

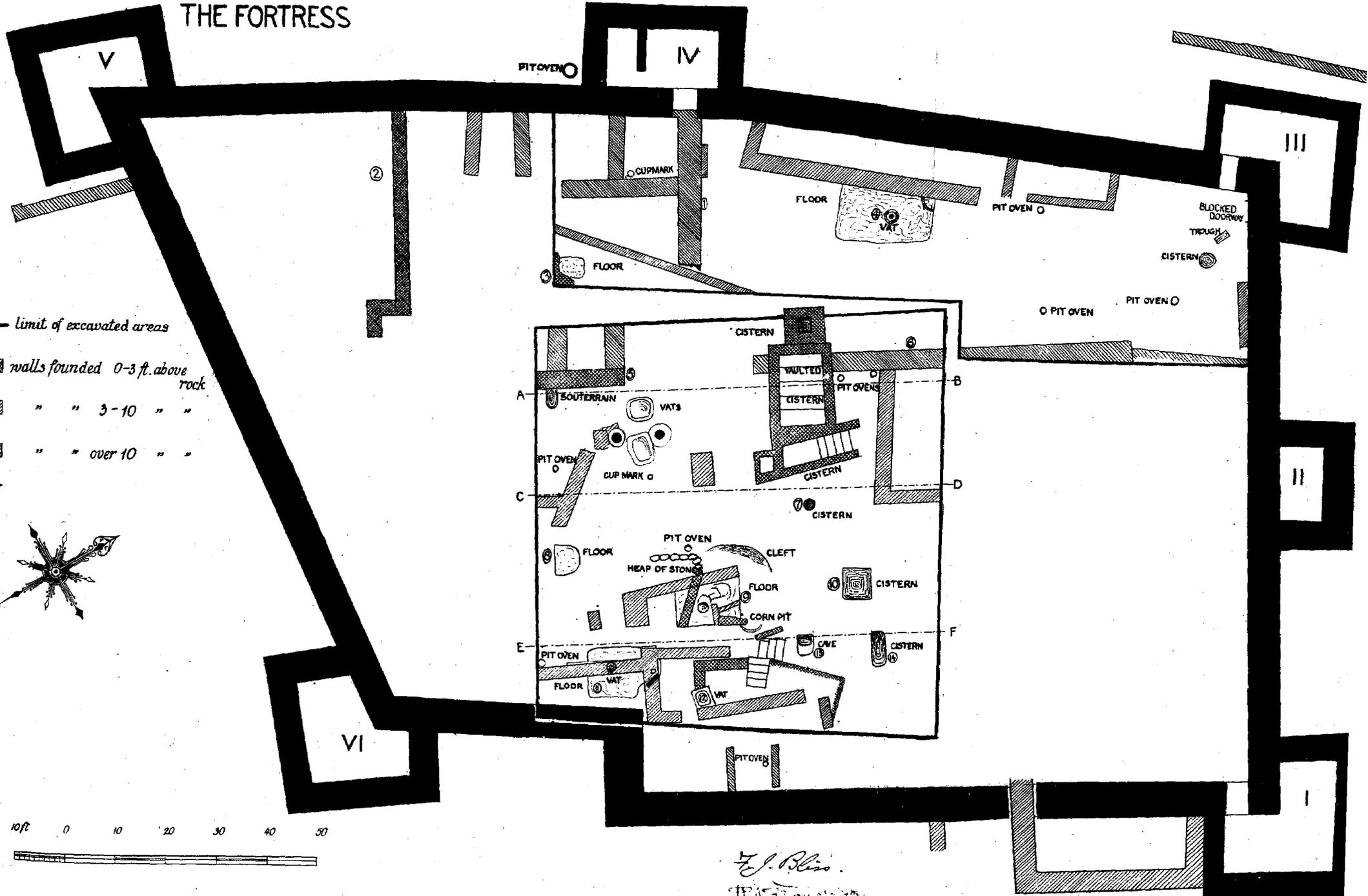
THIRD REPORT ON THE EXCAVATIONS AT TELL
ZAKARIYA.

By F. J. BLISS, Ph.D.

WITH the last report we published a plan of the Fortress of Tell Zakariya as traced up to Christmas, 1898. Since then we have completed the excavation of the east side, have laid bare to the rock the north half of the west wall along its inside face, and have re-surveyed the whole building. Many of the inferences made during the first season's work have been justified, while the following of new clues has led to the reconsideration of others. The plan (I) now published shows the outlines of the fortress according to the latest results, together with the walls and other remains found in the course of clearing to the rock about one-half the area which it encloses. To these are added remains of buildings found in trenches outside the large clearance.

On p. 91 of the last report I stated that while Tower II was a later addition to the fortress, Towers III, IV, V, and VI were bonded into the main walls. Our work since has shown that all the towers have been added on to an originally plain building. On p. 92 I mentioned that on the inside face of the west wall of the fortress, at a point opposite to its junction with the north wall of Tower IV, a vertical joint occurs, the masonry to the left of the joint being better set. A similar joint has since been observed at a point in the wall opposite to its junction with the south wall of Tower IV, but in this case the better-set masonry occurs to the right of the joint. Both joints extend to the rock. Hence, instead of our having a contemporary tower bonded into the main wall, we have a later tower bodily let into a breach in the wall. From a study of the masonry drawn on Plate III, it would appear that the sides of the breach were made plumb at the time of the insertion of the tower. The bossed stones mentioned on p. 93, which were apparently taken from some other place, thus belong to the period of the tower, which contains similar stones. A

TELL ZAKARIYA EXCAVATION THE FORTRESS



ISOLATED MASS
OF MASONRY

further examination of Towers I and V showed similar joints. In the case of Tower I it was proved that the breach in the wall had not reached to the rock. Tower II, as we have already stated, is simply added on to the main wall, which runs behind it. The north side of Tower III is let in as shown by a vertical joint to the rock in the main wall opposite to the point of junction. No such joint occurs in the west wall; hence we infer that the south wall of the tower merely butted against the fortress, though at the point of junction it was ruined down to a great depth and covered with large, fallen stones which prevented our verifying the matter. Practical considerations decided us not to test the question at Tower VI, but having proved that five of the towers were added on to the main building, it seems legitimate to infer that the sixth was a similar addition.

