SECOND REPORT ON THE EXCAVATIONS AT TELL ZAKARIYA.

By F. J. Bliss, Ph.D.

As the large fortress or enclosure occupying the south-eastern portion of Tell Zakariya had not been fully traced at the time of posting the last report, I was obliged to confine myself to a few general statements. A report written in moments snatched from the work, before careful and final measurements have been taken, is liable to contain errors, and I find that some of the measurements given are inexact, the fortress being larger than stated there. The plan now submitted shows the building as traced up to Christmas, when we had recovered the whole
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outline as it was when finally ruined, except a small portion of the east side. At this portion the excavation is slow and complicated for two reasons: the ruin is great owing to its position on the steepest slope of the Tell, and the later line appears to have diverged from the earlier.

The method of excavation was as follows:—When we first arrived we found an extended mound on the south-east part of the Tell, but the only actual signs of building consisted of a course of stones, projecting from the surface here and there between what turned out later to be Towers II and III, and Towers III and IV. The clue being thus given, we speedily ascertained the thickness of the walls at various points, and thus were able to run trenches, from 2 to 10 feet deep, along their outside and inside faces. These trenches were deepened to the rock at an angle of all the towers, except Tower VI, and at four places along the main wall. Wherever tested, both main wall and towers were found to rest on the rock, except part of the inside wall of Tower IV, which rests on a rude mass of stone, forming the sill of the door and extending under both jambs, as well as under the doorway between the two chambers of the tower itself. In cases where walls are traced along both their inside and outside faces, these are indicated on the plan by solid black; a heavy black line indicates that only the outside face was traced; a thin black line shows that though the line was not excavated yet its course is practically certain; and a dotted line shows the probable course of an unexcavated line, for example, where the thickness of a wall was not ascertained, the inside face is dotted in, giving to the wall the thickness found at other points.

The excavation, thus, was comparatively simple, and a visitor to-day could see the outline of the building merely by walking over the mound. In the open trenches may be seen the full extent of the north and east walls, the complete outlines of Towers I and V, all but a small part of Towers II and IV, and the main angles of Towers III and VI. We searched for doors connecting Towers I and II with the main building, at levels both higher and lower than those of the sill of the door into Tower III, but no entrance was found. A door was found connecting the fortress with Tower IV, and also a thin partition,
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THE MAIN BUILDING AS TRACED, DECEMBER 1898
inside the tower, dividing it into two chambers of unequal size, connected by a doorway. These doorways, as well as the one into Tower III, are mere openings in the wall, roughly silled, with no signs of door-sockets or other indications as to the fitting in of the door itself. The wall at Tower V is ruined below the levels of the above-mentioned sills, and if any opening existed it is probably gone; at any rate we failed to find one in an especial deepening of the trench. Search for a central south tower, i.e., between Towers V and VI, was unsuccessful. The wall is much ruined here, but we proved that no tower was ever bonded into it. Towers III, IV, V, and VI are bonded into the wall, while at Tower I the question is complicated by a repair in the building to be more fully investigated. But Tower II was apparently a later addition, as the main wall runs back of it (at least to a depth of 5 feet on the east side), and contains a plastered stone concealed by the side wall of the tower. If a similar tower was ever added on to the south wall it has entirely disappeared. Only about half the south wall was traced, for as we went towards Tower VI the remains were found deeper and deeper, and the soil was very unfit for tunnelling, containing stone chippings, as well as many well-squared stones of soft limestone, marked with the droving iron. However, the wall was picked up again in a shaft which hit immediately upon the angle it forms with Tower VI. The west and south sides of this tower were traced in a tunnel terminating in the open air at the south-east corner, which occurs on the slope of the Tell. The door to this tower was not looked for. Instead of a central tower on the east side there is a long projection, the extent of which has not yet been determined. The outline of the building as described thus far was the one existing during its latest period. Signs of an earlier period, following a different line, have been observed near Tower I, but the matter awaits further excavation.

Though doors were found connecting the fortress with Towers III and IV, no entrance has been found to the building from the outside. Our excavations have proved that there was no opening in the north wall, or in the west wall between Towers III and IV, at least at the levels of the entrances to these towers. Between Towers IV and V the ruin of the wall
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gradually becomes greater, and it is possible that a doorway once existed beyond the point where the top of the remaining wall is below the level of the above-mentioned door-sills, as some entrance from the plateau would be expected. That the main approach from the plain may have been from the south is suggested by a glance at the plan of Tell Zakariya now published. This plan is the result of a carefully-chained and levelled survey by Mr. Macalister, with the 50-feet contours laid down in thin black lines, and with the edge of the plateau and the edge of the superimposed mound containing the fortress in heavy black lines. The Tell rises abruptly from the surrounding country on all sides but the south. The Wady Zakariya (a part of the Wady es-Sunt, or Valley of Elah) is taken as the zero point, the lowest point of the plateau being 324 feet, and the highest point of the superimposed mound being 350 feet above the valley. The steepest incline is at the east, while at the south the Tell is connected with another hill by a broad neck of land, from 150 to 200 feet above the level of the valley, thus forming a natural break in the ascent. Unfortunately, the south wall of the building is in such a state of ruin that no entrance could be found. I may notice here that the five principal groups of rock-cuttings described by Mr. Macalister in the January Quarterly are marked on this plan.

