



## First Quarterly Report of the Excavation of Gezer

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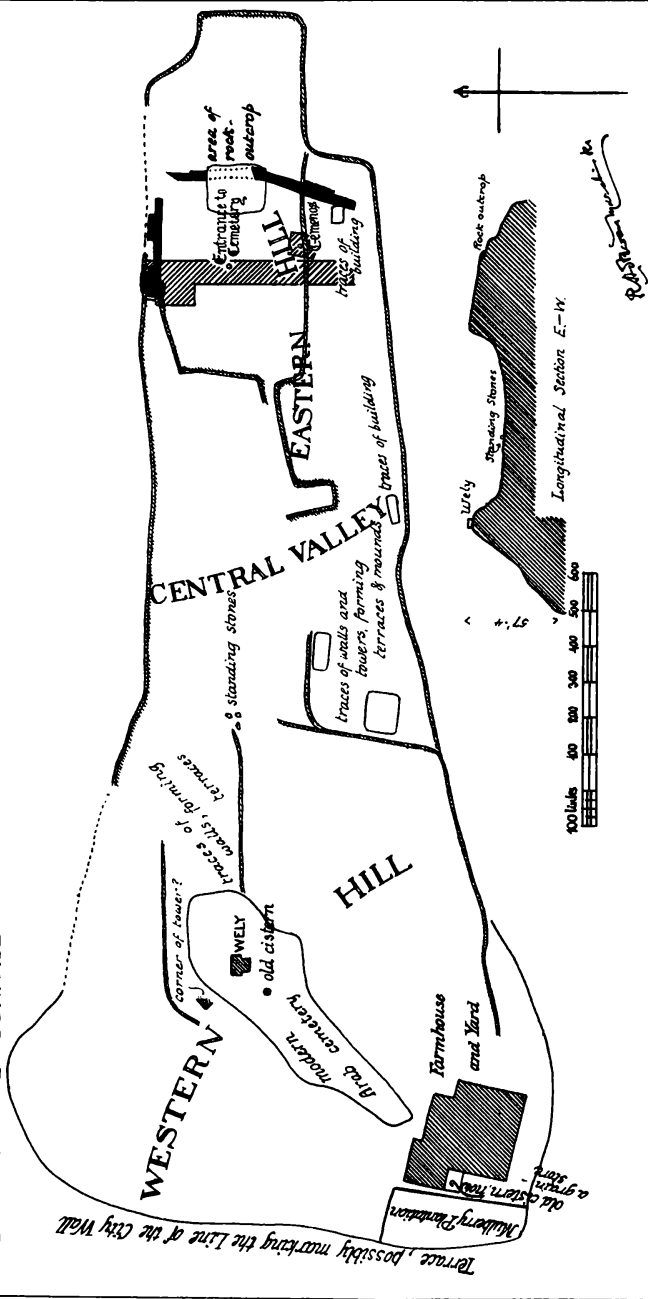
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# EXCAVATION OF CEZER

## PLAN OF THE SURFACE



# FIRST QUARTERLY REPORT OF THE EXCAVATION OF GEZER.

(*June 14th to August 14th, 1902.*)

By R. A. STEWART MACALISTER, M.A., F.S.A.

## § I.—PRELIMINARY ACCOUNT OF THE METHODS OF WORK AND OF THE GENERAL RESULTS.

THE necessary formalities having been carried through, I commenced residence in the camp at Abu Shusheh on June 9th. I was, however, unable to begin the actual work of excavation till the 14th, owing to the absence on Government business of the Imperial Commissioner. The interval was spent in arranging camp furniture and stores, in surveying and mapping the mound, in making a more careful examination than previously of the surface indications, and in deciding how and where to commence the excavation.

In my paper on the "History and Site of Gezer," published in the last number of the *Quarterly Statement*,<sup>1</sup> I mentioned that the mound, which lies due east and west, rises at each end into a knoll. These knolls are probably the débris-covered tops of two natural hills, with a valley between them which (like the Tyropæon valley at Jerusalem) has become filled up with rubbish from the elevated parts of the city. In this and subsequent reports, when I have occasion to speak of these separate divisions of the mound, I shall refer to them as the "Eastern Hill," the "Central Valley," and the "Western Hill" respectively (*see* Plate I). Possibly this division of the town into two parts—one on each hill—may have something to do with its name: at any rate, the radical גור involves the idea of "separation."

I decided that it was advisable to confine my attention at first to the Eastern Hill, as the top of the Western Hill is occupied partly by a modern cemetery and partly by the shrine of the local saint, and it seemed wise to avoid this forbidden ground as much as possible at the beginning of the work.

<sup>1</sup> *Ante*, pp. 227-232.

The length of the plateau on the top of the Eastern Hill (west to east) is about 500 feet. There is an extensive area at its eastern end over which the rock crops out to the surface, and where the soil, when tested by trial shafts, was nowhere more than 4 feet deep. I concluded that this part of the plateau might for the present be passed over. A point was therefore selected on the north side of the mound, where trial-pits showed that the soil commenced to deepen (just west of the area of shallow earth), and a trench 40 feet wide was cut right across the mound from north to south. A second trench, continuous with the first and west of it, is now being dug; and this process will be continued throughout the excavation.

The accumulation of *débris* is not very deep—the greatest depth yet reached is  $18\frac{1}{2}$  feet; and the objects it contains are uniformly of high antiquity. On this Eastern Hill we have to deal almost, if not quite, exclusively with pre-Israelite occupations: the remains, perhaps, of the Solomonic, and certainly of the Maccabean and later cities, are to be sought elsewhere, probably on the Western Hill. The principal results of this excavation have been the discovery of sections of a great city wall, of a most important burial-cave, the examination of which has thrown much light on the physical characteristics, funerary customs, and pottery of some of the earliest races of Palestine; of a small *temenos* or high place, containing a stone circle; and of a considerable variety of objects belonging to the later stone age and the bronze age of culture.

In addition to the running of trenches across the hill, other work has been undertaken—namely, the tracing of the course of the city wall and the examination of the evidences of rebuilding and alteration which it presents, the opening and clearing of ancient cisterns, and the search for tombs.

The portion excavated is hatched on the accompanying plan (Plate I); the course of the city wall, so far as has been determined, is laid down; and the positions of all the most important discoveries denoted, as far as the necessarily small scale of the plan permits. To enable subscribers to follow the progress of the work, this plan will be repeated with subsequent reports, hatching and other details being added as the excavation proceeds. To distinguish surface sites from those discovered underground, the latter are marked in Gothic characters.



## § II.—THE BUILDINGS.

The *house-walls* are uniformly in a chaotic state of ruin, and it has so far been impossible to recover the complete plan of any single dwelling. The principal value of these remains consists in their easily recognisable stratification, from which the outlines of the history of the occupation can clearly be deduced.

Throughout there are three well-marked series of walls; but underlying the lowest we have here and there a few rude structures assignable only to a still earlier occupation, and in one or two places are to be found evidences of imperfect rebuilding within the limits of a single stratum. There are, besides, a few intrusive walls: belonging to some later period, built after the surface had been deserted; these are insufficient to be classed as a fifth occupation, being merely such walls as might naturally be built for dividing property, or for landmarks in open fields, &c.

The four main strata of building I number I, II, III, IV, from rock upwards to surface. Should it ever prove necessary to refer to the subdivisions of strata caused by rebuilding, they will be indicated by the notation, *e.g.*, IIa, IIb, the first being the lower.

The walls all consist of rough stones of a great variety of sizes, from small pebbles to large boulders, which a strong man can scarcely lift, set in mud. None of the stones show evidence of any but the very roughest hammer dressing. A certain amount of sun-dried brick was also used, but the few walls built of that material were invariably founded on a course or two of stones. At two places in the first trench were found large solid masses of brick-work, irregular in outline, belonging to the third city; they were each about 6 feet high, and measured respectively, in cross dimensions, 8'  $\times$  3' 6" and 9' 3"  $\times$  7'. In the top of one of these was sunk a circular vat about 2 feet across. As an example of the size of brick used I give the dimensions of a fine specimen—1' 3½"  $\times$  1' 3½"  $\times$  7".

The floors of the houses, when they were traceable at all, consisted as usual of beaten mud and limestone. They were valuable in supplying date levels, as were also the pit-ovens found in considerable numbers throughout the trench. One of the house floors had a deep circular depression sunk within it; no doubt many domestic purposes could be assigned to this feature, which showed no special indication of the use for which it was made.

As each stratum is uncovered in the course of excavation the walls revealed are drawn on a plan and coloured brown, green, blue, yellow, and red, according as they are assignable to the first, second, third, or fourth cities, or to the intrusive stratum of occasional walls on top. The value of this method of showing the superposition of walls has already been demonstrated by such plans as that of Hissarlik by Dr. Dörpfeld. It is, however, impossible to reproduce any of the sheets of this plan in the *Quarterly Statement*, as they are necessarily of large size. It should be noticed that the first and second cities can be distinguished only where remains of both are present, and as a general rule there are only three strata existing. There are, however, too many traces of the first throughout the excavation to permit us to limit the number of cities to three. No walls or other remains will be assigned in these reports or on the plans to the first city without clear evidence being forthcoming, in each case, of the accuracy of so doing.

Characteristic of the first city are a number of broad, stone *causeways*, usually about 5 feet thick and 1 foot to 3 feet high, laid on the surface of the rock, and generally crossing irregular natural depressions therein.

The *city wall* is a magnificent structure, of an average thickness of 14 feet, and in some places standing below ground to a height of 12 feet. At intervals it has towers on the outer, and also on the inner side; the external towers are alternately (?) of shallow and of deep projection, the former extending about 3 feet, the latter about 12 feet, beyond the face of the wall. The angles of the larger towers are rounded, and the faces of both have a batter.

At the back of the wall runs another, of much less thickness, and practically parallel with it. There are reasons for regarding the inner as the more ancient structure, probably belonging to the first or second city, and the outer and larger wall as the defence of the third or fourth. At the north-east and south-east angles the two walls interfere with one another in a very complex manner; and I prefer to leave these portions undrawn on the plan, and undescribed in the report, till a little more excavation has enabled me more fully to work out their architectural history. At present I will content myself by remarking that, considering the remote period to which these works must be assigned, both walls show a surprising amount of skill in stone-dressing and masonry, for which

the roughness of the enclosed house-walls hardly prepare us. Probably each man built his own house as his skill permitted, but for important public works of this kind trained artificers, perhaps imported from Egypt, were employed.

The *Temenos* (Plate II) was made the subject of a special investigation. Its western wall projected slightly into the eastern side of the first trench, and attracted attention by its superior masonry and evident importance. A pit was accordingly dug to the east of the trench in order to determine the nature of the building to which this wall belonged. Being on the rock, and overlaid by two later independent series of buildings, it must be assigned to the first or the second city. It consists of a four-sided enclosure, not rectangular, though probably intended to be so, with rounded corners. There is no definite rule of orientation deducible. The width of the enclosure (exclusive of the 2 feet 6 inches thickness of the walls) averages about 45 feet. The western half is occupied by cross-walls, dividing the enclosure into chambers. The eastern half is free from buildings, except for a circle of small stones about 1 foot 6 inches high, set on end on a platform of beaten mud raised about a foot above the rock. Unlike any other stone circle I know of, the stones are cemented together with mud.<sup>1</sup> About a third of the circumference of the circle is left open. There are distinct marks of fire, both smoke-blackening and heat-splintering, especially on the end stone of the curve at the eastern side.

It is natural to compare this structure with the analogous building found at Tell eş-Şâfi.<sup>2</sup> In both an enclosure bounded by a large wall is partly occupied with chambers, partly empty, except for a rude stone structure, and there can be little doubt that both have been made for the same purpose. There are, however, important points of contrast whose significance would probably be more comprehensible if we knew more of the nature of the primitive rites conducted in these high places. At Tell eş-Şâfi the rude stone structure is an alignment; here, it is a circle. There, it is megalithic; here, microlithic. There, it is rigidly oriented east and west; here, no orientation can be detected. There, an elaborate

<sup>1</sup> This may have been frequent, or even usual; of course, mud or small stones filling up the interstices of a dolmen, or a stone circle exposed to wind and weather, would long since have disappeared.

<sup>2</sup> See the *Quarterly Statement*, 1899, pp. 318-324, with associated plates; also the new *Memoir*.

arrangement of apses with a skewed doorway seems to indicate some form of sunrise-worship; here, there is nothing of the kind. To infer that the Gezer high-place is simpler, therefore more primitive, and therefore older, than that at Tell eš-Šâfi would be unscientific, for in the first place the simplest rites are not necessarily the most primitive (if anything the study of comparative religion leads to an opposite conclusion); and in the second, rites of religion are usually so jealously conserved against change that it would not be possible for the Gezerite type of high-place to evolve into that illustrated at Tell eš-Šâfi, or *vice versa*, within a reasonable period of time. Rather, are we to see in these two structures, so similar yet so diverse, the remains of two distinct and contemporary varieties of one religion, which can easily be accounted for by assuming a slight racial difference between the natives of Gezer and those of Tell eš-Šâfi. For this assumption further evidence will be forthcoming as this report proceeds.

