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THE
EXCAVATION OF GEZER

VOL. I

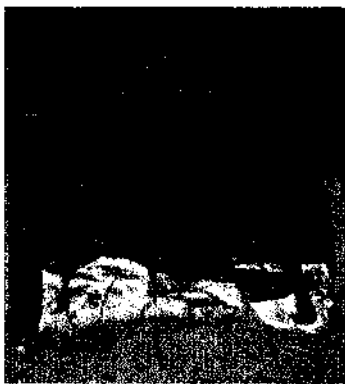


FIG. 1

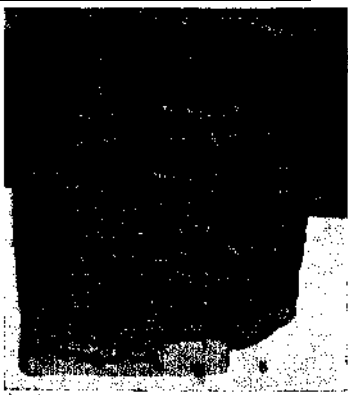


FIG. 2



FIG. 3



FIG. 4

THE EXCAVATION OF GEZER

1902—1905 AND 1907—1909

BY R. A. STEWART MACALISTER

M A , F S A ,

PROFESSOR of ARCHAEOLOGY, UNIVERSITY COLLEGE, DUBLIN

WITH NUMEROUS ILLUSTRATIONS

IN TWO VOLUMES OF LETTERPRESS AND
ONE VOLUME OF ILLUSTRATIONS

PUBLISHED FOR THE COMMITTEE OF THE PALESTINE EXPLORATION FUND

BY

JOHN MURRAY, ALBEMARLE STREET, LONDON, W.

1912

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P R E F A C E

IN what form the results of the Excavation of Gezer should be finally presented is a question that has cost me much careful thought. Two alternatives offered themselves, between which it was difficult to choose. My preference at first was to follow the natural division of the remains into epochs and culture levels, and to give a bird's-eye view of the city's life, so far as excavation could reveal it, at each successive stage of the city's history. Indeed, I made some progress with the writing of the *Memoir* on such a plan ; but I found before long that it was not free from serious inconvenience. The complexity of the stratification of the mound itself made it difficult to carry through the work of description in the form proposed. Certain classes of antiquities (such as bronze arrowheads) persist with but little change over extended periods of time; so that it would not be easy to avoid repetition, or else an undue expansion of the earlier chapters, with many cumbrous cross-references in the later. Inevitable also would be a dissection of the history of other classes of objects, notably of pottery, into a large number of isolated parts, which the student would afterwards be obliged to reunite for himself. After giving a fair trial to this method of setting forth the results, I decided to abandon it in favour of the other, which consists in grouping associated types of objects together, tracing the history of each independently of the rest.

In Chapter I, accordingly, I give a description of the site with its history, derived from literary sources, and from results of the excavation itself. In Chapter II is told the story of the identification of the site, and an account is given of the methods of excavation and of recording. This chapter is written for two practical purposes: to assist future excavators by giving hints as to methods which proved the most satisfactory ; and to help the reader by setting forth a *precis* of the chief results of the work, which will keep him from losing his way among the multiplicity of details

that follows. Consequently though for convenience the chapter is cast in narrative form, all trivialities of camp life and similar matters, picturesque though they may be, have been carefully excluded as being irrelevant to the ends in view.

Chapters III-X are the sections of the book in which the discoveries themselves are described in detail. The principles of classification adopted are explained in Chapter II, to which the reader may be referred.

It may here be stated, once for all, that no complete picture of the ancient civilization of the country can be drawn from excavation alone; for the simple reason that by far the greater number of the articles in daily use among the ancient inhabitants have long ago perished by the ordinary processes of decay. Textiles, wooden furniture and utensils, written documents on papyrus or on parchment, which we can hardly doubt were fairly common in the later periods, have been practically annihilated; and it is difficult in all cases, impossible in many, to reconstruct them in the imagination. We are limited to objects of stone, brick, pottery, bone, ivory, and metal—many even of these imperfect: and obviously the information drawn from them must be less than half of the whole subject. Here and there I have endeavoured to indicate how these unavoidable gaps in our knowledge may be filled—by reference to contemporary monuments, archaeological or literary, or by comparisons with modern customs, which so often offer valuable illustrations of ancient practices. But to do so systematically would swell the book unduly, and would lead us away too far from its proper subject—the results of the Excavation of Gezer.

This book is naturally based upon the current Reports sent home during the progress of the work, and published regularly in the *Quarterly Statement of the Palestine Exploration Fund* from October 1902 onwards. The matter has, however, been completely re-written; many theories and suggestions thrown out from time to time have had to be modified or entirely withdrawn. It is therefore to be remembered, wherever discrepancies are found between statements or views expressed in the *Quarterly Reports* and in this book, that the former are superseded by the latter.

While abandoning, for the reasons above mentioned, a chronological

arrangement, I have endeavoured to keep the chronology and stratification of the remains prominent throughout. The plans of the successive cities on Plates i—vii are the foundation of the whole work. These plans are numbered **I - V I** : plate vii contains three intermediate plans, numbered **IIa, IIIa, Va**, necessitated by the subdivision of strata on the Western Hill. To prevent confusion, the plans are numbered with capital letters, the plates with minuscules. The exact spot in the mound where any ordinary object chanced to lie is not generally of great importance; thus, so long as we know the date at which a certain type of knife was used, it does not much matter, as a rule, in which of the houses it was discovered. I have contented myself therefore in the majority of cases with indicating in which of the trenches the object was found, specifying more closely wherever necessary, by reference to some conspicuous building in that trench, or, when exactness is essential, by reference letters in the plan.* These indications of position are printed in the description of each object in the form [V 10], which means "Plan V, trench 10." This tells the reader to what period the object so indicated belongs (the Fourth Semitic Period in the example cited), which in the great majority of cases is all he will need or desire to know.† To limit further the *horizontal* position of ordinary objects (by east-to-west lines crossing the north-to-south lines that divide the trenches) would have involved additional labour that hardly seemed to give information of commensurate value; while to fix their *vertical* position by reference to the sea-level, as has sometimes been done in descriptions of excavations, is misleading whenever, as at Gezer, the successive strata of contemporary objects are not horizontal planes.

To save space, the familiar abbreviations ', ', for "feet" and "inches" are used in the dimensions. A table for calculating equivalents in the metric system is given for the convenience of Continental readers.

* To avoid confusion, the lettering on the plans is printed in blue, and the trenches are divided by red lines.

† The formula V 10 A denotes the object or structure indicated by reference letter A in trench 10 of Plan V. An index to these reference letters is provided with the plates, so that the reader examining the plans can without delay find the description of any structure regarding which he may wish for information.

The illustrations are selected from the photographs or drawings of objects, about 10,000 in number, which were made during the progress of the work. These have been classified and fitted together on the plates, though it has not always been found possible to arrange the drawings on the plates in strict order. The illustrations not required for publication in the book are deposited for reference in the Office of the Fund. For the representation of pottery and other objects, drawings shewing the antiquities "in elevation" have been preferred to photographs, though the latter would have been much less troublesome to prepare. Photographs, shewing the objects "in perspective"—not always a true perspective—do not give so exact a record of actual form as measured drawings. They are also apt to emphasize irrelevant detail, shadows, etc. Inscriptions, scarabs, and the like have all been drawn larger than full-size with a camera lucida, and the drawings then reduced in reproduction to the size of the original.

It is now my duty to express my acknowledgments to Their Excellencies Hamdy Bey and Halil Bey, the eminent Director and Sub-Director of the Imperial Ottoman Museum, who have throughout displayed a personal interest in the work, and a courteous desire to meet the wishes of the excavator.* The Imperial Commissioner attached by the Ottoman Government to the works, Therayyah Efendi Al-Khalidi, deserves the fullest acknowledgment for his unfailing friendliness, and his readiness to fall in with all suggestions and requests, so far as his obligations to the duties of his office permitted him to do so.

To the Officials of the British Embassy at Constantinople, and of the British Consulate and Vice-Consulate at Jerusalem and Jaffa, acknowledgments for important services are due : but I would add to this formal word of thanks an expression of personal regret for one to whom the Palestine Exploration Fund owes a far more than official care. In the late British Consul at Jerusalem, Mr. John Dickson, all who were privileged to come into contact with him lost a friend whose time, energies, and

* The death of Hamdy Bey, since this book was sent to press, is a grave loss to Oriental archaeology.

great knowledge of the East and of its ways were ever ungrudgingly at their disposal.

I have also to endeavour to express my thanks—which I fear I cannot do adequately—to the Dominican Fathers of Saint-Iitienne, to the ReV. Pere Germer-Durand of Notre-Dame de France, also to the Directors of the American and of the German Schools of Archaeology, for their constant interest and encouragement, their ever-ready helpfulness, the freedom with which they have given me access to the libraries under their control in Jerusalem, and many other kindnesses.

Chapter 111 owes whatever merit it may possess to my father, Professor Macalister of Cambridge, who in several visits to the camp made a study, for which I myself should not have been competent, of the osteological material accumulated. The section on the *Conditions of Life in the City* is founded on one of many valuable discussions I have had with my friend Dr. Masterman of Jerusalem. For help and advice on individual points I have to acknowledge my indebtedness to Professor Ridgeway of Cambridge, Professor Myres of Liverpool, Dr. L.I. Griffith, and many others. I have endeavoured throughout by footnotes or otherwise to acknowledge the source of any criticisms or interpretations that I have adopted.

It would be ungrateful to fail to acknowledge the trustworthiness, energy, and devotion to duty displayed by the capable foreman of works, Yusif Khattar Kina'an, without whom I could not have carried out this work single-handed.

About the year 1869 the mound and other parts of the lands of the village of Abu Shusheh were acquired by Messrs. Bergheim, sometime bankers in Jerusalem. This proved a fortunate circumstance for the excavator: for to the administrator of the estate, Mr. Serapion Murad, an incalculable debt is due. He put the site freely at the disposal of the Palestine Exploration Fund; used his great influence with the turbulent local fellabin to keep them from being unduly troublesome; was always ready with valuable advice, whenever troubles arose; and last, but not least, followed the work with the keenest interest, and proved himself a pleasant companion in the solitude of camp life.

Certain **books that** are frequently cited are indicated by the following abbreviations:—

- TH*—*Tell el Hesy*, by W. M. Flinders Petrie.
MMC—*A Mound of Many Cities*, by F. J. Bliss.
EP—*Excavations in Palestine*, by F. J. Bliss and **R. A. S. Macalister**.
ARP—*Archaeological Researches in Palestine*, by C. Clermont-Ganneau.
RAO—*Recueil d'Archéologie Orientale*, by C. Clermont-Ganneau.
QS—*Quarterly Statement of the Palestine Exploration Fund*.
CCM—*Catalogue of the Cyprus Museum*, by J. L. Myres and M. Ohnefalsch-Richter.
VC—*Canaan d'après l'exploration récente*, by H. Vincent.

Of other books to which reference is made the full title is given, or enough of it to enable the reader to identify the work without difficulty.

R. A. S. M.

DUBLIN,
December 1910.

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A CHRONOLOGICAL TABLE OF THE PERIODS IN THE HISTORY OF PALESTINIAN CIVILIZATION

PERIOD	NAME	APPROXIMATE LIMIT OF DATE
I	Pre-Semitic	To the entrance of the first Semitic inhabitants.
II	First Semitic	To the end of the Twelfth Egyptian Dynasty.
III	Second Semitic	To the end of the Eighteenth Egyptian Dynasty.
IV	Third Semitic	To the establishment of the Hebrew Monarchy.
V	Fourth Semitic	To the destruction of the Hebrew Monarchy (B.C. 1000-550).
VI	Persian and Hellenistic	To the beginning of the Roman domination (B.C. 550-100).
VII	Roman	B.C. 100—A.D. 350.
VIII	Byzantine	A.D. 350-600.
IX	Early Arab	A.D. 600-1100.
X	Crusader	A.D. 110-1200.
XI	Modern Arab	A.D. 1200 onwards.

A CHRONOLOGICAL TABLE OF THE HISTORY OF GEZER

It may be convenient to collect into a chronological table the events of which written records exist. Fuller particulars of these, with their authorities, will be found in Chapter I. Owing to the uncertainties of the chronology of the earlier period, dates have been intentionally omitted from the first few entries in the table.

Probable date for the beginning of the Semitic Occupation.

Thutmose III conquers Gezer.

YAPAH king. The *Sa-Gaz* and *Sutu* attack Gezer. *Yapahi's* brother joins the enemy. *Beia*, a renegade, joins the enemy and captures the city. *Labaya* confirms the city in its league with the conquerors. The city assists the allies of the *Habiru* who attack the district of Jerusalem.

Merneptah spoils Gezer.

HORAM king. Israelite immigration. The king of Gezer killed at Lachish, and the city assigned to the Kohathite Levites in the tribe of Ephraim. The Israelite population fuses with the Canaanites.

DAVID. Gezer in the hands of the Philistines. Skirmish here between David's "mighty men" and the Philistines.

SOLOMON. Gezer taken by the king of Egypt and given as a dowry to his daughter. The city rebuilt by Solomon.

Fall of the kingdom of Israel.

HURUASI governor. An Assyrian garrison settled in Gezer.

Captivity of Judah.

Accession of ANTIOCHUS IV (Epiphanes).

Revolt of *Mattathias* against the imposition of Hellenism.

Judas Maccabaeus leads the revolt. Battle of Emmaus; pursuit of Gorgias to Gezer.

Accession of DEMETRIUS I (Soter). He sends Bacchides to quell the Maccabean party and to secure the high-priesthood for the Hellenizing Alcimus. Battle of Beth-horon. Nicanor pursued to Gezer.

Judas defeated by Bacchides and slain. *Jonathan* succeeds him. Bacchides holds Judaea. Gezer fortified by Bacchides.

Death of Alcimus and departure of Bacchides.

ALEXANDER Balas begins to reign at Ptolemais. The foreign garrisons partly withdrawn from Judaea.

Accession of DEMETRIUS II. Further withdrawal of the foreign garrisons promised at the request of Jonathan by Demetrius, but not performed. Jonathan deserts Demetrius.

Capture of Jonathan, who is put to death at Ptolemais. *Simon* succeeds him. Siege and capture of Gezer by Simon, who puts out the idolaters and builds a house for himself in which his son John resides.

Accession of ANTIOCHUS VII (Sidctes). Embassy from him to Simon demanding compensation for the capture of Gezer.

Murder of Simon. Assassins sent to murder John at Gezer slain on their arrival. *John* succeeds Simon.

Antiochus raids Judaea and probably recaptures Gezer.

Restoration of DEMETRIUS II. John petitions the Roman Senate for intervention.

About this time the boundary inscriptions cut, and the hill-top site deserted by the inhabitants, who settle in the neighbouring villages.

TABLE FOR THE CONVERSION OF DIMENSIONS

ft. in.	met.	ft. in.	met.	ft. in.	met.
0 0 $\frac{1}{8}$	0'003	0 10	0'254	20 0	6'095
0 0 $\frac{1}{4}$	0'006	0 11	0'279	25 0	7'619
0 0 $\frac{3}{8}$	0'009	1 0	0'305	30 0	9'144
0 0 $\frac{1}{2}$	0'013	2 0	0'609	32 10*	10'000
0 0 $\frac{5}{8}$	0'016	3 0	0'914	40 0	12'191
0 0 $\frac{3}{4}$	0'019	3 3 $\frac{1}{2}$ *	1'000	50 0	15'239
0 0 $\frac{7}{8}$	0'022	4 0	1'219	60 0	18'287
0 1	0'025	5 0	1'524	70 0	21'335
0 2	0'051	6 0	1'829	80 0	24'382
0 3	0'076	6 6 $\frac{1}{2}$ *	2'000	90 0	27'431
0 4	0'102	7 0	2'134	100 0	30'479
0 5	0'127	8 0	2'438		
0 6	0'152	9 0	2'743	Miles.	Metres.
0 7	0'178	9 9 $\frac{1}{2}$ *	3'000	$\frac{1}{2}$	804'5
0 8	0'203	10 0	3'047	1	1609
0 9	0'229	15 0	4'572	13	20921'

* Approximately.

THE EXCAVATION OF GEZER

CHAPTER I

THE SITE AND HISTORY OF GEZER

§ i.—THE SITE AND ITS SURROUNDINGS

THE hill on the summit of which for some three thousand years the city of Gezer stood, lies in the boundary that divides the maritime plain of Philistia

CORRIGENDA TO VOL I

Page 187, line 12, for "two" read "four."

Page 187, line 9 from bottom, for "* VI 17 B " read " VI 30 B ."

Page 188, title under Fig 76, same error as last.

Page 275, title under Fig. 142, for " VI 4 " read " VI 5 "

Page 276, line 3, same error as last.

Page 288, line 1, for " fig. 17 " read " Vol. II , fig 505."

the level of the surrounding plain. The height is not uniform : at each end, especially the western, it rises in a knoll. These knolls will, in the following pages, be distinguished as the "*Western Hill*" and "*Eastern Hill*" respectively, the saddle between them being called the "*Central Valley*." The summit is a long oval area about $\frac{1}{2}$ mile in length, and about 450'-600' in breadth. The slope of the hillside is steepest under the *wely*, a Muslim saint's shrine that crowns the N.W. corner. At the western end the mound is connected by a *col* with a subsidiary hillock, on which stands the modern village of Abu Shusheh; but otherwise it is completely isolated from the surrounding hills.

Before the human occupation of this site, it must have presented an appearance very similar to that of the neighbouring hills to the south, as

we may see them to-day (Plate ix, fig. i). These are of grey limestone, naturally soft and friable, but, with weathering, taking a very hard surface. The limestone is interrupted by frequent strata of flint nodules. The altitude is moderate; the tops are rounded. A great part of the rock-surface is bare: the irregularities and hollows are filled with shallow patches of earth, supporting a scanty, thorny vegetation. In excavating the mound, virgin soil was found only in small quantities, filling the natural pockets in the rock-surface ; so that there can have been but little earth on the hill before the accumulation of the debris of the successive cities.



To a primitive race in search of a home this site would offer many attractions. The limestone of which it is composed is honeycombed with caves, some of which were ready to serve as dwellings, while others needed but little alteration to adapt them for that purpose—an easy matter, even with primitive tools, owing to the softness of the rock. The hills and valleys around shelter a considerable variety of game ; they likewise afford rough but sufficient pasture, and every springtime are covered with flocks of goats and sheep; while the most unobservant cannot fail to appreciate the magnificent fertility of the plain that stretches north and east. The hunter, the shepherd, and the agriculturist might go farther and fare much worse than at Gezer.

Moreover the neighbourhood is blessed, like few other places in South Palestine, with abundant and excellent water. In the valley at the east end is the great spring-well, never dry in the hottest summer and generally overflowing in winter, called 'Ain Yerdeh. This source is the water-supply of the large village of El-Kubab, and is contained within the lands of that village. Proceeding to the west, along the road to Abu Shusheh, we come to the winter spring called 'Ain el-Bufmeh*; and next, to a ruined reservoir, within recent years despoiled of all the cut stones with "which it had been built, representing the now dry 'Ain et-Tannur.† Farther west, to the south of Abu Shusheh, is the well which is the principal supply of that village; it is called Btr el-Balad.‡ A little farther westward is Bir et-Taydsheh. To the north of the latter is another spring-well called Bir el-Lustyeh. On the north side of the hill are numerous watercourses, which carry away surface drainage during the rainy season; there is one winter spring, known as 'Ain el-Haflis.§

There is another characteristic, which must have been of great importance in primitive times. This is the obvious strategic advantage of the site, whether for purposes of defence or of offence. From its highest point an uninterrupted view can be obtained northward, including the modern towns of Ramleh, Lydd, and Jaffa; the castle of Ras el-'Ain (*Antipatris*); and, on a clear day, practically the whole of the sea-coast plain as far as the misty range of Carmel. Westward the eye sweeps over the wide plain to the sea, taking in such modern villages as Ni'aneh, Zernukah, and the Jewish colonies at Deran and at 'Akir. Southward and eastward the view is more restricted, being shut in by the Shephelah hills and by the Judean mountains: but a scout placed on the summit where now stands the shrine of Sheikh Musa Talt'a, about half an hour's walk to the south-east of the site of Gezer, can command a prospect southward almost as extensive as that which Gezer itself overlooks to the north.|| Thus an army of invaders could be seen for many miles, and preparations made for its reception long before it could appear at the gates. The hill itself, while not impregnable, is in places by no means easy to climb, and the excavation has afforded evidence that formerly (especially on the north side) it was much steeper even than it is now. A striking indication that the reduction of the city was a difficult matter is afforded by the record preserved by the authors of the Books of Joshua and of the Judges. This record confesses that the Ephraimites did not drive out the Canaanite inhabitants of Gezer as of other places, even though the city had been weakened by the slaughter of its king and of a number of its defenders when endeavouring to assist Lachish against the Israelite leader.

* "The Spring of the Terebinth." An enormous terebinth tree that once grew here is still remembered.

t "The Spring of the Oven"—a centre of legends to which we shall refer later.

‡ "The Well of the Village."

§ I do not know the meaning of these three names. It is said that Bir el-Lustyeh was choked up and completely forgotten till about sixty years ago, more or less, when the round top of its shaft was betrayed by the vegetation growing over it in a year of exceptional drought.

|| A description of this site, which I believe to have been used as a look-out station, is given in Chapter IX.

In the eyes of the Gezerites this wide prospect would perhaps have another advantage. Not only could invading armies be kept a long time in view, but trading caravans also could be sighted from afar off and forced to pay compulsory toll to the city as they passed. Two trade routes of importance lay thus within sight of the city. The first was the coast road from Egypt to Mesopotamia; the second was the way from Jerusalem to the sea, down the valley at whose mouth the city stood.

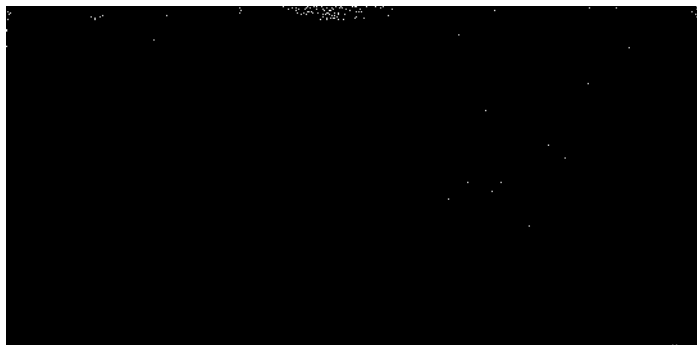


FIG. 2.—ROCK-CUT ROADWAY AT THE EAST END OF THE MOUND

Outside the limits of the city itself, there are but *few* remains of antiquity to be seen in the neighbourhood; if we except the quarries, tombs, and fruit-presses with which the hillsides are thickly dotted, and which are planned in Plate viii and described in Chapters IV, V, and VI respectively. There are a goodly number of caves, most of them natural or slightly enlarged by art; some of these have probably been used at one time or another for dwellings. The most striking of these is the enormous quarry known as *Mugharet el-Jaihah*, on the hill-slope south of Abu Shusheh. South of the hill containing this cave (and outside the limits of the plan on Plate viii) is the valley known as Wady Jaihah; in the hill that forms.

the south side of this valley is the remarkable cave called *Sliakif ez-Zutt* ("the rock-hollow of the gypsies"), and on the west behind it is the very interesting shrine now called *Sheikh Jdbds*. These sites are described in Vol. II, Chapter X. Two other shrines may possibly perpetuate old religious traditions—the tomb of the *Sheikh Darwish*, east of the modern threshing floor, and the great fig-tree just east of the village called *Tinetshe-Sheikh fkh-rays*, at which vows are paid in the case of sickness. Of other traces of man's handiwork outside the ancient city wall the most striking is a rock-cut roadway (marked OLD ROAD in the plan, Plate viii), which runs up from the neighbourhood of 'Ain Yerdeh and trends toward the north side of the city (fig. 2). It is quarried through the rock-outcrops at the base of the hill, but merges with a modern footworn track before it reaches the city and its ultimate destination is lost. It probably ended in the N.E. city gate.

Nor are there any definitely ancient traditions to be detected in the present names of the fields and the other land divisions surrounding the site. Most of them are demonstrably modern, and the presumption is that none are of great antiquity. They often refer to persons still in living memory, or to the modern Arabic names of plants supposed to grow there. A few (like *Habl el-Lulu*, "the pearl-chain") are fanciful; * but with one possible exception (*Sardahannah*, a word of which I could obtain no explanation) none of them are even suggestive of interesting possibilities. One of the most curious names is *Hajar Ibrahim*, "Abraham's stone," applied to a conspicuous boulder on the top of which is cut a fruit-press on the north side of the hill (Plate ix, fig. 2). I was told by one of the natives that this Abraham was the patriarch, who used the stone as a platform for prayer, and who made the vats of the fruit-press by the pressure of his body in his frequent prostrations. Another informant scouted this, saying that Abraham was a modern *fellah*, though it was not known what he had to do with the stone. Perhaps we have here a legend in the making.

§ 2.—THE HISTORY OF THE CITY

The Hebrew root which has the same consonants as the name of Gezer implies some such meaning as "dividing, separating"; and perhaps

* Possibly a clam of pearls was actually found at some time in a tomb on this patch of ground: the name is almost too imaginative to be explained otherwise.

includes the sense of "precipice." Though no longer applicable to the site, this latter signification would well fit in with its actual appearance in ancient times along a certain section of the north side ; here the excavation shewed that the wall had been built on the edge of a lofty cliff, now completely concealed under detritus. But in Palestine, as elsewhere, the study of place-names is full of pitfalls. It is not unlikely that the etymology of the name is to be sought elsewhere ; it is indeed not impossible that its Semitic appearance may be merely superficial, and that it is a legacy from the aborigines. But such a suggestion would open a maze of conjecture into which we must not venture here. It will be sufficient to take the name of the city as we find it, recording in passing its most obvious-derivation.

(a) The Pre-Semitic Occupation

There is no evidence of an occupation of the hill of Gezer itself before the Neolithic period. In the fields around, especially to the north-west and north, stone axes of the Chellean type, the most frequently represented among the palaeolithic remains of Palestine, are to be found, especially after the soil has been turned up by the plough. It is true that a few palaeolithic implements were found here and there in the city ; but these must have been picked up and imported into its precincts in comparatively recent times. Some representative specimens of palaeolithic implements, picked up in the neighbouring fields, are shewn in fig. 3.

It cannot have been much later than 3000 B.C. when the primitive race which in these pages we shall call the *Troglodytes* took possession of the caves that abound in the rocky core of the hill. Who these people may have been, and what their relation was to the other tribes of the Mediterranean basin, are questions that for the present must await further researches in other centres of their occupation. The fact that in the principal deposit of their remains discovered, the bones were burnt, and so made useless for minute examination, prevents our obtaining detailed information on their physical character. What can be told will be found in Chapter III. Let it suffice here to say that they were a small-statured race, in the neolithic stage of culture, and that they lived in caves and supported themselves principally by hunting or by their cattle.

The suggestion has been made that this aboriginal cave-dwelling race may have had some connexion with the Horites of Mount Seir (Gen. xiv. 6 and elsewhere)*

The Horites do not seem to have belonged to the tall race of aborigines (Rephaim, Anakim, Emim), but appear in Deut. ii. 10-12 to be referred to as a different though contemporary stock.* However we know so little of the early peopling of Palestine that it would be premature to press with too great insistence such comparisons as are here mentioned, though they cannot be passed over altogether in silence.

(b) *The Early Semites and the Influence of Egypt*

It was not till the first invasion of the Semites that Gezer ceased to be a mere settlement of savages and began to assume the dimensions and the importance of an organized city. Various lines of argument agree in indicating 2500 B.C. as approximately the date of this momentous event:



FIG. 3.—PALAEOLOGIC IMPLEMENTS FROM THE NEIGHBOURHOOD OF GEZER

but much of the evidence comes directly or indirectly from Egypt, and unfortunately this is for the present rendered ambiguous by the disagreements among scholars regarding the chronology of the Egyptian Middle Empire. Egypt very soon began to interfere in Syrian politics, and our earliest literary sources for the history of Gezer come for the greater part from Egyptian soil, and even when found in the city itself are written in Egyptian hieroglyphics.

It is not easy to say whether the imposing engineering works that are a notable feature of the early Semitic city—especially the inner city wall and the great tunnel—are native works or were constructed under the

* "The Kinnim dwelt [in Moab], a people . . . tall as the Anakim: these also are accounted Rephaim, as the Anakim. . . . The Horites also dwelt in Seir" [but are *not* correlated with the Rephaim, here or elsewhere].

influence of a dominating external civilization. On the whole the latter is the more probable, though the regrettable absence of epigraphic evidence leaves the question open. It is not easy to imagine the superior sheikh who called himself " King of Gezer " conceiving and executing the design for the tunnel uninfluenced by some pressure from without.

It is true that Egypt has not yet produced a monument of the Middle Empire in which the name of Gezer has been recognized. But the excavation yielded evidence that trade between the city and the empire of the Nile was actively carried on, especially under Senwosret (Sesostris) I and during the Hyksos dynasty; and that a number of Egyptians were actually resident within the city walls. It is highly probable that the Egyptian suzerainty, which is a well-established historical fact of a later century, actually began at a date earlier than that for which we have direct epigraphic evidence.

To follow with fulness the course of Egyptian conquest over Palestine would lead us too far from our present subject. A paragraph or two, giving the salient points, will be necessary but sufficient. The campaign of Ahmose, the first king of the eighteenth dynasty, laid the foundation of Egyptian supremacy. His conquests were confirmed by the successes of Thutmose I, by whom the Syrian tribes were kept under tribute. But the slack hand of Thutmose II, and the negligence of Hatshepsut, raised hopes among the Asiatics of throwing off the Egyptian yoke ; so that when Thutmose III became sole lord of Egypt on the death of his domineering aunt, the tribes of Palestine were in a state of open revolt.