In studying this fortress we are struck with the lack of symmetry in its construction. Measured on the inside the north wall is 120 feet long; the west wall 228 feet; the south wall 130 feet; while the linear distance between Towers I and VI (at the east side) is about 170 feet. The west wall is at right angles with the north wall, from the north-west angle of the building as far as the point of junction with Tower IV, a distance of 103 feet, where it turns through an angle of five degrees. Just at this point a vertical joint, broken at one place only, occurs in the rough rubble of the inside face, the masonry at one side of the joint differing somewhat from that of the other. It is possible that the building may have been originally about square, the original south wall having been destroyed, and an addition built on to the west wall, thus extending its length to 228 feet. The acute angle at the south-west corner of the building appears to be due to
the conformation of the rock, for, had the south wall run at right angles to the west wall from this point, Tower VI would have occupied a position far down the slope of the hill. (See plan of summit-plateau, January Quarterly.)

A lack of exactness in building is shown by the smaller measurements. With the exception of Tower II (apparently a later addition), whose face is much shorter—25 feet—the faces of the towers appear to have been designed to have the same length, but they actually vary from 29 feet 6 inches to 32 feet 1½ inches, the lengths of eight different faces being: 29 feet 6 inches, 29 feet 10 inches, 30 feet 6 inches, 31 feet 2 inches, 31 feet 6 inches, 31 feet 6 inches, 31 feet 7 inches, and 32 feet 1½ inches. The projection of the towers varies from 13 feet 6 inches to 16 feet 9 inches; the length of nine different projections being: 13 feet 6 inches, 15 feet, 15 feet, 15 feet 6 inches, 16 feet, 16 feet, 16 feet, 16 feet, and 16 feet 9 inches.

These variations may be partly due to the fact that the measurements were taken at different levels, owing to a varying condition of ruin. The thickness of the main wall was measured at several points, and found to be: 5 feet 9 inches, 5 feet 10 inches, 6 feet, 6 feet 3 inches, 6 feet 6 inches, 6 feet 7 inches, and 7 feet 6 inches respectively; the last measurement, however, was taken at a point on the east side where the wall is ruined down far below the original ground-level, where a greater thickness would be expected. The thickness of the tower walls varies from 4 feet 8 inches to 5 feet 3 inches.

The main walls of the building are formed of roughly-coursed rubble laid in mud, containing some well-worked stones, irregularly intermingled with field stones of various sizes. The maximum size may be deduced from the following measurements, taken from larger stones selected here and there:—2 feet 10 inches by 1 foot 7 inches, 2 feet 10 inches by 2 feet 2 inches, 3 feet 3 inches by 1 foot 3 inches, 5 feet 1 inch by 1 foot 9 inches. We have mentioned the slight change of masonry at the vertical joint in the inside face of the west wall at the point of junction with Tower IV. Immediately to the left (i.e., the south) of the joint the masonry appears to be better set. In a course near the rock it contains a drafted stone, on which another drafted stone rests, boss downwards,
apparently taken from some other place. Shafts were sunk to the rock at the angles of Towers IV and V, but the wall between was examined only by a trench of no great depth. The stones in the part uncovered gradually diminish in size from north to south, and the proportion of little field stones increases; the masonry is at first random rubble brought to courses, but afterwards it is uncoursed. From the north-west elevation (see Plate 1) it will be seen that between Towers IV and V the wall is ruined to a greater depth than further north, and it is quite possible that the missing courses may have been originally continuous. This view is strengthened by the fact that in general the uncoursed part falls below the levels of the sills of the doors connecting the main building with Towers III and IV.

The south and east walls consist of rough rubble of varying size, brought to courses, but there are two well-worked stones at the outer angle of the eastern projection. Beyond this course the line of the rough foundations (which are all that remain) is very irregular, but a distinct change in the angle is noticeable.

In general the masonry of the towers, as excavated, consists of fairly large rubble brought to courses, with well-squared stones at the external angles. Most of the masonry remaining appears to have been below the original ground-line, except at Tower IV, where four of the five courses of well-squared stones were probably above the ground-line. At Tower I a shaft was sunk to the rock at the east external angle, revealing an offset measuring 7 inches on the north side and 3 inches on the east. Below this, to the rock, we observe large drafted stones with prominent bosses, badly set. At the other angles we find well-squared masonry, extending in two cases for a few feet along the tower faces. For the rest the stones are rubble, occasionally interspersed with bossed stones, and containing at two points a stone covered with plaster, in one case ornamented, in a pattern consisting of squares.

