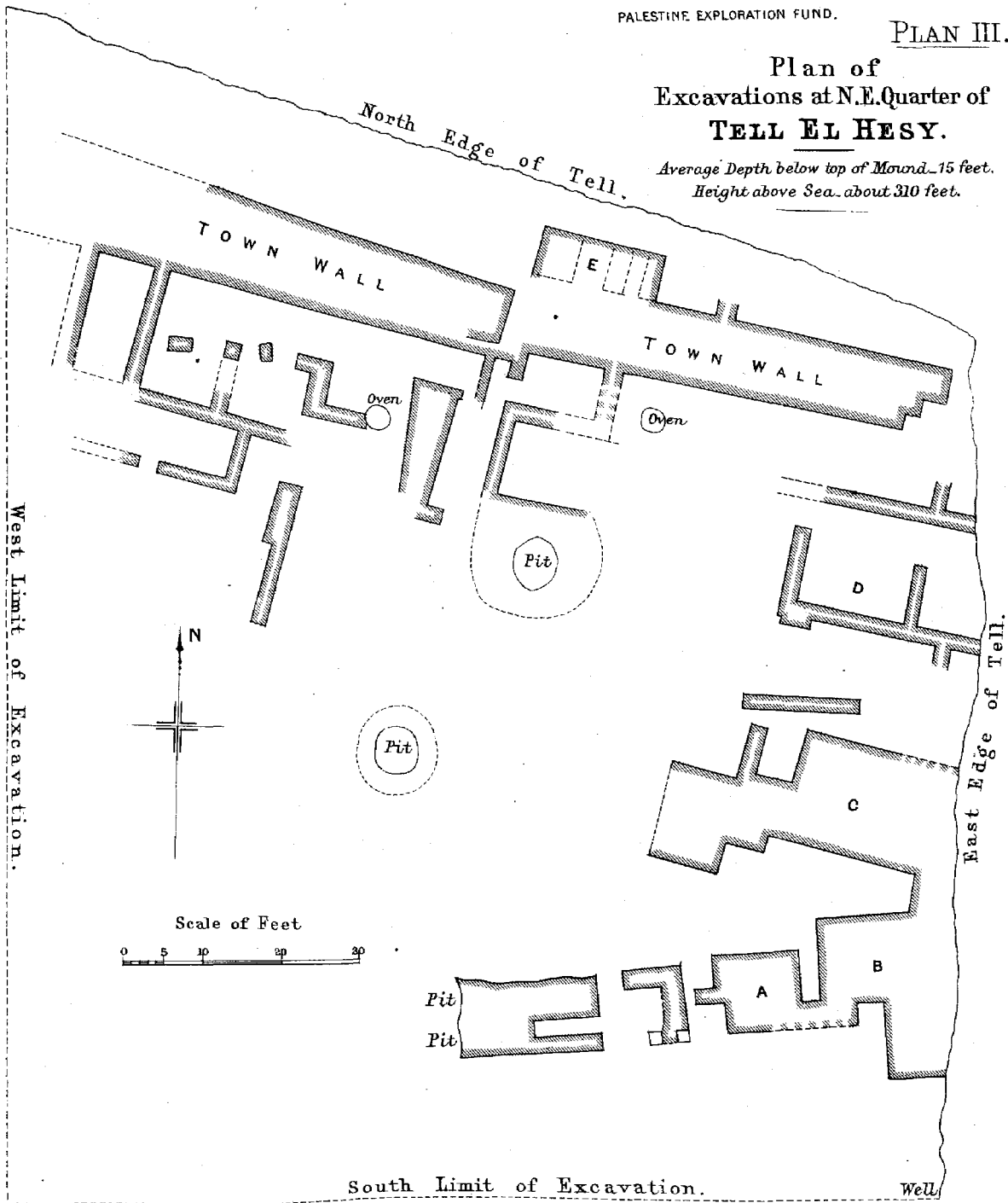


Plan of Excavations at N.E. Quarter of TELL EL HESY.

Average Depth below top of Mound...15 feet.
Height above Sea...about 310 feet.



South Limit of Excavation.

Well

REPORT OF THE EXCAVATIONS AT TELL EL HESY,
FOR THE AUTUMN SEASON OF THE YEAR 1891.

By FREDERICK JONES BLISS, B.A.

THE excavation was resumed on October 13th. Readers of my report for the spring season will remember that I had cut down the north-east quarter of the Tell to an average depth of $12\frac{1}{2}$ feet; the mound slopes down towards the north, so that, although the floor of the excavations was pretty level, the deepest cutting was at the south end, near the wall marked on Mr. Petrie's plan, where I had gone down $18\frac{1}{2}$ feet. As the mound is narrower at the south end, I had, as far down as the digging went, thoroughly investigated actually more than one quarter of the mound, more nearly one-third. I took up the work where it was left off, and on December 19th, when the storms drove us away, the excavation had reached an average depth of $22\frac{1}{2}$ feet, the part near the wall being $28\frac{1}{2}$ feet below the top of the mound at that point. Of course, as we descend the area of the excavation increases in proportion to the slope of the hill.

Wishing to reach the Amorite period somewhere, I took advantage of a place partially cleared by Mr. Petrie in front of the Pilaster building, and in a plot 50 feet by 20, dug down till I reached the earliest dwellings founded on the original soil, 25 feet below the level of the Pilaster building. Taking into account this second excavation, the increase of area in the first, and the debilitated condition of the work-people, many of whom were reduced by fever, I think the work went on as rapidly as could be expected, and compares favourably with the work in the spring.

It will be remembered that I had uncovered the parts of two towns lying within the limits of my area, the second lying at an average depth of $7\frac{1}{2}$ feet below the top of the mound, and that after this I dug through about 5 feet of *debris*, which yielded little result. We had been at work hardly an hour on October 13th when the bases of wallings of a third town appeared, and in a few days I was able to make Plan III, which represents the walls lying at an average depth of 15 feet, about 310 feet above sea-level. Whether the large depth of *débris* between the base of the second and the wallings of the third town are due entirely to the ruins of the third town, or to very much decayed ruins of an intermediate town, I cannot decide. In my report in the October *Quarterly Statement*, page 289, I wrote: "Rooms A B, and C in the plan of the second town were built on ruins of similar walls in this intermediate period. Signs of other walls were found, but not satisfactory enough to plan." I insert



VIEW OF EXCAVATION AT TELL EL HESY.

this quotation to show that I do not speak of the town uncovered in the middle of October as the third town dogmatically, but for convenience, as it is the third town clear enough to be planned.