To quell the insurrection he conducted an important campaign in the country. When in his camp at *Yehem* he heard that the Syrians were encamped at Megiddo, which he accordingly besieged and compelled to open to him. An extraordinary quantity of plunder was seized, and captives were taken as hostages from the different cities represented in the coalition. A list of these places is engraved on the wall of the great temple of Karnak. In the list referring to South Palestine the 104th is that is K' drwi. This name is identified by Maspero with Gezer, and the identification is generally accepted. Thus we learn that Gezer joined the abortive Syrian coalition against Thutmose, and suffered with the rest.

Thutmose III transmitted the dominion of Palestine to his descendants ; but till we reach Amenhotep III, we learn nothing about Gezer from the monuments.* This silence, however, is compensated for by the great hoard

* Save a mention of Gezerite captives, settled in the "Fortress of Menheprure," on a tablet in the mortuary chapel of Thutmose IV at Thebes (Breasted, *Ancient Records of Egypt*, II, p. 326).

of letters belonging to his reign and to that of his successor Amenhotep IV (Ikhnaton) found in 1888 at Tell el-Amarna.

In these tablets, unfortunately for us, much valuable space is wasted in empty compliments to the Pharaoh and in Chinese-like protestations of abasement: the meagre remainder being about equally divided between not very convincing disclaimers of charges of disloyalty brought by rivals against the writers, and similar counter-charges (obviously inspired by personal malice) against most of the writers' neighbours. However, in all this wilderness of envy, hatred, and uncharitableness there is a precious harvest to be gleaned. The numerous references to Gezer are of special interest in the present discussion.

The letters trace the gradual defection of Syria and Palestine from Egypt, and the failure of the governors of the different cities to stand against the growing power of the Aramaean tribes. Ikhnaton, the first great religious fanatic of history, had no leisure to think of temporal matters. While he was busy developing his theories of cult and of art his great Asiatic dominion gradually crumbled away, and we can watch the disintegration in progress with the help of these very human documents.

The tablets relating to Gezer are as follows :—

(a) W. 163, K. 254.* This letter is from Labaya, a person whose history, so far as it can be reconstructed from the tablets referring to him, seems to have been much the same as that of most of his contemporary chieftains. He was lord of two cities whose names are unknown (W. 162, K. 252) which were attacked by enemies and defeated by their superior strength, notwithstanding the presence in one of them of an officer of the Egyptian king. After the loss of his cities, disgusted no doubt by the slackness of the dilettante monarch, Labaya seems to have made terms with the Aramaeans, deserting his allegiance to the king of Egypt, though at one time he had been entrusted with the duty of escorting the king's caravans (W. 256, K. 255). He attacked a certain number of cities which are enumerated in a tablet (W. 164, K. 250). Proceeding northward, he invested Megiddo (W. 195, K. 244) and was seized by the king of that city. The latter had the intention of sending him for judgment to Egypt: but Surata, prince of Acca, persuaded him to deliver up the captive to

* These numbers are those assigned to the tablets in the editions of Winckler and of Knudtzon respectively.

himself, undertaking to transport him by sea as a prisoner to the Pharaoh. Instead, however, he set him free (W. 196, K. 245). Ultimately Labaya was killed in a town called Gina (W. 164, K. 250). He left two sons, both of whom were leagued with the Aramaeans, though one of them, whose name is read Mut-Ba'lu by Knudtzon, attempted to obtain his father's office as escort of the royal caravans (W. 256, K. 255).

Labaya's letter is as follows:—

To the king, my lord and my sun, hath Labaya spoken thus, thy servant and the dust whereon thou dost tread. At the feet of the king my lord and my sun have I fallen down, seven, seven times.

I have heard the words which the king hath written to me. And whom am I, that the king should lose his land on my account? Lo, I am a trusty servant of the king; no ill-doing have I wrought and no sin have I committed; nor do I withhold the tributes, that my suzerain demands.

Lo, one hath slandered me, hath dealt ill with me, and the king my lord hath not let me attain to the knowledge of my ill-doing.

This is my ill-doing, that I have entered Gezer and said "The king hath altogether taken what belongs to me, but all that Milkilu has, where is it?" I know the action of Milkilu against me.

The king hath written concerning Dumuia. I know not that Dumuia has gone with the *Sa-Gaz*. I have given him into the hand of Addaia.

Should the king have written for my wife, I would not refuse her. Should the king have written to me "Thrust a bronze dagger into thy heart and die," I would not fail to carry out the king's order.

Milkilu was probably the complainant that Labaya was answering in this letter.

(b) W. 177, K. 253. This letter, also from Labaya,* probably refers to the same visit of the rebel chieftain to Gezer. It is another version of the story.

To the king, my lord and my sun, hath Labaya spoken, thy servant and the dust whereon thou dost tread. At the feet of the king my lord have I fallen down seven, seven times.

I have heard the words which the king my lord hath written to me on a tablet. Lo, I am a servant of the king, as my father and my father's father, who were servants of the king aforetime. I have wrought no ill-doing, and I have committed no sin.

This is my ill-doing and this is my sin, that I entered Gezer. Thus I speak: "May the king be gracious unto us, for 10, there is now not another face

* By Winckler read *Arzaya*.

turned away from the service of the king; and all that the king hath said have I heard. So may the king entrust to me, by the hand of my officer, the protection of the city of the king."

(c) W. 180, K. 287. This letter is one of the important series from Abdi-Hiba, king of Jerusalem. It is too long to quote in full, and refers to matters not germane to our present subject; the following is the part important for us:—

To the king my lord, Abdi-Hiba thy servant hath spoken thus. At the feet of my lord have I fallen down seven and seven times. . . .

Let the king know that all the lands have become hostile to me; so may the king care for his land!

Behold, the land of Gezer, the land of Ashkelon and of Lachish have given them [the rebels] food, oil, and all they need. Let the king care for troops! Let him send troops against the people who work ill-doing against the king, my lord.

If in this year there be troops here, the land and the governors will remain to my lord the king. But if there be no troops, the land and the governors will not remain to the king. . . .

(d) In letter W. 183, K. 290, Gezer appears again:—

To the king my lord. Abdi-Hiba thy servant hath spoken thus. At the two feet of the king my lord have I fallen down seven, seven times.

Behold the deed which Milkilu and Suardatu have wrought to the land of the king my lord. They have hired people of Gezer, people of Gimti, and people of Kilti; they have plundered the land of the town Rubute.

The land of the king has fallen away to the Habiru, and now there is besides a town of the land of Jerusalem, whose name is Bet-Ninib, a town of the king, withdrawn thither where the people of Kilti are. Let the king hearken to Abdi-Hiba thy servant and send troops, that they bring back the king's land to the king. If there be no troops, the king's land will be lost to the Habiru.

We need not here concern ourselves with the very complex relationships of the people named in this document, or with such questions as the topography of Rubute or the identification of the mysterious Bet-Ninib.

(e) W. 205, K. 298. This and the three following letters are for us of especial interest, for they were written from Gezer itself by Yapahi, its governor. We find him in a very unhappy frame of mind:—

To the king my lord, my gods, my sun, the sun of heaven, thus hath spoken Yapahi the Man of Gezer, the dust of thy two feet, the groom of thy horse.

At the two feet of the king my lord, the sun of heaven, have I bowed me down seven and seven times with breast and back.

All that the king my lord saith to me well, well do I hear. A servant of the king am I and the dust of thy two feet

Let the king my lord learn that my youngest brother hath deserted me and hath entered Muhhazi [Makkedah?], and his two hands have submitted to the *Sa-Gaz*. And 10, the land . . . *annaki* is hostile to me. Therefore care for thy land.

Let my lord write to his lieutenant regarding this event.

(f) W. 204, K. 299. An answer was sent, which was acknowledged as follows :—

To the king my lord, etc., etc.

Well, well have I heard the words of the messenger of the king my lord. Therefore let the king my lord, the sun of heaven, care for his land.

Lo, the *Sa-Gaz* have become powerful against us. Let the king my lord extend his hand to me, and I may . . . the king my lord out of the hand of the *Sa-Gaz*, that the *Sa-Gaz* do not bring us to nothing.

(g) W. 206, K. 297. Once more the much-troubled governor writes, this time in a more hopeful mood :—

To the king my lord, etc., etc.

All that the king my lord hath said to me have I heard very gladly.

I had become . . . like . . . of copper . . . on account of the *Sutu*. And 10! I have received the good breath of the king, and now that it is gone out to me is my heart in perfect rest.

(h) K. 300; not in W. The break in the clouds was, however, temporary only. The last message from Yapahi is written after the anticipated disaster. His letter is much injured; its sense is restored by Knudtzon thus :—

To the king, etc., etc.

. . . out of my land, and there is nothing in my possession. So may he send his troops [and let them?] bring me into my town, and truly I will serve the king my lord like my father and his consort. And behold, I have listened to the words of the king my lord, and I have listened to the words of Maia the officer of the king my lord, the sun of heaven, the son of the sun.

(i) W. 239, K. 292. In one more letter of the series we find a reference to Gezer. It is signed by one Addu-dani, and runs thus :—

To the king my lord, my gods, my sun, thus hath spoken Addu-dani thy servant, the dust of thy two feet. At the feet of the king my lord, my gods, my sun, have I fallen seven times seven times. I looked here and I looked there, and there was no light. And I looked on the king my lord, and there was light. And a brick may loosen from under its . . ., but I loosen not from under the two feet of the king my lord.

I have heard the words which the king my lord hath written to his servant, "Protect thy officer and protect the cities of the king thy lord!" Lo, I protect them, and 10, I hearken day and night to the words of the king my lord. And let the king my lord care for his servant.

Hostility from the mountain-lands hath fallen to my lot. I had built a house—Manhate is its name—in order to make all in order for the troops of the king my lord: and verily Maia hath taken it out of my hands, and put his officer in it. Therefore command Rianap my officer to bring the city back into my hands, and I will set everything in order for the troops of the king my lord.

Behold the deed of Beia, son of Gulate, against the town of Gezer, hand-maid of the king my lord: for how many days he hath already plundered her, so that she hath become like . . . on his account. From the mountain[eer]s the people escape for a ransom of 30 pieces of silver, but from Beia only for 100 pieces of silver. Understand then these words of thy servant.

There is another letter from Addu-dani (K. 294; not in W.) complaining against this Beia, to the effect that he has taken prisoner the writer's brothers, despatched to guard the territory of Joppa.

What then is the consecutive course of events in the history of Gezer during this period?

The first thing to notice is, that the chicken-hearted Yapahi has nothing to say about either Labaya or Beia. This suggests that the Yapahi letters, or at any rate the first three of them, are the earliest of the series that have been quoted in the preceding pages. The history opens therefore with Gezer loyal, but very anxious on account of the invading tribes, the Sutu and the *Sa-Gaz*. Who or what the latter people may have been, whether or not they are to be identified with the Habiru of other letters, and if so, what relation, if any, they had to the Biblical Hebrews, are questions to discuss which would take us too far from Gezer.

The defection of Yapahi's brother was the first, and no doubt a very serious disaster. The traitor would certainly be familiar with the city, and with the weak points in its defences; his help would assuredly be very valuable to the enemy in their operations against the city.

It was not, however, Yapahi's unnamed brother, but B&ia, son of •Gulate, who captured the city for the hostile party. This we learn from the letter of Addu-dani. The event happened about the same time as the visit of a certain Maia, an envoy of the Egyptian court, to Palestine. He had passed Lachish, and delivered a message to its king, acknowledged in W. 218, K. 328; had visited Yapahi, as we learn from his fourth letter; and had interfered inconveniently with Addu-dani's own arrangements. The reference to the journey of Maia is an indication that Addu-dani's letter is of nearly the same date as Yapahi's fourth communication.

The last-named document appears to have been written by the governor after the fall of his city, and when he himself was in exile. He prays to the king to send troops to restore him : but it is obvious that this petition never bore fruit.

The next recorded event is the visit of Labaya. This must have been for some seditious purpose, as otherwise it would scarcely have been brought to the notice of the Egyptian king. It is a pity that we have only Labaya's own version of the affair—or rather, his two conflicting versions, neither of which the judicious historian can take to be even remotely correct. Probably what he did was to persuade the citizens to accept the inevitable, to give up their hopeless longings for Egyptian aid, and to enrol themselves definitely on the side of the conquerors. Whether it was due to Labaya's influence or not, it is evident that this is what actually happened : for when at a rather later date, as various indications tend to shew, the Habiru with their Canaanite allies turn their attention to the as yet uncorrupted Abdi-Hiba of Jerusalem, Gezer is one of the cities to which they look to afford them men and supplies.

Two other references to the city are to be found in a monument on Egyptian soil. The first is on the stele of Merneptah, famous for its enigmatical reference to Israel. The passage containing the name of Gezer runs as follows:—

The Libyans are destroyed : the Kheta are at peace: the land of Canaan is captive . . . : Ashkelon is carried into captivity: Gezer, too, is taken : Yenoam is destroyed : Israel is spoiled, it has no crops: Southern Palestine is like a widow for Egypt.

So far as the results of the excavation permitted us to judge, very few traces of these events remained in the city itself. Scarabs of Thut-

mose III and of the Amenhoteps were fairly common, and these and other small Egyptian objects shewed that there was intercourse between the city and Egypt under those monarchs. But Beia, Yapahi, Labaya, and the rest have vanished from the scenes of their activities and left not the smallest recognizable trace. That Merneptah's claim to have conquered Gezer is not (as it might be regarded with tolerable probability) a mere empty boast, is indicated by his assumption of the special title "Binder of Gezer" in the second of the passages referred to—an inscription in the temple of Amdda (Breasted, *Ancient Records*, III, p. 259, no. 606). We may perhaps see a monument of his conquest in an ivory pectoral [IV 10] that bears his cartouches. On the face is a figure of the king adoring the god Thoth; on the reverse is a group of radiating lines. The straight side is 2¼" long. The ivory having shrunk a little, the circles—originally no doubt struck with a compass from the small dot in the centre above the discs with uraei—have become flattened. The broader parts of the cutting retain the green enamel with which they were filled. This object was the only relic of Merneptah found in the city.

Thus the Egyptian records regarding Gezer close, as 250 years before they opened, with the bare mention of its capture by the Pharaoh.

(c) *The Hebrew Invasion and the Old Testament References*

We have now reached the point where the Biblical history of Gezer begins; for though flourishing in the patriarchal period, it happens not to be mentioned in the patriarchal record. The first reference to its name in the Hebrew Scriptures is in connexion with the Israelite immigration. Taking first the earlier account of this event, preserved for us by the compiler of the Book of the Judges, we read of the failure of the Ephraimites to capture the city, the earlier and the later Semitic populations dwelling together within its walls:—

And Ephraim drave not out the Canaanites that dwelt in Gezer ; but the Canaanites dwelt in Gezer among them.—*Jud.* i 29.

The author of the Book of Joshua, who rarely admits a failure on the part of the Israelites, has quoted* the same passage (*Josh.* xvi 10), but

Not necessarily directly: the two passages may have had a common source.

with the characteristic gloss "the Canaanites dwelt in the midst of Ephraim, unto this day, *and became servants to do taskwork*"—thereby shewing that the city was conspicuously a centre of Canaanite population.

In the record of Joshua we find a remarkable story of the investment of Lachish by the Israelites, of the coming of the king of Gezer to its aid, and of his defeat and slaughter:—

And Joshua passed from Libnah, and all Israel with him, unto Lachish, and encamped against it, and fought against it. . . . Then Horem king of Gezer came up to help Lachish, and Joshua smote him and his people, until he had left him none remaining.—*Josh*, x 31-33.

Several details in this incident deserve notice. In the first place, it is the only case that we find, at any rate in Southern Palestine, of one city aiding another against the invader. It is true that the same chapter relates the story of a temporary coalition between five Canaanite kings ; but it is striking that this is not to make common cause against the common danger, but to punish another of their number who has made a league with the enemy. As in the time of the Tell el-Amarna letters, every town and village community is a unit more or less hostile to all the rest. Indeed such a condition still prevails, to a very large extent. This Ishmael-like state of society makes the action of the king of Gezer yet more noteworthy.

Secondly, if it be remarkable that the king of Gezer should offer assistance to any other city, it is still more remarkable that Lachish should be the favoured town. Lachish is a good two days' journey away from Gezer : seeing that there were so many other cities nearer at hand, why did the king of the besieged city send to such a distance for help ? It could hardly be expected in less than five days when we take into account Oriental procrastination.

The excavation itself supplied a hint of a possible answer to this question. During the work of the Palestine Exploration Fund on the Shephelah mounds,* it was perplexing to notice that certain types of pottery and other antiquities, common in Tell el-Hesi, failed to appear. They reappeared however at Gezer so conspicuously as to suggest a connexion, possibly tribal, between the inhabitants of the two cities, closer than that which united the folk of either town with those of the Shephelah. One of Abdi-Hiba's

* This expression is used as a convenient general denotation for the four mounds excavated under the Society's auspices in 1899-1900.

letters, above quoted, seems to present evidence corroborating this deduction. There the names of Lachish and Ashkelon are coupled with that of Gezer, in a way that implies that there was some understanding between them.

The third point to consider is the name of the ill-fated king of Gezer. In the Hebrew text this is given as (Horam), in the Greek version ALAAM or EAAM. The same form appears in the latter version for the name of the king of Hebron, mentioned in the earlier part of the same chapter ; this appears in the Hebrew as (Hoham). Possibly there is some confusion between these very similar names, but without any other source of information it is impossible to detect and to remedy the corruption.

It is most likely that Horam displayed a characteristic Semitic caution when he went to help his ally, and took care to weaken his own town as little as possible. We need not reject the explicit statement that Joshua left to Horam "none remaining": nothing is more likely than a complete massacre of the officious contingent whose coming added to the difficulty of capturing Lachish. But it is not to be understood that there was a universal slaughter of Gezerites: this is ruled out by both history and archaeology. The city was left with so many defenders that the Ephraimites did not care to risk a siege, and Gezer remained a Canaanite stronghold until the time of Solomon. However, it is enumerated in the list of captured cities in Southern Palestine (*Josh.* xii 12).

The following verses inform us of the allotment of Gezer :—

And the lot for the children of Joseph went out . . . unto the border of Beth-horon the nether, even unto Gezer—*fosh.* xvi 1-3 (cf. *I Chron.* vii 28).

And the families of the children of Kohath, the Levites, even the rest of the children of Kohath, they had the cities of their lot out of the tribe of Ephraim. And they gave them Shechem . . . and Gezer with her suburbs, etc.—*Josh.* xxi 20-22 (cf. *I Chron.* vi 67).

That is to say, the city was in the border of Ephraimite territory, and whatever Israelite element there may have been in its population belonged to that tribe: also, it was one of the sacred cities of the Pre-Deuteronomic dispensation.*

When next we meet with Gezer we find that a new element has been

* If the apportioning of the Levitical cities be not a post-exilic scheme, it is not impossible that the presence of the great High Place was one of the reasons that led to the choice of this city as a heritage for the priestly tribe.

introduced into its population; for the *Philistines* seem to have been dominant over the city in the time of David. Twice in the story of his reign is Gezer referred to, and each time in connexion with that elusive people. The first event is the battle of the plain of Rephaim. The *Philistines*, alarmed by David's capture of the Jebusite stronghold and consequent union of the divided monarchy, came up against him : but David "inquired of Yahweh" with the result stated in the following passage:—

[Yahwch] said : Thou shalt not go up: make a circuit behind them, and come upon them over against the mulberry trees. And it shall be, when thou hearest the sound of marching in the tops of the mulberry trees, that thou shalt bestir thyself: for then is Yahweh gone out before thee to smite the host of the *Philistines*. And David did so, as Yahweh commanded him ; and smote the *Philistines* from Geba until thou come to Gezer.—II *Sam.* v 23-25.

The parallel version in *Chronicles* (I *Chron.* xiv 16) substitutes Gibeon for Geba. This does not help us in unravelling the difficult topography of the battle ; but probably the terminus of the pursuit was at Gezer, because that city was within *Philistine* territory and under *Philistine* domination at the time. Josephus (*Ant.* VII iv 1) expressly states that this was the case : and the tombs, most probably of the *Philistines*, that were discovered in the proper stratum, afford confirmatory evidence.

The second reference to Gezer in the history of David's reign further confirms this conclusion. It is the account of a skirmish with the *Philistines* at the city itself, preserved for us in II *Sam.* xxi 18 and I *Chron.* xx 4. There are important differences between these two narrations, which can best be set forth by parallel lines. The upper line when alternatives are given is the reading of Samuel, the lower line that of the Chronicler.

And it came to pass after this, that there	was again	war	with the <i>Philistines</i>
at Gob	arose	at Gezer	with the
<i>Philistines</i> :	then Sibbecai the Hushathite	slew	Saph, which was
		Sippai,	of the sons of
the giant.*	And there was again	war	with the <i>Philistines</i>
		at Gob	[omitted]
Elhanan the son of Jaare-oregim	the Bethlehemite	slew	[omitted]
	Jair	Lah mi	the brother of
Goliath the Gittite, the staff of whose spear	was like a weaver's beam.	And	
there was again war at Gath, etc.	II <i>Sam</i> xxi 18-20		
	I <i>Chron.</i> xx 4-6		

* The Chronicler here inserts 'and they were subdued.'

The paragraph is probably copied from some older history or note. It raises questions that are difficult beyond hope of complete solution.

The name *Gob*, which has never been found elsewhere, is probably an error of transcription—313 for the Greek and Syriac versions, apparently by a conjectural emendation, here read *Gath*. The passage states that there was a skirmish with the Philistines at Gezer at some time during David's life and perhaps before his capture of Jerusalem—it is impossible to limit the date more narrowly, as it is by no means certain that the fragment is in its proper setting; and that there Sibbecai the Hushathite (elsewhere called Mebunnai, II *Sam.* xxiii 27) slew a prominent Philistine called Sippai or Saph, son of Rapha. The latter may be a proper name, as in I *Chron.* viii 37, or, as the English translators have taken it, a common noun meaning "giant." It further appears that at the same place (though the Chronicler does not say so), and possibly on the same occasion, Elhanan of Bethlehem slew Goliath of Gath. This latter incident is in even worse confusion than the former. Elhanan appears in the Samuel account as son of Jaare-oregim, in the Chronicler of Jair: the former version, as has long been recognized, has been produced by an accidental dittography of the word ("weaver's beam") in the following line. In II *Sam.* xxiii 24, however, he is named "son of Dodo of Bethlehem," that is to say, of David himself, or of a namesake. The Chronicler has developed Elhanan's native town into a brother of Goliath called Lahmi, evidently to get rid of the obvious contradiction between this narrative and the story of David's own youthful prowess at Ephes-dammim. The two versions of the death of Goliath seem to be combined in I *Chron.* xi 12-14, the scene being transferred to Ephes-dammim, the name of the Philistine champion suppressed, and the hero being a son of Dodo "the Ahohite," whatever that may mean; his name, however, is not Elhanan but Eleazer.

It is hardly to be expected that the difficulties presented by this waif of early Hebrew history will ever be solved; but while its details are obscure, the fact which for our purpose is alone essential remains clear—that in the time of David there were Philistines in Gezer, and that at some time he attacked them successfully with the aid of his followers.

The "Gizrites," an alternative reading of R.V. marg. to I *Sam.* xxvii 8, can scarcely in any case refer to the people of Gezer.

There is one more allusion to Gezer in the Old Testament, contained in the following passage:—

And this is the reason of the levy which king Solomon raised: for to build the house of Yahweh, and his own house, and Millo, and the wall of Jerusalem, and Hazor, and Megiddo, and Gezer. Pharaoh, king of Egypt, had gone up, and taken Gezer, and burnt it with fire, and slain the Canaanites that dwelt in the city, and given it for a portion unto his daughter, Solomon's wife. And Solomon built Gezer, and Beth-horon the nether, and Baalath, and Tamar [or Tadmor] in the wilderness.—I *Kings* ix 15-18.

The levy referred to is introduced abruptly, the context not being continuous.

We shall here assume that Solomon's father-in-law, of whose name we are unfortunately ignorant, was really a king of Egypt, and not, as some scholars hold, a prince of the district of Musri in Arabia. One of the Gezer tablets shewed that the Egyptians still continued paramount in the city even after the Assyrian captivity of the Northern kingdom. The delivery of the city to Solomon's queen by no means implied its unconditional surrender to Solomon and his successors.

We are not to suppose that the dowry presented to the daughter of Pharaoh was merely a group of blackened ruins. The impression is obtained from the record that the city was completely destroyed. But though there had evidently been large local fires at different periods of the city's history, there was no bed of ashes (such as was found at Tell el-Hesi) speaking of a universal conflagration by which the whole area was devastated.

It is remarkable that Gezer is omitted from the parallel account at the beginning of 11 *Chron.* viii. This is probably with intention, the priestly author of the book being unwilling to record any details of Solomon's matrimonial connexions with foreign nations, except such incidents as that contained in 11 *Chron.* viii 11, where the king himself is made to emphasize the unholiness of the association.

We infer from this record that the city was admittedly outside the dominion of Solomon, as the king of Egypt would hardly have acted as he did were it under the rule of his new kinsman. A very probable reason for the action of the Pharaoh has been sought in the commanding position of the city, to which reference has already been made in § 1. The king must have been glad of an excuse for acquiring a hold over a city that dominated one of his important trade-routes.*

A lingering tradition of this event is preserved in the neighbourhood. There is an old watercourse called *gandet Bint el-Kafir*—"the conduit of the infidel's daughter"—running west of the mound in the direction of Ramleh. One day the foreman of the works asked an old man of the village, "Who was this 'infidel's daughter'?" "I do not know," said the old man, "unless it be Pharaoh's daughter, whom our lord Solomon took to wife. For Pharaoh was an infidel. And when Solomon married her a gift came to her from the sea, and came as far as Jazer, but we know not where Jazer may be" "Perhaps," suggested the foreman, "it was the place where Pharaoh's daughter lived."

* See Paton's *Early History of Syria and Palestine*, p. 189.

The old man was, however, very positive that she lived at the village of Latrun—an important point, for this unauthorized detail shews that it is not a distorted compilation made up from hints that might have been overheard from my own conversation with anybody. The narrator himself said he had heard the story in Ni'aneh, a village on the opposite side of the conduit. Jazer, of course, is the Arabic rendering of the name of Gezer.

In the foregoing pages it has been assumed that after the entrance of the Hebrews into Palestine a certain number of the newcomers settled in the city, which thenceforward contained a composite population. This theory, suggested primarily by the passages about the fate of the Canaanites in Gezer already quoted from Joshua and Judges, has been opposed by Professor Driver,* who says that it rests "upon an incorrect exegesis of Joshua xvi 10, . . . which states, not that Israelites and Canaanites dwelt together in Gezer, but simply that the Canaanites maintained themselves in Gezer in the midst of an Israelite population outside."

On the question of exegesis I can but accept the criticism of Professor Driver; the explanation of the disputed passage which he maintains is however less in accordance with the archaeological data. If we are to take the various references to the city in Joshua and Judges as historical—and if not, it is a mere waste of time to discuss them here at all—then the population of Gezer ought, in view of the massacre at Lachish, to have been less, not greater, after the date of the Israelite immigration. In point of fact, however, a glance at the plans in plates i-vi (especially plate iv) will shew that the population must have received a considerable *increment* at about that time. The houses are smaller and more crowded, and the sacred area of the High Place is built over. The space within the walls was insufficient for the needs of an increased population. Again, the capture of the city by the king of Egypt, in the time of Solomon, and the destruction of the Canaanites that dwelt therein, would have implied a complete depopulation, for which there is no archaeological evidence. It may also be noticed that there is no indication of an exclusively Israelite population around the city *outsider* such as Professor Driver's comment postulates; there is indeed no trace of an early settlement anywhere in the neighbourhood. But even if there had been hamlets, which have vanished and left no sign, we cannot assume that their inhabitants were Israelites. The sea-coast region in which Gezer stands was occupied by an alien people down to the time of the Maccabees.

* Schweich Lectures on *Modern Research as Illustrating the Bible*, p. 69.

(d) The Assyrian Occupation

After the capture of Gezer by the Egyptians in the time of Solomon, we hear nothing further of the city in the Old Testament. The scarabs and other evidences of Egyptian influence still continue, though not in such profusion as in the older strata. Israelites have left unmistakeable traces in the remarkable calendar inscription, the potter's jar-stamps, and other relics, which will be described in their proper place. The collapse of the kingdom of Israel does not appear to have been marked by any local catastrophe severe enough to have left any traces: but immediately afterwards we find evidence of an Assyrian garrison settled in the city, using the Assyrian language and letters, and carrying on their business with Assyrian methods of procedure.

The evidence for this is afforded by two tablets, or rather fragments of tablets, each bearing an Assyrian inscription. Illustrations will be found in the Frontispiece, figs. 1-3. They were both found in the neighbourhood of a building whose thick walls appear in the north end of V 27-30; and the legal nature of the documents makes it not improbable that the building was of the nature of a Court of Justice. It is therefore the more regrettable that the wely and its cemetery made further excavation in this particular corner impossible.

That tablets of the Tell el-Amarna period should be found at Gezer was expected, and the discoveries of such tablets at Lachish and Taanach made this hope appear all the more reasonable. It was, however, disappointed, as no such documents came to light.* On the other hand the tablets actually found were of such an unexpected nature that it was at first suggested that the ground had been "salted," tablets brought from elsewhere being laid down for discovery by some dishonest workman. Tricks of this kind were tried at the beginning of the work: but the total ignorance of the labourers of the relative dates of objects and of strata made them pathetically futile. As men who "discovered" Cufic coins or fragments of Roman pottery in undisturbed Early Semitic debris found themselves promptly dismissed, such tricks soon came to an end. It would have been nothing short of miraculous if a workman had had the insight to bury these two tablets (found not at the same time, but at an interval

They may of course still exist in some of the untouched portions of the mound.

of a year) in their proper archaeological context—and moreover to choose the tablets so wisely that they had one signatory in common, so that each corroborates the true local origin of the other.