In connexion with the description of this enclosure, it is well to notice a considerable number of small rounded pillar stones which have been found all through the excavation. Most of them are found in the lower strata, but some were unearthed quite close to the surface. The largest and finest seems to be associated with the burial cave, to which a later section of this report is devoted, and it will there be described. The others are all small, not more than 1 foot 6 inches or, perhaps, 2 feet high, and 1 foot 6 inches in diameter; they are circular in section, and resemble the drums of rather rude columns more than anything else: it is quite evident, however, that they serve no constructional purpose, and there can be little doubt that they are *maššebôth* or bœtylic pillars, like the stone anointed by Jacob at Bethel.

Near the north end of the first trench was found a large standing stone on the rock, untooled, 7 feet 6 inches high and 4 feet 10 inches broad. It was kept in an upright position by two smaller stones wedged under it. Like the standing stones at Tell eš-Šâfi it had been adapted constructionally, second city walls having been butted against it. I have little doubt, however, that it was originally set in position by the first city occupants. It is shown in Fig. 2, which was photographed after the intruding walls had been nearly all removed: the remains of one will be seen to the left.

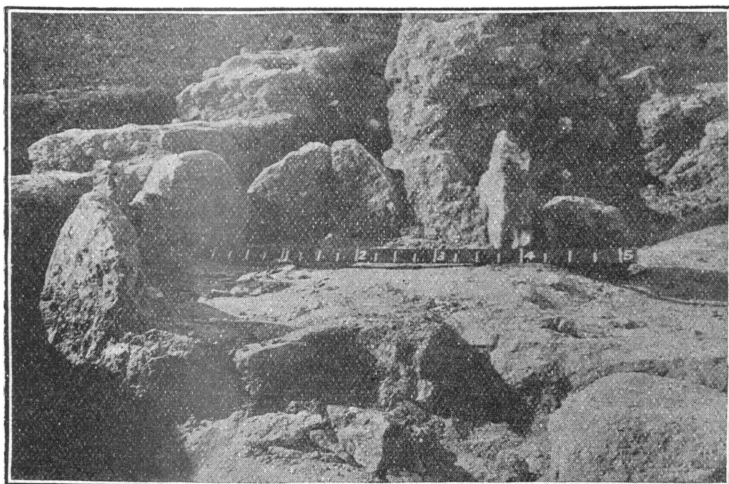


FIG. 1.—Stone Circle in High Place.

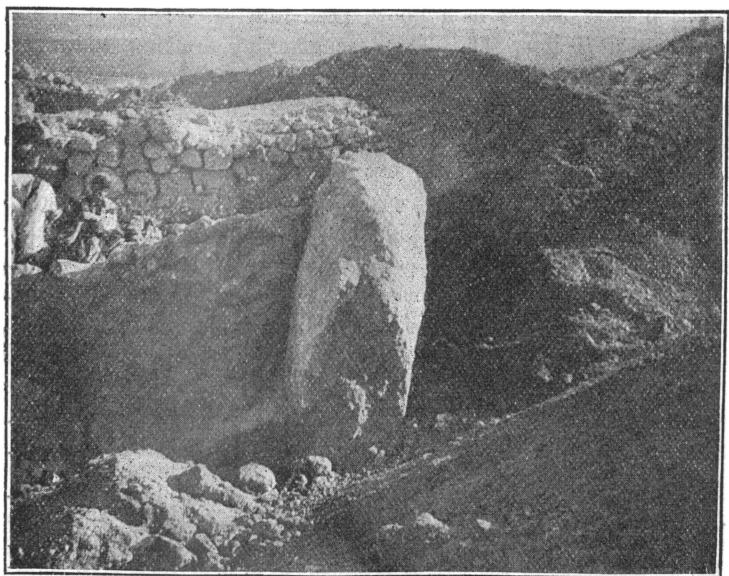


FIG. 2.—Standing Stone.

## § III.—STONE OBJECTS.

*Flint.*—The flint implements found in such profusion in the sites already excavated in Palestine, reappear at Gezer with the like frequency. The ordinary forms of flaked flint from Palestine have already been fully illustrated (*see* P. TH., Plate X; B. MMC., p. 124, with the appendix, by Mr. Spurrell, pp. 193–197; BM., Plate LXXI),<sup>1</sup> as well as identical types from elsewhere (*e.g.*, PC., “Primitive Greece,” vol. i, p. 121). It is not necessary to say more than that fine examples of all the types illustrated have been found, but, except a triangular awl or pricker (Plate III, Fig. 1), 8·8 cm. long, and a small arrowhead 2·6 cm. long (Plate III, Fig. 5), no new form has come to light.

The *flaked* flints, as is well known, are found at all periods down to the Seleucidan. The only chipping they show is a little touching up of the edge, which generally produces the appearance of a finely-toothed saw (as in all the examples in P. TH., Plate X). Flints formed entirely by *chipping* are, however, confined to the earliest ages of Palestine occupation, and when found are a certain indication of remote antiquity. None of the chipped flints of Palestine have, so far as I know, been illustrated: one specimen was found at Tell es-Şâfi. The accompanying drawing (Plate III, Fig. 2) of a magnificent example from Gezer, 8·6 cm. in length, may supply the deficiency. It was found in a pocket of earth between the foundation of the great city wall and the rock, on the inside, at the north end of the first trench.

Associated with this flint was a curious little bar of stone, at present 4·5 cm. long, but (being broken at each end) originally longer. The sides, end, and edge are shown in Plate III, Fig. 3. It has a slightly convex—almost plane—face, and a convex back. The face is ornamented with groups of lines, finely and closely cut, arranged in a basket or plait pattern, carried round the edges and some way over the back. I have no idea of the purpose of this object, which, from its associations, must be of great antiquity. The stone is a close-grained granite, with very fine particles of mica.

<sup>1</sup> P. TH. = “Tell el-Hesi” (Lachish), by W. M. Flinders Petrie. B. MMC. = “A Mound of Many Cities,” by F. J. Bliss. BM. = “Memoir on Excavations at Tell Zakariya, &c.,” by F. J. Bliss and R. A. S. Macalister. CCM. = “Catalogue of the Cyprus Museum,” by J. L. Myres and M. Ohnefalsch-Richter. PC. = Perrot and Chipiez’ “Histories of Art.” These abbreviations will be used throughout this and subsequent reports.

Marked flints are so extremely rare that every specimen is worth recording. Two such were found at Gezer. They are flat knives, respectively 10 and 8 cm. in length, with, on one side a calcareous deposit, on which the marks are scratched. The second, with a rude animal figure, is especially interesting (*see* Plate III, Figs. 6, 7).<sup>1</sup>

*Mace-heads.*—The egg-shaped perforated balls of quartzite (by some termed mace-heads, by others [*cf.* CCM., p. 55] apparently considered as merely large spindle-whorls), which are found in considerable numbers in Egypt and Palestine, have been fairly plentiful in the present excavation. Most of the specimens found were fragmentary, but one very fine unbroken example was recovered. Typical examples will be found figured in B. MMC., pp. 40, 41; the specimen here illustrated (Plate III, Fig. 4) is peculiar in having the perforation stopped at about one-half the length of the object from the broad end. As a rule the perforation is carried completely through. It is 4.4 cm. in length.

*Ornamental Stones.*—That the Gezerites were not blind to the æsthetic effect of pretty stones is shown by the numerous polished

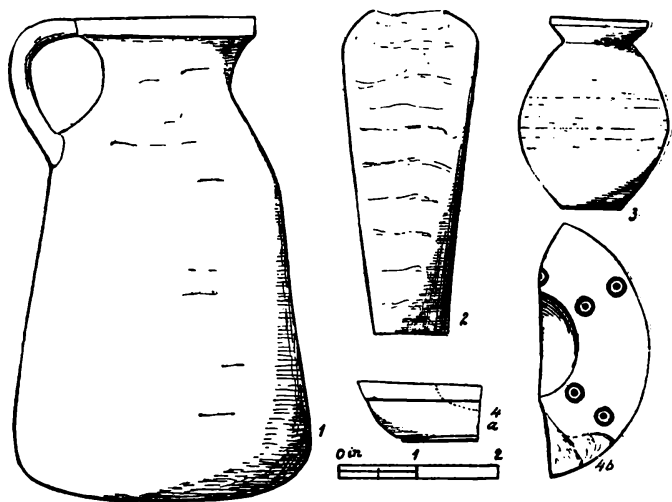


FIG. 3.—Alabaster Vessels.

pebbles of jasper, agate, chalcedony, and quartzite which exist through the débris; by two or three fragments of polished diorite jars; and by several vessels of alabaster, including two remarkably

<sup>1</sup> It is worth noticing that the first of these flints was found on the rock, the second (with the animal figure) just under the surface.

finely veined and well-cut fragments. A minute crystal of emerald, uncut and unpolished, and a bead or two in carnelian, complete the catalogue of precious stones.

*Corn-grinders and Cooking Vessels.*—Corn was ground in three ways: by mortars and pestles, by rubbing-stones, and by quern-stones. Examples of all three classes have been found, but I reserve a more complete study of them for a future report, referring meanwhile to B. MMC., p. 85, and BM., Plates LXXII, LXXIII, where illustrations of typical specimens will be found.

By the term "cooking dishes" I denote a peculiar type of shallow circular bowl, about 1 foot in diameter, raised on three legs. One specimen was found, in fragments, but almost entirely recovered; another whose legs had been lost was also found, as well as fragments of the legs of others. The type persisted to the Seleucidan period, for a specimen was found at Tell Sandahannah blackened with smoke.<sup>1</sup>

*Miscellanea.*—I may mention under this head a peculiar chair-shaped object in soft white limestone, ornamented with lines roughly scratched upon it, 10·2 cm. high, 7·2 cm. broad, 6·8 cm. thick (Plate III, Fig. 8); a block of stone with a bowl-shaped depression on one side, like a mortar, but with a channel running out of it; height 20·3 cm., breadth 24·1 cm., length 35·6 cm. (Plate III, Fig. 9); and a small bar of limestone with a depression like a finger-mark on one end (Plate III, Fig. 10). I can assign no purpose to any of these objects, unless the last be the foot-stone of a carpenter's drill, worked, like the analogous instrument in use in the east at the present day, by a bowstring. The stone, however, appears almost too soft for such a purpose.

It is as important to notice the absence of objects as their presence. To these remarks, therefore, should be added that nothing resembling a draught-board, so common in the Shephelah tells,<sup>2</sup> has yet been found. The other stone objects discovered, being all of common type, need not be enumerated individually; they are pounders, sling-balls, weights (for *weighting*, not *weighing*), hammer-stones, &c. (see BM., Plates LXXII, LXXIII, where similar articles are illustrated).

<sup>1</sup> While this report was in progress, a very fine perfect specimen was found.

<sup>2</sup> The "Shephelah tells" is the term by which I shall refer collectively to the four mounds excavated under the last firman held by the Palestine Exploration Fund—Tell Zakariya, Tell es-Sâfi, Tell ej-Judeideh, Tell Sandahannah; Tell el-Hesi is *not* included.



## § IV.—COPPER AND BRONZE OBJECTS.

There is more variety and interest in the objects of copper and bronze than in those of stone. The majority are arrow-heads, javelin-heads, pins, needles, and spatulas. Tweezers and fibulæ are also found, as well as an occasional ring, but armlets are entirely absent.

The *arrow-heads* are all of the leaf-shaped type, with a tang square in section and slightly tapering; barbed arrow-heads are unknown, as are also types with a cylindrical tang.

The *javelin-heads* are distinguished from the arrow-heads by being of greater size, but otherwise they are similar. The blades, however, are narrower in proportion, and in several there is a distinct central rib, as well as thickening at the edges of the blade. The tangs are all square in section, slightly swelling at the base into stop-knobs; in one example there is a suspicion of lateral flanges.

A fine copper javelin-head, found in the third city, is deserving of special mention. It is unlike all the others in having no tang. The blade, which is 10·3 cm. long, is tapering, a flat oval in section, with a very faint suggestion of a central rib at the base.<sup>1</sup>

*Spear-head.*—One magnificent spear-head of bronze was discovered in the excavation. The blade is flat and triangular, with abrupt basal angles; a short, flat, tapering tang is attached. The length of this spear-head is 17·4 cm. It belongs to the second city.

*Pins* can be classified into two divisions—round-shanked and square-shanked; the former slightly predominate. Though pins are very common, perfect specimens are few, as it is almost impossible to recover these delicate, often highly corroded, objects without injuring them. There is a considerable range in the diameters of the shanks, some being as fine as 1·5 mm., others almost 1 cm. in thickness; as a general rule, the square-shanked pins are the coarser.