Towers II and III appear to be of the same construction, but the masonry revealed in the shafts sunk to the rock at the east outer angle of Tower II and at the west outer angle of Tower III contains some flush-drafted or vermiculated stones.
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ELEVATION OF THE S.-W. SIDE (OUTER FACE) CENTRAL N.-W. TOWER (No. 4)

not excavated

Level of dress mill

Level of large pit oven

conjectured line of rock

ROCK

M. A. H. A. Foundation, Palestine Exploration Fund.
A shaft was sunk to the rock at the junction made by Tower IV with the wall running south, and the upper part of the whole south-west side was laid bare, including, probably, all that remains of the masonry originally above the ground-line (see Plate 2). At the junction 13 feet of the wall remain standing, showing $5\frac{1}{2}$ feet of rubble above the rock, on which are five courses of stones squared and dressed, averaging 18 inches in height; the lowest course is ruder than the rest. The masonry is badly jointed, and set in mud containing a very slight proportion of lime, appearing as small particles. The stones fall generally under two classes—plain-faced, and drafted with boss. In both classes we observe several stones set on end—i.e., having a height much greater than the breadth—a characteristic noticed all over the building. The plain-faced stones are mainly quarry-picked, but one is slightly dressed in diagonal lines, and another prominently chisel-picked. The bossed stones have drafts varying from 2 to 4 inches in width, dressed with a broad chisel, forming horizontal strokes, except on the top drafts, where they are vertical. One stone has no top draft, and on another the drafts are picked diagonally. A fragment of plaster is found on the draft of another stone. The stone at the extreme left in the fourth course from the top shows a draft along the top edge only; this feature is found on another stone in the main wall, and is characteristic of the masonry of a wall found inside the fortress, to be described when the interior is more fully excavated. The bosses vary in regularity, some projecting with straight sides 2 inches. Their faces are scabelled or pock-marked. The last stone to the left in the top course is flush-drafted, or vermiculated. In the stone to the extreme left in the third course, counting from the top, the upper strip has been left rough, and the rest dressed by the strokes of a chisel used obliquely, alternately up and down, so as to produce a chevron-like pattern. Two similar stones were found in Towers II and III respectively; the latter, however, was so placed that the undressed strip was vertical. On the northern face of Tower IV is a stone with bossed face, showing a revet or reveal on the inner end. As in the present position of the stone this can have served no purpose, we must infer that its present use is secondary.
The tools used in the dressing of this piece of walling seem to be the ones employed in the rest of the building, and are: a broad chisel, a narrow chisel, and a sharp-pointed pick. No signs of the comb-pick (so generally characteristic in Palestine) are found anywhere, but in some cases the broad chisel appears to have been held sideways, so as to make saw-tooth marks. The bossed stones of the Zakariya Tower are not unlike the specimens shown on pages 117 and 118 of my "Excavations at Jerusalem," found on the scarp to the west of the Old Pool. This scarp represents the line of city wall at the time of Herod, and the masonry may date as far back as that time (pp. 326, 335).

The walls of the fortress were found, in the portions excavated to the rock, to stand to a height ranging from 13 to 19 feet, but the question now arises: How much of the débris of Tell Zakariya had accumulated when this fortress was built? We stated in the last report that this débris, averaging about 16 feet deep, was shown by the pottery to consist of three strata: (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; and (3) a stratum disturbed in Roman times. The depth of the two lowest strata, taken together, averages about 9 feet, and the depth of the third, or upper stratum, about 7 feet. The chief indications of the ground-levels of the fortress interior are given by the sills of the doorways entering Towers III and IV. The sill of the latter is about 7 feet under the surface and is 9 feet above the rock. The sill of the former is about 3 feet higher, showing that the interior of the building had not the same level at all points. From the elevation of the outside face of the south-west side of Tower IV it is clear that the ground-line outside the building must have been at least 5 feet 6 inches above the rock, as we have rude rubble to that height, which is about 3 feet below the level of the door-sill, but the lowest course of dressed stones appears to be rougher, and may have been always underground; at any rate the ground-level outside the building would naturally be lower than the ground-level within. Another indication of level is given by

1 Plate 2.
the offset between Towers II and III, about 7 feet under the surface, and about 13 feet above the rock. Below this offset the masonry is rubble, and above it, in two different courses, are two well-squared stones, one plain faced and the other flush-drafted or vermiculated. The offset at Tower I is 4 feet 6 inches below the surface and 14 feet from the rock.

From these various indications it is clear that a considerable amount of débris had accumulated on the Tell before the fortress was built. It would be rash to dogmatise as to the exact amount, but the key may be furnished by the door-sill at Tower IV, which is nearest in position to the large clearance within the building, and which has the same archaeological level (i.e., the same level above the rock) with the top of the second stratum. Accordingly it would appear that the foundations of the building had been sunk in the older débris forming the two lower strata, and that the third stratum had accumulated after the building had been erected. This view appears to find confirmation in the fact that large fallen stones were found in that part of the large clearance-pit within the fortress which was near the main west wall, to a depth of 7 feet only, i.e., in the upper stratum. Hence these stones may be due to the destruction of the building. Now, as it is only in the upper stratum that we find Roman pottery, we infer that the building was erected in pre-Roman times. Moreover, the proportion of Roman ware to Jewish and Archaic types is so small, only 2 or 3 per cent., that were there no indications of ground-levels at all, I should not feel justified in ascribing to the Romans the erection of this important fortress, which, from the indications of repair, to be detailed in a further report, was evidently in use for a long period. If the identification with Azekah or Gath be correct, the erection of this fortress may be the work of Rehoboam (2 Chron. xi, 9).