The document first found (Frontispiece, figs. 1, 2) is the longer and more important of the two.* It measures $2\frac{1}{4}$ " x $2\frac{1}{4}$ " and is $\frac{1}{8}$ " thick. Its text and translation are as follows :—

Obverse

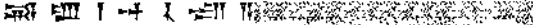
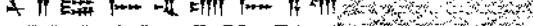
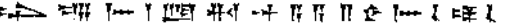
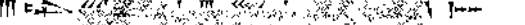
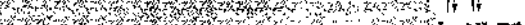
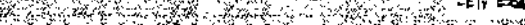
- Line 1. 
 2. 
 3. 
 4. 



FIG. 4.—SEALS ON THE FIRST ASSYRIAN TABLET

5. 
 6. 
 7. 
 8. 
 9. 

* The tablet was very fully discussed in (AS⁹, July 1904, pp. 229-244, by the Rev. C. H. W. Johns, Dr. Pinches, and Prof. Sayce. The description here given is a summary of the remarks of these scholars. The transcript and translation are due to Mr. Johns. See further remarks by Col. Conder, QS, 1904, p. 400, with Mr. Johns' comments.

Reverse

Line I



TRANSLITERATION

- Line I. Kunuk D.P. Maruduk-eriba apil . . .
 2. Kunuk D.P. Abi-eriba apil . . .
 3. gamru sina awelute beld bite ekli . .
 4. bit D.P. Lu-ahe a-di gi- . . .

[Seals]

- 5 DP. nise D.P. Tu-ri-D.P.-A-a sina sinnisati-su, mari-su
 6 salset D.P. . . .
 7. sina -ga
 8 -a-a
 9 ia-kar.

This wedge apparently redundant.

² Or perhaps <.

Reverse

- Line 1.
 2. u-ta-ra(?) . . .
 3. la i-lak-ki si-bit be-e[n-n]u
 4. a-na isten meat u-me sa-ar-tu a-na kal u-me
 5. Arah Siwanni, umu sibaseru lim-mu sa arki
 6. D.P. Assur-dura-usur D.P. bel pihati al Mas-hal-zi *
 7. Pan D.P. Zag-gi-i, pan D.P.P. Tebet-a-[a]
 8. pan Bel-apla-iddina, pan D.P. Maruduk-nasir
 9. pan D.P. Hur-u-a-si D.P. ha-za-nu
 10. pan D.P. Bur-ra-pi-'i D.P. dam-†
 11. pan D.P. Zer-ukin apil D.P. Tebet-[a-a]
 12. pan D.P. Hi(?)—ta-din,‡ pan D.P. Si'—
 13. pan D.P. Mannu-ki-arba-tlu pan . . .
 14. pan D.P. Zer-u-tu.

TRANSLATION

Obverse

- Line 1. Seal of Maruduk-eriba, son of . . .
 2. Seal of Abi-eriba, son of . . .
 3. total, 2 men, owners of the houses, field (?) [&c, sold]
 4. the house of Lu-alie, to . . .

[Seals]

5. The people [probably slaves] Turi-Aa, his two wives, his son
 6. 3 men . . .
 7. 2 . . .
 8. . . .
 9. . . .

Reverse

- Line 1. [The money sevenfold to their owners]
 2. he shall return, [in the lawsuit he shall plead and]
 3. he shall not receive. Guarantee (?) [against] sickness (?)
 4. for a hundred days, physical defect (?) for all time.
 5. Month Sivan, day 17th eponymy which is after
 6. Assur-dura-usur, prefect of Mashalzu.§

* Or Bar-hal-zi.

‡ Or Addu-tadin, or Adadi-tadin.

† Probable completion, dam-kar.

§ Or Barhalzu.

7. Before Zaggi ; before Tebetaa;
8. before Bel-apla-iddina ; before Maruduk-nasir ;
9. before Huruasi the governor ;
10. before Burrapi'u the commis[sion-agent] ;
11. before Zera-ukin, son of Tebetaa;
12. before Hitadin* ; before Si'—
13. before Mannu-ki-arba-ilu ; before . . .
14. before Zcrtutu.

This is a contract relating to the sale, by Maruduk-eriba and Abi-eriba, of an estate, the property of a person whose name is phonetically written LU-PAP-MES, which scholars read variously Lu-ahe or Musctik-ahe, owing to the ambiguities of cuneiform polyphony. The tablet being broken, it is impossible to gather how these persons had the right to sell the estate, or the extent or exact position of the property itself, it was however of considerable size, if we may judge from the meagre fragment of the schedule preserved. The vendors of the estate have affixed their seals. Of these, one is a commonplace representation of the branch of a tree ; the other displays two figures, man and woman, adoring a winged disc that flies above an object which resembles the Egyptian †, but perhaps is no more than an altar, such as is generally figured in similar groups.

The inventory of the estate commences with the name of the slave Turiaa, probably the steward, and of his household; after which there is a gap that, in addition to the rest of the specification, contained information with regard to the situation of the property and the conditions of sale. The last few words of the latter part are preserved on the reverse of the tablet: they are in accordance with the usual formulae of such documents ; the finality of the transaction is assured, and a guarantee given that the slaves sold are, and for a definite period will remain, free from certain physical disabilities of the exact nature of which there is some uncertainty.

Then follows the date of the contract, which is suggestive. It is the seventeenth of Sivan, in the year following the eponymy of Assur-dura-usur. The date of this eponymy is known to be 650 B.C., so that the date of the tablet itself is 649. The eponym for that year was Sagabbu, but it would appear that this fact had not yet been learnt by the scribe who wrote the document. This is a strong argument against supposing the tablet to belong to Nineveh or to any other central city, and to have been brought by some unexplained chance to Gezer. One other instance of such uncertainty in dating a document is known, and in this case also the year is stated as being that following the year of the previous eponymy.

The tablet ends with a list of twelve witnesses, the names of ten of whom are preserved, perfectly or nearly so. An analysis of these names gives interesting results. The first name, Zaggi, is not otherwise known. Tebetaa, Bel-apla-iddina, Maruduk-nasir, which follow, are all Assyrian. The next name, Huruasi, specified as the governor or mayor (presumably of Gezer), is especially noteworthy, in that it

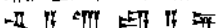
* Or Addu-tadtn, or Adadi-tadin.

seems to be Egyptian (Hr-wd't). If this be so, a confirmation is afforded by the tablet of the statement above made, that the town when delivered over to Solomon's queen did not pass out of Egyptian hands: some welcome light is also thrown on the Egypt-Musri entanglement. Then follows the name of the middleman, who probably found the purchaser for the property: this person, as might be expected, was a native of the locality, his name not being Assyrian; it seems to have Palmyrene analogies Zera-ukin, being a son of the Tebetaa already named, is necessarily Assyrian, as are Mannu-ki-arba-ilu and Zerutu; the latter being the last name in the list, may reasonably be considered as the name of the clerk. The two remaining names, which are either uncertain or defective, appear to be West Asiatic, and have no Assyrian associations.*

The witness Huruasi being specified as mayor, it is natural to ask why his name does not head the list. This question can be answered by conjecture only, but it is not unreasonable to recall the state of the country at the time when the contract was drawn up. The power of Egypt had declined before the advancing Assyrians; and the documents, being written in Assyrian and being concerned almost exclusively with Assyrians—the non-Assyrians are probably all subordinates, as the slave Tebetaa and the middleman Burra-pi'u certainly are—is evidence of a settlement or garrison of Assyrians having been established in the town. We need not therefore be surprised to find in the Egyptian governor a person of so little importance that he had to wait till the names of the domineering Assyrian notables had been signed before he was allowed to add his own

The second tablet (Frontispiece, fig. 3), which was found not far from the first and (by a curious coincidence) almost on the anniversary of the discovery of the former, is more fragmentary. A Hebrew called Nethaniah sells his field, which abuts on the property of a man called Sini. The purchaser is not mentioned on the fragment, and the tablet ends as before with the names of the witnesses. The fragment measures 1-½" x 2" and is ²/₃" thick. The following is the text and translation:—

Obverse

- Line 1. 
 2. 

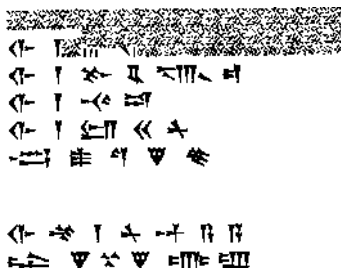
[Three impressions of a seal]

3. 
 4. 

* For parallels from other monuments for the names on this tablet reference may be made to Mr. Johns' paper, *QS*, 1904, pp. 237-243.

Reverse

Line



TRANSLITERATION

Obverse

- Line i. TAK-SID (= kunuk) D.P. Na-tan-Ia-u
 2. bel A-SA (= ekli) SE (= tadani)-a-ni
 3. . . . BAR A-SA (=ekli) SUH (= kimmat) D.P. Si-ni-i
 4. SUH (= kimmat) D.P. Si-ni-i

Reverse

- Line pan D.P. ———
 pan D.P. Bu-sik- . . . -is
 pan D.P. Zer-DU (= ukin)
 pan D.P. Nergal-sar-usur
 arhi Sabati timi IV (Kan)

Lower Edge

- Line limmu D.P. Ahi-ilai
 amelu sa-kin Gar-ga-mes

TRANSLATION

Obverse

- Line 1. The seal of Natan-Iau (Nethaniah)
 2. the owner of the field made over
 3. (area) of field next Sint
 4. next Sini

Reverse

- Line 1 in the presence of . . .
 2. in the presence of Bu-sik- . . . -is
 3. in the presence of Zer-ukln
 4. in the presence of Nergal-sar-usur
 5. in the month Shebat, fourth day.

Lower Edge

- Line 1. Eponymy of Ahi-ilai
 2. Viceroy of Carchemish.

Mr. Johns and Professor Sayce have discussed this document in *QS*, 1905, pp. 206, 272. Each gives a translation: these are virtually identical, differing only in the name of the neighbour (which Prof. Sayce prefers to render Amtu-sini), and in that of the second witness, which is obscure: Prof. Sayce reads doubtfully Bukhbur.

The particulars of the amount of land are broken off, as are most of those of the boundaries and landmarks: the last is regrettable, as it would have been interesting, if possible, to identify the field to which the deed relates.

The second witness has a name that resembles Bu-sik-ti-is, according to Mr. Johns: but the sign *bu* may also be read *pu*, *gid*, *sir*, etc., and the sign *sik* might also be *sik*, *sig*, *pik*, etc.; the third sign is doubtful, and the sign read (from a photograph) *ti* might be meant for another, reading *rit*, *gir*, or *ah*. According to Mr. Johns the last sign is certainly *is*, but Prof. Sayce does not seem to share this assurance.

The third witness is Zerukin; a happy accident, as he was also one of the witnesses to the transaction recorded on the first tablet. In the absence of the city's name, this is the best demonstration possible that the two documents relate to local events. The fourth witness bears the well-known Assyrian name Nergalsharezer.

The date, the eponymy of Ahi-ilai, comes into the year 648 B.C., according to Mr. Johns, though George Smith assigned it to 647. In any case, it is about a year later than that of the previous tablet: one eponymy, that of Bdl-Harran-sadua, viceroy of Tyre, falls between those of Sagabbu and of Ahi-ilai. That Ahi-ilai was viceroy of Carchemish was a fact unknown before the discovery of this tablet.

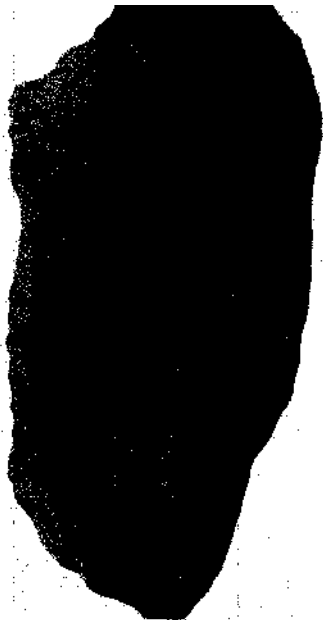
It is remarkable that the Hebrew Nethaniah should have had a seal bearing what is evidently a lunar emblem.

The Assyrian occupation cannot have been of long duration, as otherwise we could not fail to have found a much greater number of relics of Assyrian civilization; indeed it is rather remarkable that so few actually came to light. But Assyrian was not the only "cuneiform" language used in Gezer. A discovery, curious in itself as well as in its circumstances, was

made near the close of the excavation. While I was marking out the area of a new pit on the Eastern Hill, with the help of the foreman, the latter picked up a fragment of a cuneiform tablet on the surface of the ground, close by where his hand was holding the end of the tape-measure. It measures $2\frac{3}{8}$ "x1".

This document (Frontispiece, fig. 4) was examined by the Rev. Pere P. Dhorme, Professor of Assyriology at Saint-Itienne, Jerusalem, and by Professor R. F. Harper of Chicago, at the time Director of the American School of Archaeology in Jerusalem. It proved to be a letter in Neo-Babylonian; but as it was broken on all four sides, the beginning and end of the document were gone, as well as the beginning and end of every one of the surviving lines. It was therefore impossible to recover a connected sense.

The text and translation run thus:—



- . as-sum mi-ni-im . . .
 . . . by reason of which . . .
 . [a-n]a ma-ah-ri-ia . . .
 . . . before me . . .
 . [l]a mi-nim ma . . .
 . . . [without] number . . .
 . ka . . . mu(?) nam-r[u] . . .
 . . . your . . . bright(?) . . .
 . lib-ba-ka i-na (alu) . . .
 . . . your heart! In the town of .
 . aha-ka li-ba[l-lit] . . .
 . . . may he [heal] your brother .
 . [i-n]a (alu) Ki-id-di-im . . .
 . . . in the town of Kiddim . . .
 . am (amelu) Is-si-ir tar . . .
 . . . the . . . of Issir . . .
 . [ina al]u la-ap-pu(?)-u . . .
 . . . [in the town] of Jaffa . . .
 . i-na-di-in . . .
 . . . he will give . . .
 . 7 alpe . . .
 . . . 7 oxen . . .
 . [i]t alpu . . .

FIG. 5.—THE NEO-BABYLONIAN TABLET

The only noteworthy points in this fragment—beside the language in which it is written—are the geographical names, Kiddim (perhaps Gittaim of Benjamin, II *Sam.* iv 3) and, apparently, Joppa. The personal name Issir is compared by Pere Dhorme to the Jezer of *Gen.* xlvii 24.

Nearly five centuries pass uneventfully (so far as Gezer is concerned) between the date of these tablets and the next mention of the city in the pages of history. Although by way of compensation for this long silence, we know more of the history of Gezer for the years between 166 and 130 B.C. than for all the preceding millennia.

(e) The Maccabaeen Period

In order to make clear the events in which Gezer figured, and to prevent their being a series of mere disconnected, and therefore unintelligible, incidents, it is necessary briefly to trace the course of the Maccabaeen revolt, omitting, of course, everything not essential to our purpose.

In 175 B.C. Antiochus Epiphanes began to reign over Syria, and devoted himself to an attempt to force Hellenism, in art and religion, upon the Jews. In 168 B.C. orders were issued for the cessation of Jewish rites, the paganization of the Temple, and the erection of a heathen altar in every village. At Modin was an aged priest, Mattathias by name, who had retired thither to escape the persecution. He refused to offer sacrifice on the altar, when commanded to do so, and slew the royal commissioner, as well as a Jew of the village who attempted to conform. This act was the first blow in the great rebellion led by the sons of Mattathias. Mattathias died in the year 166, leaving the leadership to his son Judas Maccabaeus.

Judas began by defeating in battle the Syrian generals Apollonius and Seron, the latter at Beth-horon, not far from Gezer. Antiochus, in great anger at these defeats, collected a powerful army; but lacking money, departed himself to Persia to collect tribute, leaving his kinsman Lysias in charge of the affairs of the kingdom. Lysias set Ptolemy, Nicanor and Gorgias, three favourites of the king, over an army of 40,000 foot and 7,000 horse. These pitched at Emmaus Nicopolis, the modern 'Amwas, about five miles from Gezer. Judas, after prayer at the ancient sanctuary of Mizpeh—an interesting touch—marched to Emmaus with the result that

The Gentiles were discomfited, and fled into the plain. But all the hindmost fell by the sword : and they pursued them unto Gazara, and unto the plains of Idumaea and Azotus and Jamnia.—I *Mace.* iv 14, 15.

During the four following years occurred the battle of Bethzur (the day after that of Emmaus) in which Lysias himself was defeated; the purification of the Temple and the restoration of its worship; the defeat of a coalition of the heathen tribes surrounding Judaea; the battle of Bethzacharias (the first defeat suffered by the Jews); and the grant of religious liberty to the Jews, which was forced from Lysias by domestic troubles in Syria.

In 162 B.C. the Hellenizers in Judaea, dissatisfied with this defeat of their aims, came with a petition against Judas to Demetrius, who had succeeded to the Syrian throne. They were headed by Alcimus, an aspirant to the high-priesthood. Demetrius was not sorry for an excuse to interfere in Jewish politics, and sent Bacchides, governor of the provinces east of Jordan, to quell Judas and to secure the high-priesthood for Alcimus. In this, Bacchides was unsuccessful. Alcimus again presented his petition and the king sent Nicanor, "one of his honourable princes, a man that hated Israel." Nicanor visited Jerusalem, blasphemed the Temple, and finally met Judas at Adasa, in the pass of Beth-horon. Here he was defeated and slain, and his army fled.

And they pursued after them a day's journey from Adasa until thou comest to Gazara, and they sounded an alarm after them with the solemn trumpets.—
I Mace, vii 45.

Six weeks afterwards Judas lost his life at the battle of Elasa, in which Bacchides was in command of the Syrians. He was succeeded by his brother Jonathan. Bacchides took advantage of his victory to increase the authority of the Hellenizers, who persecuted the Maccabean party. Jonathan remained in retirement at Tekoah: his brother John was seized and slain at Medaba: Jonathan crossed the Jordan to avenge his brother, and was intercepted by Bacchides at the fords of the Jordan. The Jews escaped from the trap by swimming the river, but Bacchides retained the upper hand for a time and

. . . builded strong cities in Judaea . . . and in them he set a garrison to vex Israel. And he fortified the city Bethsura, and Gazara, and the citadel, and put forces in them, and store of victuals.—*I Mace*, ix 50-52.

This was in 161. In the following year, 160, Bacchides returned, the death of Alcimus (from a paralytic stroke) removing the reason for his occupation of the country. A period of comparative peace followed.

The strategical importance of Gezer to the combatants on both sides has been well brought out in Professor Clermont-Ganneau's analysis of this history. Modin, the headquarters of the leader's family, and consequently the rallying-place of the Jewish side, is easily within sight. The passages that have been quoted seem to shew that the Graeco-Syrians were able to retain possession of this powerful stronghold, and to make use of it as a retreat in case of a check.

In 153 B.C. Alexander Balas (son of Antiochus) seized Ptolemais (Acca) and set up a kingdom rival to that of Demetrius. Demetrius endeavoured to secure the powerful aid of Jonathan by making certain concessions, including the releasing of hostages, and the removal of the garrisons placed in the cities fortified by Bacchides :—

And the strangers, that were in the strongholds which Bacchides had built, fled away ; and each man left his place, and departed into his own land. Only at Bethsura were there left certain of those that had forsaken the law and the commandments: for it was a place of refuge unto them.—*I Mace*, x 12-14.

For the next eight years the history is occupied with the rivalry of these two claimants, ending in 151 with the death of Demetrius, followed in 145 by the death of Alexander. Jonathan had espoused the latter's claim, but after Alexander's death made his peace with Demetrius II, who promised to

cast out of Jerusalem them of the citadel, and them that were in the strongholds : for they fought against Israel continuously (*I Mace*, xi 41),

shewing that the former withdrawal of troops had not been as thorough as the Jews would have desired. This promise Demetrius failed to keep ; Jonathan in consequence once more deserted him, but was ultimately captured and imprisoned at Ptolemais (Acca), where, in 143, he was put to death.

Simon, the last surviving son of Mattathias, succeeded his brother. He had already distinguished himself by his capture of Joppa; and his defeat at Adida of Tryphon, the former general of Alexander (who had succeeded in establishing Alexander's son Antiochus on the throne), was all that was necessary to end the war. He then applied himself strenuously to strengthening the defences of Judaea, and to removing the last

traces of the foreign garrisons and of the Jewish Hellenizers. It would seem that the principal of these remained at Gazara ; at any rate the first care of Simon after " the yoke of the heathen was taken away from Israel" (I *Mace*, xiii 41) was the siege of Gazara, described in the following graphic passage :—

In those days he encamped against Gazara,* and compassed it round about with armies ; and he made an engine of siege, and brought it up to the city, and smote a tower, and took it. And they that were in the engine leaped forth into the city ; and there was a great uproar in the city : and they of the city rent their clothes, and went up on the walls with their wives and children, and cried with a loud voice, making request to Simon to give them his right hand. And they said, Deal not with us according to our wickednesses, but according to thy mercy. And Simon was reconciled unto them, and did not fight against them : and he put them out of the city, and cleansed the houses wherein the idols were, and so entered into it with singing and giving praise. And he put all uncleanness out of it, and placed in it such men as would keep the law, and made it stronger than it was before, and built therein a dwelling-place for himself.—I *Mace*, xiii 43-48.

The remains of the dwelling-place mentioned in the last sentence of this extract, and the inscription by which it was identified, will be described in Chapter III. After this victory Simon went to the citadel of Jerusalem, which he treated in the same way ; and shortly afterwards

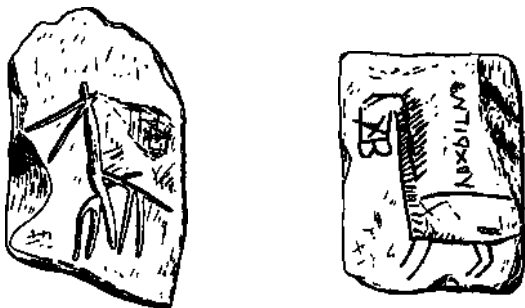
Simon saw that John his son was a *valiant* man, and he made him leader of all his forces : and he dwelt in Gazara.—I *Mace*, xiii 53.

This capture of the city was duly recorded in the inscription set up at Jerusalem on bronze tablets, in Simon's honour (I *Mace*, xiv 27, 34).

In 139 B.C., four years after Simon's capture of the city, the new king, Antiochus Sidetes, sent to the high priest his messenger Athenobius to demand the restitution of Gazara, Joppa, and the citadel of Jerusalem, or as an equivalent for the cities and the tribute due from them an indemnity of 1,000 talents of silver—a demand that Simon scornfully answered by offering 100 talents.

* This, the reading adopted by the English Revised Version, is certainly correct, though all the MSS. have *Gaza*. See Clermont-Ganneau, *ARP*, II, p. 246. This is proved by Jos. A. / . XIII vi 6, B. J. I 11 2, and A. J. XIII xiii 3, B. J. I iv 2, which latter passages shew that the Jews did not secure possession of *Gaza* till the time of Alexander Jannæus.

[Antiochus] sent unto him (Simon) Athenobius, one of his Friends, to commune with him, saying, Ye hold possession of Joppa and Gazara, and the citadel that is in Jerusalem, cities of my kingdom. The borders thereof ye have wasted, and done great hurt in the land, and got the dominion of many places in my kingdom. Now therefore deliver up the cities which ye have taken, and the tributes of the places whereof ye have gotten dominion without the borders of Judaea: or else give me for them five hundred talents of silver; and for the harm that ye have done, and the tributes of the cities, other five hundred talents: or else we will come and subdue you. . . . And Simon answered and said unto him, We have neither taken other men's land, nor have we possession of that which appertaineth to others, but of the inheritance of our fathers; howbeit, it was had in possession of our enemies wrongfully for a certain time. But we, having



FIGS. 6, 7.—STONE TABLETS WITH GROTESQUE ANIMAL FIGURES

opportunity, hold fast the inheritance of our fathers. But as touching Joppa and Gazara, which thou demandest, they did great harm among the people throughout our country, we will give a hundred talents for them. And he answered him not a word, but returned in a rage to the king.—*I Mace*, xv 28-36.

In a house in VI 9 two stones were found bearing a device that possibly had a reference to this event. The first of these (fig. 6) is a block of soft limestone, measuring $3\frac{7}{8}$ " X $2\frac{3}{8}$ ", by 2" in maximum thickness; the section is triangular. On the broadest face is scratched the likeness of a grotesque animal with a long upright neck. The other (fig. 7), which is a similar block of limestone (3 " x $2\frac{1}{4}$ " x $3\frac{3}{4}$ "), bears an animal essentially identical but more artistically finished. This latter stone is inscribed AN TI OX OY in a single

line above the back of the animal, parallel to the neck: there are also faint traces of two or three letters in front of the animal, under its snout. After prolonged examination of these I came to the conclusion that they were the initial letters of the same name. The artist had evidently begun to write here, but finding that he had not allowed sufficient room, transferred his inscription to the space he finally chose.

If we may assume that these absurd animal figures are *jeux d'esprit*—a sort of political caricature—we cannot find a more suitable event with which to associate them than this repulse by Simon of the demand of Antiochus Sidetes.*

In 135 Simon, with two of his sons, was treacherously murdered by his son-in-law Ptolemy, who aimed at supremacy. He wished to include John among the victims, and accordingly

... he sent others to Gazara to make away with John . . . and one ran before to Gazara, and told John that his father and brethren were perished, and he hath sent to slay thee also. And when he heard, he was sore amazed ; and he laid hands on the men that came to destroy him, and slew them ; for he perceived that they were seeking to destroy him.—I *Mace*, xvi 19-22.

John [Hyrcanus] then succeeded to the high-priesthood, with which event the First Book of the Maccabees closes.

The last reference to the town in ancient history occurs in the negotiations between John (Hyrcanus), the son of Simon, and the Roman Senate. Antiochus invaded Judaea in the first year of Hyrcanus' priesthood, and although Josephus does not definitely say so, it appears that he then recaptured Gezer. For after the death of Antiochus in 128, John addressed a letter to the Roman Senate, of which Josephus preserves the answer. This answer runs thus :—

Fanius the son of Marcus the praetor gathered the senate together on the eighth day before the ides of February. . . . The occasion was that the ambassadors sent by the people of the Jews . . . had somewhat to propose about that league of friendship and mutual assistance which subsisted between them and the Romans, and about other public affairs; who desired that Joppa and the havens, and Gazara and its springs, and the several other cities and

* This modification of a suggestion made in the QS report, where these curious graffiti were originally published, is due to Pere H. Vincent.

† II *Mace*, x 32 does not refer to Gezer but to Jazer, east of the Jordan.

countries of theirs which Antiochus had taken from them in the war, contrary to the decree of the senate, might be restored to them ; . . . it was therefore decreed, as to these points, to renew their league of friendship and mutual assistance.—*Jos. Ant. XIII ix 2.*

The stress laid on the good water-supply of the city will not escape notice. This passage shews that, not long after Simon's capture of the city, it had again fallen into Syrian hands, though no record has been preserved of the event itself. The destruction of Simon's dwelling-place, and the erection of an elaborate system of baths over part of the site, may be assigned to the years immediately following this recovery of the city.

On epigraphic grounds we may assign to about this period the cutting of the boundary inscriptions marking out the city's property. These remarkable and unique monuments must now be described.

The inscriptions are cut on outcrops of rock, at various places along a line surrounding the city site on the east and south. No inscriptions have been found on the west and north. There are in those directions few convenient rocks, and most probably the boundary line was there indicated by movable landmarks which have in the course of time disappeared. The places of those known are marked with a cross on the plan (fig. 8),* which has been drawn with the aid of a plane-table. The inscriptions will also be found on Plates x, xi. They all read **ΑΑΚΙΟΥ** in Greek letters, and **אלקיו** in Hebrew—that is, the genitive case of the proper name Alkios, and "the Boundary of Gezer." The only difference between the various inscriptions lies in the relative positions of the Hebrew and the Greek, and in the omission of the Y of the Greek in the first inscription, for want of room.

Of these inscriptions, nos. 1, 2 (Plate x, figs. 1, 2) were discovered by Professor Clermont-Ganneau in 1873, and no. 3 (Plate x, fig. 3) in 1881. The Dominicans of Saint-Etienne, Jerusalem, found no. 4 (Plate xi, fig. 4) in 1900. While searching for the last, a month or two after the beginning of the excavation, no. 5 (Plate xi, figs. 1, 2) was accidentally found : my father, who was with me, noticed it first. ‡

No. 4 is the only perfect specimen remaining. To exhibit the forms of the letters a diagram is given (fig. 9, no. 2), reduced from a rubbing. The first two were long ago excised, in hopes of transporting them to Europe, but were confiscated by the Ottoman government: the first is now in the Imperial Museum at Constantinople.

* The fine line crossing this map horizontally shews the limit of the large plan on Plate viii.

† The medial form of the η is used in all the inscriptions.

‡ I assumed that this fifth boundary inscription was identical with the Dominican stone, and did not realize till three years later that it was actually a new discovery. The Dominican inscription was accidentally re-discovered by the foreman of the works while shooting one Sunday afternoon.