The heads are generally plain, abruptly square-cut. In a few examples the pin ends in a shuttle-shaped knob (Fig. 4, *a*), with a sharp point at the top; and in some of the square-shanked pins

<sup>1</sup> At almost the last moment, before my finishing and despatching this report, a *socketed* javelin-head has been found. This, so far as I can find, is unique in Palestine.

the head is in the form of a chisel-point. Ornamentation of the shank in the neighbourhood of the head by means of a series of fine lines (as in BM., Plate LXXIX, Nos. 34, 35) is rare, and only to be detected after a minute inspection of the objects. Expanding heads like an open umbrella in shape (as in BM., Plate LXXIX, Nos. 36-39) are quite absent.

Besides the ordinary pins, whose average length was about 10 cm., there were a few minuter pins (possibly nails); a rather flat rectangle in section, expanding from the tip towards the head, and then contracting again: length, about 3.5 cm. (Fig. 4, *b*).

*Needles.*—Needles are capable of classification according to the position of the eye. Two well-marked types have been found in considerable numbers: in the first the top of the shank is bent, like a shepherd's crook, into an oval eye; in the second the eye is cast on the shank at some point midway between head and tip. Not more than one example could be found of the third possible form in which the eye is drilled (on a slightly hammered part of the shank) after the needle has been made.

The first and third of these types were found in the Shephelah tells, and are illustrated in BM., Plate LXXIX, Nos. 23-30 and 20-22 respectively. But not a single example of the second type made its appearance during the work on those sites; specimens were, however, found at Tell el-Hesi, and may be seen figured in B. MMC., p. 59.

Here for the first time we are confronted by a significant fact, which will meet us again in a later section. During the work on the Shephelah tells Dr. Bliss and I were occasionally perplexed by the absence from those mounds of types of antiquities which had been found in corresponding strata at Tell el-Hesi; and in compiling the memoir we were obliged to go back to the latter tell for illustrations of those types. They have, however, reappeared

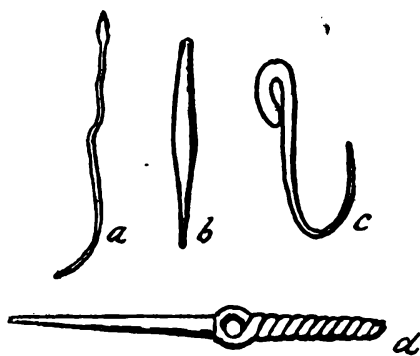


FIG. 4.—Pins, &c.

at Gezer so conspicuously as to suggest a connexion between the antiquities, and therefore between the inhabitants, of Gezer and Lachish which did not exist between the folk of either town and those of the Shephelah tells.

Of such a connexion we are not without literary evidence. Abdhîba of Jerusalem, as we have already seen,<sup>1</sup> complains of a league which the Gezerites and Lachishites, together with the men of Ashkelon, had formed against him; and when Joshua invested Lachish it was the king of Gezer who, to his own destruction, went to the help of the town. There must have been some reason why the inhabitants of Lachish sought and obtained help from the comparatively distant Gezer rather than from the numerous cities which were considerably nearer; this *rapport* between the antiquities of the two places, by suggesting the possibility of a close racial connexion, seems to indicate what that reason was.

There is nothing further to be said about the needles, which are essentially pins with eyes, and with two minor differences they are in all other respects similar to pins. These minor differences between the types of needles and pins are—first, the absence of very fine shanks, such as are sometimes to be found in pins; and secondly, the entire absence of square shanks.

Two examples were found of needles of the second type—with the eye on the shank—made of silver (Fig. 4, *d*). In these the head above the eye is ornamented with a spiral line, making the loop and head appear as though composed of two twisted wires. This however, is not so.

Whether the hook-shaped object in Fig. 4, *c*, be merely a damaged needle or be intentionally bent into this form I cannot decide.

*Spatulae* are comparatively rare, and only one really fine specimen has come to light. It has a triangular head and a long cylindrical shank, ornamented near the head with groups of incised lines. The length is 18·8 cm.

*Tweezers* (a class represented thus far at Gezer by one damaged specimen) consist of small bronze strips bent into a tong-like shape. The *fibulae* are of the same type as are shown in BM., Plate LXXX, and add nothing new to what was already known of them. Perhaps a fragment of a rather heavy fibula, with bosses ornamenting it instead of the more usual rings, is worth mentioning.

<sup>1</sup> See *Quarterly Statement*, 1902, p. 228.

One fibula had had a curious history. The pin had broken off in its owner's lifetime, and he had endeavoured to adapt it as a fastening of different form by bending the back into one ring and the pin into another, and looping the two together (Fig. 5).

The *rings* are single loops of bronze wire, some from their size apparently meant for finger or toe rings. One found in a cave is a loop of *twisted* wire.

Of *knives* I can produce but one specimen, it is 11.4 cm. long, having a flat blade, square tipped, with slightly concave edges and prominent shoulders; and a tapering flat tang, looped round at right angles to the plane of the face of the knife to form a handle.

Four magnificent copper *axe-heads* complete the series of objects under this heading of special interest so far discovered. One resembles B. MMC., No. 76, p. 38, except that its butt is square-ended, not pointed, and the form is more gracefully tapered. The edge is bevelled on one face only. Two others are of the same general type, but they are shorter, and the edges do not expand appreciably beyond the sides of the object: they are bevelled on both sides. The fourth, which is the finest of all, is 22.4 cm. long, with square butt, stop-knobs on each edge at the root of the tail, and stop-ridges on the faces, concave sides to the blade and a rounded edge, expanding slightly beyond the sides.

The half of a stone mould, for casting bronze axes, and the stump of a bronze awl or pin set in its original handle—a section



FIG. 5.—Chain made from Broken Fibula.



FIG. 6.—Bronze Awl (?) in Bone Setting.

of the shank-bone of some animal—call for notice under this heading.

## § V.—IRON OBJECTS.

In excavating the pre-Israelite cities of Gezer we are working in remains of the bronze age, and iron in any considerable quantity is not to be expected. At all depths were found numerous small nodules of meteoric iron, perhaps preserved as amulets; but worked iron was confined almost wholly to the surface and to the outside of the city wall. The iron objects from outside the wall were all arrowheads, probably the relics of the siege of the city by Egyptians, or some other iron-using invaders; those from inside were nails, armlets, and nondescript fragments of any date, possibly modern.

The only exceptions to this law of the distribution of iron were:—(1) A distorted iron bracelet, from a depth of 2 feet. (2) The blade of a knife, much corroded, from  $3\frac{1}{2}$  feet. (3) Fragment of a large nail, from a depth of 5 feet. (4) Fragment of an arrowhead, from a depth of 5 feet.

In a country almost destitute of earthworms, the blame of depositing iron objects among bronze age remains cannot be laid on those disturbers of archæological strata; but it is nevertheless possible to give a reasonable explanation of all these intrusions. The first two might easily have been brought down by the burrowing of moles, whose operations extend all over the tell. The third might have dropped over the edge of the pit from the surface during the excavation—like a small Maccabean coin which asserted itself at a depth of 10 feet associated with Neolithic walls!—and the fourth might have been shot in the town by the invaders who left the arrows outside the walls.

## § VI.—BONE OBJECTS.

*Unworked.*—Many animal bones were found throughout the trenches. None (like the hippopotamus bones from Tell el-Hesi) were at all exceptional or unexpected; all belonged to the animals which are still commonest in the district. In large numbers were camel, sheep, cow, horse, and ass bones; less common were those of gazelle, dog, and jackal; rarer still—no doubt on account of their minuteness and their perishable nature—were those of the rodents, hare, jerboa, and rat. The wild boar was represented by

one tusk. Unworked bird bones were rare, for a reason similar to that accounting for the scarcity of rodent bones. A good many bones of tunny and other fish, no doubt brought up for food, were discovered, as well as the shells of *cardium*, *buccinum*, *murex*, and *bulimus*. These shells were nearly all perforated for suspension, and worn either singly (perhaps as ornaments, more probably as charms) or in strings. Two groups of shells, one of *cardium* the other of *bulimus*, were found—no doubt in each case the disintegrated remains of a girl's necklace.

A curious hoard of cow-bones appeared near the southern end of the first trench. They were all fragments of the long bones, and had been cut by some sharp instrument, obliquely or longitudinally, apparently for the extraction of marrow. Yet the bones themselves showed no sign of having been subjected to heat, and I could not satisfy myself at all that they had been cooked. When examining these remains I was reminded by them of the extraordinary ancient Arab orgy described by Nilus and discussed by Professor Robertson Smith,<sup>1</sup> in which a camel was slaughtered in sacrifice to the morning star at the moment of the rising of the planet, and devoured by the sacrificers—flesh, skin, and bones—before its rays were lost in those of the sun. It seemed as though this cow had been hacked up and devoured in the same summary manner.

*Worked Bones.*—There is nothing of importance that is new to add to the list of bone objects; the types have all been anticipated in the excavations of the Shephelah tells. Styli, like those figured BM., Plate LXXVI, Nos. 1–12, hold out hopes that tablets may some time be found. Several specimens of the curious tally-like slips of bone (*see* BM., Plate LXXVI, Nos. 19 *a–t*, 19) have also been unearthed. In the work quoted it has been suggested that they may be the pieces used in some game analogous to dominoes; but it is perhaps more likely that they were ornamental slips for inlaying, as, for instance, into the hilt of a bronze sword. Such slips have been found in Denmark and elsewhere *in situ*. To a similar purpose are probably to be assigned the minute pieces of polished shell, about a quarter of an inch square, which appear very frequently. These I would compare with the pieces of mother-of-pearl inlaid into the ornamental woodwork manufactured in the modern workshops of Damascus or Cairo.

<sup>1</sup> *Religion of the Semites* (2nd ed.), pp. 338 *et seq.*

Other bone objects calling for notice are a slender pin (Fig. 7, *a*) made of the bone of a bird, with a simple decoration scratched at one end; a small circular ornamental pin-head (Fig. 7, *b*); a minute

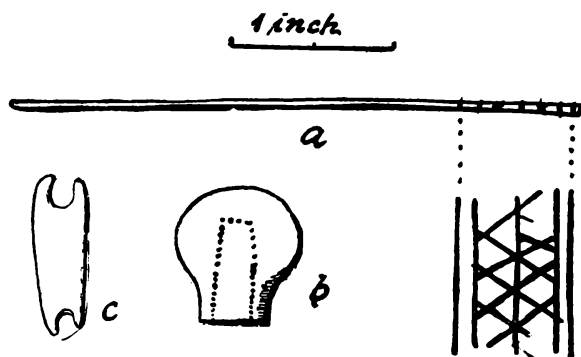


FIG. 7.—Bone Objects.

fragment with a sharp point, possibly a plectrum for plucking the strings of a musical instrument, and a small slip of bone, nicked at both ends, possibly part of the fastening of a dress (Fig. 7, *c*).

## § VII.—POTTERY.

So much has recently been written upon Palestinian pottery that it might be thought almost impossible to add to the subject. But the results even of the short period of excavation now completed lead me to expect that by the Gezer excavation the theories current regarding Palestinian pottery will be both modified and enlarged. At present, however, I need indicate the more important of the actual results of the last two months' excavation only; when the firman has expired the time will come for a full discussion of the lessons taught by the mound in this and other branches of archæology.

*Types.*—These are almost uniformly early; examples of nearly all the varieties of vessels figured in BM., Plates XXIII-XXV, have been found, not only deep down, but on the surface. In the upper strata a later admixture is easily detected by the presence of such types as BM., Plates XXX, No. 3; XXXI, Nos. 2, 19; XXXII; XXXIII, No. 1; XXXIV, No. 9. In connexion with what has been said in a preceding section respecting the relation between Gezer and Lachish, it is remarkable that the most characteristic

and frequent types of pottery have proved to be those peculiar to Tell el-Hesi. Such are BM. XXIV, No. 1; XXX, No. 4; XXXI, No. 1; to which may be added the peculiar drain-pipe-shaped object, B. MMC., No. 231, an earlier variety of which appeared in the third city at Gezer (Plate IV, Fig. 1). Of the "cup-and-saucer" jar-stands, so common apparently at Tell el-Hesi, but of which one fragment only appeared, so far as I can recollect, in the Shephelah tells, one specimen has already been found.

A common form of vessel is a flat circular tray, with raised rim and small holes impressed or picked with a stick on the under surface. This I believe to have been for baking, the holes being intended to allow the heat of the fire to penetrate the tray more easily. The neck of a jar, shaped like a long cylinder, was found that, if it were in proportion to the vessel to which it once belonged, would indicate that the latter was at least five feet high.