No cross-walls inside the fortress were found running from the main north wall, or from the west wall, between Towers III and IV. However, a cross-wall was discovered blocking the entrance to Tower IV (and hence representing a period later than the construction of that tower), having a breadth of 4 feet 3 inches. Between this and Tower V four other cross-walls appear, varying in breadth from 2 feet 7 inches to 3 feet
9 inches. None of these five walls are bonded into the main wall, and all are founded on débris except the southernmost one, which, as it rests on the rock, is the only one drawn in the present plan. The rest will be noted when we have completed the excavation of other walls in the centre of the enclosure.

The two reports thus far presented have covered only a small portion of the work done at Tell Zakariya. It would be unedifying to attempt a description of the results obtained in the large clearance within the fortress until that is complete. Our plan, as stated before, was to examine an area, 80 feet square, to the rock, which has an average depth of about 16 feet. This was divided into four sections, each 80 feet by 20 feet; when the first section was completed and all the constructions planned and levelled, we had, of course, a huge pit, on one side of which we were obliged to build a stout, dry, stone wall, to retain the earth thrown back from the second clearance, also 80 feet by 20 feet. In the same way a third section was worked, and a fourth (bounded in part by the east wall of the fortress) has been already deepened for 10 or 12 feet. In the first and second sections we found many walls, tanks, cisterns, vats, pit-ovens, &c., &c., but the third section contained hardly anything but débris. On our return we hope to complete the excavation of the area laid out (which is a little over one-fourth of the area enclosed by the fortress walls), and then perhaps to extend it so as to cover twice the area already excavated. The plan of the remains unearthed will give a fair idea of what the building contained. Thus far we gather that it was simply a fortified enclosure containing isolated dwellings.

As to the identification of Tell Zakariya with the Azekah of Scripture (referred to in Mr. Macalister’s article in the January Quarterly), I would add that this is the view supported by the “Names and Places” of Mr. Armstrong. It appears to have been originally suggested by the Rabbi Schwarz in his work, “A Descriptive Geography and Brief Historical Sketch of Palestine” (Leeser’s Translation, p. 102). At the present stage of the excavations it is not desirable to enter into a full discussion of the question.

The objects in stone, bone, iron, bronze, brick, and clay scattered through the débris were numerous and interesting.
The most important of these have been drawn on 28 plates—obviously too many to appear in a single number of the Quarterly, hence we have selected a few for the present number, the rest being reserved for future publication. I shall now run through the objects drawn, describing in detail those now presented and referring in general to the rest.

**Stone Objects.**—Plate 3 contains three slabs, intended for a game, resembling draught-boards. One is complete, and the other two are fragments only. No. 1 measures 23 centimetres by 20 centimetres by 7 centimetres. The upper surface is flat and contains 13 lines ruled each way, roughly at right angles, forming squares of irregular sizes, the largest being about 1½ centimetres each way. The ends of each of these lines project beyond the last line of the other group, but there are evidently intended to be only 144 squares. The fragment No. 2 belongs to a similar board which apparently had four legs. The crossing lines are even more irregular than in No. 1, and terminate in a raised border. In fragment No. 3 the playing surface is concave, and one side is fitted with a mortice, as though to hold the board in a horizontal position. The surface of this mortice has a faintly-cut ornamental pattern. All three are of soft limestone, and were found in the upper stratum of débris at depths varying from 3 to 8 feet. The other stone objects consist of hammer-stones, rubbing-stones, pestles, mortars, discs, coin-rubbers of the Egyptian type, bottle-stoppers, worked flints, &c., &c. Two fragments of alabaster vases, similar to Egyptian ware, were found.

The **Objects in Bone** are not published. There are four specimens, two of them whole, of the polished thin strips of bone, rounded at one end and pointed at another, resembling paper-cutters. These types were found in Cities I and VI at Tell el-Hesy, and also in Jerusalem (see Cut 256 in my “Tell el-Hesy,” also No. 52, Plate XXVIII, of my “Excavations at Jerusalem, 1894–97”). I have suggested that these may have been used in weaving, for arranging the pattern. Three specimens are drawn of bone prickers or needles, varying from 6 to 8 centimetres in length. These types were very common and were also found at Tell el-Hesy. They have been sharpened
at the point, polished, and perforated through the head. Another
bone pricker of a somewhat different type is also figured. There
is a bone spindle-wheel, ornamented with crossing lines, and a
fragment of a small bone ring, 2·4 centimetres in external
diameter, 1·4 centimetres in internal diameter; its small size
and flat shape prevent its being regarded as a finger ring, it
probably served some ornamental purpose.