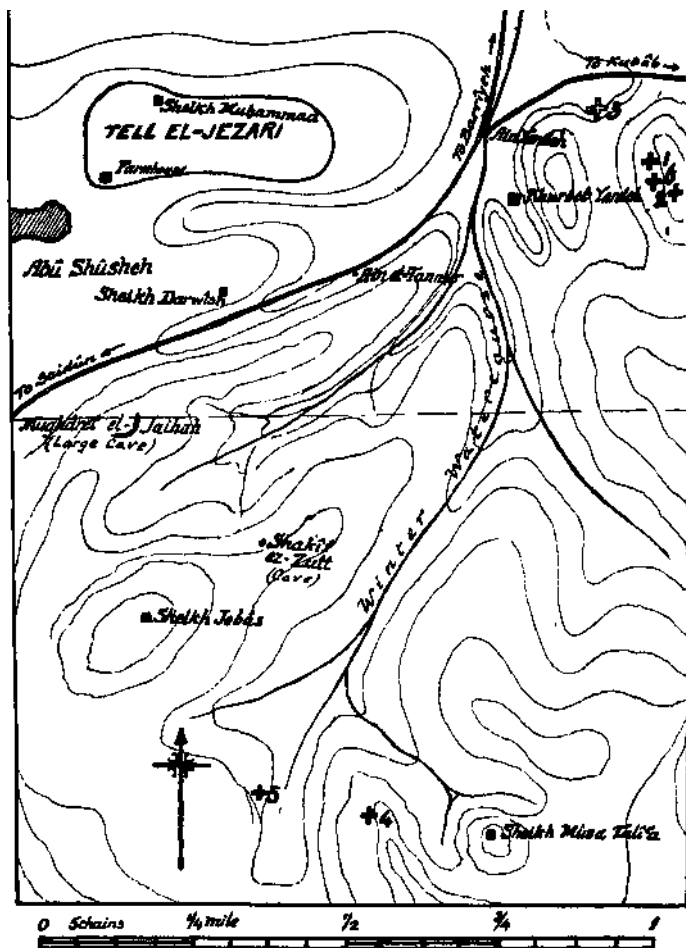


FIG. 8.—MAP OF THE BOUNDARY INSCRIPTIONS

No. 3 must have been destroyed by the fellahln at some time. I made many attempts to re-discover it, following the directions given by Professor Clermont-Ganneau in *ARP* (II, p. 231), but always in vain: and came to the conclusion that its site must now be represented by a rock the face of which shews evident signs of comparatively recent quarrying. No. 5 preserves the Greek word only: the Hebrew part of the inscription has at some time been wilfully battered away, leaving only a few faint traces, which are, however, sufficient to shew that the legend was identical with the others.

Z

FIG. 9.—INSCRIPTIONS NO. 6 (1) AND NO. 4 (2).

The explanation of these enigmatical inscriptions which attracts me most is the simplest—that they mark the boundaries of the city lands. Indeed, the fifth stone occurs in the course of an ancient boundary, marked out by boulders about 2 6" in diameter, which are well shewn in the photographic view (Plate xi, fig. 2).* There are some less definite remains of a similar boundary in connexion with the fourth stone also. Such

* For clearness a mark (+) has been made on the photograph above the principal stones. A few smaller intermediate stones can be detected by the reader for himself. Since the photograph was taken the boulders have all been broken up and removed for burning into lime.

ancient boundaries are common in Palestine, and fragments of similar alignments occur in many places on the hills round Gezer. I have followed most, if not all, of these, hoping to be led to another inscription, but in this have been disappointed. These boundaries are certainly older than local tradition can tell: the natives vaguely attribute them to the *Rum*, that is the Greeks, which simply means that nothing at all is known about them.

The name Alkios is probably that of some public-spirited governor under whose auspices the delimitation was marked out. It occurs but once else where, in an inscription on an ossuary found long ago at Lydd, not impossibly referring to the same person. The Alkios of the Lydd ossuary is called "Son of Simon Gobar," which is obscure: Professor Clermont-Ganneau makes the tempting suggestion (*ARP*, II, pp. 266, 343-349) that he may have been a son of Simon Maccabaeus, and consequently a brother of John Hyrcanus. This would account for the prominent position he held in the city.

It has been suggested that they mark out the limits of the Levitical possession, in accordance with *Numbers xxxv* 2-5, whereby the city was to be in the middle of a square, or at any rate a rectangular figure, whose sides were to be directed to the cardinal points and to be a thousand cubits out from the city wall. It is not easy to follow the arithmetic of this passage, but it would appear as though the "square of two thousand cubits every way" neglects the internal length and breadth of the city itself, or, what comes to the same thing, treats it as a point at the centre of the square. It will, however, be seen that the lines along which the inscriptions lie, if produced, would meet in a very acute angle a long distance from the city. Possibly there was one other stone of the series at 'Amwas: in the possession of a fellah of el-Kubab is a fragment of inscription reading  which he asserts he broke from a rock on the lands of 'Amwas.

Close to the first group of boundary stones there is another inscription, discovered by M. Leconte de Nouy, Professor Clermont-Ganneau's draughtsman. It is numbered 6 in the plan, fig. 8, and is shewn in Plate xi, fig. 3, and also in fig. 9, no. 1, above. This inscription is a crux. The letters are well-formed square Hebrew characters, that appear to read . This does not make any known Hebrew or Aramaic word, and so far ingenuity has been expended on it in vain. The characters are clearly and boldly cut. The legend is engraved on a sunk space specially prepared for it, 6' 6¾" in length and 2' 7½" in breadth. The inscription itself measures 3 ft. by 1 ft.

It would be difficult now to find the rock-markings figured in *ARP*, II, pp. 233, 234, as the Jo'bas fig-tree to which the bearings are taken has been cut down. I am, however, convinced that they are mere natural markings in the rock. Such marks abound in the district and often have a very deceptive inscription-like appearance.

(f) *The Roman and Later Periods*

Not long after the Maccabaeon turmoils the ancient site must have been deserted: this is proved by the total absence of later antiquities. Possibly under the firm hand of the Romans the community, dwindled in numbers owing to the harassing wars of the previous century, felt that they could venture from behind their walls to a more convenient proximity to the springs. Half of the population moved eastward, and settled on the flat land between 'Ain Yerdeh and 'Ain et-Tannur, moving later up the hillock which still bears the ruined village of Khurbet Yerdeh. This settlement must have been of some importance, as is shewn by the fine bath and associated drain, described later in this work. The other half went westward and established themselves on the site of the modern village of Abu Shusheh, near the spring known as Bir el-Balad. This village presents few marks of antiquity; there is, however, a fragment of mosaic pavement in one of the houses.

The tombs opened during the excavation prove that in the fourth century A.D. there was a considerable Christian community representing the ancient Gezerites. No one lived on the mound itself, but the two sites we have named were both occupied. It was a mixed population, the ancient strain being combined with a foreign element, that now first makes its appearance in the tombs, and with one or two individuals possibly of Negro race. Of the history of the community during this period nothing is known. Very few objects of interest have come down to us from these settlements except those found in the tombs, described in Chap. V. Near Khurbet Yerdeh a ploughman found a fragment of marble, apparently part of a Byzantine tombstone, with a few Greek letters on it (fig. 10).

Professor Clermont-Ganneau, whose labours have lightened those of all subsequent investigators of the history of Gezer, has brought forward strong and ingenious arguments in favour of the very natural hypothesis that the

site of Gezer is the *Mont Gisart* of the Crusaders.* But the excavations revealed no trace of a Crusaders' occupation, nor is there a single stone to be seen, so far as I know, anywhere in the neighbourhood that shews signs of Crusader masons' workmanship, or that could be connected with either the stronghold or the Priory of Saint Katherine, for whose existence at "Mont Gisart" there is documentary evidence.

A few facts are to be learnt from some of the mediaeval Arab geographers regarding the later history of the site, † Yakut describes *Tell el-Jazar* as a stronghold in the province of Ramleh; 'Emad ed-Din names it as the place where the Muslims spent the night while on their way to attack Richard Coeur de Lion at Ashkelon; Beha' ed-Din describes certain empty



FIG. 10.—FRAGMENT OF A BYZANTINE TOMBSTONE

negotiations that took place between Richard and Salah ed-Din (Saladin) in 1191, the latter being then encamped on the site. Fourteen years before, Saladin had suffered defeat at the same place at the hands of Baldwin IV.

Again, Mujir ed-Din records a skirmish between Janbulat, governor of Jerusalem, and a predatory tribe of Bedawin, in the year 1495. It appears that on the 12th March of that year the Bedawin, prompted by the rival governor of Gaza, came up against the territory of Ramleh. The sub-governor of Ramleh, under the direction of Janbulat, set out from Ramleh in the direction of Ni'aneh, where he met a party of the Bedawin. These he drove back over the frontier line between the lands of Ramleh and of Gaza (the bed of the river that runs down the Wady es-Surar and enters the sea under the name of Nahr Rubin); but was himself in turn driven back in the direction of the villages of Khuldeh and *Tell el-Jazar*, both

* RAO, I, pp. 351-391, 401. † See for full references ARP, II, pp. 251-253.

inside Ramleh territory. The sub-governor entrenched himself in a long-vanished tower that then existed in the (now nearly totally ruined) village of Khuldeh, where a severe skirmish was fought, in which he was worsted. The governor of Jerusalem had left Ramleh shortly after his subordinate, and arriving at *Tell el-Jazar* heard the cries of the combatants at Khuldeh. Guided by the cries, he hurried to the rescue; but was beaten and narrowly escaped with his life. The rout was carried as far as *Tell el-Jazar*; for a commission to inquire into the matter, on visiting the site, found the remains of some of the victims on the lands of the latter village.

The wely that stands on the hill-top, which proved so serious an obstacle to the excavation, must have been built before A.D. 1607. This is shewn by an Arabic inscription roughly cut on a stone above the entrance. The inscription is of considerable interest; it runs thus:—

إن الله الله محمد رسول الله
 كتبها الفقير الحميم الذي [illegible]
 المبرك كنعان وجعل ائل [sic] وقف
 سنة الف ومئيد ١٥
 والذلال هو الباقى

There is no God but Allah [abbreviated], Muhammad is the apostle of Allah. The poor and vile one who . . ., the Amir Kin'an, wrote it, and made the mound a wakf [property of a religious foundation], the year a thousand and a hundred 15.—And the Guide is the Everlasting.

I have been unable to find out who the Amir Kin'an may have been, or by what right or for what reason he dedicated the mound. The shrine itself, though a most unfortunate barrier to the examination of the hill, is of interest, on account of its name. It contains the tomb of *Sheikh Muhammad el-Jazairli*, that is, Sheikh Muhammad the Algerian. Absolutely nothing can be found in popular tradition about this person, and I am inclined to suspect that he never had a real existence at all, but that he has been developed in popular etymology, to account for the name of *Jazar* applied to the *tell*. The old Hebrew name of Gczer was of course forgotten with the city to which it was applied.

Probably during the unsettled conditions of the sixteenth and seventeenth centuries, the village in which the people had established themselves, after the abandonment of the ancient site, became deserted and fell into

ruin. It is still remembered in local tradition that the site of the modern village was uninhabited till about a hundred years ago. For a while the ruined houses were dens of robbers. Then settlers from other villages came, and so the modern population was established. They are a mixed community, the Palestinian tribes of *Kais* and *Yaman* being about equally represented, while there is also a fair proportion of Egyptians, settled by Ibrahim Pasha. The first of the new settlers established themselves in caves which still bear their names. This interruption in the continuity of the population is a sufficient reason for the absence of ancient field-names in the neighbourhood.

With the new settlers was a certain *darwsh* or holy man, who was known as *Add Shilshah* ("father [*i.e.* possessor] of a top-knot") on account of his long hair. Nothing but his name and one or two trivial legends are remembered, some of which are recorded in *ARP*. But when he died his tomb and shrine were erected in the middle of the village, and the old village name of Tell el-Jazar finally gave place to Abu Shusheh. The date in the inscription over the door of the saint's tomb is 1236 A.H., which corresponds to 1820-1 A.D.

Thus it comes that a squalid village of some 600 souls is all that remains to represent the ancient royal city of Gezer.

CHAPTER II

THE EXCAVATION OF GEZER: METHODS AND RESULTS

§ 3.—IDENTIFICATION OF THE SITE

THE village having changed its name, as we saw in the previous chapter, the tradition was interrupted, and the site of the city buried in oblivion. The credit of recovering it belongs to Professor Clermont-Ganneau; the story of this brilliant achievement is one of the romances of archaeology. In 1869, Professor Clermont-Ganneau happened to be reading the story of the Bedawin raid, which we have already abstracted from Mujir ed-Din, and was struck by the identity of the name of the *tell* there mentioned with that of the missing city, and by the geographical indications that the story affords for establishing its position. The place must be within a short distance of Ramleh, and within ear-shot of Khuldeh ; Ni'aneh, also mentioned in the narrative, must be close by. These three sites were all marked on the maps, but no map then available indicated the village of Tell el-Jazar, because of its change of name.

Two years afterwards Professor Clermont-Ganneau, then acting for the Palestine Exploration Fund, had an opportunity of investigating the question on the spot. Starting from the known points, by inquiry he ultimately succeeded in fixing the name *Tell el-Jazari** on the great mound at the foot of which the modern village of Abu Shusheh stands. This discovery was at once announced by the investigator, and the identity of the mound with the ancient site of Gezer proposed. The arguments for this identification depended upon (1) the survival of the ancient name; (2) the agreement of the site with the geographical conditions required by the delimitation of the territory of Ephraim, and by the various historical events connected with Gezer ; (3) the indications of

* The books and maps all agree in calling the mound *Tell Jezar*; but in the colloquial Arabic of the district (which assimilates the / of the article to an initial J) it is generally called *Tell ej-Jazari* or *Tell ej-Jazairli*.

the *Onomasticon* of Eusebius, which gives the distance of Gezer from Emmaus Nicopolis, the modern 'Amwas.* As Professor Clermont-Ganneau relates, his paper when submitted to the *Académie des Inscriptions*† was met with the comment, that for the full acceptance of the theory epigraphic evidence ought to be produced.

Such evidence was hardly to be hoped for in Palestine; but two years afterwards even this was forthcoming. The eminent scholar was then in Jerusalem. A fellah of Abu Ghosh brought him a rude copy of an inscription cut on a rock not far from 'Ain Yerdeh, the great spring at the foot of the *tell*. A first attempt at decipherment of the inscription, based on this transcript, is given in QS, 1874, p. 148; it shews that though creditable, considering the unlettered copyist, nothing could be made of it as it stood. Professor Clermont-Ganneau, however, took an early opportunity of examining the original. It was the first of the series of boundary inscriptions which have been described in the preceding chapter. These documents put the identification of Gezer on a basis of absolute certainty. There are a limited number of places in Palestine, such as Jerusalem and Joppa, of which the world has never lost sight, and which are therefore accepted beyond dispute as representing the ancient cities of the same or similar names. With this favoured few Gezer takes its place.

§ 4.—PROGRESS OF THE EXCAVATION

I now propose in a few words to give some account of the progress of the excavation of the site under the auspices of the Palestine Exploration Fund. In this description I shall confine myself strictly (as has already been remarked in the Preface) to experiences and deductions there from that may be useful in guiding other explorers in similar work.‡

* The *Onomasticon* gives the distance as 4 Roman miles *ἀπὸ Βορραιοῦς* from Emmaus Nicopolis. This is right as regards distance, but wrong as regards direction if we translate *ἀπὸ Βορραιοῦς* "North." But Professor Clermont-Ganneau points out that this expression literally means "in the norths," and ingeniously explains it as meaning "in one of the northward directions" (i.e. between N.W. and N.E.). In fact, it is about N.W. of 'Amwas. There is no ruin of any importance 4 miles North of 'Amwas.

† Entitled *Découverte de la ville royale chanaaneenne de Gezer*.

‡ It will, however, be useful to warn the would-be explorer of one source of inevitable trouble. I refer to the camp cook. This unfortunately indispensable functionary is perforce drawn from a class of people among whom selfishness is developed to the level of a fine

The Ottoman law permits an area not exceeding ten square kilometres, and a space of time not exceeding two years (with the possibility of a third year's renewal), for archaeological investigation; the objects found being the absolute property of the Ottoman Government. The area may be of any shape, and accordingly an irregular enclosure accompanying the application of the stated amount, designed to include about half a dozen minor sites together with the hill identified as Gezer, was marked out on a map. This, however, was superfluous, as Gezer alone occupied my whole attention. It is far better to mark the area as a square or circle, containing the site desired in the centre, and irrespective of other places. The explorer will thus be sure of having all of the ancient cemeteries within the area at his disposal.

The permit was received in Jerusalem, 14th April, 1902. Some local difficulties, into the details of which I need not enter, detained me in Jerusalem for another two months; not until the 8th June was it possible to establish the camp on the site. Three days were spent in setting the tents in order, in studying more closely than before all surface indications of concealed buildings, in a chain survey of the plateau at the top of the hill, and in engaging workmen and arranging terms of wages.*

I decided not to use trolleys for carrying away the earth. They are excellent for the expeditious removal of earth from one place to another; but to find out what the earth may contain, the old-fashioned and slower way of carrying a small quantity at a time, in a basket, is preferable.

art. No amount of consideration or kindness will produce in him the most rudimentary instinct of gratitude or of loyalty. After about three months the loneliness of the life begins to pall on him, and, without a thought of the inconvenience he causes, he announces his intention of leaving. To attempt to keep him would be a confession of weakness of which he is quick to take advantage; there is nothing for it but to let him go, and to face the problem of finding a substitute—a problem annually becoming more acute owing to the emigration of the best men to America, and the demoralization which the tourist traffic has produced in those that remain behind. It is, however, fair to admit that the *ninth* of the series of cooks who have served the camp at Gezer was not wholly unsatisfactory!

* It may be useful to state here the wages that were found satisfactory—

Men	two beshliks (about one shilling) per day;
Boys and women	one beshlik;
Water-carrier	three beshliks (including hire of donkey);

in addition to which regular sums there was given a small gratuity for all objects found and considered worth preserving. This *bakhshish* is divided equally among the gang in whose pit the object is found, so that each member watches the others and prevents the pilfering of objects for private trading. It is desirable, in order to increase their mutual vigilance, that the men associated in one gang should come from different villages.

In digging the trenches, I first grouped the men into gangs consisting of one pick-man to loosen the stiff earth, one hoe-man to fill the baskets, and two or three basket boys or women to carry the waste earth away. Each gang worked in an area of 10' square, for the antiquities and buildings in which they were responsible. This was the method followed in the excavation of the mounds in the Hebron district, dug under the previous permit held by the Fund. Sixteen gangs were employed, so that the work was concentrated within a large pit, 40' square. When this pit was finished a second was laid out immediately south of it; when the chain of pits was carried completely across the mound from side to side the trench was finished, and then the second, next to it, was begun in the same way.

This arrangement of the men was found not altogether convenient. Ten square feet was not sufficient to give a "right of way" to the basket-carriers, the gangs being crowded too much together, and the various labourers getting in each other's way. Accordingly the small pits assigned to the various gangs were enlarged. The width of 10' was retained in order not to affect the width of the trenches; the small pits were gradually lengthened, by repeated experiments, to 15'. This was found the most practicable size; 16' was tried, but the work then proceeded too slowly.

A different distribution of the workpeople was afterwards introduced, which was found economical in time, money, and labour. When each gang contained two men, working alternately, it was noticed that the pick-man would loosen a great quantity of earth, and then take his ease perhaps for ten minutes while the women should carry it all away. To prevent this, a modification was introduced which I unhesitatingly recommend to all excavators in Palestine. Instead of dividing the pit into a number of small squares, it was subdivided into rectangles, whose length occupied the full width of the pit, and whose breadth was 15'; thus, each pit of 90' by 40', which became the normal size, was subdivided into six rectangles, each 40' by 15'. In each rectangle was placed a large gang consisting of two pick-men, three hoe-men, with nine basketers; it was found that this balance of forces was just even enough to keep the labourers busy all day, and gave no time for the intervals of idleness that were inevitable under the previous arrangement. It will be seen that one man's wages were saved in each rectangle. In pits of great depth it was necessary to engage at least one extra basket-carrier for every gang, as otherwise the work would be delayed on account of the additional time spent in the journey from the pit to the dump-heap.

Each pit was sunk to the rock, over its whole surface, before the next was begun. At first the walls on the rock were left standing; but as it was found that sometimes they concealed the entrances to caves, the broader walls of the lowermost strata were cleared away. Of course it was necessary entirely to demolish all walls of the upper strata: the only exceptions made being a few buildings such as the Maccabaeon castle, the Syrian bath-house, the reservoirs in VI 18, the large Canaanite castle in IV 15, 16, and the temple in IV 27-29. These buildings were considered too valuable to destroy, and the underlying debris of earlier periods was in each case abandoned without examination.

The day's work was sunrise to sunset, with two intervals for meals. In the month of Ramadan special arrangements have to be made, to allow the workmen home early to prepare the evening meal by which the day's fast is broken. About

an hour before sunset the examination of each day's harvest of objects begins. An essential preliminary to this part of the work is to have the *j'ar-Itandles* all sorted out from the piles of potsherds and brushed or washed clean, in search of potters' stamps. When all the objects required are selected, everything not required should be gathered and cast into a cistern or otherwise re-buried. This prevents their removal by unauthorized persons—an important point in view of the nature of the Ottoman regulations.

For convenience in making the plans, the trenches were all laid out exactly north and south. Most of them were 40' wide. Trench No. 6* is 60' across, because it is the junction of two great clearances, dug independently, the interval between which was not an even multiple of 40'. Trenches 20 and 21 were dug together, i.e. in short pits of 80' width, as also were the northern halves of 27 and 28 and the southern halves of 5 and 6.

The most important question to decide, before commencing the excavation, was the best way to attack the mound, where to begin, and how to pursue the work once it was begun. Under ideal financial conditions there is only one legitimate and scientific way of excavating a mound of accumulation; namely, to dig a trench at one end and, after clearing it to the rock, to dig the next trench adjacent to it of the same width, throwing the waste soil into the first trench, and so proceeding from end to end of the mound. This method I intended to follow. Though the accumulation at the western end had the more tempting appearance, I considered that it would be wiser to dig at first at the eastern end, keeping as far as possible from the shrine of El-Jazairli and the modern graveyard until the childish suspiciousness which is second nature with the fellahin should have been allayed.

There is an extensive area on the Eastern Hill on which the rock crops out to the surface. Trial shafts were dug to the west of this, in three rows, from north to south. In the first (easternmost) row of shafts the depth of soil was found to be not more than 3'-4'. In the next row of trial shafts the soil was rather deeper, and I accordingly decided to cut a trench across the mound that should include these in its course.

The beginning of the work was discouraging. The heaps of cast limestone, subsequently found inside the city wall all round, contained no antiquities of importance: the stratification was much disturbed, and the walls meagre and ruined; the debris was shallow. In fact, as it afterwards appeared, if I had intentionally chosen a disappointing place to begin upon, I could not have done so more successfully. On the 30th June, however, the first important discovery—the Troglodyte burial cave—was made; and a few days after the remarkable Maccabaeian well was opened. On the 8th July I had the pleasure of welcoming my father at

* The trenches are numbered in order of position, not in the order in which they were dug.

the excavation camp, and he gave timely help in the work of clearing out the burial cave and the examination of the human remains it contained. At the same time a gang of men was employed in digging trenches round the outer face of the city wall, and so determining the limits of the city.

After practical experience of the rate of work, I found the ideal I had set before me to be impossible. The amount of money which the Society was enabled to put at my disposal was insufficient to turn over the whole mound within the period of the Ottoman permit; and even if it were, the rate at which the antiquities would turn out of the soil would be too rapid to allow of their due recording and examination.

Before the commencement of the excavation, the most striking external indication of the treasures lying hidden in the mound was afforded by the tops of two large stones projecting a foot or two above its surface. These had already attracted the attention of the Dominicans of Saint-Itienne, Jerusalem, on one of their visits to the site, and sketches of them appear in the journal edited by that foundation, the *Revue Biblique*. The stones had also attracted the less legitimate attention of the tomb-plundering natives of el-Kubab, who had surreptitiously dug a hole around them hoping to be led to buried treasure; I never heard, however, that they were successful in finding anything. Messrs. Bergheim also, I believe, had made some small excavation in the neighbourhood of the stones. In consequence of these researches, when I first saw the site, there was a small hollow on the surface of the mound, from inside which the two stones projected. The position of this hollow was on the eastern margin of the gentle rise culminating in the knoll on which is built the wely.

Beside and to the west of the stones a third was lying on the surface of the ground. Unlike the standing monoliths, which displayed no evident marks of tooling, it had been carefully squared. The two ends had been broken, apparently comparatively recently, and probably had the excavations not intervened and saved it from its fate, it would ultimately have been smashed up altogether by the village masons seeking building stones.

Of course so obvious a clue had to be followed, and accordingly, on 1st September, 1902, a pit was commenced south of and including the standing stones. After a week's work in this pit another large stone was found, comparable in size with the other two, whose extreme top projected

above the surface; but owing to the smallness of the part exposed it had been unnoticed among the multitudes of smaller stones with which the mound is strewn. Between this and the other two large stones a smaller pillar, not more than half the height and of course completely buried in the earth, made its appearance.

The results of the week's trial being thus so stimulating, it was resolved to transfer the whole body of labourers from the Eastern Hill, where they were at the time working, to the neighbourhood of the standing stones; and large pits were laid out for excavation north and south of the stones, so as to expose a sufficient area around them. This work was begun on the 8th September. Before very long the characteristic remains of the now famous High Place were unearthed one by one. By a fortnight all the stones of the alignment had been exposed, and the two northernmost surviving, which had fallen, were re-erected. On the nth September the first discovery of jar-buried infants was made. On the 20th the supposed sacred cave was opened. In short, the work on the region of the High Place occupied practically the whole of the rest of the excavating year, that is till the following June. During that time discoveries were daily made—many of them of course not definitely connected with the place of worship itself, but with the buildings that had been erected over its site after it had, in a measure, lost its sanctity.

Towards the end of 1902 the work of excavation was first impeded, then entirely interrupted, by the serious cholera epidemic of that year. This disease spread northward from Gaza, and in the first week of November reached Abu ShOsheh. As very strict quarantine regulations were enforced, and it would have been impossible to obtain supplies—to say nothing of the danger of infection—I felt obliged to close the work for the year on 8th November. A few days before, one of the camp guards had had a mild attack of the disease in the tents, and on the day preceding my departure two of the labourers had collapsed under it on the works—one of them died the following morning. In the village of Abu Shusheh 31 deaths took place during the outbreak; in the neighbouring village of el-Kubab several hundreds died.

It was impossible to return to the district, owing to the quarantine regulations, until the beginning of the following February; from that onwards the work advanced without interruption, save for intervals of three or four weeks for rest in midsummer and midwinter, till it was finally closed by the cessation of the permit.

Having tried the experiment, I have come to the conclusion that it is hardly worth while trying to keep the work at full pressure through the harvest season. The able-bodied men and women, and the older children, all go to the work of the fields, leaving only the weaklings available. This, however, is a convenient time to attack the city cemeteries, which require a few gangs only. As usually the results of tomb-digging produce good *bakhshish*, it will probably be found practicable to retain a staff of a dozen labourers or so, who most likely will find as much in the time as the excavator can cope with.

During 1903 the work was principally concentrated on the Central Valley, the chief aim in view being the complete clearance of the High Place. The whole area of the sanctuary was dug over, and the pit extended east, west, and south—northward it was limited by the city wall—till I felt satisfied that there was no more to be found out by excavation regarding that important centre of worship. In the course of this work a number of interesting minor discoveries were made—the first Hebrew potter's stamp from Gezer, the unique Ashtoreth Karnaim statuette, and the enigmatical altar of Eunelos; but no building of importance came to light. In the latter part of the year the strange cup-marked area with its associated caves came to light; and close by was found the enormous reservoir, the clearance of which occupied nearly six months of the time of two gangs.

Whether the weakness left by the cholera was responsible or not I cannot say, but in any case the summer of 1903 was peculiarly trying. The neighbourhood of Abu Shusheh is usually accounted remarkably healthy, but in that year, during the months of July, August, and September, a severe malaria raged in the village. Not a day passed that at least one or two of the labourers did not leave the trenches with violent fever. The foreman was laid aside with it five or six times; and though I myself escaped while the epidemic was at its height, an attack confined me to my tent for a week in the middle of October. In September I decided that it would be as well to give the enervated labourers a rest, and so suspended the work for three weeks. Except for this break, and occasional single days lost on account of rain, or of business which called me to Jerusalem or to Jaffa, the excavation was prosecuted continuously from the beginning of February till the week before Christmas.

In 1904 the original permit came to an end; but an application for its extension was made to the Ottoman authorities, and granted by them. The work accordingly was pursued without interruption. On the 18th March

I had the honour of receiving the late Sir Charles Wilson, then the President of the Executive Committee of the Society, whose constant interest in the work had been a never-failing source of encouragement, for a few days' visit. The work was then being prosecuted on the Western Hill. This proved—as I had half expected it would—to be the richest part of the city. Many valuable objects were recovered from here, chief of which was the first Assyrian tablet above described, which was found early in May.

In the summer, advantage was taken of the extended permit to make a search for the tombs of the ancient inhabitants—a research which proved very fruitful in results. Although no fine tombs, comparable with the wonderful sepulchre of Apollophanes at Beit Jibrin, came to light, a more complete knowledge was gained of the ordinary burial customs of successive periods in Palestine than ever before.

The excavation on the mound was resumed in the autumn, and rewarded almost immediately by the recovery of the Maccabaeian Castle. The work was continued, partly here and partly on the Western Hill, during 1905. The castle and the remarkable bath-house were unearthed in the Central Valley, while on the Western Hill a number of important buildings were found, and, among other objects of importance, the second cuneiform tablet.

The permit should have come to an end on 14th June, 1905 ; but representations having been made to Hamdy Bey that two months had necessarily been lost to the excavation by reason of the cholera epidemic, His Excellency most kindly granted two months' further extension to compensate for this loss of time. These proved to be fruitful months : the first three of the Philistine tombs were found ; and the work was finally crowned by the great catacomb on the Western Hill with its rich deposits. In the middle of August the permit finally lapsed, and I left Gezer having turned over about two-fifths of the available surface.

It was suggested to the Committee of the Fund that it was far better to return to a mound whose results had been so rich than to leave it thus imperfectly examined in favour of any other site in the country. This was received favourably by the Committee, and in consequence application was made for a second permit for the same place. The application was, after a time, granted ; and the work resumed on the 15th March, 1907.

My first care on returning to the site was to erect a series of huts

to replace the tents that had previously, sheltered the party. From every point of view these were found to be an improvement.

A happy year followed the re-commencement of the work; all the three pits that had been opened under the first permit were extended, and interesting "finds" made in each of them. A remarkable castle in the Central Valley; two more "Philistine" tombs; and, among smaller objects, the "Zodiac" tablet and a model shrine or "soul-house," may be mentioned as the most remarkable discoveries. During the harvest some fresh tombs were opened, without, perhaps, adding much to the knowledge that the previous campaign had given us; but the discovery of a Roman bath near 'Ain Yerdeh opened up fresh and unexpected epochs in the history of the city. Above all, the autumn of 1907 was distinguished by the discovery of the Water-passage, one of the most extraordinary remains of antiquity in Palestine.