We have described the entrances into Towers III and IV from the fortress, and have shown that the door-sill at Tower III is only 3 feet higher than that at Tower IV. We argued that the levels of these doorways represented in general the ground level of the interior of the fortress at the time of its construction, and that the two lower strata of *débris* must have accumulated before the fortress was built, its foundations being sunk in this *débris*. Taken by itself the discovery that the towers are a later addition would weaken the force of this argument, if not destroy it altogether. But that the foundations of the walls were built down into *débris* was proved in another way. From the door-sill at Tower III an offset of $8\frac{1}{2}$ inches was traced along the inside face of the west wall as far as the point where Tower IV is let in. The level of this offset ranges from 9 to 14 feet above the rock. The masonry below it is smaller and ruder than that above. At several points, some 4 or 5 feet below the level of the offset, I recognised distinct traces of the original trench which had been dug for the wall foundations. At these points the trench had been cut 2 or 3 inches wider than the breadth of the walls, and owing to stones fallen against the wall, or some such obstacle, the space between the trench and the wall had not got filled up. Above the offset four courses of masonry occur, consisting of larger

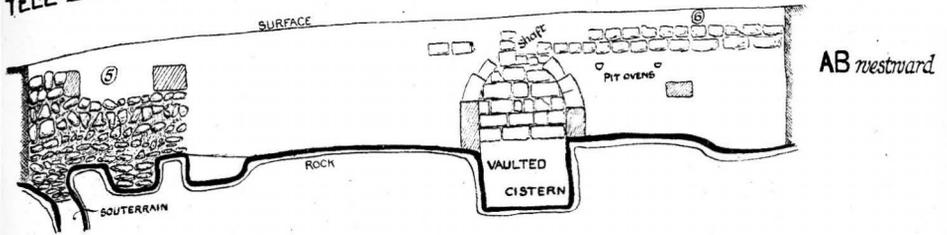
and better squared stones than those found below. The two lower of these courses are interrupted at one point by a drain, about 3 feet 3 inches square in section, which runs through the wall.

I must admit that in view of the fact that a considerable amount of *débris* existed when the main walls of the fortress were built, and that probably more had accumulated when the towers were added on, it is puzzling to find the straight joints extending below the supposed ground line to the rock at two points at Tower IV, and at one point at Tower III. However, that the towers were let in as described above appears to me to be the only explanation of these joints. At Tower I, as stated before, the straight joint does not extend to the rock, the lower part of the main wall serving as the lower part of the back wall of this tower.

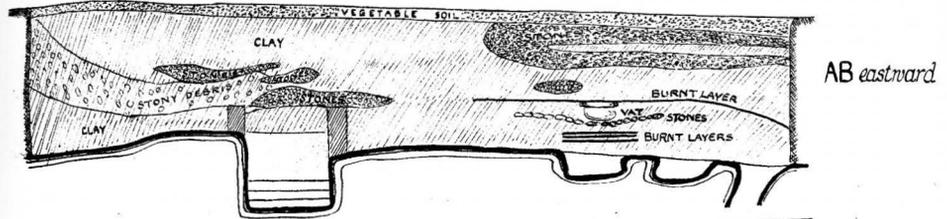
A second entrance to Tower III was found in the north wall of the fortress, but blocked up with masonry. Its level is $8\frac{1}{2}$ inches lower than the door-sill of the other entrance. An entrance to Tower I was also found, its door-sill being about 1 foot higher than the west entrance to Tower III. No offset was discovered along the interior of this north wall though a length of 30 feet was cleared to the rock. The offset in the west wall, which extends as far as the point where Tower IV is let in, was not found in this wall beyond the south end of the tower. The north wall runs back of the west wall, without bond, but it should be remembered that at this point the former serves as the back wall of Tower III which was let in at a later period. We have stated before that the main walls are laid in mud; further examination has shown that the mud contains an admixture of straw, but no lime. This mud was found both above and below the offset, as well as in the back walls of Towers III and IV. As argued before, the entrance to the fortress was probably in the south wall, but this is so ruined that all traces of a doorway have been lost. We sank a shaft to the rock at a point near the south edge of the tell opposite to the central point of the south wall, in the hopes of finding a stairway or some indications of approach, but with no success.

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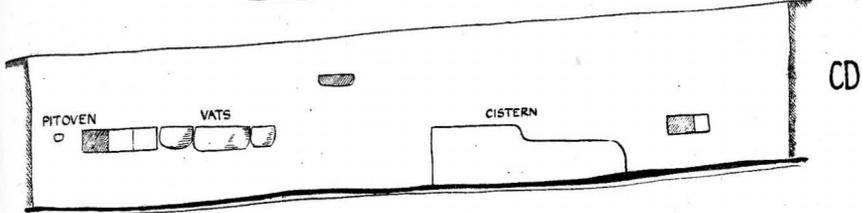
TELL ZAKARĪYA: SECTIONS OF EXPLORED AREA IN THE FORTRESS



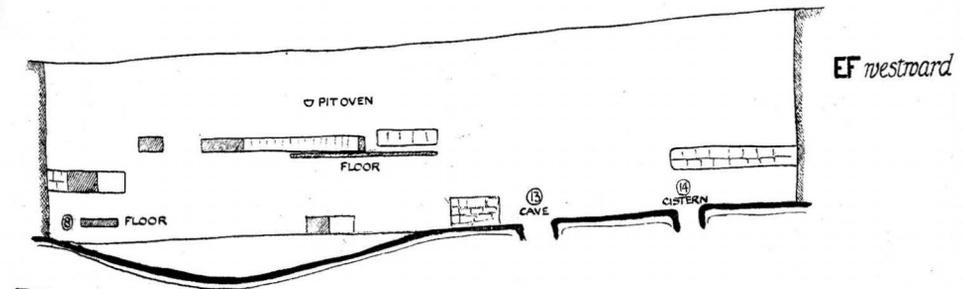
AB westward



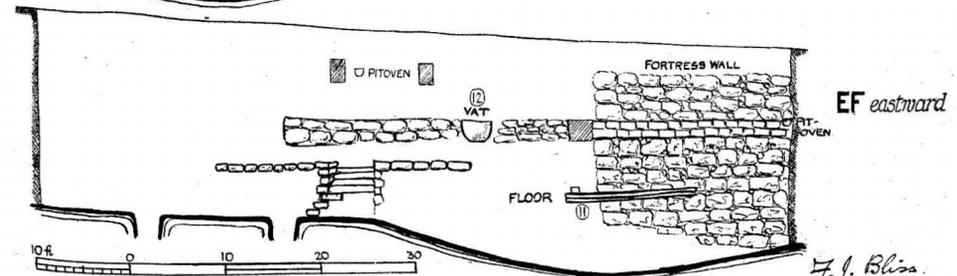
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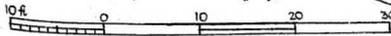
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EF westward