This third town, then, is interesting, as it is bounded on the north by the wall which Mr. Petrie suggests may be ascribed to Manasseh. My observations in regard to this wall differ from his in some particulars. Starting from the east edge (*see* Petrie's "Tell el Hesy," Plate II), his wall runs for about 150 feet north, 69° west. Starting at the same point my wall runs north, 78° west (magnetic) for 39 feet, when there occurs a platform projecting to the north. The wall then changes, the direction, running north, $71\frac{1}{2}^\circ$ west (magnetic) for 43 feet, after which it was so decayed that I could not decide whether it continued in the same direction, or turned towards the north for a few feet before continuing west. The whole wall gave me some trouble at first, as it was worn down to 2 or 3 feet above its base, but when I came to destroy it, I was confirmed in my measurements. For example, from the north-east corner to the platform E (*see* Plan III), I found decay and burning outside my wall, while the wall itself was solid brick, with a clear face. This part rested on rough stones. At 29 feet 6 inches from the north-east corner there were remains of a thin walling running north, between which and the platform the main wall was slightly bent for 7 feet. The platform was quite clear, with decided corners at the angles it made with the wall. This may have been a tower or a gateway. I have indicated by dotted lines the solid squares of bricks which remained after the decay had been removed from the platform.

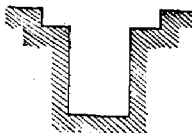
From the platform west the face was very clear; outside the decay contained small fragments of pottery, the wall itself, when broken up, revealed none. We found the face by approaching through the outside decay, and as we got nearer, by giving a sharp tap of the pick, when the decay, hardly distinguishable to the eye from the brick in place, would fall off from a face of solid walling. The wall in this part rested on solid brick.

The whole town was worn down almost to its base. The thickness of walls A, B, and C make it probable that they were the mud brick floorings of small rooms. Room D was rectangular; the inside measurements of the north and south walls being 14 feet 3 inches, and of the east and west walls 13 feet 2 inches. The northern, southern, and western walls were 21 inches thick, and the eastern wall separating it from a room, the walls of which came to an end where the east edge is worn away, was 13 inches thick. This town contained ovens and pits.

Plan IV represents the foundation of structures found at an average depth of 20 feet, about 305 feet above sea-level. We find here a puzzle—roughly parallel lines of isolated stones and brick wallings, worn down to two or three feet from their base; the whole covering a large area. The measurements of the builders were rough. For example, the line of stones C, having the direction north, 18° east (magnetic), is exactly parallel to line B, but walling D has the direction north, $15\frac{1}{2}^\circ$ east (magnetic); line E,

north, 14° east (magnetic); line F, north, $17\frac{1}{4}^{\circ}$ east (magnetic); and wallings H and I, north, $16\frac{1}{4}^{\circ}$ east (magnetic). The stones in each line are only approximately equidistant; the eight stones in line C are severally 41, 43, 45, 43, 40, 41, and 42 inches apart, and drawn accordingly. Again, the stones in one line are not opposite to the stones in another. They are of rough sandstone very roughly squared, the surfaces bearing the marks of a tool with a broad thin edge at one end, while the other end was small and rounded. Each stone was placed on a thin bed of fine yellow sand, which occurred nowhere between them. Their average size was $30'' \times 15'' \times 15''$. Near A, B, C, and D, on a level with the top of the stones, and in some cases a few inches above their level, but never lying on the stones themselves, was a rough pavement of pebbles. I have indicated by dotted lines the places in the rows where the stones were missing, but may properly be inferred. Three stones in row E were placed on a low line of brick. Also the second stone from the north in line F was placed on a stand of brick, extending a few inches beyond the stone to the east. The walling M is at right angles with the rows, but if it belonged to the system it could not have extended far without intersecting the last stones in lines C and F. Walling P buries the last stone in line J, and is at right angles with O and N, which are decidedly out of line with I and K, so the three wallings O, P, and N, I, shade with red as undoubtedly belonging to a later period. The distance between A and B allows exactly for a walling midway between them, but as no indication was found of one, I do not represent it on the plan even by dotted lines. However, if A belongs to the system, it is probable that such a walling did exist; calling this A', then A and A' would correspond to H and I in the system. Line K, being at the west limit of excavations, I made trial trenches and cuts at the proper intervals, in search for lines of stones and wallings farther west which might connect the system with Petrie's north-west tower, but found nothing. The level of line K is from two to three feet lower than that of line A, and the level of the southernmost stone in A is higher by a foot or so than that of the northernmost stone in the same line, so that the structure slopes down from south to north and from east to west. Under line C ran a thick wall of laid mud, not of individual brick; at the south end of C this wall was met by other similar mud walls running west, and laid side by side, the whole forming a sort of foundation for the system of stones. This platform, formed of mud wallings, pebbles, &c., comes to an edge at C (4 feet from the north stone of line C, and at right angles with the line), which is a battlemented face descending vertically for 2 feet. This battlement, or more properly this ornamental edge, was traced for only 16 feet, but it may have edged the platform along the extent of its north face. It is strange that so unsubstantial a structure should have been preserved at all. On Plan IV I have enlarged it. The rough small stones of the platform reach nearly to the edge where their sides were coated with a layer of mud which was covered with plaster to the thickness of half an inch, forming the back wall of the alcoves. The partitions between the alcoves are of individual bricks put

in place after the back wall (or layer of mud), for as I have indicated in the plan by dots, the plaster occurs behind each partition. The sides of the alcoves are plastered, but the faces of the partitions were worn away, so that their exact depth could not be measured. The irregular alcove is a puzzle. The bricks may have been plastered before they were built in, and I would suggest this as the original form of the alcove :—



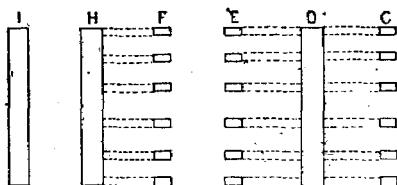
This bears a singular resemblance to the false doorways on the outside of the small Fourth Dynasty Mustabas at Meidum, Egypt.

The earth burying this whole structure contained few stones, little burning, and was chiefly of decayed brick and rubbish.

Having now given the measurements and other details of this singular structure, I may remark :—

(1) The rough pavement extending around the isolated stones, either at their level, or a little higher, but never over them, seems to prove that these stones were below the flooring of the structure. They may have been bases for small columns probably of brick, as we find not a single trace of stone columns above. This takes the lines of stones out of the category of stone circles and similar arrangements of stones, which are themselves prominent objects above ground.