*Details.*—Several hitherto undescribed details have been found. Prominent among these is what I may term the *pillar-handle* and *pillar-strainer* (Plate IV, Figs. 2, 3). They are not absolutely new, for specimens were found in the Shephelah tells; all, however, were fragmentary. No jar has yet been found with either of these features *in situ*; it is quite evident, however, that the pillar handle rose more or less vertically from the shoulders of the jar, parallel to the neck, to which one side of the conical cup, that may be likened to the "capital" of the pillar, was attached. The pillar strainer differs only in two holes being pierced through the attachment of the "capital" and the neck of the vessel, by which liquid could be poured into the receptacle. It is quite evident that the apparent spouts often found on vessels (*e.g.*, BM., 49, 3) are in reality of the nature of bottle fillers, with narrow orifices for straining out impurities in the liquid.

A restoration<sup>1</sup> is attempted in the annexed drawing (Plate V) of a singularly interesting vessel, of which some six or eight fragments were found. It must have been of considerable size, with a mouth about a foot, more or less, in diameter. There were two bold handles, right-angled, ornamented on the back with deep grooves. The lip round the mouth was heavily moulded; the fractures showed that the moulding concealed a channel or tube

<sup>1</sup> Evidence for all the details shown in the drawing remain on the fragments, except for the raised collar round the strainer, which, however, was an obvious necessity. No fragment of the lower part of the vessel was recognised.



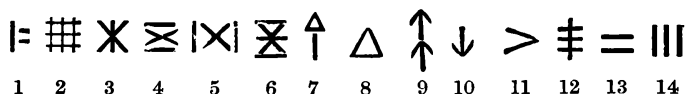
running inside, right round the mouth. This tube had two orifices: one, in the shape of a cup with strainer bottom, at the attachment of one handle; the other, in the shape of a spout moulded into the form of a lion's head, at the attachment of the other. The wine, or whatever liquid was stored in the jar, was evidently not poured in at the wide mouth but at the strainer, and ran round the tube and out at the lion's head. The jar is a remarkable example of impractical ingenuity, for a cloth stretched over the mouth would have served the purpose better, and with less trouble.

*Ledge-handles* (compare BM., Plate XXVI) appear of all shapes and sizes, including the form of a horizontal, flat, rectangular tongue, which has not hitherto been illustrated. In one very curious jar the ledge-handle had developed into a frill completely surrounding the neck.

Of ornamental *combing* and *burnishing* some fine examples came to light. A good specimen of the former will be found on Plate IV, Fig. 4. Among the latter a considerable number of fine *white* burnished stands must be noticed. In addition to their colour they had a remarkable peculiarity. When the imitation of cords, so common in early Palestinian pottery, appeared on these fragments, it was always incised, never (as is more usual) in relief. Such imitations of cords, of all the patterns figured in BM., Plate XXVIII, are very common at Gezer.

*Potters' Marks.*—The few *stamps* are all Egyptian, and properly belong to the subsequent section on *Communication and Trade* (§ VIII). The rest of the marks are all to be classified under the following heads: (1) *Finger-marks*, usually those of the index finger, though the thumb is not uncommon, and the little finger is sometimes found: generally impressed on the upper surface of the handle at its upper attachment, though occasionally (two examples) inside the mouth of the vessel opposite the upper attachment of the handle, and rarely (one example) on the *under* surface of the handle at its upper attachment; it has also been found over the lower attachment in one or two specimens. The prints are usually blurred, and it is extremely rare that a good impression of the papillary ridges of the potter's finger-tip can be found. The impressions are generally single, but sometimes two finger-prints are found, either side by side or one over the other. (2) *Punch-marks*, which may be either simply the end of a stick impressed

once (common), twice (occasionally), or four times (one example) on the back of the handle ; or else some very elementary device, such as a circle, or a cross in an oval. In one curious example the mark, so far as I could make out, was impressed with a complicated knot on a piece of cord. (3) *Nail-marks*, traced either actually with the nail, or more commonly with a stick. The marks are all very simple. The plain cross of two lines, shaped sometimes like a Latin cross, sometimes like a Greek cross, and sometimes like the cross of St. Andrew, is by far the commonest. Then come such combinations of lines as these :—



which may be compared with the nail-marks figured in BM., Plates XXIX, LVI. There is, however, one important difference. There is nothing that can safely be compared with any of the letters in the Old Hebrew or Phœnician alphabet, if we except the cross and Nos. 8, 12, which might be equated with  $\aleph$ ,  $\gamma$ , and  $\delta$  respectively. I do not think, however, that such a comparison is justifiable, as the similarity may be a mere accident ; if Phœnician letters were to be found among these nail-marks, they would appear in greater numbers. The proportion of potters' marks found at Tell el-Hesi comparable with letters of the Phœnician alphabet is considerably greater than at Gezer.

*Moulded Decoration.*—This is rare in Palestinian pottery, if we exclude spouts and handles in the shape of animals' heads. I can bring forward two examples of a different kind—a potsherd with a sheep or some such animal in relief upon it (Plate IV, Fig. 5), and a jar-handle with the figure of a snake creeping upon it (Plate IV, Fig. 6).

*Coloured Decoration.*—The contrast between the Gezer-Lachish group of antiquities and those of the Shephelah tells is nowhere more strongly emphasised than in the department of coloured pottery. The peculiar patterns, fully illustrated in BM., Plates XXXVI to XLII, so especially characteristic of Tell es-Sâfi, are at Gezer very meagrely represented, which seems also to have been the case at Tell el-Hesi. They are not wholly absent, however, and, being found sometimes in the very lowest strata, must have developed earlier than had been previously supposed. On the

other hand, there is a different style of painting, found in some examples at Tell el-Hesi, entirely unknown in the Shephelah tells, which has reappeared in Gezer. The difference between the two styles is well illustrated in the treatment of the bird figure in B. MMC., Plate LXII, as compared with that in BM., Plate XLIV. The first is drawn in broad lines—almost in wash—the second in narrow lines; in the first the whole outline is filled in with stripes of a different colour, in the second the outline is left open; the first is essentially polychromatic, the second essentially monochromatic: for though two colours are often employed together in the Shephelah painted pottery, it is by no means in the most typical examples.

The fine painting of a fish, reproduced on Plate IV (Fig. 7), gives us the first example of what I may for the present call the Tell el-Hesi technique, found since the excavation of that mound was closed, and also presents us with an entirely new motive in the colour decoration of Palestinian pottery.

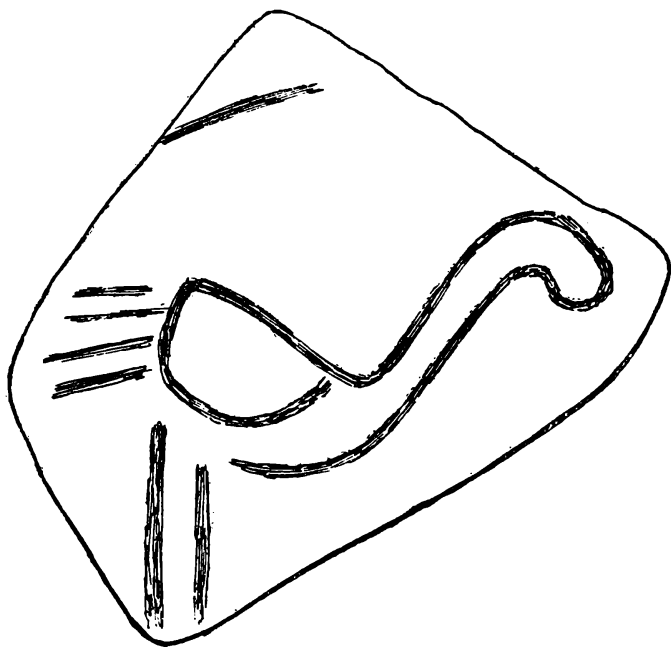


FIG. 8.—Sketch of an Ostrich on a Potsherd.

The geometrical patterns show the same difference. Compare any of the examples on BM., Plate XXXVII, with B. MMC., Plate LXIII, No. 109. The Shephelah artists painted two parallel zigzags side by side, of the same colour, and then left them. The Tell el-Hesi artist went a step further, and fitted in a third zigzag in a different colour, filling up the space between them. The illustrated example of geometrical pattern in coloured ware (Plate IV, Fig. 8) shows a similar characteristic. A Shephelah artist would certainly have been satisfied with outlining the pattern; the Gezer artist has attempted, by filling in the outlines, to supply a background.<sup>1</sup> A much ruder and more primitive style of art is illustrated by the picture of an ostrich sketched in red lines on the potsherd here represented (Fig. 8, p. 337).

*Miscellaneous.*—I may mention a curious sherd with scratched ornament, evidently made with some sharp instrument after the vessel was finished and fired (Plate IV, Fig. 11); a small jar (Fig. 9, p. 339), its upper half ornamented with groups of small dots apparently picked on with a comb; and a curious little vessel with strainer bottom, a fragment of which was found (Plate IV, Fig. 9).

A collection of circular discs of sun-baked mud, about 8 inches in diameter and 1 inch thick, was found close to the rock in the first trench, associated with buildings of the first or second city. About eight or ten were unearthed. They are more like children's mud pies than anything else, and I am not disinclined to believe that this is what they actually are, though it is of course open to anyone who considers such an explanation too puerile to regard them as votive models of lectisternal oblations analogous to the shewbread of the Hebrews.

In BM., Plate LXXVIII, will be found a spindle-wheel cut out of a disc of pottery, no doubt once part of the side of a vessel. Other examples of such a secondary use of pottery appear at Gezer. One specimen (Plate IV, Fig. 10) having two holes must be a button. Other small discs of pottery, evidently cut down from broken sherds, but without holes, have been found; these are also probably buttons, or rather the cones of buttons, cloth being wrapped round them. I assign a large number of pebbles,

<sup>1</sup> The cross-patching in these two drawings represents a dull brownish-black, very different from the glossy black of the Shephelah designs. The vertical lines denote red.

apparently water-worn and brought up from the sea, some of which are found nearly every day, to a similar purpose.

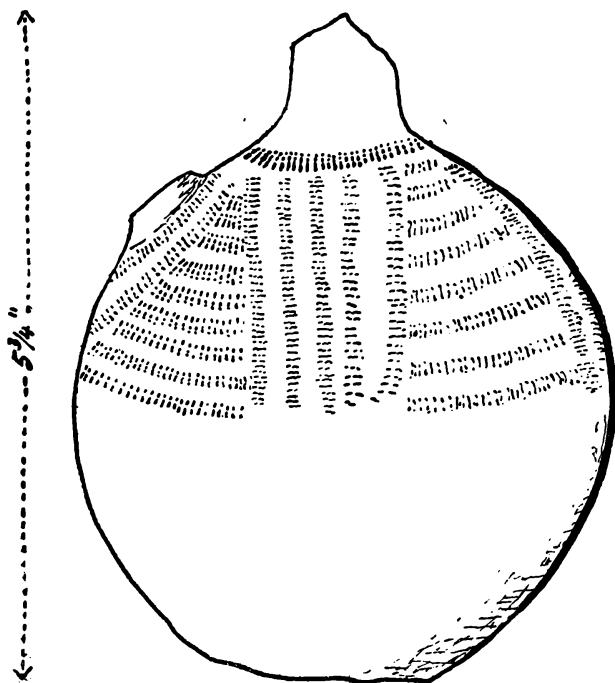


FIG. 9.—Sherd of Jar with Dot-ornamentation.

*Stamped Jar-Handles.*—Besides the Egyptian handles to be described in the next section, I must mention a number of Hebrew and Greek handles,<sup>1</sup> found by the workmen or by myself scattered over the surface of the mound.

The Hebrew stamped handles are four in number. They are all in a very bad state of preservation, and add nothing new to this much-discussed class of objects. All are "Royal stamps," one bearing the town-name *Hebron* with the flying disc; the others the name of *Socoh*—two with the disc, the third with the scarabæus.

The above account of the pottery is exclusive of the food-vessels from the burial cave, which will be described with the account of that important discovery.

<sup>1</sup> [Mr. Macalister has already found over 40 Greek stamps, a complete list of which will be published in a later number of the *Quarterly Statement*.]

## § VIII.—COMMUNICATION AND TRADE.

As might be expected, the great majority of objects of foreign provenance are Egyptian in origin. The Egyptian objects consist exclusively of jar-handles with scarab-seals impressed on them, scarabs, and the impression of a scarab on a fragment of hard, black pottery. The small amulet figures, fairly common on the Shephelah tells, are notably absent from Gezer; a very minute and quite unrecognisable fragment of a paste figure, covered with blue enamel, was the solitary indication of the possibility of such fragments still lying buried in the tell.

These various seals and scarabs are collected on Plate VI.<sup>1</sup> No. 1 shows a pattern of spirals, such as is characteristic of about the twelfth and thirteenth dynasties. Nos. 2, 3 belong to about the same period, in which scarabs showing the field ornamented with symmetrical but meaningless arrangements of figures are common: notice the rude representation of the flying scarabæus<sup>2</sup> at the bottom of 3. No. 4 is worn and difficult to make out. It represents a man walking, holding something in his hand. No. 5 on the same plate represents the irregular fragment of black, hard clay just referred to, bearing an impression from a scarab. It allies itself in style and date to jar-handles 2, 3.