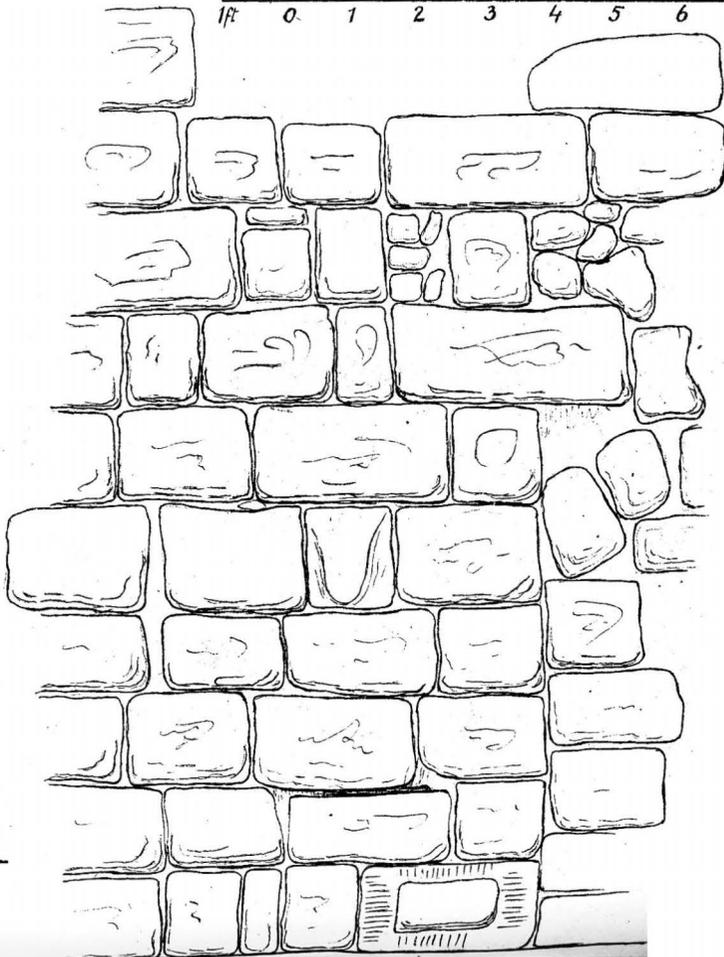
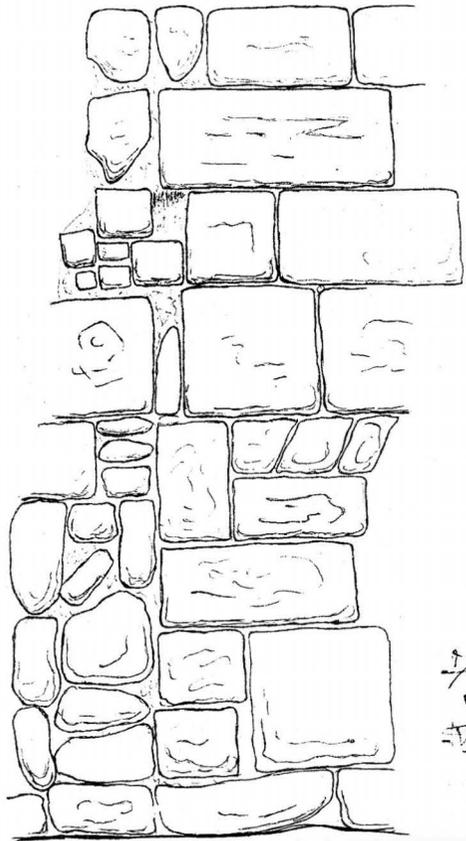
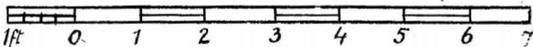
EF eastward



F. J. Bliss.
(Signature)

TELL ZAKARIYA EXCAVATION

MASONRY AT THE JUNCTIONS OF TOWER IV AND THE MAIN WALL



F. J. Bliss.
1912

The east side of the fortress has no central tower, but 33 feet north of Tower VI the wall runs out at right angles for 17 feet, and, turning again, runs straight to Tower I. South of this bend, eastwards, the wall was exposed to its foundations for a length of 20 feet, along the inside face, and it was found standing to a height of 18 feet. Section EF (Plate II), looking west, shows that the corner rests upon about 5 feet of *débris*, but further south it is founded on the rock. The building (hatched on plan) which occurs just outside of Tower I, and whose south wall appears on plan to be let in to the east wall of the fortress, is a puzzle. It does not rest on the rock. It was excavated as far as practicable, in order to ascertain its relation to the fortress, but the masonry of both is so rude that it is difficult to come to any decision. After balancing the arguments as to priority, we are inclined to regard the hatched building as the older structure; in this case the upper wall of the later fortress was carried over the ruined foundations of its south wall. There are no data for determining the use or the age of the isolated mass of masonry outside of Tower I. Built into it is a fragment of a door-sill containing a socket, which indicates the former existence of some large gateway at some part of the tell. Outside of Towers III and V are rude walls, just under the surface, clearly late, as their foundations are only 3 or 4 feet deep, and rest on some 15 feet of *débris*.

We now turn to the interior of the fortress, about one-half of whose area was excavated. Some of the walls were left standing, and in the cases where these were not founded on the rock the piles of earth left as a support were necessarily unexamined. At one point a large cleft in the rock filled with boulders and stones was not cleared out, and two cisterns were not emptied of all their *débris*. Otherwise the rock was entirely laid bare over the whole excavated area. The depth of soil ranged from 14 to 24 feet, the average accumulation being about 18 feet. Some 175,000 cubic feet of soil were thus examined. On the plan the two areas excavated are enclosed by thick black lines. One area—which we will call the west clearance pit—extends southward from the north wall of the fortress, between Towers III and IV. The other—or eastern

clearance pit—is more in the centre of the building, and extends towards the east wall, part of which was excavated to its foundations. This portion was excavated first, and afterwards a pier of earth was left for safety between it and the western clearance pit.

The chief difficulty in the making of these large clearances lay in the disposition of the *débris*. At Tell-el-Hesy, where I cut down one-third of the mound, the earth was cast over the sides, and at the close of the excavations the arable area of the mound was even greater than when I began operations, only it was at two levels, the lower level being the easier of access. Hence the landowner had nothing to complain of. At Tell Zakariya, where our clearances were inside the fortress, the problem was quite different. Our only chance to make extensive excavations lay in the promise to restore the soil to the *status quo*. Our first clearance was laid out in a square of 80 feet. This was worked in four sections, each 80 feet by 20. Each section was divided into 16 squares, with a digger accompanied by a man and two boys or girls in each square. The earth from the first section was carried in baskets by the children and piled to the north and south. At first the work went on rapidly, but as the section deepened, involving the use of cranes and gangways, and as the piles of earth grew higher, the progress was slow, but the lower we got the more precious grew the *débris*, and the delay allowed the men in the pit greater leisure to examine the soil. When the first section was cleared to the rock and all the remains planned, a stout retaining wall was built along the side facing the next section, so that the earth from the latter might be cast back into the former. This process was continued in the other sections. Sometimes the beginning of a new section was delayed by our discovering in the section just completed a souterrain which called for clearance. The carrying to the surface of quantities of stones, some scattered in the *débris*, others from walls which we were obliged to pull to pieces, after they were planned, in order to get at the layers of earth below, formed no easy feature of the work.