(2) Until I found the alcove bordering, I thought that each stone might have been placed under the termination of a small brick wall running back to the larger walls, so that we would have a series of small chambers :—



We would thus have a sort of bazaar with streets between the lines of chambers. In the modern bazaars we do find shops almost as small as these, 10 feet by $3\frac{1}{2}$ feet. But the ornamental edge gives the place the look of some public structure in which it would be difficult to explain a lot of little rooms. The theory of brick columns seems more tenable.

(3.) The decided slope of the structure, both to the north and to the west, suggests that it was not a covered building, which would naturally have a level floor. We cannot prove the absence of a wooden roof, how-

ever, by our failure to find charred wood, for such remains might have been cleared away. On the other hand, if we take the stones to be bases of pillars, some sort of a roof would naturally be expected.

(4.) Whatever the place was it occupied a large part of the town, covering from one-tenth to one-ninth of its area. I confess that the place still puzzles me, and I await with interest the suggestions of others as to its original form and use. The stones, wallings, and platform on which they rest were of the same dull brown colour, and all so low as to give little variety of shade, so that, although I tried repeatedly, I failed to get a good photograph. To secure any result at all I was obliged to dig away part of the platform, leaving each stone standing on a little pedestal.

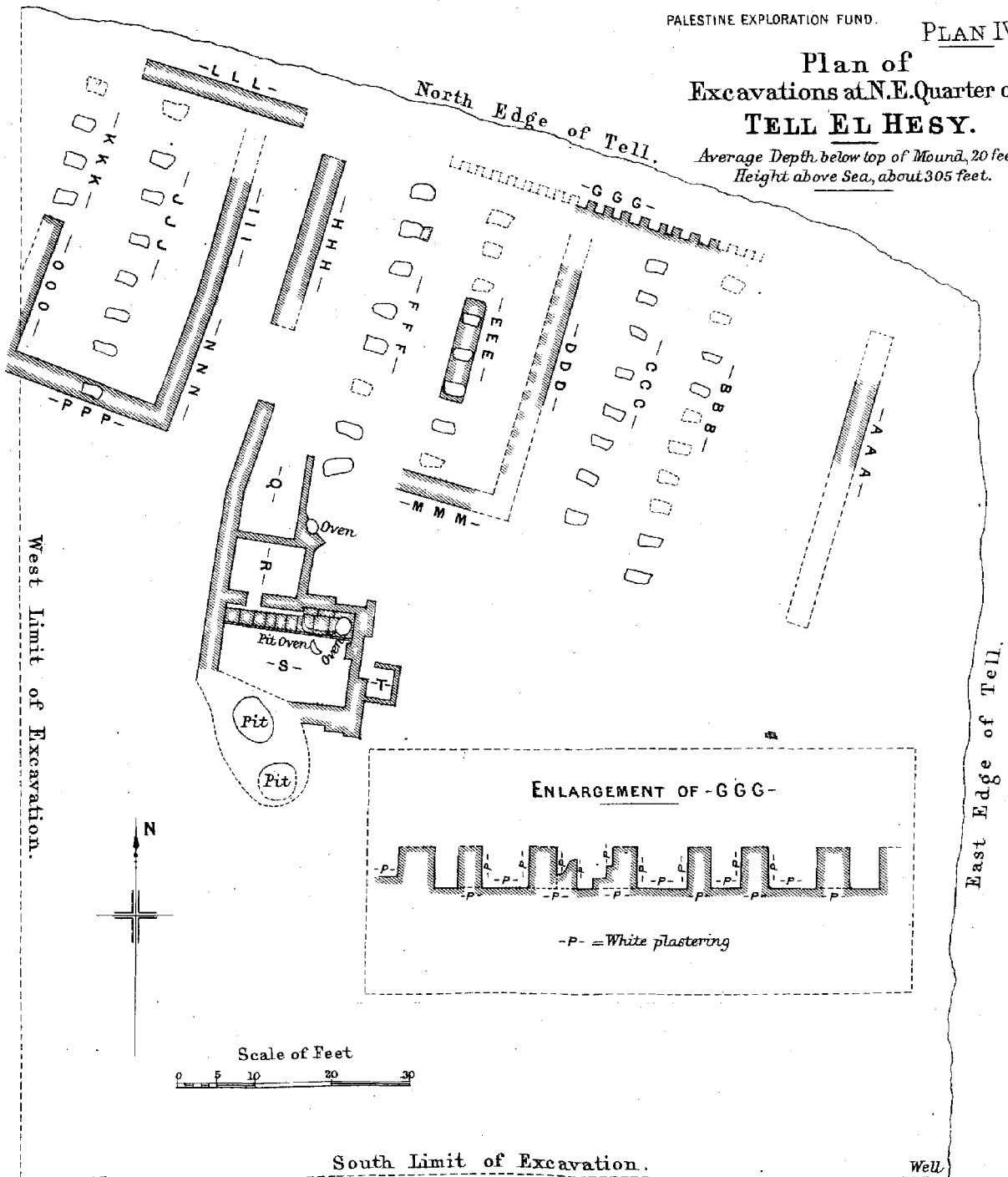
Plan IV contains also the ruins of some interesting rooms, which I shade with red, for they seem to belong to a later period, though not much above the level of the lines of stones. The north side of room S is paved with large bricks, 19 inches by 12 inches by 6 inches, separated from each other by slits, $\frac{1}{4}$ inch thick, filled with fine yellow sand, and one part, shut off by a thin partition, contains in the corner a mud oven. This paved part is separated from the rest of the room by a long, deep slit, also filled with yellow sand. The pit oven marked in black is lower and older. I is a small outer room, which probably had no roof, with a seat in the corner. The oven outside of room Q is not a pit oven, but a rounded construction of brick, narrowing to a small mouth, on which a pot could have been placed. On its front side there is a round opening. Such ovens are found near Baalbec to-day. The fire is kindled at the bottom, and when it is reduced to coals, the side opening is closed with a round piece of clay, dough is plastered on the inside to bake, and a pot is put on top. The oven on the bricks in room S is also not a pit oven.

After the remains indicated on Plan IV were cleared away, we dug down for about 5 feet more but found little but brick decay. In the north-east of the excavations there were several jar burials, similar to those in the "Cemetery" described by Petrie, and of the same period. The brickwork was much consolidated and difficult to resolve into walls. In one part, from the nature of the decay between two parallel wallings, 3 feet apart, it looked as if we had found graves with mud brick sides, but of this I cannot be sure, though bones appeared.