**Objects in Bronze** (Plate 4).—No. 1 is a fragment of a knife.
Nos. 2 to 6 are spatulas, all complete except No. 6. The whole
ones vary in length from 12·8 centimetres to 16 centimetres.
The handles are all cylindrical. Nos. 2, 3, and 6 have flattened
triangular heads. Nos. 4 and 5 have flattened heads, inclining
to an oval shape. No. 6 is bent and broken off at the handle.
No. 7 (an object of uncertain use) is fractured at the ends; the
probable restoration is shown in the drawing. It is 8·5 centi­
metres long, consisting of a thin flat strip of bronze, with T-like
projections at either end. No. 8 is incomplete, it is a bronze
pin terminating at one end in a flat circular base, slightly wider
in diameter than the shaft, and bent with a hook at the other.
No. 9 is an ornamental pin bent at the head into a closed
spiral. No. 10 is an ornamental pin of another type. No. 11
is a pin or nail with circular head. No. 12 is a pin complete,
but much corroded at one part. No. 13 is much bent and
broken, probably a fibula of the safety-pin type. No. 14 is a
lozenge-shaped arrow-head, the tang broken off. No. 15 is a
leaf-shaped arrow-head, the tang is bent and the tip lost.
No. 16 is beautifully preserved, except for a very slight
fracture at the extreme tip, the tang is formed by bending
over the continuation of the edges of the blade. No. 17 is a
small ring, the section (not quite circular) is marked on the
drawing. No. 18 is a bent thin plate of bronze, perforated
with four holes for stringing; it is noticeable that the direction
of perforation is not the same, as indicated by the arrows in
the section. No. 19, fragment of a small knife, the tang-end
broken off. No. 20, a pin, much corroded, the head being
broken off. No. 21, pin, much corroded, the upper part seems
to be ornamented with horizontal rings, as found in No. 10,
but the corrosion makes this uncertain. No. 22, handle of a
vessel, consisting of a cylindrical bar of bronze, bent; one end
is hammered flat and curved into a hook, the other end (much corroded) is filed so as to be of less diameter, and then wound into a spiral. The most interesting bronze object is the amphibious figure drawn on Plate 7 (No. 16), to be described on a later page, together with a few bronze objects drawn on the same plate.

The plate of Iron Objects is not now published. We have two fragments of knives, one showing two rivets in the tang. There are a number of iron bolts with heads varying in diameter from 2·6 to 3·9 centimetres. In some cases the heads appear to be pentagonal, in others round, but owing to the corroded condition of all it is impossible to be certain on this point. The shafts are square in section. One is complete, being 13·7 centimetres in length; the rest are shorter, but are all broken off. Some are bent, apparently by unskilful hammering. A large number of these nails were found near together at a slight depth. There is a portion of the flat tail of a door-hinge, showing the stump of the hook. It is broken across the nail-hole: present length, 11·8 centimetres; breadth, 3·2 centimetres. A similar object was found to which fragments of wood were adhering, but it was so much corroded that it was not considered worth preserving or drawing. The other objects are: a double-ended chisel, 10 centimetres long, rounded at the ends; two hasps, consisting of bars of iron bent at right angles at both ends; tube of iron, 8·45 centimetres long, bearing a screw-thread on the outside (six revolutions to each centimetre) and formed of two layers of metal, the inner being very thin; and a shaft end of a priming hook, or similar object, showing the recurved blade (broken off just above the angle) and the tube or socket for fitting on a wooden handle, length 10·3 centimetres. The most interesting discovery in iron are the fragments of a cuirass corroded together in a solid mass, found at a depth of about 5 feet. It was necessary to separate these piecemeal, hence, as we found that only a small part of the cuirass remains, it is impossible to restore it completely. Enough, however, remains to establish several points, which are described by Mr. Macalister as follows:—“It was constructed of iron scales (see drawing), 5 centimetres long and 3·5 centimetres across.
TELL ZAKARIYA EXCAVATION: HUMAN AND ANIMAL FIGURES

PLATE 6.

PALESTINE EXPLORATION FUND

Yaddeh, Beed (43), L. Elkeles, H. (Hebrew), 23/7/42.
of pottery drawn, eight consist of Archaic (or pre-Israelite) types, only one of which (Plate 5) is published at present. On this plate is figured an object which appears to be a small smelting brazier, consisting of a cylindrical vessel with rounded bottom, broken off at the shoulder near the top. The ornamental band which runs a third of the way around it is perforated with three holes. There is another hole near the bottom. The handle, which was near the bottom on the side opposite to the perforation, is broken off, leaving only the stumps. Three of the sheets are devoted to fragments of roughly-painted ware, showing a great variety of patterns. In the lowest stratum on the rock this Archaic ware occurs almost exclusively, and an immense number of sherds, including some specimens almost whole, were found in a sort of cave, where they appeared to have been thrown. Plate 6 shows fragments of human and animal figures of well-known types. Nos. 1 to 3 are slabs with human figures in relief. No. 1 has the lower half of a female figure; Nos. 2 and 3 show the upper half of female figures, probably Phoenician. In No. 2 the hands are uplifted and hold plants, while in No. 3 the hands are crossed over the breasts. Nos. 4 to 7 are rude heads of the Egyptian type. No. 8 appears to be the head of a bull. No. 9 is the figure of an animal with painted stripes. No. 10 resembles the head of a cat. Nos. 11 and 12 are heads of camels.

In Jewish ware the most interesting finds were:—(1) A group of jars purposely buried in the débris outside the east wall of the fortress, in a manner similar to the jar burials at Tell el-Hesy; and (2) a group of 25 small saucers, mostly whole, scattered near each other in the débris of the clearance-pit, at a depth of about 7 feet. I am inclined to regard these as late Jewish. One sheet shows a variety of sieves and strainer-spouts, and another illustrates the development of the lamp.