Our observations of the pottery excavated in the first half

of the east clearance pit led us to infer three strata of *débris* (see *Quarterly Statement* for January, p. 21): an archaic stratum on the rock, slightly disturbed in pre-Roman times; a stratum much disturbed in pre-Roman times but probably after the archaic period; a stratum disturbed in Roman times. Our more extensive operations have in the main justified this theory of stratification, though some modifications have been necessary. Thus, the lowest, or archaic stratum, which was said to contain mainly pre-Israelite native ware, with some Phœnician types and a very slight admixture of Jewish stuff, and which appeared at first to be only 4 feet thick, has been found in other places to be 10 feet thick, notably near the north wall, where the archaic types are unmixed with later ware. The highest stratum was said to contain mainly Jewish and Phœnician types, with a slight admixture of archaic stuff and 2 or 3 per cent. of Roman fragments. In the western clearance pit, along the north wall—140 feet in length and averaging 35 feet in breadth—Roman ware was entirely absent from this upper stratum, which differed from the so-called second stratum only in the fact that the latter contained more archaic types. Taking the two clearance pits together it would be better to speak of two strata: an archaic or pre-Israelite stratum on the rock, slightly disturbed in Jewish times, and a second stratum containing mainly Jewish types, but mixed with older styles, and near the surface in some parts only 2 or 3 per cent. of Roman ware. The finding of some of the oldest types of pottery, as well as other early objects, in the upper stratum, is easily explained when we remember that a considerable amount of earth from the lowest stratum must have been cast up when trenches were dug in it for the foundations of the fortress.

The levels of the foundations of the walls unearthed are indicated on the plan by a difference of hatching: those founded on the rock or within 3 feet thereof are cross-hatched, those founded on *débris* from 3 to 10 feet from the rock are hatched to the right, and those founded on *débris* over 10 feet from the rock are hatched to the left. This hatching does not always indicate the relative age of a building. The fact that a wall is on the rock does not necessarily relegate it to the earliest

period, as its foundations might have been sunk through *débris*. However, the greater the accumulation of *débris* under the foundations of a wall, the later that wall should be placed. Thus all the walls hatched to the left must belong to a late period. Where walls are associated with a flooring, the level of the latter indicates the real ground-level of the building, and helps to determine its relative age. The heights at which the vats and pit-ovens occur also furnish an indication of archæological level. In a series of occupations, during which the building material was chiefly stone, it is impossible to assign each building to a particular period, or to count the exact number of periods, as we were able to do at Tell-el-Hesi, where mud-brick tower rose directly above the ruins of mud-brick tower, and where ground-plans of parts of each tower could be made. However, a study of the plan and sections at Tell Zakariya will show that there must have been at least four mutually excluding occupations. Three section lines have been taken through the east clearance pit; sections AB and EF are drawn to face both east and west, making five sections in all. In the sections the remains of the various constructions are shown *in situ*, the earth in which they were bedded being treated as though transparent. For the sake of clearness, however, and in order to avoid unnecessary repetition, the area included in each section is bounded by the next section line. Thus in section EF (Plate II), looking west, no walls are shown beyond CD; the next in that direction, section AB, facing east, is of a different character, its purpose being to show the nature and stratification of the soil. Here the wall of earth which formed the east boundary of the first quarter of this clearance pit before the second was worked, and which lay a little to the east of the section line, is shown in elevation, and bounds the area of vision. Section EF, looking east, includes the thin walls butting against the fortress wall, although the excavation here was not completed to the rock.

We may now refer to the various constructions in detail. Wall No. 1 blocks up the doorway to Tower IV, and hence must have been built after that tower, which is itself later than the main walls of the fortress. Its foundations are 11 feet

above the rock, and its ruined top was found almost immediately below the surface. Three courses stand, consisting of well-squared stones laid in mud (mixed with straw), very widely jointed and roughly dressed. The lowest course is 1 foot 10 inches high, above which, on the south side, is a 7-inch offset. Above this offset the wall is 4 feet 2 inches thick. The two upper courses average 18 inches in height. Part of this wall forms the north wall of a chamber, 13 feet by 11 feet, the west wall of which is formed by the interior wall of Tower IV. The east and south walls of the chamber are of less thickness. The east wall is rather more heterogeneous in style than the north wall. Three courses stand, the lowest containing one top-drafted stone. Two rollers are built in lengthways, the holes for the spindles turned outwards. The south wall of the same chamber is more compactly built; the masonry is smaller, and little field stones are used to fill up corners. One top-drafted stone occurs. There is no bond in any pair of walls of this chamber. Wall No. 2 lies outside the area of the clearance pit, but it was found to rest on the rock, and stands to a great height. It butts against the city wall. It does not differ materially in construction from wall No. 1. The two cross walls immediately to the north also butt against the city wall. Both rest on *débris*, but the foundations of the southernmost one are 5 feet deeper than those of the other.

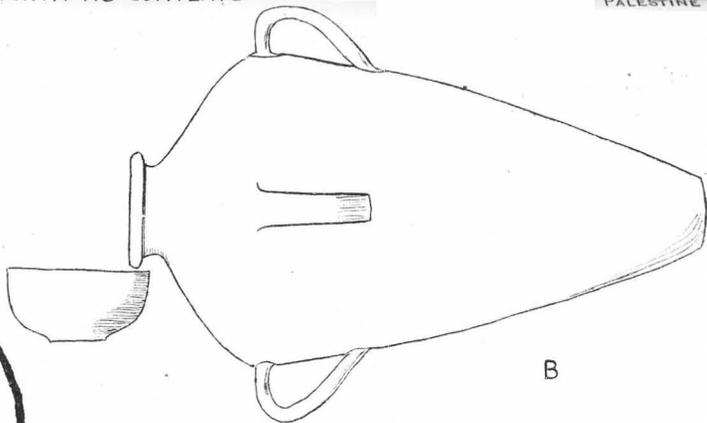
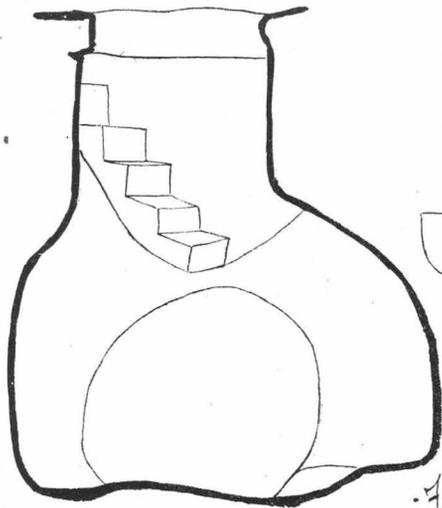
In the vicinity of wall No. 3 we have distinct indications of four periods. Immediately above the rock we found a portion of a very rude mud flooring *in situ*, covered with earth to the height of a few inches, containing stamped jar-handles with winged figures similar to the types found at Jerusalem by Warren, near the rock at the south-east angle of the Haram. Above this occurred a mud flooring, somewhat less rude, broken but *in situ*, on which was a burned layer containing stamped jar-handles with winged creatures similar to the type figured on p. 104 of the April *Quarterly*. The foundations of wall No. 3 are 2 feet 3 inches higher than the level of the second flooring, and thus must belong to a later building. The foundations of the wall running obliquely to the west are 3 feet 9 inches higher than those of wall No. 3; it may, however, be no later,

but it is certainly later than the second flooring, and is earlier than wall No. 1, which was found broken off at the point where it once ran over the oblique wall, the level of its foundations being 5 feet 4 inches higher than those of the latter. This brings the distinct number of periods up to four. Both wall No. 3 and the oblique wall are of small, uncoursed rubble. The slight wall which appears on plan to be against wall No. 1 consists of one course of rubble, the foundations of which are 5 feet 6 inches lower.