Nos. 6–11 represent the scarabs. No. 6 is plain, of blue enamelled paste. No. 7 is of white slate; its device is a curious steatopygous figure seated on a chair. No. 8 is a scaraboid of bone from the surface of the Western Hill, apparently later in date than the rest; the style seems comparable with eighteenth dynasty work. No. 9 is a magnificent scarab of diorite, bearing a singularly realistic group of a lioness and crocodile. This scarab is unfortunately chipped at the end. No. 10 is a small and neatly-cut scarab of jade, which has also been chipped. It seems to have borne a horse cut upon it, but nothing is left except the ends of the legs and the tip of the tail. No. 11 is a small fragment of an amethyst scaraboid; of the device two small circles, having dots at their centres, alone remain. All the scarabs and Egyptian stamps were found in the upper strata.

<sup>1</sup> [For Professor Petrie's remarks, *see* p. 365.]

<sup>2</sup> Scarabæus = the living beetle; scarab = the figure of the beetle in stone, &c.

In Fig. 12 is shown a rude clay cylinder, the existence of which indicates a direct or indirect trade with Babylon.

The rude seal of limestone, Fig. 13, with the figure of a stag, is probably Canaanite. A similar seal, with two stags back to back, was found at Tell Zakariya,<sup>1</sup> and the impression in clay of a third seal, also engraved with a stag, was picked up on the surface of the present tell.

Other sporadic evidences of foreign trade, at various periods, have been found. They consist of: (1) The mouth of a small jug of burnished brown ware of a well-known Græco-Phœnician type characteristic of Cyprus; (2) several small fragments of painted ware of the type associated with Mykenæan civilisation; (3) a small sherd of an Athenian black vase, found at a depth of 2 feet 6 inches.

#### § IX.—RELIGION AND FOLKLORE.

Besides the *masseboth* and the *temenos*, reference to which has already been made, several illustrations of the religion and superstitions of the Gezerites have been unearthed. These consisted of figures and amulets.

*Figures.*—The oldest and most interesting was the rude *teraph* from the burial cave, still to be described. The only other human figures were examples of the well-known type of undressed female divinity with lotus flowers, in low relief, on a terra-cotta plaque (as in BM., Plate LXVI, Nos. 10–16; LXVIII, 1, 2. See also Fig. 10). Fragments of four of these have been found. A fifth was long ago found by Mr. Bergheim on the tell; it is figured in the *Survey Memoirs* (vol. ii, p. 439), and in

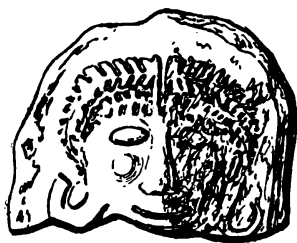


FIG. 10.—Head of Goddess Figure.

Professor Clermont-Ganneau's *Archæological Researches* (vol. ii, p. 242).

As in the Shephelah tells, several fragments of statuettes of the cow divinity were found. In one of the pits the four legs of such a statue appeared in different places, as though it had become

<sup>1</sup> *Quarterly Statement*, 1899, Pl. VII (facing p. 106), No. 14.

accidentally broken, and its owner had thrown the pieces about. The head (Fig. 11, *a*) belongs to a different statuette.

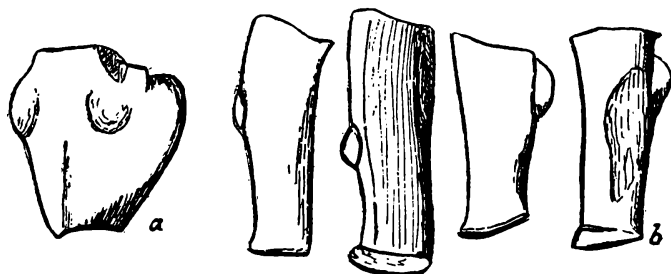


FIG. 11.—Fragments of Statuettes of the Cow-divinity.

Numerous roughly-cut phallic objects in white limestone were scattered all through the accumulation. Less commonplace was the figure of a flat fish of the same material, from the third or fourth city—the stratification was a little uncertain. This is suggestive of Atargatis-worship, of which, it will be remembered, evidence was also found at Tell Zakariya.

Being in white limestone, these objects would seem to support the interesting theory of Dr. Wünsch, set forth in the important account of the Tell Sandahannah tablets, contributed by him to BM.—namely, that white limestone had some special esoteric meaning for the natives of Palestine. But it is worth remembering, perhaps, that limestone magical tablets are not confined to Palestine,<sup>1</sup> and that at least one imprecation-document written on a plate of lead was found two or three years ago at Beit Jibrin.<sup>2</sup> Palestine is practically made of white limestone, and this, being the commonest material found there, is less likely to be invested with mystery, for it is to strange not to familiar objects that mankind ascribes esoteric characteristics. Moreover, being so

<sup>1</sup> A hoard of 1,200 magical tablets on limestone was found at Biere, Saxony, and are now in the museum at Quedlinburg; see my *Studies in Irish Epigraphy*, vol. ii, Appendix.

<sup>2</sup> I was shown at the time a fragment of this tablet, which was about the size of a man's hand, and closely written with Greek characters. The man into whose possession it had fallen demanded not less than two Napoleons as its price. He told me that it was originally five times larger, but that he had torn it in pieces, because he could get as much from tourists for each fragment as for the whole tablet when perfect. This is a typical example of what is going on daily in Palestine.



common and so soft—it can be scratched with a finger nail—it is at once the cheapest and the most easily worked material to be found, and it is exactly these two qualities which are the most likely to appeal to a Semite, even when he is engaged on so serious an operation as cutting out a household god, or invoking malediction on someone who has got the better of him.

As a matter of fact, when making *amulets*, it was black slate which was the favourite material. A good many such were found,

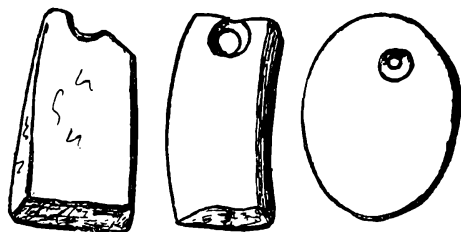


FIG. 12.—Amulets in Black Slate.

either oval, rectangular, or sinker-shaped, generally flat, and always perforated for suspension (*see* Fig. 12); with these prophylactics must be classed the metacarpal bone of a kid, pierced like a button with two

holes, which was found in the burial cave; and also, probably, the perforated shells which have already been referred to.

#### § X.—MISCELLANEOUS OBJECTS.

A few objects remain which cannot conveniently be classed under any of the above heads.

*Food.*—Cow bones, split for marrow, have already been mentioned. Several hoards of burnt grain—wheat and barley—no doubt relics of conflagrations in the granaries, have been found. (Traces of considerable fires are very common throughout the strata, but so far no uniform layer of ashes, such as I expected to find resulting from the destruction of the town by the father of Solomon's Egyptian wife, has made its appearance.)

*Dress.*—The processes of making clothing are illustrated (1) by the ubiquitous spindle-whorl, of which some curious examples have been found in clay, slate, limestone, jasper, and bone; the commonest form at Gezer is a plain, unpolished limestone ring; (2) by weaver's weights of more or less compact brick, or else of pebbles and stones perforated. The pyramidal or conical form of brick weight is exclusively found; none of the spherical weights, so common at Tell Zakariya, have appeared. As is natural, they are often discovered in groups of a dozen or two.

*Animal Figures.*—Beside the cow figures mentioned in the last section, I may refer here to the very curious horse-head (Fig. 13, *a*), as well as to the head of a snake in pottery, and the figure with breasts (?) and goat's horns (Fig. 13, *b*). Fig. 13, *c*, is probably a toy.

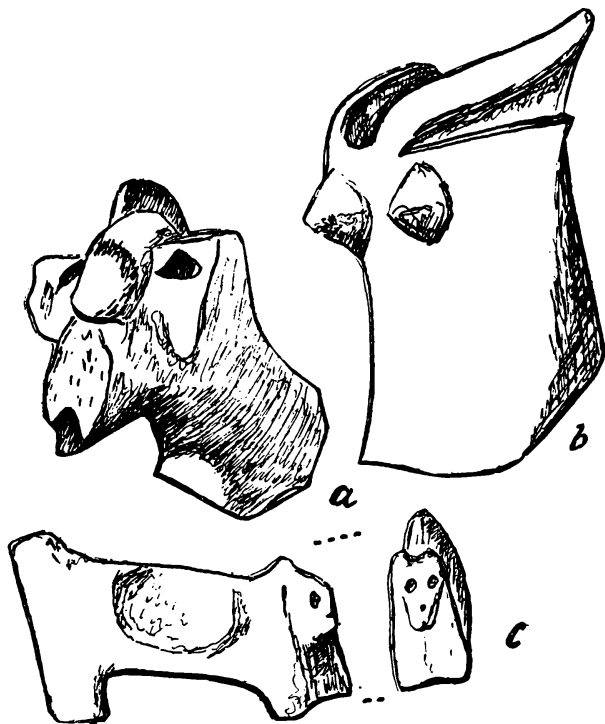


FIG. 13.—Animal Figures.

A limestone bar, apparently cut into the similitude of a snapping dog (Fig. 14), from the first city, may *possibly* be natural, as the limestone nodules here sometimes take extraordinary shapes, which it is difficult to distinguish from human workmanship.

*Weights.*—Three stone weights require special mention. The first is of porphyry (17·125 grammes); the other two of quartzite (31·825 and 45·39 grammes respectively). The porphyry weight is spindle-shaped; the lightest quartzite weight is the frustum of a cone, inverted; the third is of a similar shape, but with a domed top.<sup>1</sup>

<sup>1</sup> [For Professor Petrie's remarks, see p. 365.]

*Gold, Silver, and Lead.*—Gold was represented by a minute annulet, 4 mm. in diameter, by a slip of gold leaf wrapped round a fragment of bronze wire and ornamented with a fern-leaf pattern indented on it, and by a small ear-ring. In silver I have to record the needles, already mentioned in § IV, and a few bracelets. Lead was represented by a disc about the size and shape of a halfpenny.

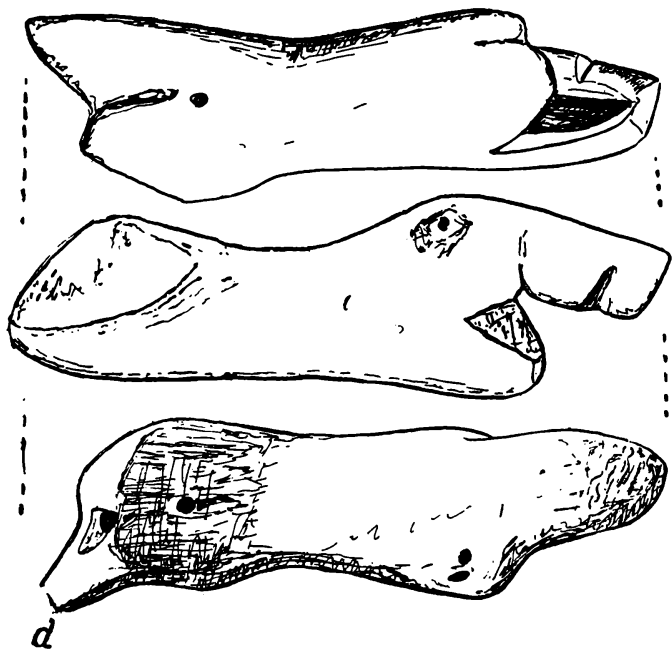


FIG. 14.—Animal Figure.

#### § XI.—ROCK-CUTTINGS AND TOMBS.

Careful enquiries have been prosecuted among the workmen, some of whom have had experience of tomb-robbing, in order to find out whether any special methods are followed by the fellahin in their illicit search for tombs. It will be interesting to state the results of these enquiries, the truth of which, of course, remains to be tested.

The fellah, accustomed all his life to the changing aspects of one particular set of hillsides, is naturally at a great advantage compared with the traveller who encamps in the district for, at most, a year

or two. The former has by experience discovered certain indications of the probable existence of ancient tombs. The simplest and most obvious one, the tops of rock-scarps, appearing above the surface of the ground, which may be rock-faces containing the vertical doors of tombs. They may, of course, be also the sides of quarries or olive-presses, or merely a natural formation; this is settled by a little digging. I am assured that it is always regarded as a good sign if the foundation of a built wall appears above the ground, butting at right angles against the face of the rock.

