the north side of Tower II a similar wall, buried by the slope, and not resting on the rock, was found running towards Tower III. It is 11 feet 6 inches thick at the top, but narrows as it descends. This was picked up 21 feet beyond, and traced for 7 feet, where it appeared to return at right angles in a wall 2 feet thick. At the south-east angle of Tower III a rude wall, similar to those described before, was found, while the absence of a wall on the other side was proved. No traces of other towers were observed to the north, though superficial search was made.

In arguing as to the relation of the constructions described above, I would start from the assumption that the ground-line of the three towers at their time of building was the line of the present slope, as supported by the difference of masonry above and below the slope. As the walls running from the towers are apparently of the same date with those towers, and as these walls are buried by the slope which appears to be unchanged since the towers were built, it would appear that these walls were erected in places as a sort of revetment or retaining wall when the edges of the plateau were levelled and then buried by the slope formed over them. They never appeared above the surface, and did not connect the towers, as their absence in places under the presumably undisturbed slope shows. The towers thus rose isolated from the edge of the plateau at its south-western corner, at a point where, as the
contours will show (when the survey is complete), attack was to be dreaded. The steps leading to the rude house between Towers I and II would, according to this view, antedate the towers and the formation of the slope.

The eastern slope is faced with a lining of stones roughly coursed, found in one place to be laid in two thicknesses. This lining suggests the glacis found by Petrie at the south end of Tell-el-Hesy. The western slope to the north of Tower III is interrupted a few feet below the edge by a terrace marked on the plan, above which traces of a similar lining appear. As the terrace trends downwards we thought it might be a road, but, trenching across it, we found nothing to support the hypothesis further.

As the main building occupying the raised mound has not yet been fully traced I must leave details to the next report,
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confining myself here to a few general statements. When we first arrived only a course or two of part of the west wall were visible above ground, but the walls, wherever tested (except at one point where a breach had been repaired), have been found to rest on the rock, standing in some places about 20 feet high. The walls are 4½ feet thick, and consist of rubble. Six towers have been found, built of drafted masonry, some of which are a later addition, as they project from the building without bond. Except at the south-east, where the test has not yet been made, all have been found to rest on the rock. The tool used in dressing the drafts is a broad chisel, no signs of the comb-pick being observed. Several cross walls have been found running east from the west wall, but only one of these rests on the rock. Another blocks up the entrance from the building to the central west tower, thus furnishing a sign of three periods, as this tower is an addition to the main wall. The length of the north wall, measured along its inside face, is about 100 feet, and the length of the west wall about 160 feet. The south and east walls are very much ruined, but it seems improbable, from our investigations, that a central south tower ever existed. In our large clearance inside the building we have found walls at different levels, pit ovens, a vaulted cistern, vats, and other interesting constructions to be described later. The average accumulation of débris above the rock is about 14 feet.

We were led to begin our large clearance in consequence of the testimony to the antiquity of the site furnished by the pottery. It seemed to us that every cubic foot of the soil was ancient and might be precious. The pottery resolved itself into five types:—

(1) Archaic Ware, called by Petrie Amorite.—With the exception of the peculiar spouts all the types described by him in his “Tell-el-Hesy” were found, namely:—(a) Ware with comb-facing; (b) ledge-handles; (c) thick-brimmed bowls, with pattern-burnishing on the inside; (d) ware with fine polished facing; (e) thick vessels of light brown, black brown, and drab ware (see Nos. 78 to 74, &c., in his book, Plate VI). The majority of types were such as were found by me in Cities II and III at Tell-el-Hesy, dating approximately from 1550 to
1400 B.C., and showing a period when the Archaic forms of pottery merged into the Phœnician styles.

(2) Phœnician Ware (see Petrie's "Tell-el-Hesy," Plates VII and VIII).—(a) The predominant types found by us are similar to Nos. 106-114, 116-125, and 137 in Petrie's book. At Tell-el-Hesy these shapes were found in rough, light brown ware, which occurs here, but usually gives place to rough reddish ware and to smoother yellow ware. The lamps and bowls may be also seen in my "Mound of Many Cities," p. 87. Among these may be seen vessels with a lip, and a cup in the centre; one fragment of the latter type has been found here. (b) The bowls painted in bistre, with handles in the form of a wishbone, also occur (Petrie, Nos. 150-157). (c) Several fragments of the thin black flasks (called bilbils) have turned up (Petrie, 115, 138, 141, 144). (d) The pottery with patterns (Petrie, 163-183) also occurs and belongs, according to Petrie, to the period of the Phœnician predominance in pottery.

(3) Jewish Ware.—Of the types shown in Plate XXV of my "Excavations at Jerusalem, 1894-97," we have found here Nos. 1, 2, 4, 5, 6, and 11. The most common are the lamps with stands (No. 1), and the cooking pots (No. 2), which were very common at Tell-el-Hesy. I also have observed many fragments which appear to belong to vessels similar to Nos. 230 and 235, figured on pp. 118 and 119 of my "Mound of Many Cities." In connection with the Phœnician and Jewish types just described were found forms new to me, to be detailed later.