The next year, 1908, was perhaps on the whole less rich in noteworthy discoveries than previous years had been; the cave with graffiti being the most striking. There were a number of important smaller objects, of which the Hebrew calendar was the most valuable. During the few weeks of 1909 which were included in the permit the weather was very bad and the work much hampered in consequence; a remarkably perfect olive-press and an Egyptian statuette were the only noteworthy discoveries.

If nothing else has been gained by the work at Gezer, it may at least be claimed to have proved that work throughout the year is not impossible in Palestine—at least in certain parts of the country. In the Gh6r, summer work would of course be out of the question; but at Gezer not more than two or three days in each year were too hot for digging. Many of the days in the rainy season also are ideal for outdoor work. As the three years allowed by the law are barely sufficient to exhaust even one of the minor mounds, every possible day is precious. There should be sufficient funds to allow for a rotation of directors and foremen, so that each could have a few weeks' rest in turn; for the labourers the Sunday break—which if only for purely physical reasons it is important to observe—is sufficient. I have made a rough calculation of the financial support necessary to enable a party of explorers to turn over the whole mound of Gezer in three years, assuming that the work is to proceed continuously exclusive of Sundays and wet days, and taking into account the necessity of an increase in the archaeological staff with every increase in the number of labourers. I find that a sum of at least £350 *per mensem* would be requisite; and this does not allow any margin for the extra expenses involved by such special work as the examination of the Central Reservoir and the Water-passage.

§ 5.—THE PLAN OF THE PRESENT WORK, AND THE CHRONOLOGICAL
CLASSIFICATION OF THE REMAINS.

The plan upon which this work is designed has already been explained in general in the Preface; but before the reader passes on to the detailed description of the results of the excavation, which begins in the following chapter, it will be necessary to put him in possession of some further principles that have been kept in view while the description was being written.

There are three heads under which antiquities can be classified—material, use, and date. I have already explained in the Preface why classification by date cannot be made the basis of a scientific account of the discoveries. Classification by *material* is equally inadmissible, as certain types of objects, such as beads and spindle-whorls—and indeed some individual specimens—are made of a variety of materials. The *use* for which the object was made is, for purposes of classification, the point of chief importance. This implies, as a moment's thought will shew the reader, that the objects are here primarily valued, not for their own intrinsic interest, but as illustrations of the life, manners, and customs of the inhabitants; in other words, that the *anthropological* significance of the discoveries has been kept in the foreground. For this reason the first of the descriptive chapters is devoted to the people themselves, and the second and third to a detailed study of the city they inhabited, and of the cemeteries around it; and for this reason also the commonplace details of daily life within the walls of the city are examined, under their various headings, before we deal with the wider questions of the relationship between the inhabitants and their contemporaries (in trade and in warfare), or the supernatural (in religion).

But while this utilitarian classification is the basis of the work, it has not been forgotten that a chronological classification is an absolute necessity; and that the date of every object described must be indicated as nearly as circumstances permit. Where possible, the simplest and best way of giving this information is by stating in which stratum an object happened to be found; but in the case of Gezer this method is not admissible, owing to the irregularity of the stratification—in some parts of the mound only two strata were found, in others eight. An artificial division into culture periods is the second-best method, and this is the

plan which I have adopted. It is not amiss, however, to remind the reader that these periods must not be likened to so many labelled pigeon-holes, with fixed partitions between them: there was never a sudden breach of continuity, when people agreed to abandon the use of one group of art-motives, and to adopt another. Like the successive styles of Gothic architecture, the periods rather resemble the colours of a prism, shading gradually one into another. When limiting dates are stated, in terms of years B.C., for any of the periods into which I have ventured to divide the course of civilization, the date midway between the two limits is that in which the characteristics of the period were most conspicuous.

Various attempts have been made, in previous reports of Palestinian excavations, to formulate a scheme of chronological classification. All these, for various reasons, are unsatisfactory. That adopted by Dr. Bliss and myself, for example, in *Excavations in Palestine*, I now with larger experience feel reposes too much weight on the Israelite immigration as a cardinal point—which, whatever influence it may have had on the cities whose excavation is described in that work, did not greatly affect Gezer and other cities that were outside the limits of the Hebrew domination. The nomenclature of the various divisions is also open to criticism. A numerical system (analogous to the "First and Second Minoan," etc., of Cretan explorers) now appeals to me as more scientific; but it is difficult to choose a sufficiently exact territorial adjective, "Palestinian" would not serve, as Palestine proper is merely the strip of land occupied by the Philistines; and although Gezer happens to lie on the borders of this territory, some name is required which would more accurately denote the whole of the region now improperly called Palestine. For a similar reason "Canaanite" is objectionable. I finally decided that "Semitic"* was sufficiently general to include the successive civilizations of Amorite and Hebrew, and that by "Pre-Semitic" the culture of the primitive cave-dwelling race could sufficiently be expressed. For the latest period such words as "Maccabaeon," "Ptolemaic," and "Seleucid" have previously been employed, none of which are satisfactory; for though the Maccabees, the Ptolemys, and the Seleucids all tried to influence the religious and

* Even for this term a reservation must be made in that it does not include the *Philistines* within its scope; but in view of the exotic nature of the Philistine civilization this may be an advantage.

artistic development of their generations in one way or another, they were unable to stem the irresistible tide of evolution. Hellenic influence is the dominating factor that distinguishes this period, and I have chosen the word "Hellenistic"* as most aptly conveying the chief characteristic that distinguishes the remains of this epoch.

There remains the question of the subdivision of the long succession of Semitic periods. The stratification, as has just been said, is not sufficiently uniform to date the objects by the numerical order of the Gezer cities; but here the dominant influence of Egypt comes to our aid. The periods of Egyptian history can very conveniently be taken as chronological data, at least for the earlier half of the Semitic domination. For the later, the establishment in Jerusalem of the Hebrew monarchy, and its final destruction, supply adequate reference dates; the Solomonic associations of Gezer make this all the more appropriate to our subject.

A table of the successive periods—including the Post-Maccabaeon—will be found prefixed to the first chapter. About this table only three remarks need for the present be made. In the first place, the absolute chronology of the earlier periods must be left open till Egyptologists finally come to an agreement regarding their dates. Secondly, it may sometimes be convenient to divide the sixth period into two subdivisions; the first of these (from B.c. 550 to 300) may fittingly be called the Persian period, and the second the Hellenistic proper. Thirdly, the dates given for the later periods do not claim to be more than round numbers.

The reader may be reminded in conclusion that even the best scheme of classification, from whatever point of view it may be planned, cannot be carried out with absolute rigidity. There must be a certain amount of overlap for which allowance has to be made; and there must also be objects about whose use and date there is room for at least two conflicting opinions. These difficulties have to be accepted, with the inconsistencies which they inevitably involve.

* Perhaps *Hellenizing* would be more strictly correct; but the slight gam in accuracy did not seem to me sufficient to justify the constant employment of so awkward a vocable; and it involves in its use solecisms analogous to the absurd expressions "Crusading fortress," "Crusading church," which are seen so frequently. (Churches and fortresses do not "crusade" !)

CHAPTER III

THE PEOPLE OF GEZER

§ 6.—OSTEOLOGY OF THE INHABITANTS

IN almost every part of the excavation, and at all levels, human bones were found in considerable quantities. It was, however, disappointing to find that for the greater part they were in such a condition of disintegration that accurate measurements could be made of a comparatively small number, either of skulls or of long bones. Few of the skulls were complete: usually the basal, and often the facial parts had decayed, and notwithstanding every care very few of the bones could be moved without their falling to pieces. Many of the measurements had to be made on the bones while still *in situ*. Of the long bones, a large proportion had lost their articular ends through decay, so that the determination of their lengths, and the deduction of the stature of their owners, could be no more than approximate in many cases.

It has been felt that to cumber the pages of this book with elaborate tables of dimensions and such particulars, which appeal only to a limited number of specialists, would be a waste of valuable space. These it is hoped later to publish elsewhere. Meanwhile we give the general results of an examination of all the human bones that were found available for scientific purposes, so far as they reveal the physical character of the people. These are stated in chronological order.

(a) *The Pre-Semitic Period*

The largest accumulation of the bones of this race was found in the lower stratum of human remains in the Crematorium on the Eastern Hill. These were broken into fragments and much distorted by the process of burning: they had moreover been comminuted by being trodden down, when in later times the cave was used as a burial chamber. The number of individuals must have been considerable. Fragments of at least twenty adult mandibles were found, and there were portions of others of

children and infants. About 450 fragments were recovered from this mass of debris whose anatomical features could be ascertained.

From the portions of femora and tibiae collected, from whose surface markings it was possible to estimate the size of the whole bone, it was evident that these people were of small stature—probably averaging about 5' 6". Some of the females cannot have exceeded 5' 3". In a few instances the femora were platymeric, but this condition was uncommon. The amount of pilastering was small, as the *linea aspera* was not prominent. About 30 per cent of the tibiae shewed some degree of platynemia, but others were conspicuously eurycnemic. Only one or two shewed traces of the articular notch on the anterior edge of the lower border for the neck of the astragalus, which is supposed to be correlated with the habit of squatting. On all the astragali, however, there was a forward extension of the tibial malleolar facet which is usually associated with that notch. The fibulae were stout and channelled. The arm-bones were slender but with well-marked ridges: only 4 per cent of the humeri shewed the supra-trochlear perforation so common in the bones of early Egyptians. The sacral and iliac fragments were those of a mesatipelvic race.

The cranial bones were very much broken. The fragments were thick, and the surface appeared in many cases to present strong muscular ridges. So far as the curvatures of the surfaces could be trusted as a guide, the common cranial shape seems to have been ovate-ellipsoid, fairly well arched longitudinally, but rather flat-sided. The calvariae, so far as they could be restored, appeared to be dolichocephalic. A calvaria found in another cave, with pottery like that in the cave of burnt bones, was dolichocephalic, mesognathous, with moderate brow-ridges, low forehead, and deep fronto-nasal notch. The height was less than the breadth, and the capacity was small.

In the mandibles the chin seemed small and low, the molar teeth large, the rami of the jaw wide and low.

Scarcely any bones were found shewing marks of senility.

(b) The Semitic Periods

It was impossible to detect any physical characters which could be regarded as peculiar to any one of the Semitic Periods. In the same stratum and even on the same spot specimens coexisted which exhibited small variations of head-form and stature, and as a whole the

earliest inhabitants of the First Semitic Period were indistinguishable from those of the later occupations. Some minor points of difference that exist are duly noted below. Probably, therefore, the several immigrations were all of the same stock. There were no doubt individuals shewing marked divergencies. At least two crania were in shape, size, and facial character markedly negroid in type, and several, especially of those found in the city dating from about 1500 B.C., shewed the elongated oval form with large parietal eminences which is common

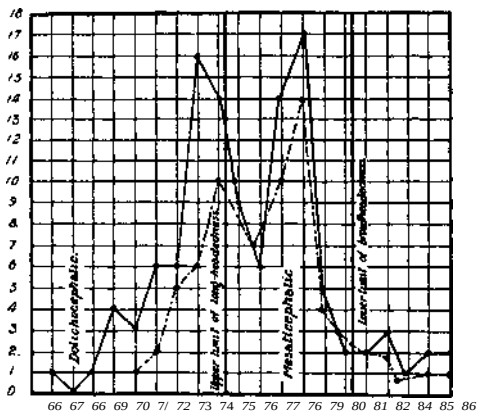


FIG. 11.—CURVE OF CEPHALIC INDEX
(Breadth x 100 — length)

in Egypt but rare in Palestine. From the many evidences of close Egyptian connexion with the city this was only to be expected.

In consequence of the damaged state of the crania only a little under a hundred specimens could be completely measured. The fragments of the broken examples, however, on being scrutinized were found to be comparable in character with their more perfect neighbours, and corroborated the deductions drawn from the latter.

Taking first the crania, we note that the majority of the skulls were of moderate size and breadth; few were large. The majority shewed a length : breadth proportion of 100 : 77, but there was a smaller group of

lower width, in about the proportion of 100 : 72. These narrower heads were commoner in the older deposits, though some of them are of the Mycenaean age. The diagram, fig. 11, graphically represents the range of proportion: the *firm* line gives the result for the First and Second Semitic Periods, the *dotted* line for the Third and Fourth. The brow-ridges are seldom massive and overhanging: the forehead is generally narrow—often low.

The nose is usually fairly prominent; it has a comparatively narrow anterior aperture. In fig. 12 is represented the relation of the total nasal height to the width of the skeletal anterior nasal opening. This shews that the largest number have a proportion of 100 : 47. In a few, and these usually of the older period, the proportion rises to 100 : 56. But on the other hand in a cranium of the Maccabaeen age even a greater width was found—100 : 60.

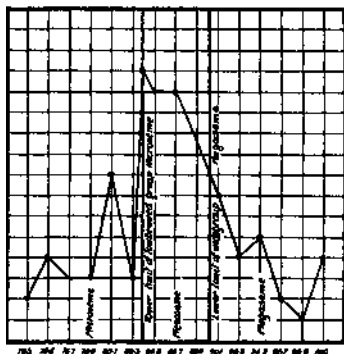


FIG. 13.—CURVE OF ORBITAL INDEX
(Orbital height X 100 orbital width)

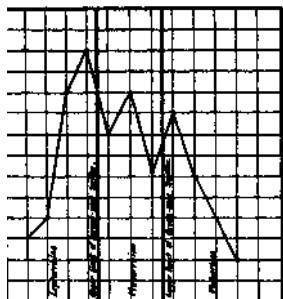


FIG. 12.—CURVE OF NASAL INDEX
(Nasal width X 100 — nasal height)

The orbital openings are seldom round, except in some crania of later age. They are usually much greater in breadth than in height, and the long axis is oblique, drooping downwards and outwards. In fig. 13 is shewn the proportion of orbital height to width: in the majority this ranges from 83 : 100 to 86 : 100.

The cheek-bones are fairly but not obtrusively prominent. The faces are seldom broad, but still more rarely very long and narrow. The length from the root of the nose to the mid point of the upper jaw is in the

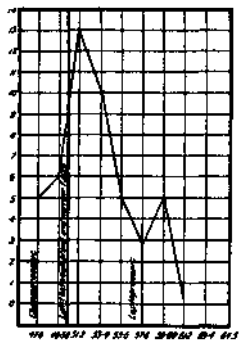


FIG. 14.—CURVE OF FACIAL INDEX
(Facial height x 100 —brygomatic breadth)

of a large number of imperfect crania shews that it rather understates the proportion of orthognathous to mesognathous skulls.

The head is seldom high: the contour of the roof is usually a uniform curve, and the hinder part is generally narrow. (In this respect the Gezer crania are in marked contrast to those found in a cave I have seen at Safed, which a very probable local tradition asserts was used as a receptacle for the bodies of the slaughtered Crusaders. Among these the back of the skull is usually wide, high, and flat.) The female heads are of the same type as the males, but smoother and smaller, and with sharp edges to the orbit.

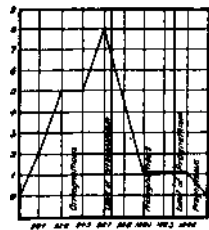


FIG. 15.—CURVE OF GNATHIC INDEX

greatest number just half the greatest facial breadth. The range of variation in this respect is shewn in fig. 14.

The chin is generally moderate, seldom prominent, and the teeth are usually large. The jaws do not as a rule protrude forwards. Only one of the definitely Canaanite crania and one of the detached maxillae shewed *very marked* prognathism. The two negroid crania referred to above were also strongly prognathous. Sometimes the upper incisors projected forward, although the jaws were normal. This dental prognathism, however, is an individual, not a racial peculiarity. In fig. 15 is shewn the relative frequency of prognathism in a selected number of specimens; but the structure of a large number of imperfect crania shews that it rather understates the proportion of orthognathous to mesognathous skulls.

With regard to the other bones exhumed, information was obtained from them as to the stature and general development of the people represented. A comparatively large number of these were bones of adolescents, which seems to indicate a disproportionally great mortality of persons under 21 years. The bones of over 200 individuals of adult age were measured for the estimation of stature, only those with perfect articular extremities being selected, and the cal-

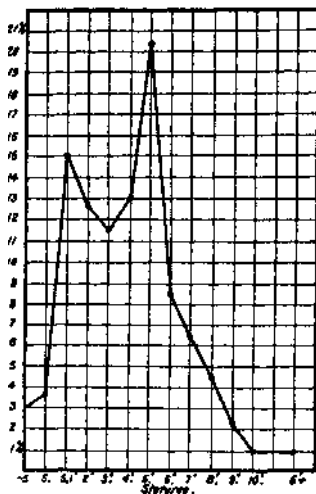


FIG. 16.—CURVB OF VARIATIONS OF STATURE

The race to which these bones belonged must have so closely resembled the modern fellabin, that a few words of description of the external characters of these may suitably be appended. The average male stature is 5' 6"-5' 7½", though a few exceed 6' : the female stature ranges from 4' 11" to 5' 6". The heads of the men are almost all dolicho-ellipsoid, with rounded foreheads, moderately prominent at the frontal eminences but bulging medially. The brows are fairly heavy, often rising at the lateral end, and scarcely ever synophryous. The noses are for the greater part prominent and fairly straight, with large cartilages and alae, but with narrow nostrils. In a few the nose is slightly aquiline : it is very rarely concave. The inter-orbital width is considerable, and the columna nasi wide. The malar regions are moderately prominent: the chin is weak and tends to recede: the lips are fairly thick and often prominent: the eyes are usually fairly large and prominent, with iris ranging in colour from yellowish brown to dark blackish brown. Facial hair ranges from dark brown to black, but it is not very abundant or general: the beard is short and curly. In the women, the faces are proportionally wider and shorter than in the males, the head outlines being more oval. The foreheads are flatter: the nose is seldom quite straight or high-bridged ; it is usually flatter at the upper bony portion and wider at the alar region. The eyes range in colour from very dark brown to black ; sometimes they are light yellowish brown, but blue only by the rarest exception. The hair is usually dark brown or black, but sometimes is distinctly fair. In the foot the great toe is in the majority of cases set straight on the metatarsal, not bent outwards ; in the males the second toe appears generally to be a little longer than the first, but this is not the case in the females.

The plate of photographs (Plate xii), selected from a large series, shews fairly the general appearance of men and women of various ages, and probably sufficiently represents the people of ancient Gezer as well.

The interesting bones from the " Philistine " graves (described in Chapter V) are comparable with the types of ancient Cretan bones described by Duckworth and Hawes, and with Cretan bones in the Cambridge Museum. They represent a people of fairly tall stature (the man in grave 2 was 5' 10", that in grave 3 was 6' 3½"). They were probably about or under 40 years of age. In all the femora were not pilastered and the tibiae not platynecmic. The skulls were ellipsoidal, mesaticephalic, orthognathous, megaseme (with wide orbits), mesorrhine

(with moderately wide nose), and microdont. The female skull in grave 4 was a little wider in proportion, and though the teeth were moderately small, the incisors projected forward, though not enough to make the face prognathous. The lower teeth were also very oblique.

§ 7.—CONDITIONS OF LIFE IN THE CITY

It is obvious that the most elementary rules of sanitary science were unknown, or at least unpractised, by the inhabitants of ancient Gezer, and that the "happy-go-lucky" existence—I need hardly apologize for the colloquialism, which so perfectly expresses the facts—of the modern fellah found a complete counterpart in the life of his predecessors. Indeed the fellah is probably in some respects the more fortunate. He at least spends his days in the open air, either in the fields, or with his flocks, or in the courtyard of the village guesthouse. There is not one of the inhabitants of a modern village who need be confined to his house the whole of the day, unless he be held by age and infirmity.

In Gezer and other cities of the same type the case was different. A huge maze of crooked, narrow, airless streets was shut inside a thick wall, and the whole population had to find room somewhere or other inside that area. There must have been a considerable sedentary population of craftsmen—weavers, carpenters, and the like—who seldom if ever escaped from the bounds of their own workshops. Those who have *smelt* their way through the filthy Jewish quarter of Jerusalem are in a good position to realize what a result the crowding of these unhealthy people must have had.

It need hardly be said that there is no trace of any sanitary conveniences, any more than there is in the majority of the modern villages. Each of the latter is practically girdled by a ring of excreta, which taints the air hideously from whatever side the village is approached. The case must have been worse in the ancient city, on account of the larger population, much of it confined within the walls—especially during sieges, when the whole of the people would be shut in.*

The only contrivances that can certainly be called drains were the

* It may be supposed that they had portable contrivances of some sort, but these had to be emptied somewhere: there was little or no formal sewage system, as noted in the next paragraph.

vertical shafts of jars, that were found in two or three places, more fully described in the following chapter. These did nothing but carry sewage down vertically into the earth below the house, where it found a lodgement as best it could. Naturally the earth under the foundation of the house would before long become impregnated with unclean refuse. There was but one sewer, belonging to the Maccabean period: with characteristic carelessness this ran right under the entrance to the governor's castle. The scraps of built channels found here and there are probably not for sewage, but for conveying water to cisterns. If they were for sewage they were inefficient, for being carelessly built they very likely leaked along their whole course.

In time of siege the atmosphere must have been pestilential: for the cattle would no doubt have been driven into the city and would be confined therein.

If we turn from this unsavoury subject and look to another aspect of the question we find further indications of unhealthy conditions. We shall see in the following chapter that sometimes men and animals fell into the cisterns and were drowned. We can but hope that the water was never used again: certainly the bodies were never taken out. The great central reservoir must have filled the city with mosquitos and sandflies—the latter are still a perfect plague during the month of May and, to a lesser degree, in September. This would be in any case a pest, but if malaria was already endemic in the country—as is highly probable—the reservoir would have much to answer for. And on the (apparently rare) occasions when the reservoir was cleaned the silt was "dumped" beside it and there allowed to fester.

Under these circumstances it is not surprising to find evidences in the tombs of a high rate of mortality. This may be inferred from the comparatively large number of youthful bones, and the small number of bones shewing evidences of advanced age. Probably (as among the modern fellahin) the young aged more rapidly than in Western countries: no doubt also the modern custom of premature marriage, with its attendant result of early child-bearing, was practised, and had all the physical consequences which this involves.

A hint at this unsatisfactory physical condition of the people may possibly be found in the 90th Psalm, the author of which speaks of eighty years as the extreme limit to which it is possible for a robust

man to attain. Octogenarians are not so very uncommon among ourselves,—far commoner than the Psalmist would allow : in fact he speaks of a man of eighty much as we would speak of a man of a hundred.

The soft parts of the human bodies having long decayed to nothing, it is of course impossible to speak from direct observation of the diseases which afflicted the inhabitants : we can only infer these from the conditions of life, from the literary evidence afforded by the Biblical and other writings, and from observations of the maladies prevalent among the modern inhabitants. For such, reference must be made to the suitable articles in Bible Dictionaries. We can here speak only, and that very briefly, of the diseases and accidents which have left their mark on the

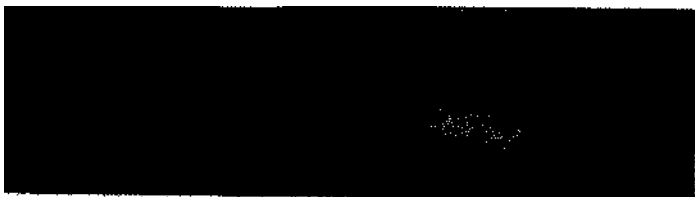


FIG. 17.—DISEASED HUMERUS FROM TOMB 155

bones. A female skeleton, that of a woman probably over fifty years of age, found buried under a house wall (see illustration in Vol. II), shewed lateral curvature of the spine; disease of the articular processes of the third and fourth neck vertebrae ; and extensive disease of the right shoulder, which was ankylosed, evidently of old standing as the right humerus was only 204 mm. long while the left was 252 mm. The left ulna had been broken in early life and crookedly united. The left knee was extensively diseased with osteo-arthritis, and stiff in the flexed position : the back of the patella and the trochlear surface of the femur were eburnated and deeply scored.

The femur in "Philistine" grave 3 shewed extensive necrosis of long standing, and great ridges of new bone surrounded the hollow from which the sequestrum had escaped.

The humerus (fig. 17) as well as all the long bones of both legs of a

skeleton found in a tomb of the 3rd century A.D. shewed pathological changes which in a modern skeleton would undoubtedly be considered syphilitic. The point is of importance, as it is commonly asserted that this disease, now so prevalent in the country, was introduced by the Crusaders.

Osteo-arthritis of the vertebral column was noted in several cases, but did not seem to be so common as in Egyptian remains.

In two crania, one of the 10th century B.C., the other of the Maccabaeen age, the skulls were abnormally thick and spongy, with a roughening of the inner surface. This was the pathological condition known as *pachycephalus*, due to a diseased condition of the membranes of the brain.

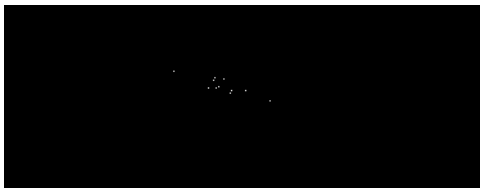


FIG. 18.—ABNORMAL CRANIUM FROM TOMB 150

One skull shewed a considerable necrosis of the frontal bone.

Two or three skulls shewed depressions on the surface that probably were due to tumours. In two cases a caries had eaten right through the bone, making in each a perforation almost the size of a threepenny-piece.

The teeth were very worn, but as a rule sound in the early skulls. From about 1000 B.C. onwards, however, dental caries became more and more common, and the teeth of some of the Hellenistic and Byzantine skulls were in a dreadful condition. In two jaws there had been extensive disease around the roots of the teeth, and large abscess cavities had been formed.

One of the calvariae (fig. 18) was extraordinarily low, and (unless, as is not unlikely, deformed posthumously) probably was that of a person of weak intellect. This specimen came from a Fourth Semitic tomb: in a

Byzantine tomb a similar case, but not so extreme, was found. Otherwise no evidence of abnormal mental conditions was observed.

To accidents or fights are due the two cases of depressed fracture of the cranium, and the one case of fractured cheek-bone, driven in by a blow. In another skull the nasal bones had been broken and had united crookedly. Fractures of long bones were common: in every case these had been left to unaided nature to do the best she could for them. One of the humeri found in the bone-pits on the south slope of the hill had been neatly cut across by a sharp instrument immediately before death.

CHAPTER IV

DWELLINGS AND DEFENCES

§ 8.—THE CAVES

IN Chapter I it has been remarked that one of the attractions which this hill would offer to people in a low stage of culture was the profusion of caves, serviceable as dwellings, in the soft limestone rock. These caverns were the first abodes of man in Gezer, as is proved by the primitive character of the deposits found within them. Moreover, they had become sealed up by later accumulations which closed their entrances.

A glance at Plate viii will shew that the neighbouring hills are likewise full of caves, which no doubt were also used for habitation. A few were examined, but no relics of very early periods were found in them; perhaps because, unlike those inside the city walls, they had remained open and had been cleared out from time to time by successive occupants. Some of the caves were used as habitations within living memory, and still bear the names of people who lived in them. A cave in *Waret et-Tayasheh*,* for example, is called *Mughdret † er-Rabb*, from a man of the family of er-Rabb (I believe a family of Kubatiyeh, near Jenin) who took up his abode there. Again a conspicuous cave, the largest on the slope facing the Gezer *tell* on the south, is called *Shakif Hamdd*, or Hammad's cave, and it gives its name to the field that contains it. Hammad's grandchildren still live in Abu Shusheh. Next to it on the west is *Mughdret et-Tahrawi*, the cave of et-Tahrawi, a man whose daughters were among the steadiest women labourers in the works. Two caves side by side in *Waret 'Othmdn* (named from one 'Othman, who within living memory tilled that unpromising tract of stony hillside) are called *Mugkr 'Othwdn*, i.e. "'Othman's caves." I could not find any cave name that seemed to enshrine an *old* tradition. In several of the caves Roman and early Arab pottery was found.

* For this and similar field names see Plate viii. † *Mugh&re(t)* = a cave.

The old man was, however, very positive that she lived at the village of Latrun—an important point, for this unauthorized detail shews that it is not a distorted compilation made up from hints that might have been overheard from my own conversation with anybody. The narrator himself said he had heard the story in Ni'aneh, a village on the opposite side of the conduit. Jazer, of course, is the Arabic rendering of the name of Gezer.

In the foregoing pages it has been assumed that after the entrance of the Hebrews into Palestine a certain number of the newcomers settled in the city, which thenceforward contained a composite population. This theory, suggested primarily by the passages about the fate of the Canaanites in Gezer already quoted from Joshua and Judges, has been opposed by Professor Driver,* who says that it rests "upon an incorrect exegesis of Joshua xvi 10, . . . which states, not that Israelites and Canaanites dwelt together in Gezer, but simply that the Canaanites maintained themselves in Gezer in the midst of an Israelite population outside."

On the question of exegesis I can but accept the criticism of Professor Driver; the explanation of the disputed passage which he maintains is however less in accordance with the archaeological data. If we are to take the various references to the city in Joshua and Judges as historical—and if not, it is a mere waste of time to discuss them here at all—then the population of Gezer ought, in view of the massacre at Lachish, to have been less, not greater, after the date of the Israelite immigration. In point of fact, however, a glance at the plans in plates i-vi (especially plate iv) will shew that the population must have received a considerable *increment* at about that time. The houses are smaller and more crowded, and the sacred area of the High Place is built over. The space within the walls was insufficient for the needs of an increased population. Again, the capture of the city by the king of Egypt, in the time of Solomon, and the destruction of the Canaanites that dwelt therein, would have implied a complete depopulation, for which there is no archaeological evidence. It may also be noticed that there is no indication of an exclusively Israelite population around the city *outsider* such as Professor Driver's comment postulates; there is indeed no trace of an early settlement anywhere in the neighbourhood. But even if there had been hamlets, which have vanished and left no sign, we cannot assume that their inhabitants were Israelites. The sea-coast region in which Gezer stands was occupied by an alien people down to the time of the Maccabees.