If all these surface indications have been tested—and nowadays it is difficult to find a piece of rock-scarp that has not been tested—there remain others, less obvious to the traveller. The fellah keeps his eyes open in early spring and late summer, and notices where the grass and weeds become green the soonest, and retain their green the longest. In the Palestinian hills, consisting as they do of rock with a thin coating of earth spread unevenly over it, a depression in the rock, which naturally contains rather deeper earth, is marked by more flourishing vegetation. These green patches are tested by sinking a crowbar: if it strikes rock soon then the depression is a natural hollow, or at most, an ancient olive press; if it sink deeper, and ring hollow when it at last strikes stone, the native knows he has found a tomb-shaft.

When we were at Tell Sandaḥannah we learned two further details from the Beit Jibrîn people, which are given here for what they may be worth. First, the tomb-shafts are said to be filled with earth rather whiter than the surrounding soil,<sup>1</sup> and so, when testing a place known to contain tombs, the fellah scrapes and scratches here and there till he comes to soil of light colour, and then digs his shaft. Secondly, when a tomb has been found and robbed, the plunderer takes six paces to the side of it, and at the end of the sixth he sinks again, in the reasonable certainty of finding a second. If this prove unsuccessful six more paces in the same direction is almost certain to lead to another tomb.

There must be a large cemetery round so extensive a city as Gezer, and the few tombs that I have found to be rifled are not sufficient to account for all the inhabitants it must have contained. Much damage has been done in recent times near Kubâb, Silbît, 'Amwâs, and other places in the neighbourhood, but these are too

<sup>1</sup> Perhaps due to fragments of limestone chippings remaining after the original quarrying-out of the tomb chamber.

distant from the tell to have been the burial-places for the Gezerites. The analogy of Tell Sandahannah leads me to expect to find the city cemetery on the slopes of the tell, or of the hillsides immediately adjacent. Hitherto I have not been able to spend more than a couple of days in the search, with a certain proportion of the workmen, whom I directed to run trenches along the side of the hill over a prescribed area—the trenches being sufficiently wide, and sufficiently close together, to include any tomb-shafts that may exist. No tombs have yet been found, but the work has not been wholly unproductive. It gives an idea of the extraordinary way in which the hillside must be honeycombed with excavations of various kinds to consider that in the little area tested—not one-thousandth part of the area of the hill—I found four cisterns and a large cave of the Beit Jibrin type, the existence of which has been quite unsuspected. This cave is, perhaps, an ancient burial cave, like that to be described in the next section, but possibly merely a cistern. As its exploration still requires a considerable amount of clearance, I shall send a fuller description with a subsequent report.

That in early times the dead were buried within the city walls is shown not only by the burial cave of the most ancient inhabitants, but also by the occurrence of skeletons among the house-walls of the upper strata. These seem to show that in late pre-Israelite (and early Jewish?) times the dead were buried, not only within the city, but even within the houses. There were no special grave deposits found with the skeletons. We have still, however, to discover the tombs of the Maccabean population.

Within as well as without the wall the hill was found to be full of cisterns. Some of these I am clearing out. The work is necessarily slow, and is not yet sufficiently advanced to report upon. I may, however, remark before passing from the subject for the present, that the results thus far have been quite sufficiently interesting to justify the outlay.

## § XII.—THE BURIAL CAVE.

About 140 feet south of the great city wall, in the first trench excavated, the workmen found an oval sinking in the rock-surface, its long axis lying about north-east and south-west, and between 13 and 14 feet long. Walls of the third city had been built over

and concealed it. On clearing out the earth, steps leading downwards (Figs. 15, 16) were uncovered, one by one, terminating in the foundations of a ruined wall that had been built across the mouth of a cave to which the steps gave access. This cave proved on examination to be artificially excavated, as pick-marks were visible on the walls all round. It consists of one chamber of a maximum length (east to west) of 31 feet, breadth of 24 feet 6 inches, and height ranging from 2 feet at the south to 5 feet at the east. There are two entrances: that with steps, just mentioned, at the south-west corner; and, at the east end, a shaft in the roof, which I afterwards opened, roughly circular, about 3 feet 6 inches in diameter, and stopped by a great stone, 5' 5"  $\times$  4' 7"  $\times$  8" thick, lying on the surface of the rock.

It became immediately obvious, on entering the cave, that this was a very early and unroofed cemetery, and I therefore decided to clear it completely. This was most carefully done, and every shovelful of earth passed under my inspection, as I remained in the cave the whole time the workmen were employed in it. It will be convenient to give the results of this examination in historical order, rather than in the order in which each fact came to light.

On the accompanying plan (Plate VII) it will be seen that an area of perhaps slightly less than half the extent of the cave is marked off by a broken dot-and-dash line. This area was found to be covered with the ashes of burnt human bodies. The layer, which was spread directly on the rock floor, was not of uniform thickness, it was at least 1 foot thick at about 5 feet from the stepped entrance, and diminished rapidly to the border of the area where mere traces were found.

A little perforated ornament or amulet, made from the bone of a kid (Fig. 17), was found charred with the human remains. This had presumably been on the body of the person to whom it belonged, and burnt with it. From this I would infer that the bodies, not the bones merely, were cremated; and the general coherence of the bones showed that the cremation took place inside the cave. A further reason in support of this deduction will presently be advanced in the account of the human remains contributed by my father to this report.

The fire reduced the bones to a white ash at the place where it had been most powerful—namely, just inside the door of the stepped entrance opposite the left-hand jamb. For so strong a

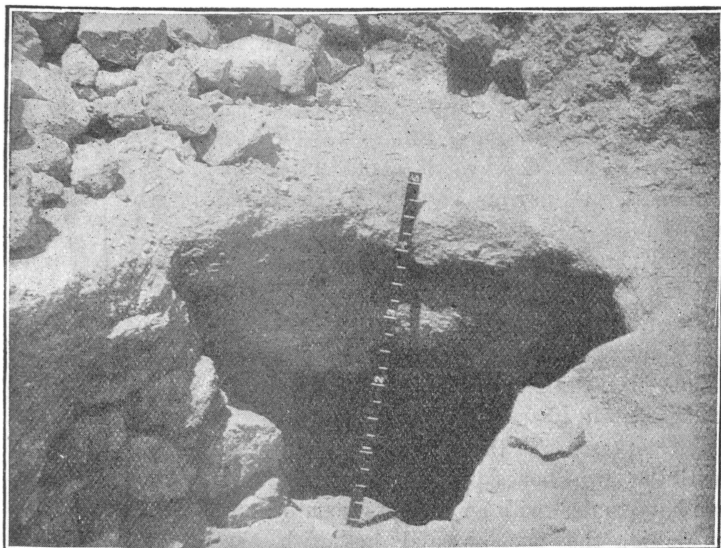


FIG. 15.—Entrance to Burial Cave.

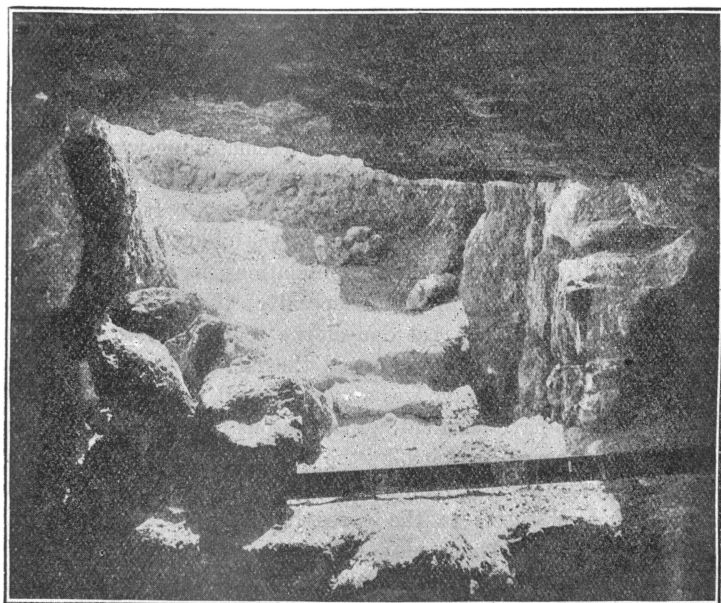


FIG. 16.—Steps to Entrance of Burial Cave, from the Interior.

flame a draught was required: and the method by which this draught was supplied is one of the most interesting features in the cave. Just under the roof of the chamber, all round, is a stratum of soft rock, which to the left of the doorway is about 2 feet in thickness. A narrow passage, 9 feet long, was cut in this stratum, and in its roof a conical chimney, 2 feet 5 inches in diameter at the bottom, 8 inches at the top, was formed. The interstices of the rock in the sides of the chimney still show traces of smoke-blackening: pick-marks in its wall show that it is artificial.

The presence of this chimney in connexion with the burnt bones proves conclusively that we have to deal with an ancient crematorium, made for the purpose, and not with the traces of such a tragedy as that described in 2 Kings x, 25, in which Jehu slew the worshippers of Baal, which might otherwise be a possible explanation. That the bones were left just as they were burnt was shown by the regularity with which the intensity of the fire, as indicated by its effects on the remains, increased to a focus.

The people who used the cave as a crematorium were followed by others who employed it for inhumation. It is possible that these were the inhabitants of the third city. It seems most probable that the stepped entrance was the older, and that it was blocked up (by the wall whose foundations have already been mentioned) when the method of disposal of the dead was altered. This is shown by the fact that one of the rock-cut steps was found underneath the wall when I removed the latter. At this time, as a new entrance to the cave was thus rendered necessary, I believe the roof shaft to have been cut. The reasons for this alteration are obvious. The space occupied by the old entrance and the chimney shaft were required for building; and the roof shaft would not afford such easy access to the caves for dogs or thieves as did the staircase. The bones of a dog were found just inside the stepped entrance, showing that these animals occasionally found their way in.



FIG. 17.—Bone Amulet.



It is possible that the cave was enlarged when reappropriated by the inhumating people, and that the area of cremation represents its original extent. Unfortunately the walls are so friable that they do not retain the individual pick-marks sharply enough to settle this question. Had the cave been cut in the soft, homogeneous clunch of Beit Jibrîn, which preserves every mark as sharply as the impression of a seal, an answer would have been found easily. In some caves at Beit Jibrîn it is possible not only to tell the exact nature of the tools employed, but also the probable number and approximate stature of the workmen, and even occasionally to detect evidence of such physical peculiarities as left-handedness.

The dead, in this second period, were deposited all over the floor, and (so far as could be determined) in a contracted position on their sides. No evidence of any attention to orientation was observable. The bones of different individuals were heaped upon one another, and the resulting confusion was greatly increased by the operations of rats, whose burrows extended in all directions.

Ranged along the wall were a series of enclosures, evidently the graves of persons of distinction. These are denoted on the plan by index letters. A and D each consisted of a platform of flat stones, laid together in regular order like the paving blocks of a street, about 8 inches above the rock floor of the cave, and bounded by rows of larger stones. In A there were two such rows, in D one only. E was similar, but it had no regularly paved floor; its area contained a disordered *débris* of stones, which I did not think worth while recording on the plan. Probably the boundary wall had been higher, and had fallen in.

The enclosure B, like E, had no regularly laid floor; but, unlike all the others, the stones by which it was bounded were cemented together with stiff mud. They were of larger size than the stones used in any other of the constructions in the cave, and they had evidently oversailed so as to meet at the roof of the cave. The wall had, however, fallen in on the eastern side. This accident must have taken place while the cave was still in use, as a large deposit of pottery had been placed *on* the ruins. There were no bones inside this enclosure. The Rev. Père Séjourné, Prior of St. Étienne, Jerusalem, who visited the excavation recently and saw the cave, told me that he had seen a similar enclosure within a cave at 'Aid el-Mâ.

Just east of B, against the wall, was an erection of flat stones (C on plan) raised about 1 foot above the floor of the cave, and measuring 3 feet 4 inches by 3 feet 10 inches. I can only describe it as being more like an altar than anything else, though I should hesitate definitely to assign such a use to it. Nothing was found on, within, or about it to indicate its purpose. Between D and E was a large quantity of sandy soil full of bone fragments.

The most interesting interment, however, was between A and B. Here was a paved platform, such as was also noted in A and D, on which was laid a large jar of coarse brick-red porous ware. It was broken, and must have been deposited in that condition, as the pieces were not found, though close by it were found sherds of another jar of similar type. Stones were built up round the jar to keep it in position; the boundary of the grave, however, had been disturbed, and lay, confused with the débris of the wall that had closed the entrance, in the middle of the floor. The jar contained a few bones, sufficient to show that the body of an infant who had died at or immediately after birth had been deposited within it. It is difficult to avoid the conclusion that we have here the remains of the victim of an infant sacrifice, probably offered when the cave was first adapted for burial. On no other hypothesis can the special treatment of this individual infant—one of many of the same age whose remains were found in the cave—be accounted for; and the remarkable discovery at Taanach of jar-buried children associated with sacrificial furniture is a piece of evidence in the same direction.