No. 4 is a flooring of grey mud, some 10 feet below the surface and 6 feet above the rock. It is broken along three edges, hence, as in the case of the other floorings found, its former extent cannot be determined; but it probably was co-extensive with the rude rubble wall, 3 feet thick, against which it terminates at the north. In the centre was sunk a stone vat, shaped like a bowl, 7 feet 7 inches in circumference, the bowl being 1 foot deep. The curved wall in the corner probably represented a fire-place; the floor here consisted of mud of a reddish colour. Wall No. 5 consists of rude rubble badly coursed. It was founded on the rock, and partly blocks up the entrance to a souterrain. The walls at right angles are founded on *débris*, and may or may not have made use of wall No. 5 in forming a chamber. A plan of the souterrain is submitted (Plate IV). This is No. II in the series of rock-cuttings described by Mr. Macalister in the January *Quarterly*. It is approached by an oblique shaft with five rock-cut steps descending to within about 6 feet of the bottom of an oval chamber. We cleared this of its *débris*, in which was found buried on its side a large Phœnician jar, with a bowl placed near the mouth. A number of large flat stone discs were also found.

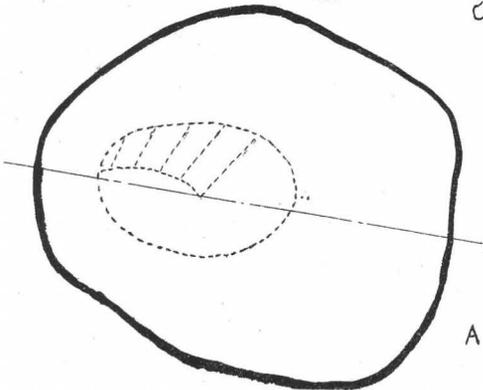
No. 6 is the largest piece of wall found within the fortress; it appears on the south side of the vaulted cistern (over which it probably ran), where it is broken off, and it extends into the west clearance pit, where it turns at right angles, forming a distinct corner. At this point it runs over another wall, which extends north. The length traced thus was about 75 feet; it is $3\frac{1}{2}$ feet thick. Its outside face is towards the

To Face Page 178.

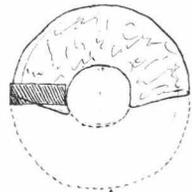
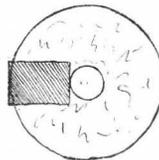
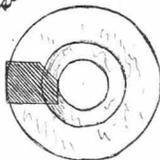


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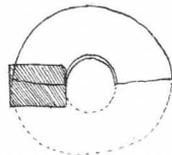
*F. J. Bliss.
 Palestine Museum*



A



STONE DISCS



C



north and consists for the main part of irregular, roughly-squared stones, from 1 foot to 2 feet 3 inches in length, built in courses 1 foot 4 inches high. From two to three courses remain, laid in mud mixed with straw. The masonry is merely quarry-dressed, but at the south end are fine stones in which a continuous chamfer—or draft line—is carried 3 inches deep along the tops, amounting to little more than a smoothing off of the surface. The maximum set-back is about 1 inch. They probably represent the characteristic work of this building, of which hardly more than the foundations remain, resting on over 10 feet of *débris*. The pit-ovens, shown on section AB, facing west, may belong to a room of this building. Such ovens were found in the higher levels at Tell-el-Hesi, and are used to-day in Syria. A hole is dug in the ground, some 3 or 4 feet deep, the sides are plastered with mud, with or without straw, sometimes laid on in rings, in some cases the bottom being also plastered; a fire of twigs is kindled at the bottom, and when these are reduced to coals and ashes the dough, flattened out, is stuck on the sides of the oven and thus baked. Thus the base of a pit-oven *in situ* may be taken as representing a level 3 or 4 feet below the ground level of the period at a given place. The wall running from under the corner of the wall just described to the fortress wall consists of random rubble. A fragment of a plaster flooring was observed along this wall at the level of its top. Beyond the edge of the wall the plaster sloped upwards (resting against *débris*) at an angle of about 110 degrees. The purpose is not clear. The pit-ovens to the north of these walls are shown by their levels to belong to an earlier period. Near the cistern, in the same vicinity, was discovered a stone trough. This cistern was not entirely cleared out; it has a cylindrical shaft, 6 feet in diameter to a depth of about 6 feet, where it expands into a bell shape. The sides are plastered.

The vaulted cistern over which wall No. 6 runs is partly excavated in the rock, having four rock-hewn steps, leading from east to west. Similar stepped cisterns were seen by me at Jerusalem. The rock was plastered in two coats. Above the rock-cut portion masonry walls rise, also plastered,

terminating in a circular vault. The rock-cut part of the cistern may go back to the earliest period, but the vaulted portion must have been underground at the time it was used, and hence is relegated to the period of the long wall running above it. The pottery found in the cistern was later than that in the *débris* banked up outside its walls. This cistern forms part of a series of waterworks. To the north is a cistern, cut in the rock, approached by a shaft, partly masonry and partly rock-hewn. The built part reaches nearly to the present surface, hence this cistern must have been used in the latest period. Its dimensions are about 18 feet long by 14 broad, and it is also stepped down. At the south end it was once connected with the vaulted cistern by a hole cut in the rock, which in later times had been filled up with masonry. A section taken through these two cisterns (unpublished) shows a fall of a few inches from the bottom step of the vaulted cistern to the top step of the other, giving a continuous series of steps. The latter cistern had been plastered after the connection was closed. A number of distinct water-lines run around the walls. To the south of the vaulted cistern is another stepped cistern, the steps running at about right angles to those of the former. Above the rock-hewn part they have a wall in common. To the south of these waterworks is a series of large stone vats for the making of wine or treacle. They are *in situ*, and belong to the middle period of the tell. Sections will be published later.