(4) Greek Ware.—(a) One fragment of Ægean glazed ware. (b) One large loop-handle, and many ribbed bowls, both relegated in Egypt to the seventh and sixth centuries B.C. Of the same date are the lamps with broad brims, being a development of the Phœnician lamps. (c) Several fragments of black and yellow polished ware (550-350 B.C.), including spouts of lamps.

(5) Roman Ware.—Fragments of the ordinary ribbed types occur in the great clearance to a depth of about 7 feet, but form an exceedingly small proportion (not more than 2 or 3 per cent.) of the whole number of fragments, which are mainly Jewish and Phœnician to that depth, with a very small admix-
ture of Archaic types. In trenching around the outside walls of the enclosure no Roman ware was found.

The great clearance is about 15 feet deep. The pottery to a depth of 7 feet has just been shown to be a mixture; this continues to a depth varying from 10 to 12 feet, but Roman ware is absent, while the proportion of Archaic types somewhat increases. From a depth of 10 or 12 feet to the rock the Archaic types are found almost exclusively, the exceptions including a few fragments of Jewish, Phœnician, and early Greek types. We thus appear to have three strata of pottery:—(1) An Archaic stratum on the rock, slightly disturbed in pre-Roman times. (2) A stratum much disturbed in pre-Roman times, but probably after the Archaic period. (3) A stratum disturbed in Roman times.1 Our clearance pit, marked out to include an area 80 feet square, is being worked in four sections—80 feet by 20 feet each. We are now completing the second section, throwing back the débris into the first, which has been carefully planned with all its remains. The observations on the strata, made by examining thousands of potsherds in the first section, have been continued in the second, and will be further tested in the third and fourth. The remains in the large clearance (walls, tanks, cisterns, vats, pit-ovens, &c.) will not be described until it has been completed, when the relation of these constructions to the enclosing building will probably appear. From all the facts at present available, we gather that the main building, with its towers, certainly antedates the Roman period, though it is not improbable that Roman settlers made use of it. That such settlers had their main habitations on the slopes of the hill is suggested by the fact that some of the lower terraces are thickly strewn with Roman ware, so scarce on the summit, as well as by a pavement of tesserae, broken, but plainly in situ.

After several years' experience of digging in Palestine soil, I have come to the conclusion that, owing to many conditions which need not be detailed now, antiquities are exceedingly scarce, and that the only hope of finding these is, first, to

1 The discovery of a single fragment of a Byzantine lamp at a depth of 9 feet proves no more than that some one dug a pit on the top of the Tell in late times.
choose a site that is proved to be ancient, and then to turn over great quantities of soil on that site. Tell-el-Hesy is a stratified mud-brick town, and the planning of the eight superimposed cities gave the work there a peculiar value, but apart from the pottery, which, fortunately is found on every ruined site in great quantities, and which at Tell-el-Hesy served as a basis for dating the various occupations, the objects confirmative of the age of the mound were most disproportionate to the amount of soil turned over. In over 750,000 cubic feet of soil examined what was found? Eleven scarabs, five cylinders, two statuettes in metal, about 100 metal weapons and tools, three inscribed pieces of pottery, a few beads, many stone implements, and one cuneiform tablet. Turning to the 50,000 cubic feet of soil examined thus far at Tell Zakariya we notice that the number of objects found compares most favourably with the proportion at Tell-el-Hesy. They include:—(1) Many stone implements (worked flints, corn-grinders, hammer-stones, pestles, mortars, &c.); (2) several pins, needles, arrows, chisels, &c., in iron and bronze; (3) a jar broken but in situ on the rock, containing over 80 carnelian beads of various shapes, including small unfigured scarabs, a quantity of small beads made of paste, a tiny figure of Bes (?) and two other Egyptian emblems, three figured scarabs, one defaced but apparently containing a cartouche of the XVIII dynasty, &c.; (4) a curious scarab, having an XVIII dynasty cartouche on the rounded back, as well as signs on the flat part, found on the summit of the Tell; (5) a sinker-shaped seal of stone, figured; (6) another small Egyptian figure of blue paste; (7) three coins, one Jewish, found at the depth of about 5 feet; the other two are much corroded, one found on the surface, the second at a slight depth. The general absence of coins is significant. When I remember, first, that the site of Tell Zakariya must always have been strategically important; second, that the range of pottery includes the period of the Tell-el-Amarna and Tell-el-Hesy tablets, and hence that in turning over the débris we may any day come across such relics; and finally that owing to the absence of modern houses and graves we have here practically a free hand, then I not only feel encouraged to complete the large clearance already marked out, but also
ROCK-CUTTINGS OF TELL ZAKARIYA.

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.