The interments in this cave were probably, roughly speaking, contemporary with the patriarchal interments in the Cave of Machpelah, and it is likely that the funerary rites and internal arrangements of the two places of sepulture were similar.

It is curious that a cross appeared to be cut on one of the stones of a wall by which the left-hand side of the stepped entrance had been brought to a fair face. But after close inspection I came to the conclusion that this might be a natural mark in the limestone.

Having now given the outlines of the history of the cave, as deduced from its examination, it remains to describe the deposits found within it. These are almost exclusively *human bones* and *pottery*.

*The Bones.*—By good fortune my father, Professor Macalister, of Cambridge, arrived on a visit to the excavations shortly after

the discovery of the cave, and he was present at its examination on all save the first two days. It has therefore been possible to obtain a scientific examination of the bones such as I would not have been competent to carry out unaided. The result of this examination he has drawn up in the following report:—

*"Report on the Human Bones in the Cemetery Cave at Gezer.*

"The human remains are in two series, burnt and unburnt. The former are the older, as they form a layer beneath the unburnt stratum, extending under the stone platforms on which the bodies buried in graves A and E had been placed.

"The calcined bones are the remains of a large number of persons (how many it was impossible to determine, as they were all broken and their fragments mixed) forming a solid stratum, in places over a foot in thickness. They had been trampled and spread when the grave mounds were built. The soft parts, as well as the bones, had been burnt, for fragments of burnt hyoid bones in the débris furnished presumptive evidence that at any rate the soft parts of the neck had been consumed. There seemed to be one centre of combustion, but its section showed that the fire had been successively renewed, probably at considerable intervals, as even here the bones were not equally burned, and strata of blackened bone alternated with masses reduced to a white ash.

"The remains were of persons of all ages. The bones of at least twelve newly-born infants were identified, scattered through the mass. There were also fragments representing more than a score of children between one and eight years of age, and about as many adolescents between nine and twenty-five years. The rest were adults. An attempt to determine the number of these, by collecting and classifying the fragments, showed that there were at least fifty, and probably even more, of both sexes, the females slightly preponderating.

"Neither skulls nor long bones were sufficiently preserved to be of use for measurement, but it was possible, by carefully grouping the fragments, to obtain some data for a general estimate of stature, and of cranial shape and size. From these observations it appears that the bones were those of a people of slender build and small, but not dwarfish, stature. None exceeded 5 feet 7 inches, and most were under 5 feet 4 inches. The limbs were slender but muscular, none of the humeri were perforated, a few tibiae were slightly platycnemic, and a few femora platymetric, but none pilastered. The cranial shape was an elongated oval, fairly well arched longitudinally, but rather flat-sided, with a length-breadth index somewhere between 72 and 75. The skull bones were thick and heavy.

"This information is not sufficient definitely to correlate this ancient people with any of the known Mediterranean races. It certainly points to their being a pre-Semitic stock.

"The unburnt bones were in two series. The majority formed a more or less uniform layer spread out on the cave floor, over, and extending beyond, the area of cremation. A smaller number were laid on stone platforms within the several grave enclosures.

"The former represented a much larger number of adult bodies than the burnt series, with a proportional number of those of immature age; but their condition of comminution and scattering was equally unsatisfactory. The whole mass was riddled with the burrows of rats, and the cancellous parts of almost all the bones had been destroyed. From the observations and measurements taken, it was clear that these belonged to a race taller than the cremated folk. The average male stature was somewhere about 5 feet 6 inches (but some few rose as high as 5 feet 11 inches); the female stature was about 5 feet 3 inches. They were a stronger, larger-boned people than their predecessors, with pilastered femora, platycnemic tibiae, and with the articular surfaces of ankle, knee, and hip, showing those increased areas of flexion which are associated with the habitual assumption of the squatting position when resting. Their skulls were larger, of thinner bones, distinctly pentagonoid, both when viewed from above and from behind. As nearly as we could estimate, the average length-breadth index  $\left(\frac{B \times 100}{L.}\right)$  ranged about 78.

The faces were longer, with fairly prominent noses and rounded chins. The teeth were large and well spaced. In one or two female jaws there was a tendency to alveolar prognathism.

"These general characters seem to correlate this people with the Semitic stock, rendering it probable that they were part of the earliest wave of Semitic immigration—that of the primitive Amorites.

"Of the bodies interred in the graves, those in A had been much disturbed, probably by the rats. There were fragmentary remains of at least three adult skeletons, which, in general characters, were indistinguishable from those of the unburnt stratum. One of these was certainly male, the other certainly female; of the third, only a few indefinite fragments were found. There were also the remains of two infants.

"In or near D were three crania—one nearly perfect, the second had lost its facial part, and the third was still more fragmentary. The first, of which photographs are appended, was that of a male adult about 30 years of age. Its length-breadth index is 75, height-length index  $\left(\frac{H \times 100}{L.}\right)$  78; index of jaw projection is 96, orbital index  $\left(\frac{Orb. H \times 100}{Orb. W.}\right)$  82, and nasal index  $\left(\frac{n. W. \times 100}{n. H.}\right)$  54. The skull is that of a Semite, probably of a better class than that of the ordinary Amorite fellah, although it shows one character which is sometimes regarded as one of inferiority—viz., a fronto-temporal suture in each pterion.

"The second skull is also that of a male, wider than the former at

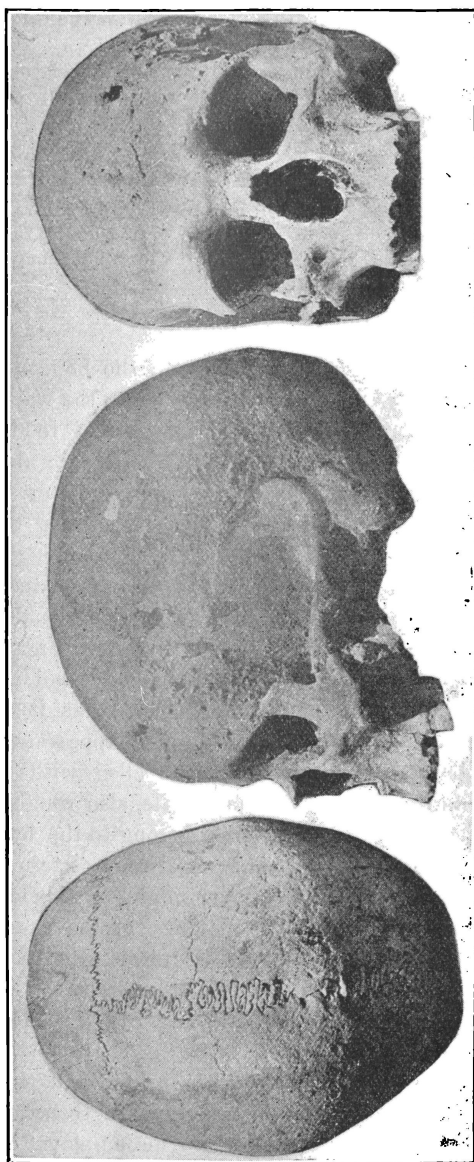


FIG. 18.—Skull from the Burial Cave.

the parietal eminences, but narrower at the forehead; a symmetrically pentagonal, with a length-breadth index of 79·7. The third is metopic, but of much the same shape, with an index about 77.

"In grave D were the fragments:—(1) Of a male skeleton represented only by a few bones; (2) of a female whose skull was rounded, pentagonoid, with a broad short forehead, and an index estimated at about 78.

"There was no reason to suppose that those buried in the graves differed in race from those of the unburnt stratum.

"About five skeletons were found in a fragmentary condition at different parts of the city. These presented the same general characters as those of the unburnt stratum,

"ALEX. MACALISTER."


*The Pottery.*—Throughout the cave—in the bone débris on the floor, inside the grave enclosures, and built into the walls surrounding them—were scattered a large collection of food vessels of different kinds. As these were nearly all perfect, or almost so, the collection is particularly valuable for the study of the earliest pottery of Palestine. Drawings of the types are collected on Plates IX–XI.

Plate IX represents the earlier types, associated with the cremated remains. They are distinctly coarser in quality than the later vessels found in the inhumated stratum. Fig. 1 is a small jug with rounded base, flattened globular body, and wide mouth. The handle is broken; the stump shows that it was deeply channelled on the back, giving it a doubled appearance. Figs. 2, 3, are hemispherical bowls, roughly modelled with the fingers. Fig. 4 is a cylindrical cup with one handle, also roughly moulded, and burnt black. Fig. 5 may possibly belong to the later period—the stratification of the pottery was not always certain, and vessels deposited on the top of the burnt layer might have belonged to the bottom of the buried layer. The rudeness of the execution leads me to prefer the earlier date. It is remarkable for displaying ledge-handles, with two little additional knobs above each. Figs. 6, 7, are jugs with loop handles, and Fig. 8 is a rough expanding cup.

The vessels in Plate X, on which are collected the *uncoloured* specimens of the late types, are, on account of their large number and size, necessarily drawn to half the scale employed in Plate IX. Fig. 1 is a small jug or cup. Fig. 2 is a bowl, remarkable for having a curious and most inconvenient handle at one side—quite too small

to give a firm grasp, even when the bowl is empty. Fig. 3 is a very fine, large, spherical jug of burnished red ware. It has a flat bottom; two plain ledge-handles—on the upper surface of one of them three small dots are punched, possibly a potter's mark; a circular mouth; and a strainer for filling the vessel and at the same time purifying the liquid. It is plain from its shape and position that this could not have been used for pouring *out*. Fig. 4 is a flat-bottomed jug of red ware, burnished. Figs. 5, 6, are two small saucers, not calling for special remark; Fig. 11 is similar to Fig. 6. Fig. 7 is a bowl with straight oblique sides: just inside the rim are two small dots impressed which do not penetrate the side of the vessel. Two other bowls were found, similar to this, but with the dots perforated right through. Figs. 8 and 9 are ordinary bowls with rounded bottoms. Fig. 9 shows perforations like those in 7, penetrating through the side of the vessel. Fig. 10 is similar to Fig. 4, but the bottom is concave. Fig. 12 is a conical jug of drab ware, with expanding neck. Fig. 13 is a globular jug with wide mouth and flattish base: there are two ledge handles and also two ear handles. The two holes near the base, shown in the plate, have been made intentionally. Fig. 14 is a saucer with curiously heavy moulding round the mouth—drawn below the figure to a larger scale. Fig. 15 is a bowl resembling Fig. 2, in having a minute handle at one side, too small to be of any practical service. Fig. 16 resembles Figs. 6, 11. Fig. 17 is a hemispherical cup on a solid cylindrical base. Fig. 18 is one of the most interesting of all the pieces of pottery recovered from the cave; unfortunately it is very imperfect. The three fragments that remain show that it was a tray, probably for baking, studded on the upper face with little squat conical knobs, just enough of which remains to show that they were arranged in a spiral. Fig. 19 is a curious anticipation of the shape of a late Jewish cooking pot, but with flat bottom. Fig. 20 is an ordinary jug with plain ledge handles. Fig. 21 is a vessel that has lost its neck and mouth. On one side are two mamillary projections, which suggest comparison with the jars found by Schliemann bearing feminine characteristics.

Few words are necessary with regard to Plate XI, which represents a bowl (Fig. 1), a fragment of another (Fig. 4)—both with the two peculiar perforations already noticed—and two small jugs, ornamented with coloured decoration. This it will be noticed is

of a uniform type: the colour—dark Indian red—is also uniform. The patterns consist of simple groups of lines arranged in V, or in the Mycenæan  pattern; one piece—the fragment (Fig. 4)—is interesting on account of the appearance of the zigzag, which plays so important a part in later pre-Israelite decoration.

The curious animal figure (which has been the handle of a jar) found just at the mouth of the cave, and illustrated in Fig. 19, is the only other piece (exclusive of the large jar containing the infant's bones) calling for notice.

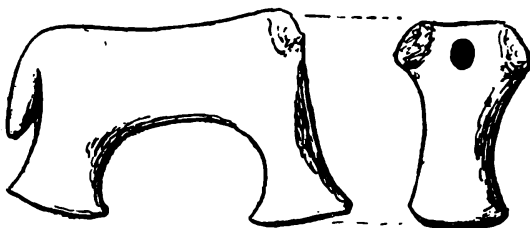


FIG. 19.—Jar Handle, shaped as an Animal's Figure.

In order to complete this account of the food vessels a word must be added respecting the grouping of the pieces. A large number were lying about on the floor, without any special order or grouping being apparent. A few were built into crevices of the grave enclosures, always in groups of at least two, a jug and a bowl. The finest pieces were heaped together on the fallen stones inside the enclosure B. I endeavoured to obtain a photograph of this group by magnesium light before disturbing it, and was successful in getting a negative good enough for a record, though not sufficiently clear for publication. In the two photographic views (Figs. 20, 21) I have assembled together the principal pieces found within this enclosure.