No. 7 is curious, as it consists merely of a shaft 4 to 5 feet in diameter and 10 feet deep. It is possible that it was merely a trial shaft for a cistern which was not completed owing to the softness of the rock or for some reason unknown; or it may be a corn-pit. The plaster floor, No. 8, is shown by section EF, looking west, to be older than the wall, which is broken off only 4 feet from it, and which probably once ran over it. The centre of the same section shows a clear indication of three periods. First we have the wall on the rock; then, 8 feet above, the room with mud flooring, with one wall *in situ*; and then, 5 feet above this, in the immediate vicinity, the base of a pit-oven, which must have been sunk in the *débris*, burying the

room with the flooring. In this flooring was a circular depression which may once have contained a vat similar to those in floorings Nos. 4 and 11. The cleft in the rock is marked, because we found cast down into it great quantities of pre-Israelite potsherds, with some whole vases. Cistern No. 10 was not fully excavated, as it seems to have been filled up in the latest times, a few fragments of Roman ware appearing in it. It is approached by a square shaft 11 feet deep and 6 to 7 feet across. As far as excavated the body of the cistern measured 14 feet by 10, but it showed signs of widening out. The walls are plastered, and have a distinct water-line a little below the base of the shaft. The semicircle marked corn-pit is part of a circular cutting in the earth for storing corn; grains of barley were actually found adhering to its sides. These corn-pits were a feature of the higher cities at Tell-el-Hesy. They were easily detected by the fact that the soil filling them up differed from the soil in which they had been excavated.

The broken flooring, No. 11, was found *in situ*, and extends over an area measuring 10 feet by 15. It is made of mud and ashes grouted in small pebbles, and is about 3 inches thick. The surface is uneven. Immediately below is a second flooring of similar construction. We have here clear signs of a room whose flooring has undergone repair. In the centre is a bowl-shaped vat of stone, having its top edges flush with the upper flooring, and projecting 3 inches above the lower flooring in which it is also sunk. It measures about 1 foot 9 inches in diameter over all, its sides are about 3 inches thick, and the depth of the bowl is 1 foot 3 inches. We have mentioned a similar vat in flooring No. 4, which has the same archaeological level. At the north end of No. 11 a cubical block of stone was found sunk down into both floorings, projecting 8 inches above the level of the higher. It measures 17 inches long by 14 inches broad. This may be a household altar, or, perhaps, merely a seat. Section EF, looking east, shows indications of three periods in the construction. The steps leading down to the mouth of cave No. 13 are older than the wall above, against which a vat is placed, and this wall and vat are plainly older than the room above, which contains a pit-oven. The rock

cutting No. 14 is curious. It consists merely of an oblique shaft, stepped down to the bottom, which is of very soft limestone. A small segment of its circular flooring was found broken, showing earth below. We cut out the whole, finding 7 inches below its surface a cave or cistern (plastered at top) filled with *débris* and pottery similar to that found in the excavated portion of the neighbouring cistern, No. 10, which, as we have stated, was only partially excavated. The pottery included one piece of Roman ware of which cistern No. 10 showed examples. The sides of the shaft are covered with a thin coat of plaster. It appears that the makers of this shaft, No. 14, abandoned their work on breaking into cistern No. 10. No. 13 is an artificial entrance, with one worked step, leading into a large natural cave, the top of which is broken, having a cleft in the rock, filled with boulders and stones, which we did not clear out. Section EF, looking east, shows a portion of the inner face of the fortress wall, with the corner where it runs out east. The foundations of this corner are very bad and rest upon about 5 feet of *débris*, though 20 feet to the south this same wall rests on the rock.

We may now sum up the results of our excavations within the fortress. We have proved that the fortress was built after a considerable amount of *débris* had accumulated on the mound, perhaps in the Jewish period. It was not divided into chambers, but was simply a large enclosure for protecting houses within. These houses belong to at least four periods. From the constructions unearthed and from the objects discovered we know how the inhabitants reaped their crops, ground their grain, baked their bread, stored their water, made their wine and treacle. The dateable objects range from pre-Israelite to late Jewish times, with a very small proportion of later objects. It appears, accordingly, that the place was inhabited when Joshua conquered the land, that it was fortified in Jewish times, that it was occupied till a late Jewish period, and that during the Roman period there was a brief occupation, after which it appears to have been deserted.

The finds of the season consist of objects in stone, bronze, iron, clay, paste, and glass. In stone we have a large quantity

of flints (both knives and sickle flints), corn-rubbers, weights, rollers, catapult balls, &c. Two of the weights bear the inscription ככ , which was found on the weight figured on Plate 7 of the April *Quarterly*. That specimen weighs exactly 10.21 grammes. The two specimens found this season weigh about 9 and 9.5 grammes respectively. One is of white limestone, the other of a stone of light reddish colour. All three were found within 5 or 6 feet of the surface. The stone cylinders will be described later. In bone we have the usual prickers, spindle-whorls, and carding tools, such as have been drawn before. In bronze, spatulas, arrow-heads, needles, a ring, three coins, spear heads, a chisel, a vase handle, &c. The iron objects (which did not extend down to the rock) include



INSCRIBED WEIGHT FROM TELL ZAKARĪYA.

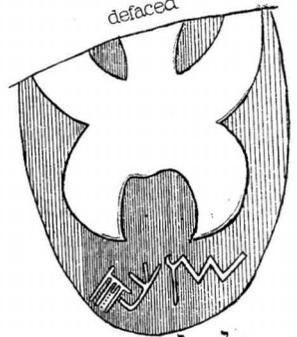
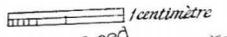
nails, clamps, and arrow heads. In brick, a number of weights turned up. A few fragments of glass vases and some glass beads were found. The pottery has been described in general above. The patterns found on the roughly-painted archaic ware are all being drawn by Mr. Macalister, and will make several interesting sheets. Some Phœnician and Aryan ware occurred; the latter must have been imported. A child's rattle, like one found by me at Tell-el-Hesy, was discovered. At one point within the fortress, 12 feet from the surface, and $2\frac{1}{2}$ feet below the foundations of rude walls, we found a group of buried Phœnician vessels. First we have a bowl in which a lamp was placed; the lamp was filled with soft earth and ashes, firmly packed; over the lamp was placed an inverted bowl, and a third bowl, also inverted, was fitted on to this, with a thin layer of earth between.

At Tell-el-Hesy jar burials occurred in a sandbank far outside the city limits, as well as inside the city, where they were usually found near the bases of walls, from which I gathered that they might refer to some ceremony connected with house dedication. The jars usually contain nothing but earth and ashes, though in a few cases animal bones have been found. Mr. J. G. Frazer, of Trinity College, Cambridge, suggests that we may have in these jar burials an example of the widespread custom of going through a form of burial in the cases of persons whose bodies could not be obtained, as it was supposed that without the performance of funeral rites the soul could not find rest, and would trouble the survivors.