I have mentioned the smaller excavation in front of the Pilaster building, where we went down till we reached the original hill. The earliest buildings we found here at a level of 286 feet, and not at 278, as Petrie marks them. Noting the discrepancy, I examined the soil very carefully, which was unmistakably native, yellow sand, with a cap of reddish clay, white-spotted, the typical soil of the district. The whole east face was covered with brick ruin, fallen from above, and a lot of solidified decay, lodged on the face of the hill ten feet below, might easily have been taken for brick in place. Indeed, I repeat that I am constantly astonished at the accuracy of Mr. Petrie's observations in his rapid survey over the whole ground. His book has been an invaluable aid.

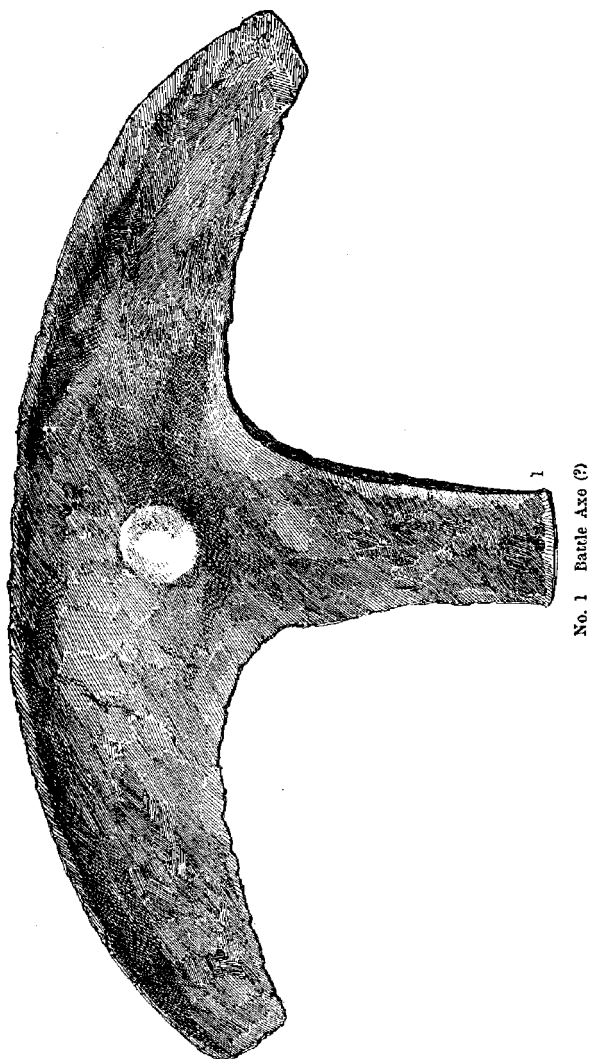
Plan of
Excavations at N.E. Quarter of
TELL EL HESY.

Average Depth below top of Mound, 20 feet.
Height above Sea, about 305 feet.



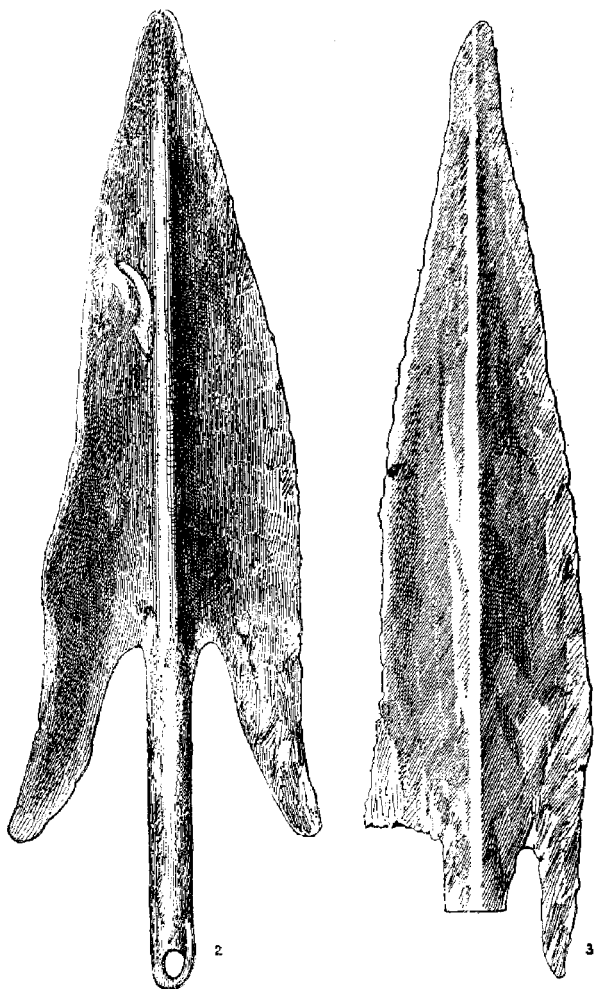
Well.

In this smaller excavation I found much solidified stuff, but only two sets of wallings clear enough to plan. I was at the 293 level, 48 feet below top of mound. It is noticeable that the walls running to the east



come abruptly to an end, showing how much of the east face of the hill was worn away by the eating in of the stream below. The brickwork here was dark brown, containing but little straw, and so solidified as to