* Schweich Lectures on *Modern Research as Illustrating the Bible*, p. 69.

(d) The Assyrian Occupation

After the capture of Gezer by the Egyptians in the time of Solomon, we hear nothing further of the city in the Old Testament. The scarabs and other evidences of Egyptian influence still continue, though not in such profusion as in the older strata. Israelites have left unmistakeable traces in the remarkable calendar inscription, the potter's jar-stamps, and other relics, which will be described in their proper place. The collapse of the kingdom of Israel does not appear to have been marked by any local catastrophe severe enough to have left any traces: but immediately afterwards we find evidence of an Assyrian garrison settled in the city, using the Assyrian language and letters, and carrying on their business with Assyrian methods of procedure.

The evidence for this is afforded by two tablets, or rather fragments of tablets, each bearing an Assyrian inscription. Illustrations will be found in the Frontispiece, figs. 1-3. They were both found in the neighbourhood of a building whose thick walls appear in the north end of V 27-30; and the legal nature of the documents makes it not improbable that the building was of the nature of a Court of Justice. It is therefore the more regrettable that the wely and its cemetery made further excavation in this particular corner impossible.

That tablets of the Tell el-Amarna period should be found at Gezer was expected, and the discoveries of such tablets at Lachish and Taanach made this hope appear all the more reasonable. It was, however, disappointed, as no such documents came to light.* On the other hand the tablets actually found were of such an unexpected nature that it was at first suggested that the ground had been "salted," tablets brought from elsewhere being laid down for discovery by some dishonest workman. Tricks of this kind were tried at the beginning of the work: but the total ignorance of the labourers of the relative dates of objects and of strata made them pathetically futile. As men who "discovered" Cufic coins or fragments of Roman pottery in undisturbed Early Semitic debris found themselves promptly dismissed, such tricks soon came to an end. It would have been nothing short of miraculous if a workman had had the insight to bury these two tablets (found not at the same time, but at an interval

They may of course still exist in some of the untouched portions of the mound.

of a year) in their proper archaeological context—and moreover to choose the tablets so wisely that they had one signatory in common, so that each corroborates the true local origin of the other.

The document first found (Frontispiece, figs, 1, 2) is the longer and more important of the two.* It measures $2\frac{1}{4}$ " x $2\frac{1}{4}$ " and is $\frac{1}{8}$ " thick. Its text and translation are as follows :—

Obverse

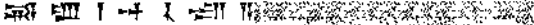
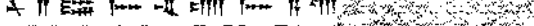
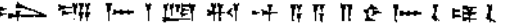
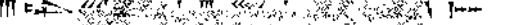
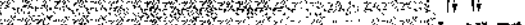
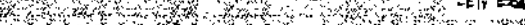
- Line 1. 
 2. 
 3. 
 4. 



FIG. 4.—SEALS ON THE FIRST ASSYRIAN TABLET

5. 
 6. 
 7. 
 8. 
 9. 

* The tablet was very fully discussed in (AS⁹, July 1904, pp. 229-244, by the Rev. C. H. W. Johns, Dr. Pinches, and Prof. Sayce. The description here given is a summary of the remarks of these scholars. The transcript and translation are due to Mr. Johns. See further remarks by Col. Conder, QS, 1904, p. 400, with Mr. Johns' comments.

Reverse

Line I



TRANSLITERATION

- Line I. Kunuk D.P. Maruduk-eriba apil . . .
 2. Kunuk D.P. Abi-eriba apil . . .
 3. gamru sina awelute beld bite ekli . .
 4. bit D.P. Lu-ahe a-di gi- . . .

[Seals]

- 5 DP. nise D.P. Tu-ri-D.P.-A-a sina sinnisati-su, mari-su
 6 salset D.P. . . .
 7. sina -ga
 8 -a-a
 9 ia-kar.

This wedge apparently redundant.

² Or perhaps <.

Reverse

- Line 1.
 2. u-ta-ra(?) . . .
 3. la i-lak-ki si-bit be-e[n-n]u
 4. a-na isten meat u-me sa-ar-tu a-na kal u-me
 5. Arah Siwanni, umu sibaseru lim-mu sa arki
 6. D.P. Assur-dura-usur D.P. bel pihati al Mas-hal-zi *
 7. Pan D.P. Zag-gi-i, pan D.P.P. Tebet-a-[a]
 8. pan Bel-apla-iddina, pan D.P. Maruduk-nasir
 9. pan D.P. Hur-u-a-si D.P. ha-za-nu
 10. pan D.P. Bur-ra-pi-'i D.P. dam-†
 11. pan D.P. Zer-ukin apil D.P. Tebet-[a-a]
 12. pan D.P. Hi(?)—ta-din,‡ pan D.P. Si'—
 13. pan D.P. Mannu-ki-arba-tlu pan . . .
 14. pan D.P. Zer-u-tu.

TRANSLATION

Obverse

- Line 1. Seal of Maruduk-eriba, son of . . .
 2. Seal of Abi-eriba, son of . . .
 3. total, 2 men, owners of the houses, field (?) [&c, sold]
 4. the house of Lu-alie, to . . .

[Seals]

5. The people [probably slaves] Turi-Aa, his two wives, his son
 6. 3 men . . .
 7. 2 . . .
 8. . . .
 9. . . .

Reverse

- Line 1. [The money sevenfold to their owners]
 2. he shall return, [in the lawsuit he shall plead and]
 3. he shall not receive. Guarantee (?) [against] sickness (?)
 4. for a hundred days, physical defect (?) for all time.
 5. Month Sivan, day 17th eponymy which is after
 6. Assur-dura-usur, prefect of Mashalzu.§

* Or Bar-hal-zi.

‡ Or Addu-tadin, or Adadi-tadin.

† Probable completion, dam-kar.

§ Or Barhalzu.

7. Before Zaggi ; before Tebetaa;
8. before Bel-apla-iddina ; before Maruduk-nasir ;
9. before Huruasi the governor ;
10. before Burrapi'u the commis[sion-agent] ;
11. before Zera-ukin, son of Tebetaa;
12. before Hitadin* ; before Si'—
13. before Mannu-ki-arba-ilu ; before . . .
14. before Zcrtutu.

This is a contract relating to the sale, by Maruduk-eriba and Abi-eriba, of an estate, the property of a person whose name is phonetically written LU-PAP-MES, which scholars read variously Lu-ahe or Musctik-ahe, owing to the ambiguities of cuneiform polyphony. The tablet being broken, it is impossible to gather how these persons had the right to sell the estate, or the extent or exact position of the property itself, it was however of considerable size, if we may judge from the meagre fragment of the schedule preserved. The vendors of the estate have affixed their seals. Of these, one is a commonplace representation of the branch of a tree ; the other displays two figures, man and woman, adoring a winged disc that flies above an object which resembles the Egyptian †, but perhaps is no more than an altar, such as is generally figured in similar groups.

The inventory of the estate commences with the name of the slave Turiaa, probably the steward, and of his household; after which there is a gap that, in addition to the rest of the specification, contained information with regard to the situation of the property and the conditions of sale. The last few words of the latter part are preserved on the reverse of the tablet: they are in accordance with the usual formulae of such documents ; the finality of the transaction is assured, and a guarantee given that the slaves sold are, and for a definite period will remain, free from certain physical disabilities of the exact nature of which there is some uncertainty.

Then follows the date of the contract, which is suggestive. It is the seventeenth of Sivan, in the year following the eponymy of Assur-dura-usur. The date of this eponymy is known to be 650 B.C., so that the date of the tablet itself is 649. The eponym for that year was Sagabbu, but it would appear that this fact had not yet been learnt by the scribe who wrote the document. This is a strong argument against supposing the tablet to belong to Nineveh or to any other central city, and to have been brought by some unexplained chance to Gezer. One other instance of such uncertainty in dating a document is known, and in this case also the year is stated as being that following the year of the previous eponymy.

The tablet ends with a list of twelve witnesses, the names of ten of whom are preserved, perfectly or nearly so. An analysis of these names gives interesting results. The first name, Zaggi, is not otherwise known. Tebetaa, Bel-apla-iddina, Maruduk-nasir, which follow, are all Assyrian. The next name, Huruasi, specified as the governor or mayor (presumably of Gezer), is especially noteworthy, in that it

* Or Addu-tadtn, or Adadi-tadin.

seems to be Egyptian (Hr-wd't). If this be so, a confirmation is afforded by the tablet of the statement above made, that the town when delivered over to Solomon's queen did not pass out of Egyptian hands: some welcome light is also thrown on the Egypt-Musri entanglement. Then follows the name of the middleman, who probably found the purchaser for the property: this person, as might be expected, was a native of the locality, his name not being Assyrian; it seems to have Palmyrene analogies Zera-ukin, being a son of the Tebetaa already named, is necessarily Assyrian, as are Mannu-ki-arba-ilu and Zerutu; the latter being the last name in the list, may reasonably be considered as the name of the clerk. The two remaining names, which are either uncertain or defective, appear to be West Asiatic, and have no Assyrian associations.*

The witness Huruasi being specified as mayor, it is natural to ask why his name does not head the list. This question can be answered by conjecture only, but it is not unreasonable to recall the state of the country at the time when the contract was drawn up. The power of Egypt had declined before the advancing Assyrians; and the documents, being written in Assyrian and being concerned almost exclusively with Assyrians—the non-Assyrians are probably all subordinates, as the slave Tebetaa and the middleman Burra-pi'u certainly are—is evidence of a settlement or garrison of Assyrians having been established in the town. We need not therefore be surprised to find in the Egyptian governor a person of so little importance that he had to wait till the names of the domineering Assyrian notables had been signed before he was allowed to add his own

The second tablet (Frontispiece, fig. 3), which was found not far from the first and (by a curious coincidence) almost on the anniversary of the discovery of the former, is more fragmentary. A Hebrew called Nethaniah sells his field, which abuts on the property of a man called Sini. The purchaser is not mentioned on the fragment, and the tablet ends as before with the names of the witnesses. The fragment measures 1-½" x 2" and is ²/₃" thick. The following is the text and translation:—

Obverse

- Line 1. 
 2. 

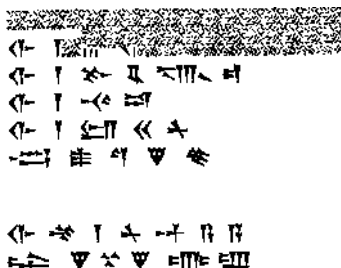
[Three impressions of a seal]

3. 
 4. 

* For parallels from other monuments for the names on this tablet reference may be made to Mr. Johns' paper, *QS*, 1904, pp. 237-243.

Reverse

Line



TRANSLITERATION

Obverse

- Line i. TAK-SID (= kunuk) D.P. Na-tan-Ia-u
 2. bel A-SA (= ekli) SE (= tadani)-a-ni
 3. . . . BAR A-SA (=ekli) SUH (= kimmat) D.P. Si-ni-i
 4. SUH (= kimmat) D.P. Si-ni-i

Reverse

- Line pan D.P. ———
 pan D.P. Bu-sik- . . . -is
 pan D.P. Zer-DU (= ukin)
 pan D.P. Nergal-sar-usur
 arhi Sabati timi IV (Kan)

Lower Edge

- Line limmu D.P. Ahi-ilai
 amelu sa-kin Gar-ga-mes

TRANSLATION

Obverse

- Line 1. The seal of Natan-Iau (Nethaniah)
 2. the owner of the field made over
 3. (area) of field next Sint
 4. next Sini

Reverse

- Line 1 in the presence of . . .
 2. in the presence of Bu-sik- . . . -is
 3. in the presence of Zer-ukln
 4. in the presence of Nergal-sar-usur
 5. in the month Shebat, fourth day.

Lower Edge

- Line 1. Eponymy of Ahi-ilai
 2. Viceroy of Carchemish.

Mr. Johns and Professor Sayce have discussed this document in *QS*, 1905, pp. 206, 272. Each gives a translation: these are virtually identical, differing only in the name of the neighbour (which Prof. Sayce prefers to render Amtu-sini), and in that of the second witness, which is obscure: Prof. Sayce reads doubtfully Bukhbur.

The particulars of the amount of land are broken off, as are most of those of the boundaries and landmarks: the last is regrettable, as it would have been interesting, if possible, to identify the field to which the deed relates.

The second witness has a name that resembles Bu-sik-ti-is, according to Mr. Johns: but the sign *bu* may also be read *pu*, *gid*, *sir*, etc., and the sign *sik* might also be *sik*, *sig*, *pik*, etc.; the third sign is doubtful, and the sign read (from a photograph) *ti* might be meant for another, reading *rit*, *gir*, or *ah*. According to Mr. Johns the last sign is certainly *is*, but Prof. Sayce does not seem to share this assurance.

The third witness is Zerukin; a happy accident, as he was also one of the witnesses to the transaction recorded on the first tablet. In the absence of the city's name, this is the best demonstration possible that the two documents relate to local events. The fourth witness bears the well-known Assyrian name Nergalsharezer.

The date, the eponymy of Ahi-ilai, comes into the year 648 B.C., according to Mr. Johns, though George Smith assigned it to 647. In any case, it is about a year later than that of the previous tablet: one eponymy, that of Bdl-Harran-sadua, viceroy of Tyre, falls between those of Sagabbu and of Ahi-ilai. That Ahi-ilai was viceroy of Carchemish was a fact unknown before the discovery of this tablet.

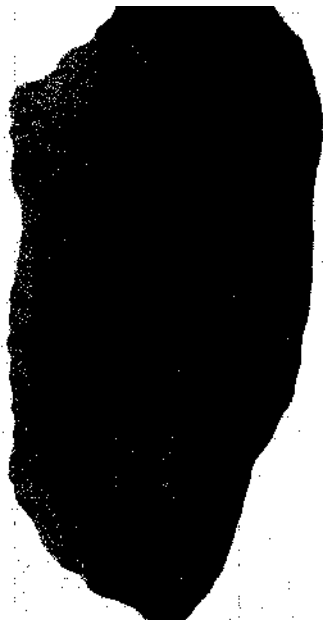
It is remarkable that the Hebrew Nethaniah should have had a seal bearing what is evidently a lunar emblem.

The Assyrian occupation cannot have been of long duration, as otherwise we could not fail to have found a much greater number of relics of Assyrian civilization; indeed it is rather remarkable that so few actually came to light. But Assyrian was not the only "cuneiform" language used in Gezer. A discovery, curious in itself as well as in its circumstances, was

made near the close of the excavation. While I was marking out the area of a new pit on the Eastern Hill, with the help of the foreman, the latter picked up a fragment of a cuneiform tablet on the surface of the ground, close by where his hand was holding the end of the tape-measure. It measures $2\frac{3}{8}$ "x1".

This document (Frontispiece, fig. 4) was examined by the Rev. Pere P. Dhorme, Professor of Assyriology at Saint-Itienne, Jerusalem, and by Professor R. F. Harper of Chicago, at the time Director of the American School of Archaeology in Jerusalem. It proved to be a letter in Neo-Babylonian; but as it was broken on all four sides, the beginning and end of the document were gone, as well as the beginning and end of every one of the surviving lines. It was therefore impossible to recover a connected sense.

The text and translation run thus:—



- . as-sum mi-ni-im . . .
 . . . by reason of which . . .
 . [a-n]a ma-ah-ri-ia . . .
 . . . before me . . .
 . [l]a mi-nim ma . . .
 . . . [without] number . . .
 . ka . . . mu(?) nam-r[u] . . .
 . . . your . . . bright(?) . . .
 . lib-ba-ka i-na (alu) . . .
 . . . your heart! In the town of .
 . aha-ka li-ba[l-lit] . . .
 . . . may he [heal] your brother .
 . [i-n]a (alu) Ki-id-di-im . . .
 . . . in the town of Kiddim . . .
 . am (amelu) Is-si-ir tar . . .
 . . . the . . . of Issir . . .
 . [ina al]u la-ap-pu(?)-u . . .
 . . . [in the town] of Jaffa . . .
 . i-na-di-in . . .
 . . . he will give . . .
 . 7 alpe . . .
 . . . 7 oxen . . .
 . [i]t alpu . . .

FIG. 5.—THE NEO-BABYLONIAN TABLET

The only noteworthy points in this fragment—beside the language in which it is written—are the geographical names, Kiddim (perhaps Gittaim of Benjamin, II *Sam.* iv 3) and, apparently, Joppa. The personal name Issir is compared by Pere Dhorme to the Jezer of *Gen.* xlvii 24.

Nearly five centuries pass uneventfully (so far as Gezer is concerned) between the date of these tablets and the next mention of the city in the pages of history. Although by way of compensation for this long silence, we know more of the history of Gezer for the years between 166 and 130 B.C. than for all the preceding millennia.

(e) The Maccabaeen Period

In order to make clear the events in which Gezer figured, and to prevent their being a series of mere disconnected, and therefore unintelligible, incidents, it is necessary briefly to trace the course of the Maccabaeen revolt, omitting, of course, everything not essential to our purpose.

In 175 B.C. Antiochus Epiphanes began to reign over Syria, and devoted himself to an attempt to force Hellenism, in art and religion, upon the Jews. In 168 B.C. orders were issued for the cessation of Jewish rites, the paganization of the Temple, and the erection of a heathen altar in every village. At Modin was an aged priest, Mattathias by name, who had retired thither to escape the persecution. He refused to offer sacrifice on the altar, when commanded to do so, and slew the royal commissioner, as well as a Jew of the village who attempted to conform. This act was the first blow in the great rebellion led by the sons of Mattathias. Mattathias died in the year 166, leaving the leadership to his son Judas Maccabaeus.

Judas began by defeating in battle the Syrian generals Apollonius and Seron, the latter at Beth-horon, not far from Gezer. Antiochus, in great anger at these defeats, collected a powerful army; but lacking money, departed himself to Persia to collect tribute, leaving his kinsman Lysias in charge of the affairs of the kingdom. Lysias set Ptolemy, Nicanor and Gorgias, three favourites of the king, over an army of 40,000 foot and 7,000 horse. These pitched at Emmaus Nicopolis, the modern 'Amwas, about five miles from Gezer. Judas, after prayer at the ancient sanctuary of Mizpeh—an interesting touch—marched to Emmaus with the result that

The Gentiles were discomfited, and fled into the plain. But all the hindmost fell by the sword : and they pursued them unto Gazara, and unto the plains of Idumaea and Azotus and Jamnia.—I *Mace.* iv 14, 15.

During the four following years occurred the battle of Bethzur (the day after that of Emmaus) in which Lysias himself was defeated; the purification of the Temple and the restoration of its worship; the defeat of a coalition of the heathen tribes surrounding Judaea; the battle of Bethzacharias (the first defeat suffered by the Jews); and the grant of religious liberty to the Jews, which was forced from Lysias by domestic troubles in Syria.

In 162 B.C. the Hellenizers in Judaea, dissatisfied with this defeat of their aims, came with a petition against Judas to Demetrius, who had succeeded to the Syrian throne. They were headed by Alcimus, an aspirant to the high-priesthood. Demetrius was not sorry for an excuse to interfere in Jewish politics, and sent Bacchides, governor of the provinces east of Jordan, to quell Judas and to secure the high-priesthood for Alcimus. In this, Bacchides was unsuccessful. Alcimus again presented his petition and the king sent Nicanor, "one of his honourable princes, a man that hated Israel." Nicanor visited Jerusalem, blasphemed the Temple, and finally met Judas at Adasa, in the pass of Beth-horon. Here he was defeated and slain, and his army fled.

And they pursued after them a day's journey from Adasa until thou comest to Gazara, and they sounded an alarm after them with the solemn trumpets.—
I Mace, vii 45.

Six weeks afterwards Judas lost his life at the battle of Elasa, in which Bacchides was in command of the Syrians. He was succeeded by his brother Jonathan. Bacchides took advantage of his victory to increase the authority of the Hellenizers, who persecuted the Maccabean party. Jonathan remained in retirement at Tekoah: his brother John was seized and slain at Medaba: Jonathan crossed the Jordan to avenge his brother, and was intercepted by Bacchides at the fords of the Jordan. The Jews escaped from the trap by swimming the river, but Bacchides retained the upper hand for a time and

. . . builded strong cities in Judaea . . . and in them he set a garrison to vex Israel. And he fortified the city Bethsura, and Gazara, and the citadel, and put forces in them, and store of victuals.—*I Mace*, ix 50-52.

This was in 161. In the following year, 160, Bacchides returned, the death of Alcimus (from a paralytic stroke) removing the reason for his occupation of the country. A period of comparative peace followed.

The strategical importance of Gezer to the combatants on both sides has been well brought out in Professor Clermont-Ganneau's analysis of this history. Modin, the headquarters of the leader's family, and consequently the rallying-place of the Jewish side, is easily within sight. The passages that have been quoted seem to shew that the Graeco-Syrians were able to retain possession of this powerful stronghold, and to make use of it as a retreat in case of a check.

In 153 B.C. Alexander Balas (son of Antiochus) seized Ptolemais (Acca) and set up a kingdom rival to that of Demetrius. Demetrius endeavoured to secure the powerful aid of Jonathan by making certain concessions, including the releasing of hostages, and the removal of the garrisons placed in the cities fortified by Bacchides :—

And the strangers, that were in the strongholds which Bacchides had built, fled away ; and each man left his place, and departed into his own land. Only at Bethsura were there left certain of those that had forsaken the law and the commandments: for it was a place of refuge unto them.—*I Mace*, x 12-14.

For the next eight years the history is occupied with the rivalry of these two claimants, ending in 151 with the death of Demetrius, followed in 145 by the death of Alexander. Jonathan had espoused the latter's claim, but after Alexander's death made his peace with Demetrius II, who promised to

cast out of Jerusalem them of the citadel, and them that were in the strongholds : for they fought against Israel continuously (*I Mace*, xi 41),

shewing that the former withdrawal of troops had not been as thorough as the Jews would have desired. This promise Demetrius failed to keep ; Jonathan in consequence once more deserted him, but was ultimately captured and imprisoned at Ptolemais (Acca), where, in 143, he was put to death.

Simon, the last surviving son of Mattathias, succeeded his brother. He had already distinguished himself by his capture of Joppa; and his defeat at Adida of Tryphon, the former general of Alexander (who had succeeded in establishing Alexander's son Antiochus on the throne), was all that was necessary to end the war. He then applied himself strenuously to strengthening the defences of Judaea, and to removing the last

traces of the foreign garrisons and of the Jewish Hellenizers. It would seem that the principal of these remained at Gazara ; at any rate the first care of Simon after " the yoke of the heathen was taken away from Israel" (I *Mace*, xiii 41) was the siege of Gazara, described in the following graphic passage :—

In those days he encamped against Gazara,* and compassed it round about with armies ; and he made an engine of siege, and brought it up to the city, and smote a tower, and took it. And they that were in the engine leaped forth into the city ; and there was a great uproar in the city : and they of the city rent their clothes, and went up on the walls with their wives and children, and cried with a loud voice, making request to Simon to give them his right hand. And they said, Deal not with us according to our wickednesses, but according to thy mercy. And Simon was reconciled unto them, and did not fight against them : and he put them out of the city, and cleansed the houses wherein the idols were, and so entered into it with singing and giving praise. And he put all uncleanness out of it, and placed in it such men as would keep the law, and made it stronger than it was before, and built therein a dwelling-place for himself.—I *Mace*, xiii 43-48.

The remains of the dwelling-place mentioned in the last sentence of this extract, and the inscription by which it was identified, will be described in Chapter III. After this victory Simon went to the citadel of Jerusalem, which he treated in the same way ; and shortly afterwards

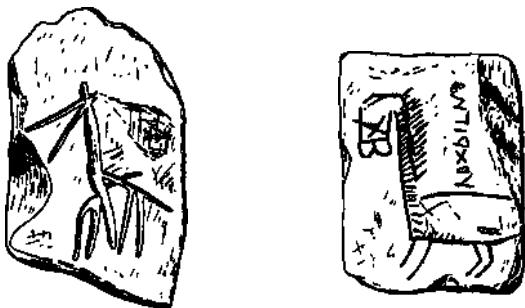
Simon saw that John his son was a *valiant* man, and he made him leader of all his forces : and he dwelt in Gazara.—I *Mace*, xiii 53.

This capture of the city was duly recorded in the inscription set up at Jerusalem on bronze tablets, in Simon's honour (I *Mace*, xiv 27, 34).

In 139 B.C., four years after Simon's capture of the city, the new king, Antiochus Sidetes, sent to the high priest his messenger Athenobius to demand the restitution of Gazara, Joppa, and the citadel of Jerusalem, or as an equivalent for the cities and the tribute due from them an indemnity of 1,000 talents of silver—a demand that Simon scornfully answered by offering 100 talents.

* This, the reading adopted by the English Revised Version, is certainly correct, though all the MSS. have *Gaza*. See Clermont-Ganneau, *ARP*, II, p. 246. This is proved by Jos. A. / . XIII vi 6, B. J. I 11 2, and A. J. XIII xiii 3, B. J. I iv 2, which latter passages shew that the Jews did not secure possession of *Gaza* till the time of Alexander Jannæus.

[Antiochus] sent unto him (Simon) Athenobius, one of his Friends, to commune with him, saying, Ye hold possession of Joppa and Gazara, and the citadel that is in Jerusalem, cities of my kingdom. The borders thereof ye have wasted, and done great hurt in the land, and got the dominion of many places in my kingdom. Now therefore deliver up the cities which ye have taken, and the tributes of the places whereof ye have gotten dominion without the borders of Judaea: or else give me for them five hundred talents of silver; and for the harm that ye have done, and the tributes of the cities, other five hundred talents: or else we will come and subdue you. . . . And Simon answered and said unto him, We have neither taken other men's land, nor have we possession of that which appertaineth to others, but of the inheritance of our fathers; howbeit, it was had in possession of our enemies wrongfully for a certain time. But we, having



FIGS. 6, 7.—STONE TABLETS WITH GROTESQUE ANIMAL FIGURES

opportunity, hold fast the inheritance of our fathers. But as touching Joppa and Gazara, which thou demandest, they did great harm among the people throughout our country, we will give a hundred talents for them. And he answered him not a word, but returned in a rage to the king.—*I Mace*, xv 28-36.

In a house in VI 9 two stones were found bearing a device that possibly had a reference to this event. The first of these (fig. 6) is a block of soft limestone, measuring $3\frac{7}{8}$ " X $2\frac{3}{8}$ ", by 2" in maximum thickness; the section is triangular. On the broadest face is scratched the likeness of a grotesque animal with a long upright neck. The other (fig. 7), which is a similar block of limestone (3 " x $2\frac{1}{4}$ " x $3\frac{3}{4}$ "), bears an animal essentially identical but more artistically finished. This latter stone is inscribed AN TI OX OY in a single

line above the back of the animal, parallel to the neck: there are also faint traces of two or three letters in front of the animal, under its snout. After prolonged examination of these I came to the conclusion that they were the initial letters of the same name. The artist had evidently begun to write here, but finding that he had not allowed sufficient room, transferred his inscription to the space he finally chose.

If we may assume that these absurd animal figures are *jeux d'esprit*—a sort of political caricature—we cannot find a more suitable event with which to associate them than this repulse by Simon of the demand of Antiochus Sidetes.*

In 135 Simon, with two of his sons, was treacherously murdered by his son-in-law Ptolemy, who aimed at supremacy. He wished to include John among the victims, and accordingly

... he sent others to Gazara to make away with John . . . and one ran before to Gazara, and told John that his father and brethren were perished, and he hath sent to slay thee also. And when he heard, he was sore amazed ; and he laid hands on the men that came to destroy him, and slew them ; for he perceived that they were seeking to destroy him.—I *Mace*, xvi 19-22.

John [Hyrcanus] then succeeded to the high-priesthood, with which event the First Book of the Maccabees closes.

The last reference to the town in ancient history occurs in the negotiations between John (Hyrcanus), the son of Simon, and the Roman Senate. Antiochus invaded Judaea in the first year of Hyrcanus' priesthood, and although Josephus does not definitely say so, it appears that he then recaptured Gezer. For after the death of Antiochus in 128, John addressed a letter to the Roman Senate, of which Josephus preserves the answer. This answer runs thus :—

Fanius the son of Marcus the praetor gathered the senate together on the eighth day before the ides of February. . . . The occasion was that the ambassadors sent by the people of the Jews . . . had somewhat to propose about that league of friendship and mutual assistance which subsisted between them and the Romans, and about other public affairs; who desired that Joppa and the havens, and Gazara and its springs, and the several other cities and

* This modification of a suggestion made in the QS report, where these curious graffiti were originally published, is due to Pere H. Vincent.

† II *Mace*, x 32 does not refer to Gezer but to Jazer, east of the Jordan.

countries of theirs which Antiochus had taken from them in the war, contrary to the decree of the senate, might be restored to them ; . . . it was therefore decreed, as to these points, to renew their league of friendship and mutual assistance.—*Jos. Ant.* XIII ix 2.

The stress laid on the good water-supply of the city will not escape notice. This passage shews that, not long after Simon's capture of the city, it had again fallen into Syrian hands, though no record has been preserved of the event itself. The destruction of Simon's dwelling-place, and the erection of an elaborate system of baths over part of the site, may be assigned to the years immediately following this recovery of the city.

On epigraphic grounds we may assign to about this period the cutting of the boundary inscriptions marking out the city's property. These remarkable and unique monuments must now be described.

The inscriptions are cut on outcrops of rock, at various places along a line surrounding the city site on the east and south. No inscriptions have been found on the west and north. There are in those directions few convenient rocks, and most probably the boundary line was there indicated by movable landmarks which have in the course of time disappeared. The places of those known are marked with a cross on the plan (fig. 8),* which has been drawn with the aid of a plane-table. The inscriptions will also be found on Plates x, xi. They all read **ΑΑΚΙΟΥ** in Greek letters, and **אלקיו** in Hebrew—that is, the genitive case of the proper name Alkios, and "the Boundary of Gezer." The only difference between the various inscriptions lies in the relative positions of the Hebrew and the Greek, and in the omission of the Y of the Greek in the first inscription, for want of room.