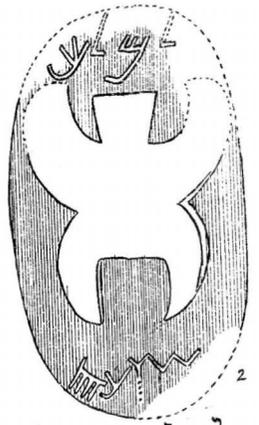
On p. 104 of the April *Quarterly* was figured a stamped jar-handle, showing a four-winged creature with the inscription, למלך חבון. It was shown that this differed from the handles with royal stamps found by Sir Charles Warren at Jerusalem. This last season we have found at Tell Zakariya 12 royal jar-handles, nine of which are drawn on Plate V. All the handles are moulded with two ribs, running up and down, as seen in the section on Plate VI, where the ribbing is drawn in its most pronounced form. Usually the depression between the ribs is slight. In cases where the stamp was carelessly used these ribs prevent the whole inscription from appearing. The stamps on six out of the nine handles drawn are of the type figured in the last *Quarterly*; the remaining three belong to the type found at Jerusalem. In the former type we have a creature with four wings curving diagonally with reference to the body, with a wedge-shaped head, and with a slight projection of the body in a zigzag below the two lower wings. The latter type seems to me to show a creature with two wings only, running at right angles to the body, with the wedge-shaped head of the former type, and with the lower part of the body more fully developed, Mr. Macalister suggests that the creature represented is a butterfly, which is treated in a more natural manner in Figs. 1 to 6, and is conventionalised in Figs. 7 to 9. He therefore argues that the Jerusalem type is a development of the other.

It should be remembered, however, that these specimens of

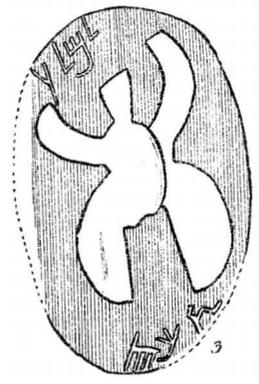
ROYAL STAMPS



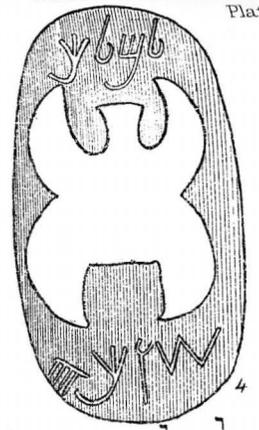
למלך שוכה



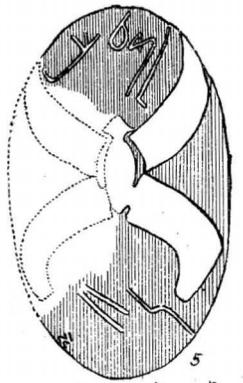
למלך שוכה



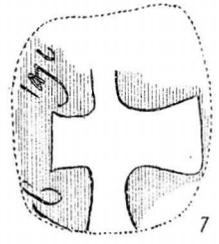
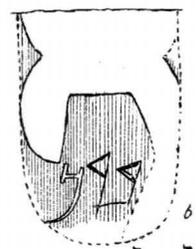
למלך שוכה



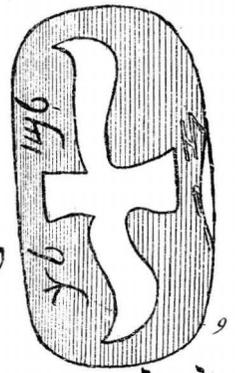
למלך שוכה



למלך *** (למלך ח)בוק למלך ***



למלך ***



למלך ז(י)ף? *
F.A.S. excavator

F. J. Bliss.
F.A.S. excavator

the Jerusalem type were found in a few inches of *débris* upon a pavement, and that above this occurred another pavement, upon which were three specimens of the supposed earlier type. Nos. 1-4 all bear the name שְׁחֹחַ below the figure, and three of them have לְמֶלֶךְ above. In the fourth (No. 1) the upper words are quite defaced: "Belonging to the king of Shocoh" is the translation. Shocoh is now represented by the ruins of Shuweikeh, some 3 miles east of Tell Zakariya. Shocoh is mentioned among the towns included in the inheritance of Judah (Josh. xv, 35); it was under the jurisdiction of one of Solomon's 12 generals (1 Kings iv, 10), and it was invaded by the Philistines in their campaign against Ahaz (2 Chron. xxviii, 18). Hence it certainly belonged to the Hebrews, though it is not mentioned in the list of royal cities in Josh. xii. In all these four specimens the joining of the ש and ך in the lower, and the four side strokes of the final ה should be noticed. The absence of the third prong in the final ך in the upper line of No. 3 is shown by an examination of the handle to be due to carelessness in stamping. In No. 5 the place name has been worn almost entirely away.

Many hours of microscopic inspection have failed to give us the clue to the letters of the defaced word. In the fragment No. 6 the place name is evidently Hebron; for though the first letter does not appear, owing to careless stamping, the three last letters בְּרֵן are perfectly clear. In No. 7 only the line לְמֶלֶךְ appears. The mark like an apostrophe after the מ might be taken as accidental, did it not appear more prominently at the corresponding point in No. 9. Mr. Macalister suggests that it may stand in place of a hyphen. The mark under the first ל of No. 13 is quite as distinct as the rest of the inscription, though its significance is not clear. In fragment No. 8 we have only the upper line. The place name of No. 10 shows the first letter ז complete, and the upper parts of two other letters, which may be י and ה respectively, giving לְמֶלֶךְ זֵיף (belonging to the King of Ziph) as the reading. Of the three specimens not drawn, one is of the type of Nos. 7-9. It is faintly stamped, only the first two