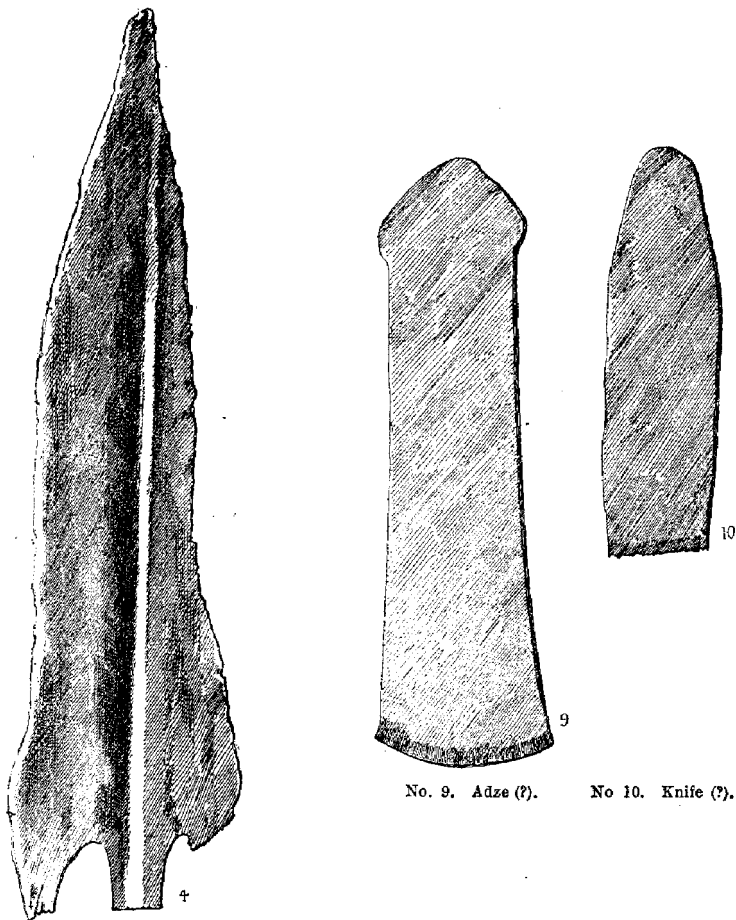
appear one mass. But on our destroying the walls they would fall to pieces in regular blocks, showing the original courses of bricks. In these rooms were found all the varieties of Amorite pottery.



Nos. 2, 3. Spear-heads.

But it was II that rewarded us for this side excavation. In room A were found the Amorite objects in bronze. The small circle was a hole in the ground, 15 inches in circumference, with a smooth, rounded stone at the bottom, and opening into rooms A, B and C. I have photo-

graphed the objects in bronze and drawn them, actual size. Those more versed in old weapons and tools than myself must determine their exact use, but I make some suggestions. The numbers follow the plates of drawings.



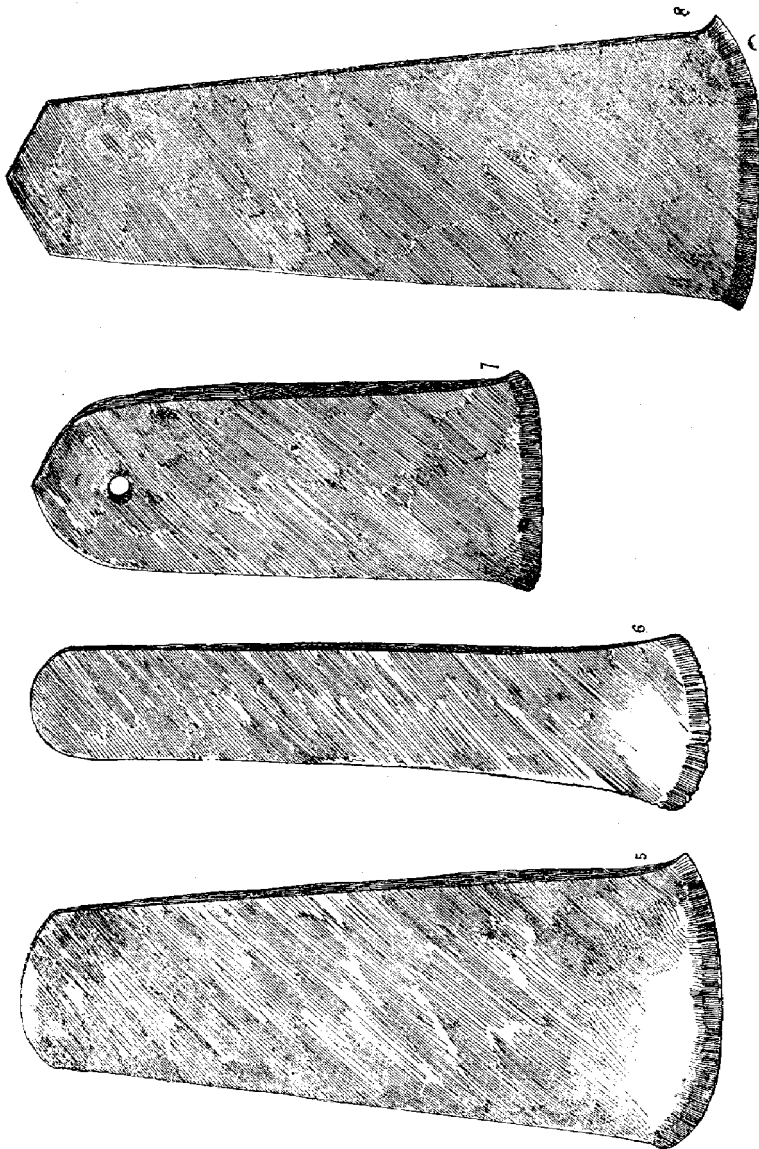
No. 4. Spear-head.

No. 9. Adze (?).

No. 10. Knife (?).

No. 1 looks like a battle-axe, coming to a thin edge ; but the curving up at the end is odd, and it is difficult to see how a wooden handle could have been fastened. It has a low boss in the centre. It also suggests a chopper. 2, 3 and 4 are spear-heads. On 2 is attached a murderous little projection, aimed to lacerate when the spear should be drawn out of the victim's flesh. This spear has a loop in the end, suggesting again a difficulty

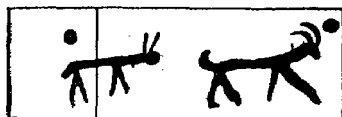
in regard to the handle. 5, 6, 7, 8 and 9 seem to be different forms of



Adzes (?). Nos. 5, 6, 7, 8, 9, 10, found with Spear-heads 1, 2, 3, 4.

adzes. 7 is very heavy, being exactly 12 millimetres (or about half an

inch) thick. Near the rounded top it has a hole, and comes to a fine edge at the other end. 8 is nine millimetres thick. 9 is very light. 10 is a very thin knife. 20 is a lath-stone of slate. 56-68 are marks on fragments of Amorite ware incised before the clay was hardened. No. 56 has a little knob, beside the incisions. 58 was at the rounded bottom of a vessel. 64, in the inside base of a bowl. This cylindrical wooden seal was found :—

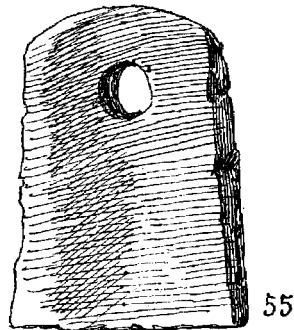
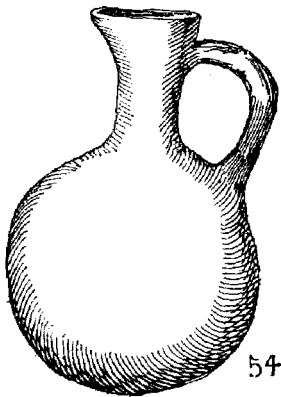
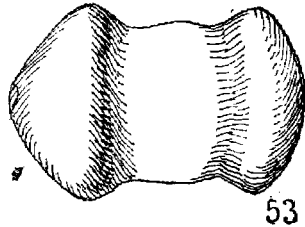
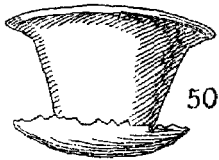


Also a flat wooden seal, with a pattern, of which I send an impression.