Of these inscriptions, nos. 1, 2 (Plate x, figs. 1, 2) were discovered by Professor Clermont-Ganneau in 1873, and no. 3 (Plate x, fig. 3) in 1881. The Dominicans of Saint-Etienne, Jerusalem, found no. 4 (Plate xi, fig. 4) in 1900. While searching for the last, a month or two after the beginning of the excavation, no. 5 (Plate xi, figs. 1, 2) was accidentally found : my father, who was with me, noticed it first. ‡

No. 4 is the only perfect specimen remaining. To exhibit the forms of the letters a diagram is given (fig. 9, no. 2), reduced from a rubbing. The first two were long ago excised, in hopes of transporting them to Europe, but were confiscated by the Ottoman government: the first is now in the Imperial Museum at Constantinople.

* The fine line crossing this map horizontally shews the limit of the large plan on Plate viii.

† The medial form of the η is used in all the inscriptions.

‡ I assumed that this fifth boundary inscription was identical with the Dominican stone, and did not realize till three years later that it was actually a new discovery. The Dominican inscription was accidentally re-discovered by the foreman of the works while shooting one Sunday afternoon.

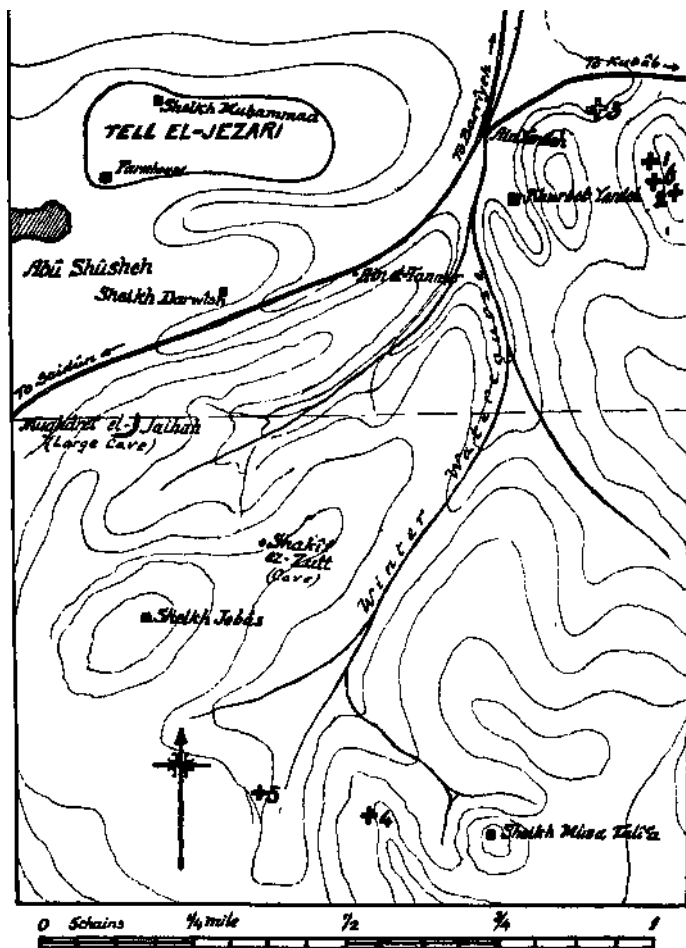


FIG. 8.—MAP OF THE BOUNDARY INSCRIPTIONS

No. 3 must have been destroyed by the fellahln at some time. I made many attempts to re-discover it, following the directions given by Professor Clermont-Ganneau in *ARP* (II, p. 231), but always in vain: and came to the conclusion that its site must now be represented by a rock the face of which shews evident signs of comparatively recent quarrying. No. 5 preserves the Greek word only: the Hebrew part of the inscription has at some time been wilfully battered away, leaving only a few faint traces, which are, however, sufficient to shew that the legend was identical with the others.

Z

FIG. 9.—INSCRIPTIONS NO. 6 (1) AND NO. 4 (2).

The explanation of these enigmatical inscriptions which attracts me most is the simplest—that they mark the boundaries of the city lands. Indeed, the fifth stone occurs in the course of an ancient boundary, marked out by boulders about 2 6" in diameter, which are well shewn in the photographic view (Plate xi, fig. 2).* There are some less definite remains of a similar boundary in connexion with the fourth stone also. Such

* For clearness a mark (+) has been made on the photograph above the principal stones. A few smaller intermediate stones can be detected by the reader for himself. Since the photograph was taken the boulders have all been broken up and removed for burning into lime.

ancient boundaries are common in Palestine, and fragments of similar alignments occur in many places on the hills round Gezer. I have followed most, if not all, of these, hoping to be led to another inscription, but in this have been disappointed. These boundaries are certainly older than local tradition can tell: the natives vaguely attribute them to the *Rum*, that is the Greeks, which simply means that nothing at all is known about them.

The name Alkios is probably that of some public-spirited governor under whose auspices the delimitation was marked out. It occurs but once else where, in an inscription on an ossuary found long ago at Lydd, not impossibly referring to the same person. The Alkios of the Lydd ossuary is called "Son of Simon Gobar," which is obscure: Professor Clermont-Ganneau makes the tempting suggestion (*ARP*, II, pp. 266, 343-349) that he may have been a son of Simon Maccabaeus, and consequently a brother of John Hyrcanus. This would account for the prominent position he held in the city.

It has been suggested that they mark out the limits of the Levitical possession, in accordance with *Numbers* xxxv 2-5, whereby the city was to be in the middle of a square, or at any rate a rectangular figure, whose sides were to be directed to the cardinal points and to be a thousand cubits out from the city wall. It is not easy to follow the arithmetic of this passage, but it would appear as though the "square of two thousand cubits every way" neglects the internal length and breadth of the city itself, or, what comes to the same thing, treats it as a point at the centre of the square. It will, however, be seen that the lines along which the inscriptions lie, if produced, would meet in a very acute angle a long distance from the city. Possibly there was one other stone of the series at 'Amwas: in the possession of a fellah of el-Kubab is a fragment of inscription reading  which he asserts he broke from a rock on the lands of 'Amwas.

Close to the first group of boundary stones there is another inscription, discovered by M. Leconte de Nouy, Professor Clermont-Ganneau's draughts man. It is numbered 6 in the plan, fig. 8, and is shewn in Plate xi, fig. 3, and also in fig. 9, no. 1, above. This inscription is a crux. The letters are well-formed square Hebrew characters, that appear to read . This does not make any known Hebrew or Aramaic word, and so far ingenuity has been expended on it in vain. The characters are clearly and boldly cut. The legend is engraved on a sunk space specially prepared for it, 6' 6¾" in length and 2' 7½" in breadth. The inscription itself measures 3 ft. by 1 ft.

It would be difficult now to find the rock-markings figured in *ARP*, II, pp. 233, 234, as the Jo'bas fig-tree to which the bearings are taken has been cut down. I am, however, convinced that they are mere natural markings in the rock. Such marks abound in the district and often have a very deceptive inscription-like appearance.

(f) *The Roman and Later Periods*

Not long after the Maccabaeon turmoils the ancient site must have been deserted: this is proved by the total absence of later antiquities. Possibly under the firm hand of the Romans the community, dwindled in numbers owing to the harassing wars of the previous century, felt that they could venture from behind their walls to a more convenient proximity to the springs. Half of the population moved eastward, and settled on the flat land between 'Ain Yerdeh and 'Ain et-Tannur, moving later up the hillock which still bears the ruined village of Khurbet Yerdeh. This settlement must have been of some importance, as is shewn by the fine bath and associated drain, described later in this work. The other half went westward and established themselves on the site of the modern village of Abu Shusheh, near the spring known as Bir el-Balad. This village presents few marks of antiquity; there is, however, a fragment of mosaic pavement in one of the houses.

The tombs opened during the excavation prove that in the fourth century A.D. there was a considerable Christian community representing the ancient Gezerites. No one lived on the mound itself, but the two sites we have named were both occupied. It was a mixed population, the ancient strain being combined with a foreign element, that now first makes its appearance in the tombs, and with one or two individuals possibly of Negro race. Of the history of the community during this period nothing is known. Very few objects of interest have come down to us from these settlements except those found in the tombs, described in Chap. V. Near Khurbet Yerdeh a ploughman found a fragment of marble, apparently part of a Byzantine tombstone, with a few Greek letters on it (fig. 10).

Professor Clermont-Ganneau, whose labours have lightened those of all subsequent investigators of the history of Gezer, has brought forward strong and ingenious arguments in favour of the very natural hypothesis that the

site of Gezer is the *Mont Gisart* of the Crusaders.* But the excavations revealed no trace of a Crusaders' occupation, nor is there a single stone to be seen, so far as I know, anywhere in the neighbourhood that shews signs of Crusader masons' workmanship, or that could be connected with either the stronghold or the Priory of Saint Katherine, for whose existence at "Mont Gisart" there is documentary evidence.

A few facts are to be learnt from some of the mediaeval Arab geographers regarding the later history of the site, † Yakut describes *Tell el-Jazar* as a stronghold in the province of Ramleh; 'Emad ed-Din names it as the place where the Muslims spent the night while on their way to attack Richard Coeur de Lion at Ashkelon; Beha' ed-Din describes certain empty



FIG. 10.—FRAGMENT OF A BYZANTINE TOMBSTONE

negotiations that took place between Richard and Salah ed-Din (Saladin) in 1191, the latter being then encamped on the site. Fourteen years before, Saladin had suffered defeat at the same place at the hands of Baldwin IV.

Again, Mujir ed-Din records a skirmish between Janbulat, governor of Jerusalem, and a predatory tribe of Bedawin, in the year 1495. It appears that on the 12th March of that year the Bedawin, prompted by the rival governor of Gaza, came up against the territory of Ramleh. The sub-governor of Ramleh, under the direction of Janbulat, set out from Ramleh in the direction of Ni'aneh, where he met a party of the Bedawin. These he drove back over the frontier line between the lands of Ramleh and of Gaza (the bed of the river that runs down the Wady es-Surar and enters the sea under the name of Nahr Rubin); but was himself in turn driven back in the direction of the villages of Khuldeh and *Tell el-Jazar*, both

* RAO, I, pp. 351-391, 401. † See for full references ARP, II, pp. 251-253.

inside Ramleh territory. The sub-governor entrenched himself in a long-vanished tower that then existed in the (now nearly totally ruined) village of Khuldeh, where a severe skirmish was fought, in which he was worsted. The governor of Jerusalem had left Ramleh shortly after his subordinate, and arriving at *Tell el-Jazar* heard the cries of the combatants at Khuldeh. Guided by the cries, he hurried to the rescue; but was beaten and narrowly escaped with his life. The rout was carried as far as *Tell el-Jazar*; for a commission to inquire into the matter, on visiting the site, found the remains of some of the victims on the lands of the latter village.

The wely that stands on the hill-top, which proved so serious an obstacle to the excavation, must have been built before A.D. 1607. This is shewn by an Arabic inscription roughly cut on a stone above the entrance. The inscription is of considerable interest; it runs thus:—

إن الله الله محمد رسول الله
 كتبها الفقير الحميم الذي [illegible]
 المبرك كنعان وجعل ائل [sic] وقف
 سنة الف ومئيد ١٥
 والذلّال هو الباقي

There is no God but Allah [abbreviated], Muhammad is the apostle of Allah. The poor and vile one who . . ., the Amir Kin'an, wrote it, and made the mound a wakf [property of a religious foundation], the year a thousand and a hundred 15.—And the Guide is the Everlasting.

I have been unable to find out who the Amir Kin'an may have been, or by what right or for what reason he dedicated the mound. The shrine itself, though a most unfortunate barrier to the examination of the hill, is of interest, on account of its name. It contains the tomb of *Sheikh Muhammad el-Jazairli*, that is, Sheikh Muhammad the Algerian. Absolutely nothing can be found in popular tradition about this person, and I am inclined to suspect that he never had a real existence at all, but that he has been developed in popular etymology, to account for the name of *Jazar* applied to the *tell*. The old Hebrew name of Gczer was of course forgotten with the city to which it was applied.

Probably during the unsettled conditions of the sixteenth and seventeenth centuries, the village in which the people had established themselves, after the abandonment of the ancient site, became deserted and fell into

ruin. It is still remembered in local tradition that the site of the modern village was uninhabited till about a hundred years ago. For a while the ruined houses were dens of robbers. Then settlers from other villages came, and so the modern population was established. They are a mixed community, the Palestinian tribes of *Kais* and *Yaman* being about equally represented, while there is also a fair proportion of Egyptians, settled by Ibrahim Pasha. The first of the new settlers established themselves in caves which still bear their names. This interruption in the continuity of the population is a sufficient reason for the absence of ancient field-names in the neighbourhood.

With the new settlers was a certain *darwsh* or holy man, who was known as *Add Shilshah* ("father [*i.e.* possessor] of a top-knot") on account of his long hair. Nothing but his name and one or two trivial legends are remembered, some of which are recorded in *ARP*. But when he died his tomb and shrine were erected in the middle of the village, and the old village name of Tell el-Jazar finally gave place to Abu Shusheh. The date in the inscription over the door of the saint's tomb is 1236 A.H., which corresponds to 1820-1 A.D.

Thus it comes that a squalid village of some 600 souls is all that remains to represent the ancient royal city of Gezer.

CHAPTER II

THE EXCAVATION OF GEZER: METHODS AND RESULTS

§ 3.—IDENTIFICATION OF THE SITE

THE village having changed its name, as we saw in the previous chapter, the tradition was interrupted, and the site of the city buried in oblivion. The credit of recovering it belongs to Professor Clermont-Ganneau; the story of this brilliant achievement is one of the romances of archaeology. In 1869, Professor Clermont-Ganneau happened to be reading the story of the Bedawin raid, which we have already abstracted from Mujir ed-Din, and was struck by the identity of the name of the *tell* there mentioned with that of the missing city, and by the geographical indications that the story affords for establishing its position. The place must be within a short distance of Ramleh, and within ear-shot of Khuldeh ; Ni'aneh, also mentioned in the narrative, must be close by. These three sites were all marked on the maps, but no map then available indicated the village of Tell el-Jazar, because of its change of name.

Two years afterwards Professor Clermont-Ganneau, then acting for the Palestine Exploration Fund, had an opportunity of investigating the question on the spot. Starting from the known points, by inquiry he ultimately succeeded in fixing the name *Tell el-Jazari** on the great mound at the foot of which the modern village of Abu Shusheh stands. This discovery was at once announced by the investigator, and the identity of the mound with the ancient site of Gezer proposed. The arguments for this identification depended upon (1) the survival of the ancient name; (2) the agreement of the site with the geographical conditions required by the delimitation of the territory of Ephraim, and by the various historical events connected with Gezer ; (3) the indications of

* The books and maps all agree in calling the mound *Tell Jezar*; but in the colloquial Arabic of the district (which assimilates the / of the article to an initial J) it is generally called *Tell ej-Jazari* or *Tell ej-Jazairli*.

the *Onomasticon* of Eusebius, which gives the distance of Gezer from Emmaus Nicopolis, the modern 'Amwas.* As Professor Clermont-Ganneau relates, his paper when submitted to the *Académie des Inscriptions*† was met with the comment, that for the full acceptance of the theory epigraphic evidence ought to be produced.

Such evidence was hardly to be hoped for in Palestine; but two years afterwards even this was forthcoming. The eminent scholar was then in Jerusalem. A fellah of Abu Ghosh brought him a rude copy of an inscription cut on a rock not far from 'Ain Yerdeh, the great spring at the foot of the *tell*. A first attempt at decipherment of the inscription, based on this transcript, is given in QS, 1874, p. 148; it shews that though creditable, considering the unlettered copyist, nothing could be made of it as it stood. Professor Clermont-Ganneau, however, took an early opportunity of examining the original. It was the first of the series of boundary inscriptions which have been described in the preceding chapter. These documents put the identification of Gezer on a basis of absolute certainty. There are a limited number of places in Palestine, such as Jerusalem and Joppa, of which the world has never lost sight, and which are therefore accepted beyond dispute as representing the ancient cities of the same or similar names. With this favoured few Gezer takes its place.

§ 4.—PROGRESS OF THE EXCAVATION

I now propose in a few words to give some account of the progress of the excavation of the site under the auspices of the Palestine Exploration Fund. In this description I shall confine myself strictly (as has already been remarked in the Preface) to experiences and deductions there from that may be useful in guiding other explorers in similar work.‡

* The *Onomasticon* gives the distance as 4 Roman miles *ἀπὸ Βεθαίου* from Emmaus Nicopolis. This is right as regards distance, but wrong as regards direction if we translate *ἀπὸ Βεθαίου* "North." But Professor Clermont-Ganneau points out that this expression literally means "in the norths," and ingeniously explains it as meaning "in one of the northward directions" (i.e. between N.W. and N.E.). In fact, it is about N.W. of 'Amwas. There is no ruin of any importance 4 miles North of 'Amwas.

† Entitled *Découverte de la ville royale chanaaneenne de Gezer*.

‡ It will, however, be useful to warn the would-be explorer of one source of inevitable trouble. I refer to the camp cook. This unfortunately indispensable functionary is perforce drawn from a class of people among whom selfishness is developed to the level of a fine

The Ottoman law permits an area not exceeding ten square kilometres, and a space of time not exceeding two years (with the possibility of a third year's renewal), for archaeological investigation; the objects found being the absolute property of the Ottoman Government. The area may be of any shape, and accordingly an irregular enclosure accompanying the application of the stated amount, designed to include about half a dozen minor sites together with the hill identified as Gezer, was marked out on a map. This, however, was superfluous, as Gezer alone occupied my whole attention. It is far better to mark the area as a square or circle, containing the site desired in the centre, and irrespective of other places. The explorer will thus be sure of having all of the ancient cemeteries within the area at his disposal.

The permit was received in Jerusalem, 14th April, 1902. Some local difficulties, into the details of which I need not enter, detained me in Jerusalem for another two months; not until the 8th June was it possible to establish the camp on the site. Three days were spent in setting the tents in order, in studying more closely than before all surface indications of concealed buildings, in a chain survey of the plateau at the top of the hill, and in engaging workmen and arranging terms of wages.*

I decided not to use trolleys for carrying away the earth. They are excellent for the expeditious removal of earth from one place to another; but to find out what the earth may contain, the old-fashioned and slower way of carrying a small quantity at a time, in a basket, is preferable.

art. No amount of consideration or kindness will produce in him the most rudimentary instinct of gratitude or of loyalty. After about three months the loneliness of the life begins to pall on him, and, without a thought of the inconvenience he causes, he announces his intention of leaving. To attempt to keep him would be a confession of weakness of which he is quick to take advantage; there is nothing for it but to let him go, and to face the problem of finding a substitute—a problem annually becoming more acute owing to the emigration of the best men to America, and the demoralization which the tourist traffic has produced in those that remain behind. It is, however, fair to admit that the *ninth* of the series of cooks who have served the camp at Gezer was not wholly unsatisfactory!

* It may be useful to state here the wages that were found satisfactory—

Men	two beshliks (about one shilling) per day;
Boys and women	one beshlik;
Water-carrier	three beshliks (including hire of donkey);

in addition to which regular sums there was given a small gratuity for all objects found and considered worth preserving. This *bakhshish* is divided equally among the gang in whose pit the object is found, so that each member watches the others and prevents the pilfering of objects for private trading. It is desirable, in order to increase their mutual vigilance, that the men associated in one gang should come from different villages.

In digging the trenches, I first grouped the men into gangs consisting of one pick-man to loosen the stiff earth, one hoe-man to fill the baskets, and two or three basket boys or women to carry the waste earth away. Each gang worked in an area of 10' square, for the antiquities and buildings in which they were responsible. This was the method followed in the excavation of the mounds in the Hebron district, dug under the previous permit held by the Fund. Sixteen gangs were employed, so that the work was concentrated within a large pit, 40' square. When this pit was finished a second was laid out immediately south of it; when the chain of pits was carried completely across the mound from side to side the trench was finished, and then the second, next to it, was begun in the same way.

This arrangement of the men was found not altogether convenient. Ten square feet was not sufficient to give a "right of way" to the basket-carriers, the gangs being crowded too much together, and the various labourers getting in each other's way. Accordingly the small pits assigned to the various gangs were enlarged. The width of 10' was retained in order not to affect the width of the trenches; the small pits were gradually lengthened, by repeated experiments, to 15'. This was found the most practicable size; 16' was tried, but the work then proceeded too slowly.

A different distribution of the workpeople was afterwards introduced, which was found economical in time, money, and labour. When each gang contained two men, working alternately, it was noticed that the pick-man would loosen a great quantity of earth, and then take his ease perhaps for ten minutes while the women should carry it all away. To prevent this, a modification was introduced which I unhesitatingly recommend to all excavators in Palestine. Instead of dividing the pit into a number of small squares, it was subdivided into rectangles, whose length occupied the full width of the pit, and whose breadth was 15'; thus, each pit of 90' by 40', which became the normal size, was subdivided into six rectangles, each 40' by 15'. In each rectangle was placed a large gang consisting of two pick-men, three hoe-men, with nine basketers; it was found that this balance of forces was just even enough to keep the labourers busy all day, and gave no time for the intervals of idleness that were inevitable under the previous arrangement. It will be seen that one man's wages were saved in each rectangle. In pits of great depth it was necessary to engage at least one extra basket-carrier for every gang, as otherwise the work would be delayed on account of the additional time spent in the journey from the pit to the dump-heap.

Each pit was sunk to the rock, over its whole surface, before the next was begun. At first the walls on the rock were left standing; but as it was found that sometimes they concealed the entrances to caves, the broader walls of the lowermost strata were cleared away. Of course it was necessary entirely to demolish all walls of the upper strata: the only exceptions made being a few buildings such as the Maccabaeen castle, the Syrian bath-house, the reservoirs in VI 18, the large Canaanite castle in IV 15, 16, and the temple in IV 27-29. These buildings were considered too valuable to destroy, and the underlying debris of earlier periods was in each case abandoned without examination.

The day's work was sunrise to sunset, with two intervals for meals. In the month of Ramadan special arrangements have to be made, to allow the workmen home early to prepare the evening meal by which the day's fast is broken. About

an hour before sunset the examination of each day's harvest of objects begins. An essential preliminary to this part of the work is to have the *j'ar-Itandles* all sorted out from the piles of potsherds and brushed or washed clean, in search of potters' stamps. When all the objects required are selected, everything not required should be gathered and cast into a cistern or otherwise re-buried. This prevents their removal by unauthorized persons—an important point in view of the nature of the Ottoman regulations.

For convenience in making the plans, the trenches were all laid out exactly north and south. Most of them were 40' wide. Trench No. 6* is 60' across, because it is the junction of two great clearances, dug independently, the interval between which was not an even multiple of 40'. Trenches 20 and 21 were dug together, i.e. in short pits of 80' width, as also were the northern halves of 27 and 28 and the southern halves of 5 and 6.

The most important question to decide, before commencing the excavation, was the best way to attack the mound, where to begin, and how to pursue the work once it was begun. Under ideal financial conditions there is only one legitimate and scientific way of excavating a mound of accumulation; namely, to dig a trench at one end and, after clearing it to the rock, to dig the next trench adjacent to it of the same width, throwing the waste soil into the first trench, and so proceeding from end to end of the mound. This method I intended to follow. Though the accumulation at the western end had the more tempting appearance, I considered that it would be wiser to dig at first at the eastern end, keeping as far as possible from the shrine of El-Jazairli and the modern graveyard until the childish suspiciousness which is second nature with the fellahin should have been allayed.

There is an extensive area on the Eastern Hill on which the rock crops out to the surface. Trial shafts were dug to the west of this, in three rows, from north to south. In the first (easternmost) row of shafts the depth of soil was found to be not more than 3'-4'. In the next row of trial shafts the soil was rather deeper, and I accordingly decided to cut a trench across the mound that should include these in its course.

The beginning of the work was discouraging. The heaps of cast limestone, subsequently found inside the city wall all round, contained no antiquities of importance: the stratification was much disturbed, and the walls meagre and ruined; the debris was shallow. In fact, as it afterwards appeared, if I had intentionally chosen a disappointing place to begin upon, I could not have done so more successfully. On the 30th June, however, the first important discovery—the Troglodyte burial cave—was made; and a few days after the remarkable Maccabaeian well was opened. On the 8th July I had the pleasure of welcoming my father at

* The trenches are numbered in order of position, not in the order in which they were dug.

the excavation camp, and he gave timely help in the work of clearing out the burial cave and the examination of the human remains it contained. At the same time a gang of men was employed in digging trenches round the outer face of the city wall, and so determining the limits of the city.

After practical experience of the rate of work, I found the ideal I had set before me to be impossible. The amount of money which the Society was enabled to put at my disposal was insufficient to turn over the whole mound within the period of the Ottoman permit; and even if it were, the rate at which the antiquities would turn out of the soil would be too rapid to allow of their due recording and examination.

Before the commencement of the excavation, the most striking external indication of the treasures lying hidden in the mound was afforded by the tops of two large stones projecting a foot or two above its surface. These had already attracted the attention of the Dominicans of Saint-Itienne, Jerusalem, on one of their visits to the site, and sketches of them appear in the journal edited by that foundation, the *Revue Biblique*. The stones had also attracted the less legitimate attention of the tomb-plundering natives of el-Kubab, who had surreptitiously dug a hole around them hoping to be led to buried treasure; I never heard, however, that they were successful in finding anything. Messrs. Bergheim also, I believe, had made some small excavation in the neighbourhood of the stones. In consequence of these researches, when I first saw the site, there was a small hollow on the surface of the mound, from inside which the two stones projected. The position of this hollow was on the eastern margin of the gentle rise culminating in the knoll on which is built the wely.

Beside and to the west of the stones a third was lying on the surface of the ground. Unlike the standing monoliths, which displayed no evident marks of tooling, it had been carefully squared. The two ends had been broken, apparently comparatively recently, and probably had the excavations not intervened and saved it from its fate, it would ultimately have been smashed up altogether by the village masons seeking building stones.

Of course so obvious a clue had to be followed, and accordingly, on 1st September, 1902, a pit was commenced south of and including the standing stones. After a week's work in this pit another large stone was found, comparable in size with the other two, whose extreme top projected

above the surface; but owing to the smallness of the part exposed it had been unnoticed among the multitudes of smaller stones with which the mound is strewn. Between this and the other two large stones a smaller pillar, not more than half the height and of course completely buried in the earth, made its appearance.

The results of the week's trial being thus so stimulating, it was resolved to transfer the whole body of labourers from the Eastern Hill, where they were at the time working, to the neighbourhood of the standing stones; and large pits were laid out for excavation north and south of the stones, so as to expose a sufficient area around them. This work was begun on the 8th September. Before very long the characteristic remains of the now famous High Place were unearthed one by one. By a fortnight all the stones of the alignment had been exposed, and the two northernmost surviving, which had fallen, were re-erected. On the nth September the first discovery of jar-buried infants was made. On the 20th the supposed sacred cave was opened. In short, the work on the region of the High Place occupied practically the whole of the rest of the excavating year, that is till the following June. During that time discoveries were daily made—many of them of course not definitely connected with the place of worship itself, but with the buildings that had been erected over its site after it had, in a measure, lost its sanctity.

Towards the end of 1902 the work of excavation was first impeded, then entirely interrupted, by the serious cholera epidemic of that year. This disease spread northward from Gaza, and in the first week of November reached Abu ShOsheh. As very strict quarantine regulations were enforced, and it would have been impossible to obtain supplies—to say nothing of the danger of infection—I felt obliged to close the work for the year on 8th November. A few days before, one of the camp guards had had a mild attack of the disease in the tents, and on the day preceding my departure two of the labourers had collapsed under it on the works—one of them died the following morning. In the village of Abu Shusheh 31 deaths took place during the outbreak; in the neighbouring village of el-Kubab several hundreds died.

It was impossible to return to the district, owing to the quarantine regulations, until the beginning of the following February; from that onwards the work advanced without interruption, save for intervals of three or four weeks for rest in midsummer and midwinter, till it was finally closed by the cessation of the permit.

Having tried the experiment, I have come to the conclusion that it is hardly worth while trying to keep the work at full pressure through the harvest season. The able-bodied men and women, and the older children, all go to the work of the fields, leaving only the weaklings available. This, however, is a convenient time to attack the city cemeteries, which require a few gangs only. As usually the results of tomb-digging produce good *bakhshish*, it will probably be found practicable to retain a staff of a dozen labourers or so, who most likely will find as much in the time as the excavator can cope with.

During 1903 the work was principally concentrated on the Central Valley, the chief aim in view being the complete clearance of the High Place. The whole area of the sanctuary was dug over, and the pit extended east, west, and south—northward it was limited by the city wall—till I felt satisfied that there was no more to be found out by excavation regarding that important centre of worship. In the course of this work a number of interesting minor discoveries were made—the first Hebrew potter's stamp from Gezer, the unique Ashtoreth Karnaim statuette, and the enigmatical altar of Eunelos; but no building of importance came to light. In the latter part of the year the strange cup-marked area with its associated caves came to light; and close by was found the enormous reservoir, the clearance of which occupied nearly six months of the time of two gangs.

Whether the weakness left by the cholera was responsible or not I cannot say, but in any case the summer of 1903 was peculiarly trying. The neighbourhood of Abu Shusheh is usually accounted remarkably healthy, but in that year, during the months of July, August, and September, a severe malaria raged in the village. Not a day passed that at least one or two of the labourers did not leave the trenches with violent fever. The foreman was laid aside with it five or six times; and though I myself escaped while the epidemic was at its height, an attack confined me to my tent for a week in the middle of October. In September I decided that it would be as well to give the enervated labourers a rest, and so suspended the work for three weeks. Except for this break, and occasional single days lost on account of rain, or of business which called me to Jerusalem or to Jaffa, the excavation was prosecuted continuously from the beginning of February till the week before Christmas.

In 1904 the original permit came to an end; but an application for its extension was made to the Ottoman authorities, and granted by them. The work accordingly was pursued without interruption. On the 18th March

I had the honour of receiving the late Sir Charles Wilson, then the President of the Executive Committee of the Society, whose constant interest in the work had been a never-failing source of encouragement, for a few days' visit. The work was then being prosecuted on the Western Hill. This proved—as I had half expected it would—to be the richest part of the city. Many valuable objects were recovered from here, chief of which was the first Assyrian tablet above described, which was found early in May.