The most valuable find in pottery was the jar-handle of rough, dark-red ware found at a depth of about 6 feet immediately outside of Tower IV. Such handles usually spring from the necks of large jars. On the handle is stamped a cartouche or ellipse, containing a four-winged figure in relief, and two
lines of Phœnician writing, both in relief, one below and the other above the figure. The inscription faces the neck of the jar; in other words, it reads upside down relative to the supposed base of the jar. Both lines are clear, the lower being beautifully sharp, except for the right vertical bar of the first letter, which is somewhat worn, though quite visible. The figure between the two lines of writing appears to represent a creature (eagle?) with four wings curving inwards, two above and two below; the body terminates above in a wedge-shaped head with no features whatever, and below in a sort of zigzag line between the two wings. The figure has no markings beyond the ordinary roughnesses of the clay. Above the figure are the four letters יִרְמָן, and below the figure the four letters לֶלֶלְלָה, giving הָבֹרִ for the full inscription. The form of

STAMP ON INSCRIBED JAR HANDLE.

the second word always appears in the Old Testament as הָבֹרִ. The absence of the י (vau) may point to an early date for our inscription. The natural translation is, "Belonging to the King of Hebron," or "Belonging to King Hebron." This jar-handle clearly belongs to the type represented by six jar-handles found by Sir Charles Warren on a bed of rich earth, from 8 to 10 feet in thickness, lying on the rock at the south-east angle of the Haram enclosure at Jerusalem, at a depth of 79 feet from the surface. These jar-handles are described as follows:

"Each of these handles bears impressed upon it a more or less well-defined figure, resembling in some degree a bird, but believed

to represent a winged sun or disc, probably the emblem of the sun-god, and possibly of royal power. On each handle Phœnician letters appear above and below the wings, and these in two instances have been interpreted by Dr. S. Birch, of the British Museum, and imply that the vessels were made for the royal use, or at all events in a royally privileged manufactory.

"A. Le MeLeK Ze PHa.—To or of King Zepha.
"B. LeK SHaT.—King Shat.
"C. LeK.—The letters which follow are uncertain.
"D, E, F.—The letters are nearly obliterated on these examples.

"It may be hoped that future discoveries may add to our knowledge of the royal personages now for the first time indicated, and that the researches of the Association may be hereafter rewarded by the finding of a fragment of the work of the royal establishment of potters mentioned in 1 Chron. iv. 23, as existing at Jerusalem."

In the specimen figured on p. 474 of "The Recovery of Jerusalem," the inscription will be seen to read sideways with reference to the position of the jar-handle. The four wings of the figure are in the form of an ordinary cross, whereas in the Tell Zakariya specimen they are placed diagonally with reference to the body of the creature. In describing the Jerusalem specimens it was assumed that Zepha and Shat represented names of persons, not places. From the two cases where Hebron is used as the name of a person (1 Chron. ii, 42 and 43, and vi, 2) we may infer that such a use was common. At the time of the Hebrew conquest, the "Kings" of the so-called royal cities were hardly more than local sheikhs, and perhaps Zepha, Shat, and Hebron were three of these. On the other hand, as Hebron is the name of a place, all three names on the jar-handles may refer to places. The list of royal cities known to us is inclusive merely of those conquered by the Hebrews. Arguing on this supposition we may be able to assign limits to the age of the Tell Zakariya inscription. In the time of the Patriarchs Hebron was called Kirjath (the city of) Arba (Gen. xxiii, 2; compare also xxxv, 27). The change of name appears to have taken place at the time of the Hebrew
conquest, for it is stated in Josh. xiv, 14, 15: "Hebron therefore became the inheritance of Caleb . . . . and the name of Hebron before (i.e., up to that time?) was Kirjath-arba; which Arba was a great man among the Anakims’’; and further, in Josh. xv, 13, 14: “And unto Caleb . . . . he gave . . . . the city of Arba, the father of Anak, which city is Hebron. And Caleb drove thence the three sons of Anak, Sheshai, and Ahiman, and Talmai, the children of Anak.” It seems natural to suppose that Arb’a should have remained as the sole name of the place as long as his descendants were in possession. That the older name was not wholly disused is shown by the reference in Neh. xi, 25. The earliest date, then, to be assigned to this jar-handle, according to this view, would be the beginning of the Hebrew conquest, when the new head of the town might have adopted the title “King of Hebron,” according to the custom prevailing in the country. The latest date would be the establishment of the kingdom by Saul, after which the term לָשׁוֹן would have a wider sense, and be no longer applicable to a single district. Before David took Jerusalem he reigned seven years in Hebron, but that period is distinctly included in the 40 years during which he is said to have “reigned over Israel” (1 Kings ii, 11), and it is hardly to be supposed that he ever could have been called “King of Hebron.”