I will now return to the larger excavation and will speak of the pottery. The Greek ware, so prevalent above disappeared below the 310 level, though some examples were found. It will be remembered that while Petrie found only a few fragments of the red and black polished ware, and these on the summit, I found them to a depth of 18 feet. I have had some correspondence with him on the subject. It will be noticed in all my plans, that the remains of wallings are usually found towards the north and east of my excavations, and that a considerable area in the south-west part, *i.e.*, near the centre of the Tell, yielded no clear ruins. In looking over my notes I find that, in general, this later ware, which Petrie assigns to the fifth century B.C., was found in this unoccupied part of the area, which may have been originally an open place filled in with rubbish irregularly, so that fragments belonging to buildings at a higher level might have been thrown down into this depressed centre of the Tell, which, in course of time, by frequent deposits, was filled up to the general level. Still, even with this allowance, I think that the discovery of this ware through more than 15 feet of digging, suggests that it was here used both later and earlier than the fifth century B.C.

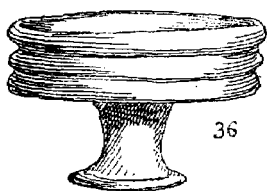
52 is an example of the brittle purplish ware found so much above, which did not occur much below the 310 level. Small vases, like 37, 40, 44, 51, and 54, were common. Some were so thick that they could have contained but a couple of drams of liquid. 43 is singular; it is hollow, like a drain-pipe, but one end is larger than the other, and this would seem to rule out the idea that it was meant to fit into similar pipes. 48 is a beautiful unique specimen, made of fine paste, somewhat polished with rings of sienna; level, between 305 and 310. 53 is a rattle, with a bit of stone or pottery inside; this was found at about 305 level, but another rattle of somewhat different shape occurred a few feet above. Large deep bowls with four handles occurred. At about this level we found fragments of plates and dishes like our modern table plates and saucers. Bowls like 49 were found in connection with buried jars at 300-305 level. 36 was of crystal, but not very symmetrical. Two such vases were found purposely

buried with large jars and the bowls. The handles below 310 level were wheel-turned; those streaked down by the fingers being characteristic of higher levels. What was probably the neck of a jar had been shaped into

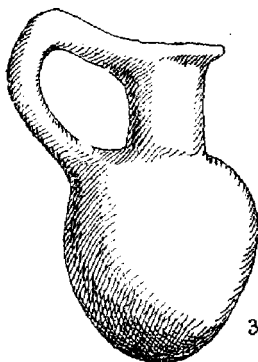


No. 50. Found at various levels.
 .. 51. Jewish. Height... .. $7\frac{3}{4}$ inches.
 .. 52. " " " " " " " " 7 " "
 (Has a purple wave.)

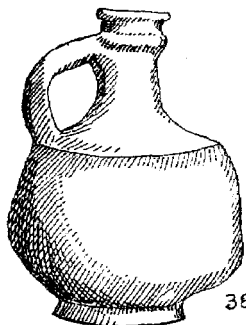
No. 53. Jewish. Height... .. 4 inches.
 .. 54. " " " " " " " " 3 " "
 (Black, smaller specimens, olive.) "



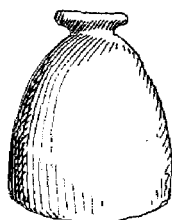
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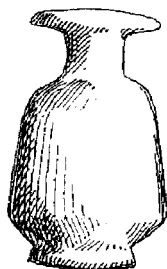
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38



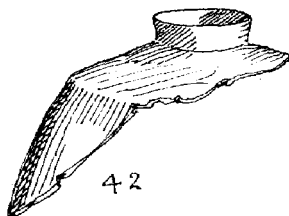
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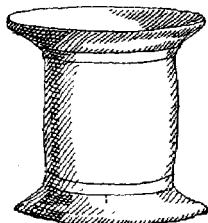
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41



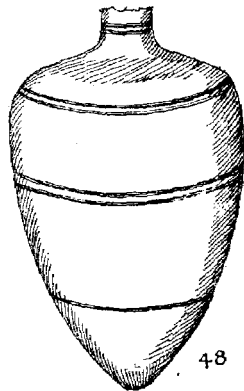
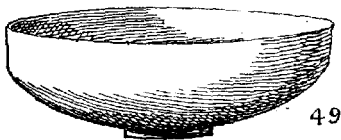
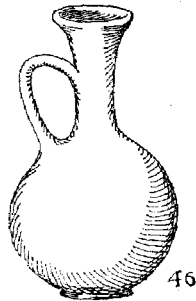
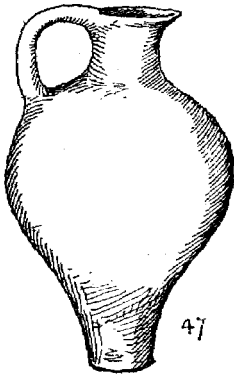
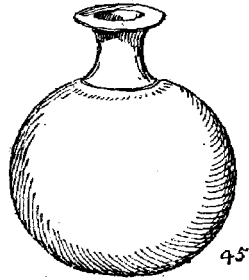
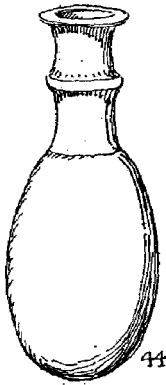
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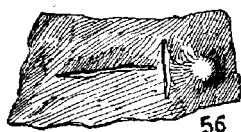
43

No. 36.] Crystal, found buried with
 large jars. Height ... 3 inches.
 ,, 37. Jewish. Height ... 3½ ,,
 ,, 38. ,, ,, ... 3½ ,,
 ,, 39. ,, ,, ... 3½ ,,