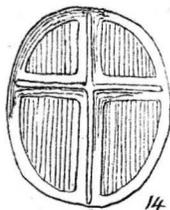
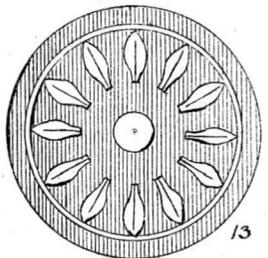
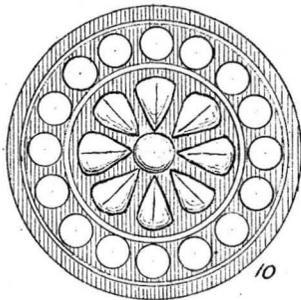
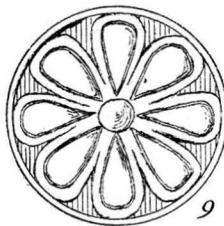
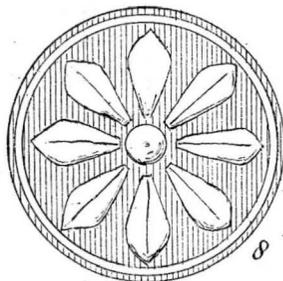
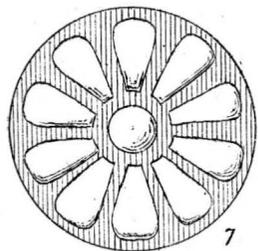
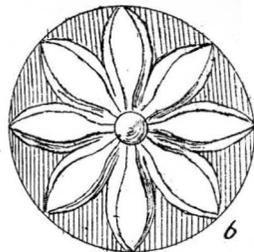
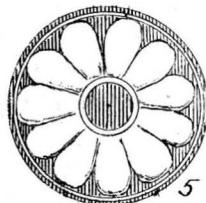
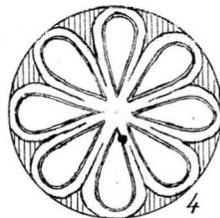
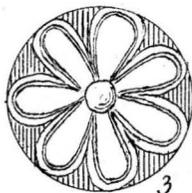
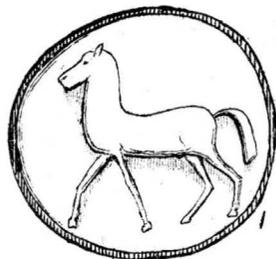
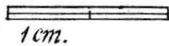
letters of the למלך occur; below, parts of three letters appear, followed by the space for a fourth. The first is certainly a ח , the other two might be ב and ר respectively; accordingly we probably have another king of Hebron stamp, this time with a creature of the two-winged type. The other two undrawn specimens are of the four-winged type. One shows part of the upper line, while the place name is illegible, though it appears to be the same stamp as No. 5. The other is much disintegrated: only the last part of the lower line appears, showing distinct traces of two letters, most probably נ and ש respectively. Before the נ indications of the tail of a כ or a ג (caph or a nun) appear, but the space between this letter and the right margin of the stamp hardly admits of the insertion of another letter, thus seeming to rule out Michmash (מכמש) as a reconstruction. Our discovery of jar-handles inscribed "To the King of Shocoh," as well as of jar-handles with figures of the Jerusalem type inscribed with place names, proves not only that the word Hebron on the jar-handles refers to the city of that name, but that the handles found at Jerusalem inscribed $\text{L}^{\text{e}}\text{M}^{\text{e}}\text{L}^{\text{e}}\text{K Z}^{\text{e}}\text{P}^{\text{H}}^{\text{e}}$ and $\text{L}^{\text{e}}\text{M}^{\text{e}}\text{L}^{\text{e}}\text{K S}^{\text{H}}^{\text{e}}\text{T}$ refer to places, not persons as assumed before.¹

On Plate VI are shown potters' marks found on jar-handles of similar ware. The horse on No. 1 shows considerable spirit; the legs are in action and the hoofs well-marked. No. 2 has an Egyptian-like figure bearing a staff. Most of the rest are beautifully formed rosettes of various types developed from flowers. No two of the same type were found, with the exception of No. 10, of which several specimens occurred. It may be mentioned that the shading on these stamps, as well as that on Plate V, has been employed merely to bring the stamps into better relief.

Plate VII shows scarabs, cylinders, and seals. Scarab No. 1 is of paste, purple enamelled. No. 2 is of slate. No. 3 is either slate or hard paste, grey enamelled. Nos. 4, 6, and 7 are paste, bluish-green enamelled. The back of No. 7 has the form of the eye of Horus. No. 5 is bone. No. 8 is paste, blue enamelled. No. 9 is a finger-ring of paste, purple enamelled. Nos. 10 to

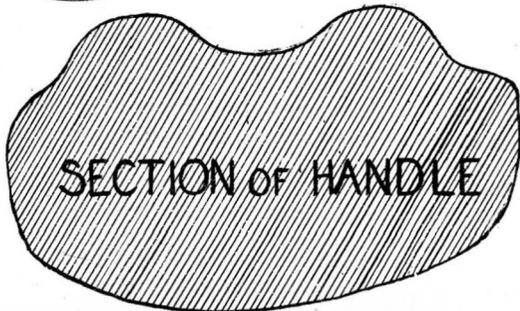
¹ See "Recovery of Jerusalem," p. 473 *ad seq.*

POTTERS' STAMPS ON JAR HANDLES

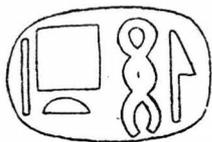


F. J. Bliss.

PALESTINE EXPLORATION FUND



TELL ZAKARÏYA : SCARABÆI, SEALS, AND CYLINDERS.



I



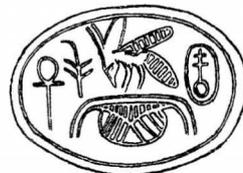
II



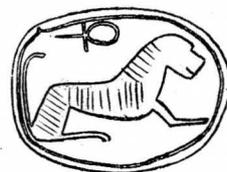
III



IV



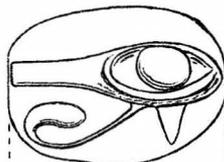
V



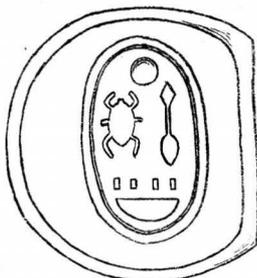
VIII



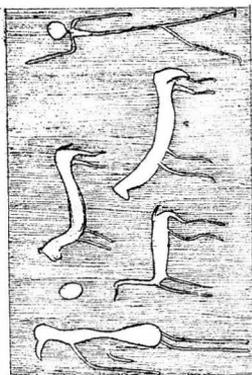
VI



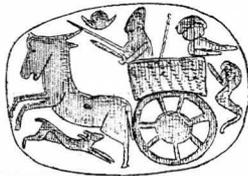
VII



IX



X



XI



XII

F. J. Bliss.
Excavations at Tell Zakariya

12 are probably Babylonian. - No. 10 is a cylinder of hard black stone; the carving is very rude, and appears to represent a man driving animals. - No. 11 is an amulet of the scaraboid form made of blue glass. It represents a lion hunt, and bears a two-wheeled chariot containing two men. The cylinder, No. 12, is of soft white limestone. It was found almost immediately under the surface.

The extraordinary series of chambers (marked XXI in the catalogue of rock cuttings of Tell Zakariya, *see* January *Quarterly*, p. 32) has been thoroughly explored by Mr. Macalister, who found at different levels 49 chambers, connected by shafts and creep-passages. His elaborate plans and sections will be published later. The difficulty of the work was enormous, owing to the lack of good air, the narrowness of the passages, the accumulation of *débris*, &c. He pursued his task with enthusiasm, and the results are well worth the labour involved.

Our work this season at Tell Zakariya began March 20th, and lasted till April 22nd. Eleven days were lost to the work owing to unfavourable weather and to the great Moslem Feast. We were honoured by a visit from Sir Charles Wilson, who not only saw the progress of the work at Tell Zakariya, but rode with me to inspect Tell-es-Sâfi. Our other visitors included the learned epigraphist, the Père Germer Durand; the director of the railway, who brought a party by special train to Deir Aban; the Rev. Dr. Nies, of America, who took a keen interest in all the details of the work; and an American soldier on his way back from Manila. Our arrival was honoured by a series of dinner parties given to us by the chief men of the village. On leaving for Tell-es-Sâfi we returned their hospitality in a lump, and an orderly crowd of some 80 people assembled in circles under the olive trees and partook of roast lamb, rice, and other simple fare. The friendly feelings of the villagers were very gratifying, and many have followed us to Tell-es-Sâfi.

TELL-ES-SÂFI, *June 6th*, 1899.