In my last report I mentioned that we found on the rock “a jar, broken but in situ,” containing a collection of objects. The jar was not large, having a globular body, but the upper part was quite destroyed. It was standing on the rock, and the fact that many objects were found in it and none in the immediate vicinity proves that it was found in situ. The jar contained very fine earth, which appeared to differ from the surrounding soil. The objects, some of which are figured on Plate 7, are as follows:—(a) 81 carnelian beads of various shapes: nine of these are in the scarab form, the bases being plain, except that of No. 24, which is marked in the form of a star. Twenty are in bottle form (No. 36), the perforation being on the neck. Other shapes are Nos. 28, 34, and 37. All these shapes are characteristic of Egyptian beads of the late eighteenth and early nineteenth dynasties—1400–1300 B.C.
TELL ZAKARIYA EXCAVATION: MISCELLANEOUS OBJECTS

1. INSCRIBED WEIGHT
2. EGYPTIAN FIGURES
3. BRONZE OBJECTS
4. BRONZE FIGURE
5. SCARAB
6. BRONZE DISC
7. SPINDLE WHORS
8. BEADS
9. TYPES OF
(b) About 250 beads of enamelled paste and glass—blue, green, yellow, and red; cylindrical, spherical, and shuttle-shaped, with one in the bottle form (Nos. 20, 22, 23, 25–27, 29–32, and 35). No. 39 is of the triple-cylinder shape, and is of blue enamelled paste. (c) A collection of minute beads, rounded and flattened, apparently of bone, coloured yellow, brown, black, and green, with some white ones (No. 33). (d) A round, black bead; a small red bead, resembling coral; and a bead (No. 38) formed of a resinous substance, now in a somewhat disintegrated condition. It is similar to a bead found at Tell el-Hesy, which was taken at first to be amber, but which turned out later to be identical in material with a specimen in the Geological Museum in Jermyn Street, brought from a resinous deposit near Mount Hermon by Sir Richard Burton. This specimen is not real amber. I regret that I omitted to notice this bead in my book on Tell el-Hesy, for the first examination thereof has led to inferences of an early trade between Palestine and the Baltic which the later examination does not justify. (e) A number of small bronze objects, including the following:—1. A small child’s finger ring (No. 15). 2. Fragment of a similar ring. 3. A pair of bronzes (?) (No. 13). 4. A pin or small arrowhead (No. 12). 5. A nondescript fragment, perhaps the hinge of a fibula. 6. A small pin (No. 11). 7. A disc of bronze, semicircular in form (No. 17). 8. A broken nail, square in section. (f) One small unpolished reddish stone. (g) Two polished pebbles. (h) Seven spindle-whorls, five of bone (No. 19), two of slate (No. 18). (i) A small bone head, perhaps fractured, now in the form of a spindle-whorl, but possibly once of the hour-glass shape (No. 21). (j) Three shells, all punctured: one cowrie, one cockle, one murex. (k) Four scarabs: one small slate uninscribed scarab (No. 9); one scarab, unidentified, of olive-green enamel (No. 8); bone scarab of Thothmes III (No. 5); green enamel scarab of Amenhotep III (No. 7). (l) Four Egyptian emblems: one figure of Bes; one lion-headed figure (No. 4); the eye of Horus (No. 3) of green enamel paste, with sinkings prepared for coloured enamel; a green enamelled figure with all characteristics destroyed.

We may describe here the other objects figured on Plate 7. No. 1 is a small dome-shaped weight of reddish stone, with
flat base inscribed in three Phœnician characters. The first and last letters appear to be ג and פ respectively; the middle letter is slightly worn, but resembles a ת. We thus would read גפ, though I find no such Hebrew root. The Rev. Père Lagrange, who has examined the inscription, reads הנב, i.e., silver. It weighs about 10 grammes or about 154 grains troy. This suggests the Egyptian Kat, which varied at different times and places between 138 and 155 grains (see article on Weights and Measures, “Encyclopædia Britannica”). It may, however, belong to a different system. It appears to have no relation to the early Hebrew shekel of 258 grains, or to the late Hebrew shekel of 218 grains. But the Phœnician shekel of 224 grains varied in actual use, being found at Naukratis, in Egypt, as high as 231 grains (see as above), and it is noticeable that the Tell Zakariya weight of about 154 grains approximates to two-thirds of the shekel as found at Naukratis. We infer from Nehemiah’s poll-tax (Neh. x, 32) that a third of a shekel existed at Jerusalem. It may be that the Phœnician shekel was divided in the same way. No. 2 is a small figure of Bes of green enamel paste, found in the Archaic stratum, similar to objects relegated in Egypt to the eighteenth dynasty. A drawing of No. 6 was sent to Professor Petrie, who recognises a type certainly earlier than 1700 B.C., and perhaps even earlier than 2000 B.C. It is a scarab of bone. The bone scaraboid (No. 10) bears the cartouche of Thothmes III (contemporary, according to Petrie). It was picked up on the surface of the Tell by the foreman, proving, together with bits of the earliest pottery also found on the top, how disturbed the débris is. No. 14 is a small wedged-shaped or sinker-shaped seal of stone, perforated near the top. The design on the base is very faintly incised, and is further much worn. At first we seemed to see a tree, under which were two figures, men or cherubim, but after studying it long in various lights under a powerful lens, Mr. Macalister recognises a horizontal bar, on each side of which is an animal, apparently a stag, the tail curved upwards; the two stags are back to back.