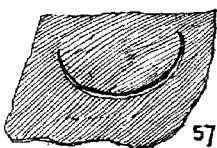
No. 40. Jewish. Height ... 3 inches.
 ,, 41. ,, ,, ... 10 ,,
 ,, 42. ,, ,, ... Large ,,
 ,, 43. ,, ,, ... 10½ ,,



- | | |
|---|--|
| <p>No. 44. Jewish. Height 4½ inches.
 „ 45. „ „ „ 4½ „
 „ 46. Phœnician „ „ 6 „
 (Black paste polished)
 „ 47. Amorite. Height 5½ „</p> | <p>No. 48. Jewish. Height 5½ inches.
 (Fine light brown paste; rings of
 darker brown, somewhat polished)
 „ 49. Jewish or Phœnician. Various sizes
 in this shape. Purposely buried.</p> |
|---|--|



56



57



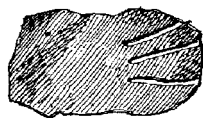
58



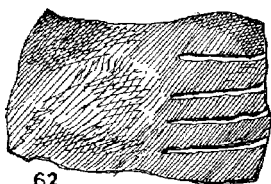
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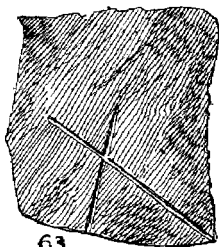
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61



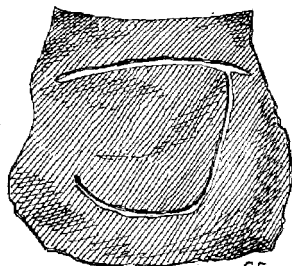
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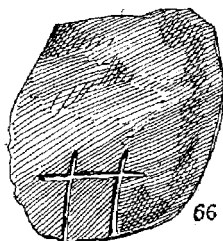
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64



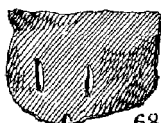
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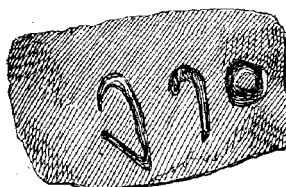
66



67



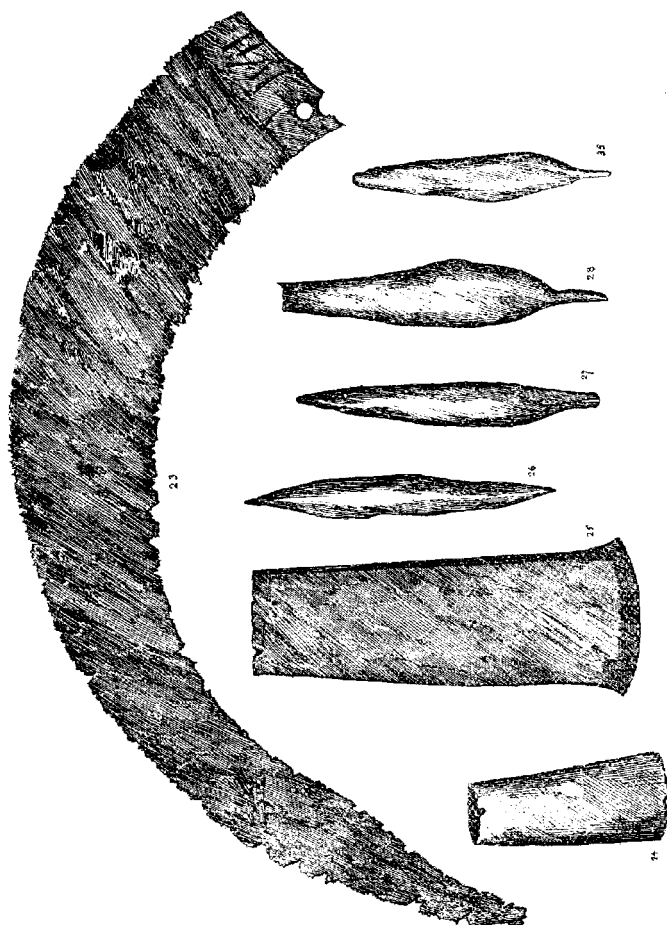
68



69

56-68 are markings on Amorite pottery, incised; 69 is copied from inside of Phoenician bowl.

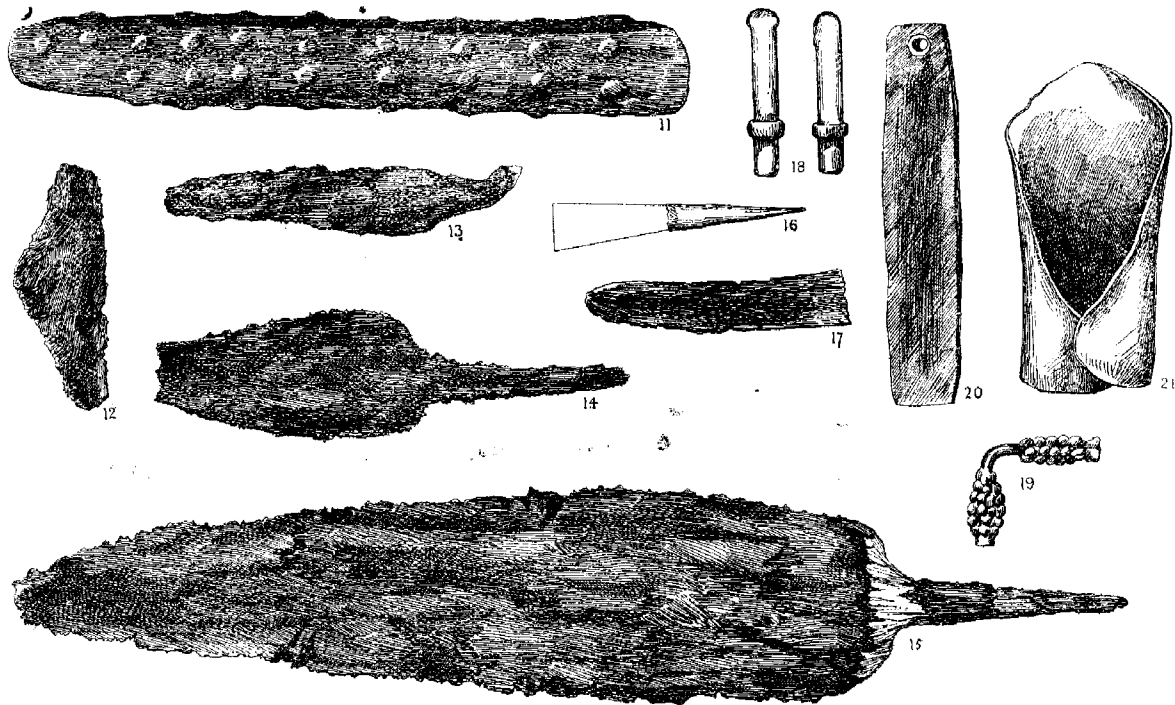
the rough bust of a woman, with the head gone. Also a head of a man or woman, not much larger than the thumb, with a hood showing the face, and drawn somewhat closer at the chin, was found. I send a cast. A human penis in pottery, of actual size, rough, but probably uncircumcised, was exhumed. Heart-shaped objects in clay seemed to be stoppers for jars.