The large jar containing the infant's bones (Fig. 22) is 2 feet 4 inches long, with flat base, inverted cone body, surrounded by a rope-moulding, gently curved shoulders, and mouth abruptly turned back. The shape allies itself with that of the fine jar from Tell es-Şâfi (BM., Plate XXIII, Fig. 1).

*Other Deposits.*—These were disappointingly few. They consisted of the singular limestone figure,  $7\frac{1}{2}$  inches high, no doubt a rude *taraph*, represented on Plate IX; of a few perforated Venus



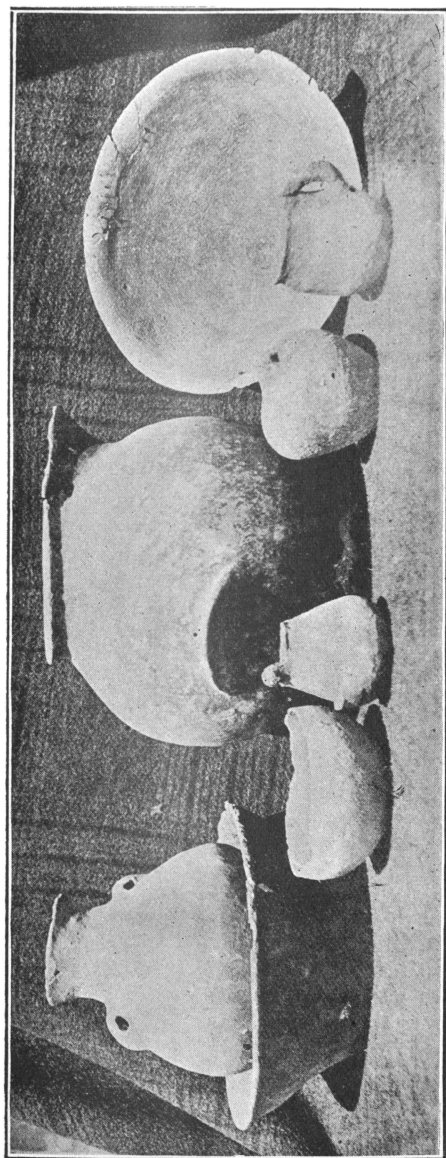


FIG. 20.—Group of Pottery from Enclosure B in the Burial Cave.

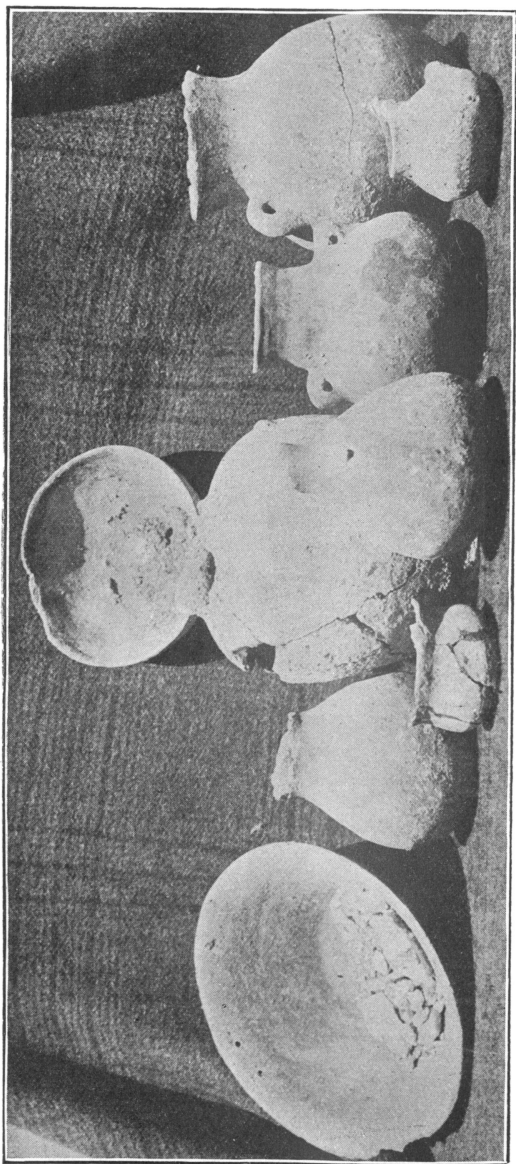


FIG. 21.—Group of Pottery from Enclosure B in the Burial Cave.

shells; of about half a dozen minute blue enamelled beads (found among the stones inside enclosure B); and of about 50 beads, consisting of small circular discs of polished agate and carnelian, with countersunk holes drilled through them.

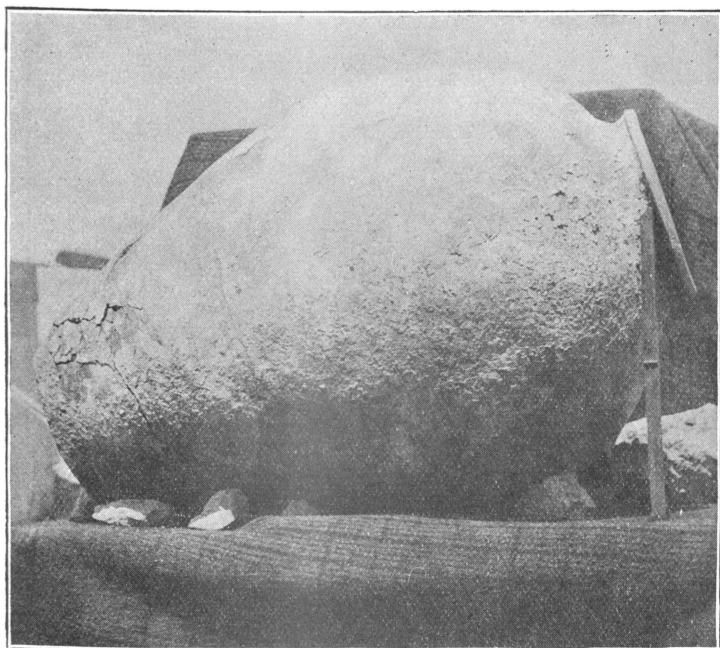


FIG. 22.—Jar containing an Infant's Bones, from the Burial Cave.  
(The rule in the photograph is 1 foot in length.)

It remains to speak of the surroundings of the cave, which were very suggestive (*see* the plan on Plate VIII, and the general view, Fig. 23). C, in the general view, is the stepped descent to the cave mouth. Behind the 5-foot rod that stands against the top step is a wall, probably independent of the cave, and a subsequent addition—the steps run partly under its foundations. At B is a standing stone or *maṣṣēbāh*, of the circular type already described, but finer than any other example yet found in the excavation. It is 2 feet in height, 1 foot 7 inches in diameter at the top, and about the same at the bottom, but swelling slightly like a barrel in the middle.

It stands on about a foot thickness of earth above the level of the rock. Between it and the steps of the cave, about midway (at A in the photographic view) is a cup-mark in the rock, 1 foot 1 inch

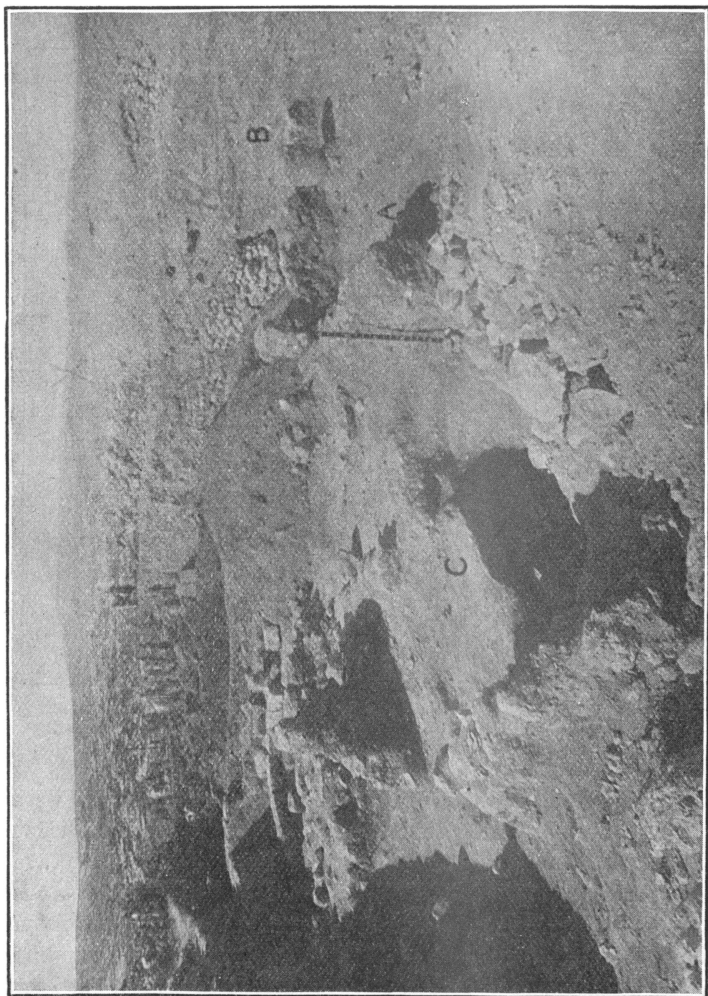


FIG. 23.—Surroundings of the Burial Cave.

in diameter and 1 foot 2 inches in depth. It seems reasonable to regard these as adjuncts, with some ritual purpose, to the cave in which the dead were deposited.

In the account of the "Rock Cuttings of the Shephelah," contributed to the new memoir (quoted as BM. in this report), I endeavoured to show reasons for believing that the columbaria of Beit Jibrin and elsewhere were not Roman, but the work of a race of possibly aboriginal troglodytes who practised cremation, and that instead of the Romans having introduced columbaria into Palestine, it was possibly from these hypothetical aborigines they themselves had learnt this convenient method of disposal of the ashes of the dead. The weak point in this rather revolutionary deduction I felt to be the entire absence of literary or other evidence for pre-Roman cremation in Palestine: the case of Saul (1 Sam. xxxi, 12) is obviously exceptional; Amos vi, 10, is an obscure passage; and both references are clearly beside the point. It has now been established, however, by this cave at Gezer that cremation was practised at an early date by an aboriginal race in Palestine. There are still many links, both in time and in evolution, missing between the rude cave at Gezer and the elaborate columbaria of Beit Jibrin, but I cannot help feeling that this discovery tends to corroborate the evidence I had already collected in favour of my views respecting the origin of the latter excavations.

In order to extract the food-vessels deposited in the crevices of the walls it was found necessary to demolish all the grave enclosures. They have, however, been restored to as nearly as possible their original aspect, and the cave will remain permanently open for inspection.

### § XIII.—THE SURROUNDING DISTRICT.

As time permits I am pursuing an examination of the ground-surface on the hillsides and in the valleys surrounding the tell in search for (1) tombs; (2) boundary stones; and (3) other remains of antiquity. I have not been able as yet to do much work in this important branch of the exploration, my time being very fully taken up on the tell itself; but such excursions as I have been able to make have not been fruitless. Some likely tomb-sites (within the area covered by the firman) have been noted. The most important remains found, however, have been on the western face of the hill to the south. Here I have to report the existence of (1) an alignment of stones, and (2) a stone circle, which are welcome additions to the scanty muster of rude stone monuments of Western Palestine.

## § XIV.—SUMMARY.

In the foregoing report I have confined myself as far as possible to the statement of discoveries, and of deductions from them not likely to be overturned by future developments in the excavation. There are, besides, numerous conclusions at which I have arrived on different points which, being less final, have for the present been set aside. It may, however, be regarded as established that the Eastern Hill shows signs of four successive occupations:—(1) A pre-Semitic, probably neolithic race, who practised cremation; (2) an early Semitic race of the copper and early bronze age; (3) two later Semitic occupations, whose chronology as yet depends only on the evidence of scarabs—for there is not sufficient distinction between the pottery of successive strata to apply with certainty the “pottery scale,” deduced from previous excavations. The chronological evidence of scarabs is notoriously untrustworthy, but it must be regarded as a hopeful sign (1) that all the scarabs appear contemporary, as well as the seals on the jar-handles; and (2) that no scarab has yet been found with the ring of Tahutmes III.

The Imperial Commissioner formerly attached to the Fund’s excavations having resigned, on the ground of ill health, his place was temporarily filled by His Excellency Yusif Pasha el-Khaldi, at the commencement of the works, as interim Commissioner, and finally by the appointment of His Excellency’s nephew, Sourraya Effendi. It would be ungrateful to fail to acknowledge the courtesy shown by both these gentlemen in the execution of their duties. I must also record the obligation which the Fund and its officers owe to Mr. Serapion Murad, administrator of the estate in which the tell stands, for giving freely every possible facility for carrying out the works. I have been requested by him to leave all discoveries of importance open, so that they may be permanently available for the instruction of students of Palestinian archæology.

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