1 On this subject, see remarks in Quarterly Statement, 1893, p. 32, by Professor Sayce on the inscriptions on weights brought from Palestine by Dr. Chaplin and Professor T. F. Wright.—Ed.
No. 16 shows a small, very rude bronze figure in four positions. The figure is complete, one side (position A), though cracked, is not corroded, hence, though the other side (position C) is somewhat corroded, we may, in studying the figure, take into account all the knobs and projections as representing real features. The object appears to represent an amphibious creature, with the head and body of a man or woman, and the tail of a fish. Position C gives the best idea and shows us a three-quarter figure with the head and tail in profile. The right shoulder is plain, and also the right arm, which is bent at the elbow to support an object (child or animal?), with its head nestling against the neck of the figure. This object is also clasped by the left arm of the figure, the left shoulder being indistinct. The nose and mouth are fairly plain. The tail curves upwards and joins the back below the shoulder. The upper part of the figure suggests a female form, but the object clasped against the body prevents the breasts from appearing.

This object was shown to M. Levy, of Paris, when visiting Jerusalem, and he suggests that it may represent the goddess Atargatis. Owing to the fact that only a small part of the wide literature on this subject is available here, we confine ourselves at present to a quotation from the article "Atargatis" in the new "Dictionary of the Bible," edited by Dr. Hastings: "In Palestine the principal seat of her worship was at Ashkelon, where she was probably identified with the Heavenly Aphrodite (whose temple is named by Herodotus, i, 105). Another famous shrine of Atargatis was at Hieropolis, or Bambyce (Mabug) on the Euphrates (Lucian, "De Syria Dea," 14; Pliny, "Hist. Nat.," v, 23). At both these shrines sacred fish were kept, and at Ashkelon the goddess herself was represented as a woman with a fish's tail (Lucian, l.c.; cf. Ovid, "Melain," iv, 44-46). According to the Greek version of the legend, Atargatis, or Derceto (to use the shorter form of the name more commonly found in Greek), was a maiden inspired by Aphrodite with love for a youth who was worshipping at her shrine. By him Derceto became the mother of a daughter, but, filled with shame, she threw herself into the water at Ashkelon or Hieropolis, whereupon she was changed into a
fish (Diod. Lic., ii, 4). According to Hyginus, "Astron.,” ii, 30, she was saved by a fish. The child, who had been exposed, was brought up at the temple of Aphrodite, and became the famous Assyrian Queen, Semiramis.” In connection with the mention of a child in the legend, it is interesting to note the object (possibly a child) clasped by the Tell Zakariya figure. We may also append a paragraph from Perrot and Chipiez’s "History of Art in Phoenicia and Cyprus,” vol. ii, p. 44: “She appears, perhaps, in one of her secondary forms on the flat of a rock crystal cone in the Paris Cabinet des Medailles. The figure is a very complex one. The bust is entirely that of a woman, and the tail that of a fish, but between the two appear the fore-quarters of a dog.” A drawing of this cone is given on p. 44 of the same work. One arm is stretched out with the index finger further extended; the tail does not bend back to the figure as in the Tell Zakariya bronze, but curves behind in two loops.

My last report was dated December 3rd, and owing to the bad weather we dug for only 12 days between that date and the hour of sunset of December 21st, when the excavations were closed for the season. Rain, of course, was a great obstacle, but a violent wind was almost equally prohibitive. One day the sun shone brightly, but a fierce gale decided me reluctantly to announce that there would be no work. I knew from experience that the clouds of dust from the excavations would almost blind the men, who might overlook and throw away some small inscribed object, perhaps of inestimable value. I have reverted to my plan employed at Tell el-Hesy of giving a small bakhsheesh for every object, however unimportant, which we wish to study. This is Petrie’s method, and the only one for ensuring careful search for objects and the preservation of them when found. The smaller the object the greater is the reward in proportion. An eager but quiet crowd of men gather about my tent at sunset, when I note in a book the bakhsheesh assigned. The men are under close supervision, and are instructed to show to Yusif at once any object out of the ordinary, but the attempt is sometimes made to palm off on us objects brought from elsewhere. Detection is almost certain from the nature of the object itself, from the
absence of earth clinging to it, from the cross-examination to which the alleged finder is subjected, from the fact that the men all work together—testimony thus being available, &c., &c. We are very severe in such cases, and I was pleased one day when a man brought me an object which he distinctly declared was not from the Tell. The simplicity of the fellahin, and their ignorance of the dates of objects, was exhibited by a youth who showed me, as an "antika," a button from my own clothes, which he acknowledged he had picked up from the surface of the Tell. The bakhsheesh paid out at Tell Zakariya has amounted thus far to about £3 3s., and has averaged less than a halfpenny per man per day.

The entire work—only partially covered by these two reports—occupied 39 days, with an average of 51½ men a day. When we remember that the Permit is available till October 1st, 1900, we ought to feel much encouraged, in view of the results obtained already. In describing the labourers I have used the term "men," but towards the close of the work we employed a few women. During the break in the work caused by the weather, the tools have been stored at the village of Zakariya, and the camp in a house at Ramleh. On my way to the station on December 23rd, I called at the Agricultural School of Beit Jemâl, and the superior expressed regret that we had not availed ourselves of his commodious establishment, promising us every assistance for the future. We stopped the work at just the right moment, for, as Yusif rode with the camp into Ramleh on Christmas Eve, a storm, which had been gathering for several days, broke in fierce torrents of rain.