25. Adze (?) Jewish or Phœnician; bronze or copper.
26, 27, 28, 30, Iron arrow-heads.

29. Iron sickle or khanjar, Jewish.
24. Bit of spear, Iron.

69 contains three Phœnician letters on the inside of a bowl, found at about 300 level. They had been cut in before the bowl was baked, as shown by the roughened and furred edges. A stamped handle was found at this level; it is much worn, but I make out a figure of a bird. I send squeeze, and wax impression. I also send impressions of three scarabs

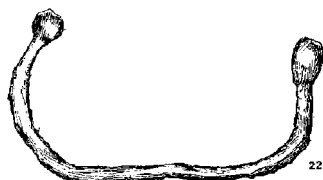


- No. 11. Iron chisel (?).
 „ 12. Iron.
 „ 13. Iron knife.
 „ 14. Spear-head.

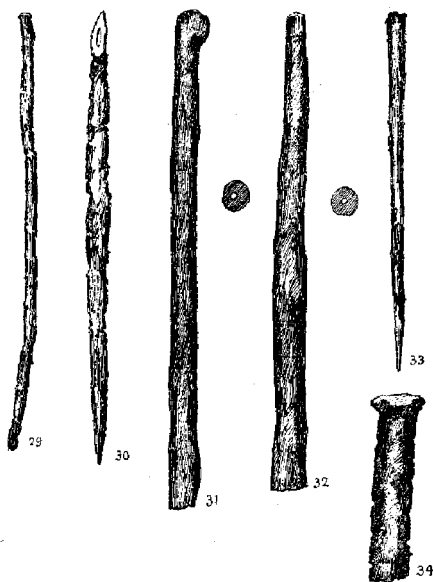
- No. 15. Knife.
 „ 16. Bronze or copper.
 „ 17. Knife, bronze or copper.
 „ 18. Goldsmith's tongs (?); bronze
 or copper.

- No. 19. (?) Handle of vase, bronze or
 copper.
 „ 20. Slate lath. (Amorite?).
 „ 21. Bronze or copper.
 All apparently Jewish with the exception of 20.

of cement. The one with pattern was found at about 306 level ; a few feet lower occurred the second with two human figures ; the third, at about 297, is in hieroglyph. Such scarabs are commonly found near Gaza. A small cylindrical seal of blue cement, at about 300 level, had bird-headed figures, and plants.



The following objects in iron were found between the levels 300-310: 15 is a large knife which fitted into a wooden handle, as a few slivers of wood still clinging to the end show. 14 and 24 are probably fragments of spears. 26, 27, 28 and 35 are arrow heads ; 26 being the most rounded. 11 is like a cold chisel, rounded at one end and with an edge



30. Bronze or copper needle. Jewish.
31, 32. Blow-pipes.

33. Pin or needle.
34. Iron nail.

on the other. It is very much rusted but the knobs were probably on it originally. 23 is a sickle or dirk ; it has a small knob at the end and traces of wood where the handle fitted. 13 is a knife-blade.

In bronze or copper we have the following:—18 may have been a pair of goldsmith's tongs, the parts were found stuck together; 17, a knife-blade; 29 and 33, long pins; 30, a long needle; 22, a bracelet or anklet; 31 and 32, tubes or blowpipes, possibly for use in goldsmith's work; 21, perhaps a weapon for prodding the enemy at close quarters; the handle fitted in where the parts fold over; this weapon is drawn about $\frac{2}{3}$ actual size. 19, evidently the handle of some vase; 16, a scraper; and 25, an adze found at about 297 level, and suggesting the early Amorite types unearthed in the smaller excavation.

We found several dishes in stone, mostly rough; but one of fine limestone, about two feet long, had smooth well-rounded sides, with rims at the end for lifting. An oval cover to a stone coffer, 20 inches long with a hinge at the end turned up. Also a spike-shaped handle of an upper millstone. Also several stone pestles.

Flint instruments were as common as ever. The long thin well-polished specimens were chiefly of the Amorite period. One flint arrow-head occurred. I will mention here three beautifully made, symmetrical vases, of black paste and highly polished, found, purposely buried in the smaller excavation, at about 297 level.

A large number of stone weights were turned up. Many were broken, but I carefully weighed 63 which were approximately whole. I am sending the list to Mr. Petrie, the authority on weights and measures, who will doubtless be able from these to settle the standard weights of the Tell. I may say here that the more common weight seemed to have been somewhere between 301 and 310 grams, as I found nine weights between these limits.

From the above report it will be seen that though nothing of great importance has been found, our autumn season has been more productive than our spring work. In other words the lower towns seem to be of greater importance. We have not yet in our larger excavation reached the period corresponding to that of the Pilaster building, and when we do, similar work may turn up. Then the marked pottery belongs to the lower levels. To find a dozen fragments inscribed with Phœnician letters would be interesting, and it may be hoped for, as Petrie and myself have already found two such fragments.

I am constantly struck with the smallness of the place. The first Amorite town probably covered an area a quarter of a mile square; but through the subsequent centuries of the Tell's history the towns were hardly 200 feet square. I am inclined to think that in its post-Amorite history the place was hardly more than a fortification to defend the springs. I have shown that the buildings are found on the edge of the Tell, and that the centre was probably an open place. This would be in favour of the fort theory. Any miserable mud village in the vicinity covers ten or twenty times the ground occupied by Tell el Hesÿ. Perhaps the idea of a fort, rather than of a town, may throw some light on the mysterious lines of stones and walls.

NOTE.—*All the illustrations are reproduced half the original size.*