In the summer, advantage was taken of the extended permit to make a search for the tombs of the ancient inhabitants—a research which proved very fruitful in results. Although no fine tombs, comparable with the wonderful sepulchre of Apollophanes at Beit Jibrin, came to light, a more complete knowledge was gained of the ordinary burial customs of successive periods in Palestine than ever before.

The excavation on the mound was resumed in the autumn, and rewarded almost immediately by the recovery of the Maccabaeian Castle. The work was continued, partly here and partly on the Western Hill, during 1905. The castle and the remarkable bath-house were unearthed in the Central Valley, while on the Western Hill a number of important buildings were found, and, among other objects of importance, the second cuneiform tablet.

The permit should have come to an end on 14th June, 1905 ; but representations having been made to Hamdy Bey that two months had necessarily been lost to the excavation by reason of the cholera epidemic, His Excellency most kindly granted two months' further extension to compensate for this loss of time. These proved to be fruitful months : the first three of the Philistine tombs were found ; and the work was finally crowned by the great catacomb on the Western Hill with its rich deposits. In the middle of August the permit finally lapsed, and I left Gezer having turned over about two-fifths of the available surface.

It was suggested to the Committee of the Fund that it was far better to return to a mound whose results had been so rich than to leave it thus imperfectly examined in favour of any other site in the country. This was received favourably by the Committee, and in consequence application was made for a second permit for the same place. The application was, after a time, granted ; and the work resumed on the 15th March, 1907.

My first care on returning to the site was to erect a series of huts

to replace the tents that had previously, sheltered the party. From every point of view these were found to be an improvement.

A happy year followed the re-commencement of the work; all the three pits that had been opened under the first permit were extended, and interesting "finds" made in each of them. A remarkable castle in the Central Valley; two more "Philistine" tombs; and, among smaller objects, the "Zodiac" tablet and a model shrine or "soul-house," may be mentioned as the most remarkable discoveries. During the harvest some fresh tombs were opened, without, perhaps, adding much to the knowledge that the previous campaign had given us; but the discovery of a Roman bath near 'Ain Yerdeh opened up fresh and unexpected epochs in the history of the city. Above all, the autumn of 1907 was distinguished by the discovery of the Water-passage, one of the most extraordinary remains of antiquity in Palestine.

The next year, 1908, was perhaps on the whole less rich in noteworthy discoveries than previous years had been; the cave with graffiti being the most striking. There were a number of important smaller objects, of which the Hebrew calendar was the most valuable. During the few weeks of 1909 which were included in the permit the weather was very bad and the work much hampered in consequence; a remarkably perfect olive-press and an Egyptian statuette were the only noteworthy discoveries.

If nothing else has been gained by the work at Gezer, it may at least be claimed to have proved that work throughout the year is not impossible in Palestine—at least in certain parts of the country. In the Gh6r, summer work would of course be out of the question; but at Gezer not more than two or three days in each year were too hot for digging. Many of the days in the rainy season also are ideal for outdoor work. As the three years allowed by the law are barely sufficient to exhaust even one of the minor mounds, every possible day is precious. There should be sufficient funds to allow for a rotation of directors and foremen, so that each could have a few weeks' rest in turn; for the labourers the Sunday break—which if only for purely physical reasons it is important to observe—is sufficient. I have made a rough calculation of the financial support necessary to enable a party of explorers to turn over the whole mound of Gezer in three years, assuming that the work is to proceed continuously exclusive of Sundays and wet days, and taking into account the necessity of an increase in the archaeological staff with every increase in the number of labourers. I find that a sum of at least £350 *per mensem* would be requisite; and this does not allow any margin for the extra expenses involved by such special work as the examination of the Central Reservoir and the Water-passage.

§ 5.—THE PLAN OF THE PRESENT WORK, AND THE CHRONOLOGICAL
CLASSIFICATION OF THE REMAINS.

The plan upon which this work is designed has already been explained in general in the Preface; but before the reader passes on to the detailed description of the results of the excavation, which begins in the following chapter, it will be necessary to put him in possession of some further principles that have been kept in view while the description was being written.

There are three heads under which antiquities can be classified—material, use, and date. I have already explained in the Preface why classification by date cannot be made the basis of a scientific account of the discoveries. Classification by *material* is equally inadmissible, as certain types of objects, such as beads and spindle-whorls—and indeed some individual specimens—are made of a variety of materials. The *use* for which the object was made is, for purposes of classification, the point of chief importance. This implies, as a moment's thought will shew the reader, that the objects are here primarily valued, not for their own intrinsic interest, but as illustrations of the life, manners, and customs of the inhabitants; in other words, that the *anthropological* significance of the discoveries has been kept in the foreground. For this reason the first of the descriptive chapters is devoted to the people themselves, and the second and third to a detailed study of the city they inhabited, and of the cemeteries around it; and for this reason also the commonplace details of daily life within the walls of the city are examined, under their various headings, before we deal with the wider questions of the relationship between the inhabitants and their contemporaries (in trade and in warfare), or the supernatural (in religion).

But while this utilitarian classification is the basis of the work, it has not been forgotten that a chronological classification is an absolute necessity; and that the date of every object described must be indicated as nearly as circumstances permit. Where possible, the simplest and best way of giving this information is by stating in which stratum an object happened to be found; but in the case of Gezer this method is not admissible, owing to the irregularity of the stratification—in some parts of the mound only two strata were found, in others eight. An artificial division into culture periods is the second-best method, and this is the

plan which I have adopted. It is not amiss, however, to remind the reader that these periods must not be likened to so many labelled pigeon-holes, with fixed partitions between them: there was never a sudden breach of continuity, when people agreed to abandon the use of one group of art-motives, and to adopt another. Like the successive styles of Gothic architecture, the periods rather resemble the colours of a prism, shading gradually one into another. When limiting dates are stated, in terms of years B.C., for any of the periods into which I have ventured to divide the course of civilization, the date midway between the two limits is that in which the characteristics of the period were most conspicuous.

Various attempts have been made, in previous reports of Palestinian excavations, to formulate a scheme of chronological classification. All these, for various reasons, are unsatisfactory. That adopted by Dr. Bliss and myself, for example, in *Excavations in Palestine*, I now with larger experience feel reposes too much weight on the Israelite immigration as a cardinal point—which, whatever influence it may have had on the cities whose excavation is described in that work, did not greatly affect Gezer and other cities that were outside the limits of the Hebrew domination. The nomenclature of the various divisions is also open to criticism. A numerical system (analogous to the "First and Second Minoan," etc., of Cretan explorers) now appeals to me as more scientific; but it is difficult to choose a sufficiently exact territorial adjective, "Palestinian" would not serve, as Palestine proper is merely the strip of land occupied by the Philistines; and although Gezer happens to lie on the borders of this territory, some name is required which would more accurately denote the whole of the region now improperly called Palestine. For a similar reason "Canaanite" is objectionable. I finally decided that "Semitic"* was sufficiently general to include the successive civilizations of Amorite and Hebrew, and that by "Pre-Semitic" the culture of the primitive cave-dwelling race could sufficiently be expressed. For the latest period such words as "Maccabaeon," "Ptolemaic," and "Seleucid" have previously been employed, none of which are satisfactory; for though the Maccabees, the Ptolemys, and the Seleucids all tried to influence the religious and

* Even for this term a reservation must be made in that it does not include the *Philistines* within its scope; but in view of the exotic nature of the Philistine civilization this may be an advantage.

artistic development of their generations in one way or another, they were unable to stem the irresistible tide of evolution. Hellenic influence is the dominating factor that distinguishes this period, and I have chosen the word "Hellenistic"* as most aptly conveying the chief characteristic that distinguishes the remains of this epoch.

There remains the question of the subdivision of the long succession of Semitic periods. The stratification, as has just been said, is not sufficiently uniform to date the objects by the numerical order of the Gezer cities; but here the dominant influence of Egypt comes to our aid. The periods of Egyptian history can very conveniently be taken as chronological data, at least for the earlier half of the Semitic domination. For the later, the establishment in Jerusalem of the Hebrew monarchy, and its final destruction, supply adequate reference dates; the Solomonic associations of Gezer make this all the more appropriate to our subject.

A table of the successive periods—including the Post-Maccabaeon—will be found prefixed to the first chapter. About this table only three remarks need for the present be made. In the first place, the absolute chronology of the earlier periods must be left open till Egyptologists finally come to an agreement regarding their dates. Secondly, it may sometimes be convenient to divide the sixth period into two subdivisions; the first of these (from B.c. 550 to 300) may fittingly be called the Persian period, and the second the Hellenistic proper. Thirdly, the dates given for the later periods do not claim to be more than round numbers.

The reader may be reminded in conclusion that even the best scheme of classification, from whatever point of view it may be planned, cannot be carried out with absolute rigidity. There must be a certain amount of overlap for which allowance has to be made; and there must also be objects about whose use and date there is room for at least two conflicting opinions. These difficulties have to be accepted, with the inconsistencies which they inevitably involve.

* Perhaps *Hellenizing* would be more strictly correct; but the slight gam in accuracy did not seem to me sufficient to justify the constant employment of so awkward a vocable; and it involves in its use solecisms analogous to the absurd expressions "Crusading fortress," "Crusading church," which are seen so frequently. (Churches and fortresses do not "crusade" !)

CHAPTER III

THE PEOPLE OF GEZER

§ 6.—OSTEOLOGY OF THE INHABITANTS

IN almost every part of the excavation, and at all levels, human bones were found in considerable quantities. It was, however, disappointing to find that for the greater part they were in such a condition of disintegration that accurate measurements could be made of a comparatively small number, either of skulls or of long bones. Few of the skulls were complete: usually the basal, and often the facial parts had decayed, and notwithstanding every care very few of the bones could be moved without their falling to pieces. Many of the measurements had to be made on the bones while still *in situ*. Of the long bones, a large proportion had lost their articular ends through decay, so that the determination of their lengths, and the deduction of the stature of their owners, could be no more than approximate in many cases.

It has been felt that to cumber the pages of this book with elaborate tables of dimensions and such particulars, which appeal only to a limited number of specialists, would be a waste of valuable space. These it is hoped later to publish elsewhere. Meanwhile we give the general results of an examination of all the human bones that were found available for scientific purposes, so far as they reveal the physical character of the people. These are stated in chronological order.

(a) *The Pre-Semitic Period*

The largest accumulation of the bones of this race was found in the lower stratum of human remains in the Crematorium on the Eastern Hill. These were broken into fragments and much distorted by the process of burning: they had moreover been comminuted by being trodden down, when in later times the cave was used as a burial chamber. The number of individuals must have been considerable. Fragments of at least twenty adult mandibles were found, and there were portions of others of

children and infants. About 450 fragments were recovered from this mass of debris whose anatomical features could be ascertained.

From the portions of femora and tibiae collected, from whose surface markings it was possible to estimate the size of the whole bone, it was evident that these people were of small stature—probably averaging about 5' 6". Some of the females cannot have exceeded 5' 3". In a few instances the femora were platymeric, but this condition was uncommon. The amount of pilastering was small, as the *linea aspera* was not prominent. About 30 per cent of the tibiae shewed some degree of platynemia, but others were conspicuously eurycnemic. Only one or two shewed traces of the articular notch on the anterior edge of the lower border for the neck of the astragalus, which is supposed to be correlated with the habit of squatting. On all the astragali, however, there was a forward extension of the tibial malleolar facet which is usually associated with that notch. The fibulae were stout and channelled. The arm-bones were slender but with well-marked ridges: only 4 per cent of the humeri shewed the supra-trochlear perforation so common in the bones of early Egyptians. The sacral and iliac fragments were those of a mesatipelvic race.

The cranial bones were very much broken. The fragments were thick, and the surface appeared in many cases to present strong muscular ridges. So far as the curvatures of the surfaces could be trusted as a guide, the common cranial shape seems to have been ovate-ellipsoid, fairly well arched longitudinally, but rather flat-sided. The calvariae, so far as they could be restored, appeared to be dolichocephalic. A calvaria found in another cave, with pottery like that in the cave of burnt bones, was dolichocephalic, mesognathous, with moderate brow-ridges, low forehead, and deep fronto-nasal notch. The height was less than the breadth, and the capacity was small.

In the mandibles the chin seemed small and low, the molar teeth large, the rami of the jaw wide and low.

Scarcely any bones were found shewing marks of senility.

(b) The Semitic Periods

It was impossible to detect any physical characters which could be regarded as peculiar to any one of the Semitic Periods. In the same stratum and even on the same spot specimens coexisted which exhibited small variations of head-form and stature, and as a whole the

earliest inhabitants of the First Semitic Period were indistinguishable from those of the later occupations. Some minor points of difference that exist are duly noted below. Probably, therefore, the several immigrations were all of the same stock. There were no doubt individuals shewing marked divergencies. At least two crania were in shape, size, and facial character markedly negroid in type, and several, especially of those found in the city dating from about 1500 B.C., shewed the elongated oval form with large parietal eminences which is common

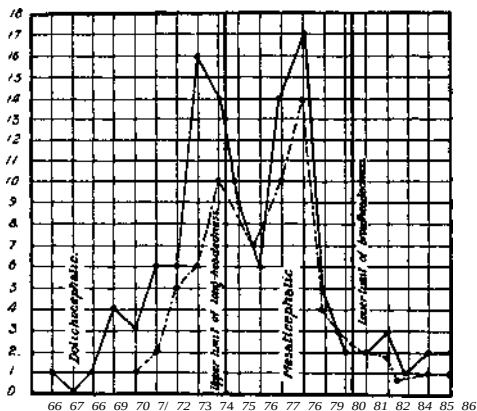


FIG. 11.—CURVE OF CEPHALIC INDEX
(Breadth x 100 — length)

in Egypt but rare in Palestine. From the many evidences of close Egyptian connexion with the city this was only to be expected.

In consequence of the damaged state of the crania only a little under a hundred specimens could be completely measured. The fragments of the broken examples, however, on being scrutinized were found to be comparable in character with their more perfect neighbours, and corroborated the deductions drawn from the latter.

Taking first the crania, we note that the majority of the skulls were of moderate size and breadth; few were large. The majority shewed a length : breadth proportion of 100 : 77, but there was a smaller group of

lower width, in about the proportion of 100 : 72. These narrower heads were commoner in the older deposits, though some of them are of the Mycenaean age. The diagram, fig. 11, graphically represents the range of proportion: the *firm* line gives the result for the First and Second Semitic Periods, the *dotted* line for the Third and Fourth. The brow-ridges are seldom massive and overhanging: the forehead is generally narrow—often low.

The nose is usually fairly prominent; it has a comparatively narrow anterior aperture. In fig. 12 is represented the relation of the total nasal height to the width of the skeletal anterior nasal opening. This shews that the largest number have a proportion of 100 : 47. In a few, and these usually of the older period, the proportion rises to 100 : 56. But on the other hand in a cranium of the Maccabaeen age even a greater width was found—100 : 60.

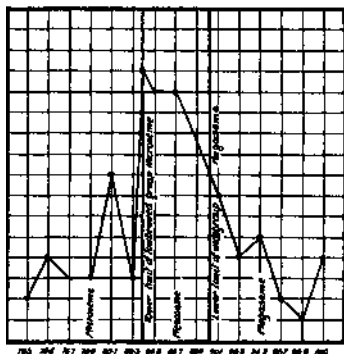


FIG. 13.—CURVE OF ORBITAL INDEX
(Orbital height X 100 orbital width)

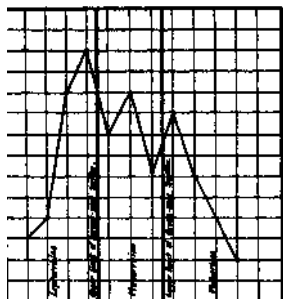


FIG. 12.—CURVE OF NASAL INDEX
(Nasal width X 100 — nasal height)

The orbital openings are seldom round, except in some crania of later age. They are usually much greater in breadth than in height, and the long axis is oblique, drooping downwards and outwards. In fig. 13 is shewn the proportion of orbital height to width: in the majority this ranges from 83 : 100 to 86 : 100.

The cheek-bones are fairly but not obtrusively prominent. The faces are seldom broad, but still more rarely very long and narrow. The length from the root of the nose to the mid point of the upper jaw is in the

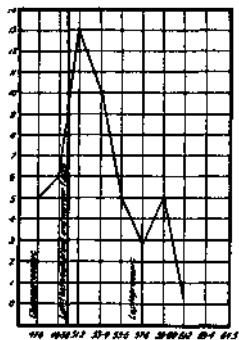


FIG. 14.—CURVE OF FACIAL INDEX
(Facial height x 100 — biryomatic breadth)

of a large number of imperfect crania shews that it rather understates the proportion of orthognathous to mesognathous skulls.

The head is seldom high: the contour of the roof is usually a uniform curve, and the hinder part is generally narrow. (In this respect the Gezer crania are in marked contrast to those found in a cave I have seen at Safed, which a very probable local tradition asserts was used as a receptacle for the bodies of the slaughtered Crusaders. Among these the back of the skull is usually wide, high, and flat.) The female heads are of the same type as the males, but smoother and smaller, and with sharp edges to the orbit.

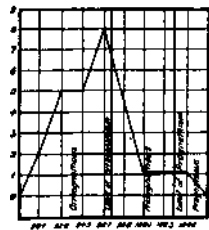


FIG. 15.—CURVE OF GNATHIC INDEX

greatest number just half the greatest facial breadth. The range of variation in this respect is shewn in fig. 14.

The chin is generally moderate, seldom prominent, and the teeth are usually large. The jaws do not as a rule protrude forwards. Only one of the definitely Canaanite crania and one of the detached maxillae shewed *very marked* prognathism. The two negroid crania referred to above were also strongly prognathous. Sometimes the upper incisors projected forward, although the jaws were normal. This dental prognathism, however, is an individual, not a racial peculiarity. In fig. 15 is shewn the relative frequency of prognathism in a selected number of specimens; but the structure of a large number of imperfect crania shews that it rather understates the proportion of orthognathous to mesognathous skulls.

With regard to the other bones exhumed, information was obtained from them as to the stature and general development of the people represented. A comparatively large number of these were bones of adolescents, which seems to indicate a disproportionally great mortality of persons under 21 years. The bones of over 200 individuals of adult age were measured for the estimation of stature, only those with perfect articular extremities being selected, and the cal-

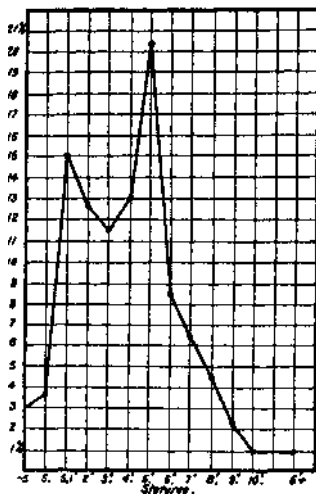


FIG. 16.—CURVE OF VARIATIONS OF STATURE

The race to which these bones belonged must have so closely resembled the modern fellabin, that a few words of description of the external characters of these may suitably be appended. The average male stature is 5' 6"-5' 7½", though a few exceed 6' : the female stature ranges from 4' 11" to 5' 6". The heads of the men are almost all dolicho-ellipsoid, with rounded foreheads, moderately prominent at the frontal eminences but bulging medially. The brows are fairly heavy, often rising at the lateral end, and scarcely ever synophryous. The noses are for the greater part prominent and fairly straight, with large cartilages and alae, but with narrow nostrils. In a few the nose is slightly aquiline : it is very rarely concave. The inter-orbital width is considerable, and the columna nasi wide. The malar regions are moderately prominent: the chin is weak and tends to recede: the lips are fairly thick and often prominent: the eyes are usually fairly large and prominent, with iris ranging in colour from yellowish brown to dark blackish brown. Facial hair ranges from dark brown to black, but it is not very abundant or general: the beard is short and curly. In the women, the faces are proportionally wider and shorter than in the males, the head outlines being more oval. The foreheads are flatter: the nose is seldom quite straight or high-bridged ; it is usually flatter at the upper bony portion and wider at the alar region. The eyes range in colour from very dark brown to black ; sometimes they are light yellowish brown, but blue only by the rarest exception. The hair is usually dark brown or black, but sometimes is distinctly fair. In the foot the great toe is in the majority of cases set straight on the metatarsal, not bent outwards ; in the males the second toe appears generally to be a little longer than the first, but this is not the case in the females.

The plate of photographs (Plate xii), selected from a large series, shews fairly the general appearance of men and women of various ages, and probably sufficiently represents the people of ancient Gezer as well.

The interesting bones from the " Philistine " graves (described in Chapter V) are comparable with the types of ancient Cretan bones described by Duckworth and Hawes, and with Cretan bones in the Cambridge Museum. They represent a people of fairly tall stature (the man in grave 2 was 5' 10", that in grave 3 was 6' 3½"). They were probably about or under 40 years of age. In all the femora were not pilastered and the tibiae not platynemic. The skulls were ellipsoidal, mesaticephalic, orthognathous, megaseme (with wide orbits), mesorrhine

(with moderately wide nose), and microdont. The female skull in grave 4 was a little wider in proportion, and though the teeth were moderately small, the incisors projected forward, though not enough to make the face prognathous. The lower teeth were also very oblique.

§ 7.—CONDITIONS OF LIFE IN THE CITY

It is obvious that the most elementary rules of sanitary science were unknown, or at least unpractised, by the inhabitants of ancient Gezer, and that the "happy-go-lucky" existence—I need hardly apologize for the colloquialism, which so perfectly expresses the facts—of the modern fellah found a complete counterpart in the life of his predecessors. Indeed the fellah is probably in some respects the more fortunate. He at least spends his days in the open air, either in the fields, or with his flocks, or in the courtyard of the village guesthouse. There is not one of the inhabitants of a modern village who need be confined to his house the whole of the day, unless he be held by age and infirmity.

In Gezer and other cities of the same type the case was different. A huge maze of crooked, narrow, airless streets was shut inside a thick wall, and the whole population had to find room somewhere or other inside that area. There must have been a considerable sedentary population of craftsmen—weavers, carpenters, and the like—who seldom if ever escaped from the bounds of their own workshops. Those who have *smelt* their way through the filthy Jewish quarter of Jerusalem are in a good position to realize what a result the crowding of these unhealthy people must have had.

It need hardly be said that there is no trace of any sanitary conveniences, any more than there is in the majority of the modern villages. Each of the latter is practically girdled by a ring of excreta, which taints the air hideously from whatever side the village is approached. The case must have been worse in the ancient city, on account of the larger population, much of it confined within the walls—especially during sieges, when the whole of the people would be shut in.*

The only contrivances that can certainly be called drains were the

* It may be supposed that they had portable contrivances of some sort, but these had to be emptied somewhere: there was little or no formal sewage system, as noted in the next paragraph.

vertical shafts of jars, that were found in two or three places, more fully described in the following chapter. These did nothing but carry sewage down vertically into the earth below the house, where it found a lodgement as best it could. Naturally the earth under the foundation of the house would before long become impregnated with unclean refuse. There was but one sewer, belonging to the Maccabaeon period: with characteristic carelessness this ran right under the entrance to the governor's castle. The scraps of built channels found here and there are probably not for sewage, but for conveying water to cisterns. If they were for sewage they were inefficient, for being carelessly built they very likely leaked along their whole course.

In time of siege the atmosphere must have been pestilential: for the cattle would no doubt have been driven into the city and would be confined therein.

If we turn from this unsavoury subject and look to another aspect of the question we find further indications of unhealthy conditions. We shall see in the following chapter that sometimes men and animals fell into the cisterns and were drowned. We can but hope that the water was never used again: certainly the bodies were never taken out. The great central reservoir must have filled the city with mosquitos and sandflies—the latter are still a perfect plague during the month of May and, to a lesser degree, in September. This would be in any case a pest, but if malaria was already endemic in the country—as is highly probable—the reservoir would have much to answer for. And on the (apparently rare) occasions when the reservoir was cleaned the silt was "dumped" beside it and there allowed to fester.

Under these circumstances it is not surprising to find evidences in the tombs of a high rate of mortality. This may be inferred from the comparatively large number of youthful bones, and the small number of bones shewing evidences of advanced age. Probably (as among the modern fellahin) the young aged more rapidly than in Western countries: no doubt also the modern custom of premature marriage, with its attendant result of early child-bearing, was practised, and had all the physical consequences which this involves.

A hint at this unsatisfactory physical condition of the people may possibly be found in the 90th Psalm, the author of which speaks of eighty years as the extreme limit to which it is possible for a robust

man to attain. Octogenarians are not so very uncommon among ourselves,—far commoner than the Psalmist would allow : in fact he speaks of a man of eighty much as we would speak of a man of a hundred.

The soft parts of the human bodies having long decayed to nothing, it is of course impossible to speak from direct observation of the diseases which afflicted the inhabitants : we can only infer these from the conditions of life, from the literary evidence afforded by the Biblical and other writings, and from observations of the maladies prevalent among the modern inhabitants. For such, reference must be made to the suitable articles in Bible Dictionaries. We can here speak only, and that very briefly, of the diseases and accidents which have left their mark on the

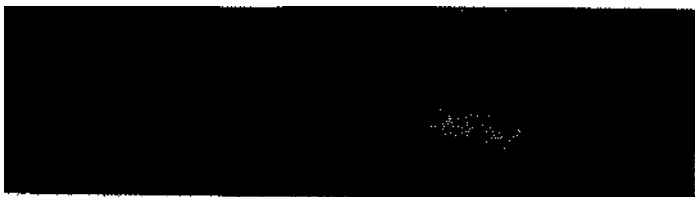


FIG. 17.—DISEASED HUMERUS FROM TOMB 155

bones. A female skeleton, that of a woman probably over fifty years of age, found buried under a house wall (see illustration in Vol. II), shewed lateral curvature of the spine; disease of the articular processes of the third and fourth neck vertebrae ; and extensive disease of the right shoulder, which was ankylosed, evidently of old standing as the right humerus was only 204 mm. long while the left was 252 mm. The left ulna had been broken in early life and crookedly united. The left knee was extensively diseased with osteo-arthritis, and stiff in the flexed position : the back of the patella and the trochlear surface of the femur were eburnated and deeply scored.

The femur in "Philistine" grave 3 shewed extensive necrosis of long standing, and great ridges of new bone surrounded the hollow from which the sequestrum had escaped.

The humerus (fig. 17) as well as all the long bones of both legs of a

skeleton found in a tomb of the 3rd century A.D. shewed pathological changes which in a modern skeleton would undoubtedly be considered syphilitic. The point is of importance, as it is commonly asserted that this disease, now so prevalent in the country, was introduced by the Crusaders.

Osteo-arthritis of the vertebral column was noted in several cases, but did not seem to be so common as in Egyptian remains.

In two crania, one of the 10th century B.C., the other of the Maccabaeen age, the skulls were abnormally thick and spongy, with a roughening of the inner surface. This was the pathological condition known as *pachycephalus*, due to a diseased condition of the membranes of the brain.

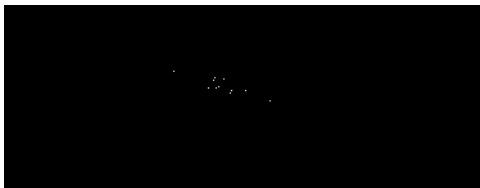


FIG. 18.—ABNORMAL CRANIUM FROM TOMB 150

One skull shewed a considerable necrosis of the frontal bone.

Two or three skulls shewed depressions on the surface that probably were due to tumours. In two cases a caries had eaten right through the bone, making in each a perforation almost the size of a threepenny-piece.

The teeth were very worn, but as a rule sound in the early skulls. From about 1000 B.C. onwards, however, dental caries became more and more common, and the teeth of some of the Hellenistic and Byzantine skulls were in a dreadful condition. In two jaws there had been extensive disease around the roots of the teeth, and large abscess cavities had been formed.

One of the calvariae (fig. 18) was extraordinarily low, and (unless, as is not unlikely, deformed posthumously) probably was that of a person of weak intellect. This specimen came from a Fourth Semitic tomb: in a

Byzantine tomb a similar case, but not so extreme, was found. Otherwise no evidence of abnormal mental conditions was observed.

To accidents or fights are due the two cases of depressed fracture of the cranium, and the one case of fractured cheek-bone, driven in by a blow. In another skull the nasal bones had been broken and had united crookedly. Fractures of long bones were common: in every case these had been left to unaided nature to do the best she could for them. One of the humeri found in the bone-pits on the south slope of the hill had been neatly cut across by a sharp instrument immediately before death.

CHAPTER IV

DWELLINGS AND DEFENCES

§ 8.—THE CAVES

IN Chapter I it has been remarked that one of the attractions which this hill would offer to people in a low stage of culture was the profusion of caves, serviceable as dwellings, in the soft limestone rock. These caverns were the first abodes of man in Gezer, as is proved by the primitive character of the deposits found within them. Moreover, they had become sealed up by later accumulations which closed their entrances.

A glance at Plate viii will shew that the neighbouring hills are likewise full of caves, which no doubt were also used for habitation. A few were examined, but no relics of very early periods were found in them; perhaps because, unlike those inside the city walls, they had remained open and had been cleared out from time to time by successive occupants. Some of the caves were used as habitations within living memory, and still bear the names of people who lived in them. A cave in *Waret et-Tayasheh*,* for example, is called *Mughdret † er-Rabb*, from a man of the family of er-Rabb (I believe a family of Kubatiyeh, near Jenin) who took up his abode there. Again a conspicuous cave, the largest on the slope facing the Gezer *tell* on the south, is called *Shakif Hamdd*, or Hammad's cave, and it gives its name to the field that contains it. Hammad's grandchildren still live in Abu Shusheh. Next to it on the west is *Mughdret et-Tahrawi*, the cave of et-Tahrawi, a man whose daughters were among the steadiest women labourers in the works. Two caves side by side in *Waret 'Othmdn* (named from one 'Othman, who within living memory tilled that unpromising tract of stony hillside) are called *Mugkr 'Othwdn*, i.e. "'Othman's caves." I could not find any cave name that seemed to enshrine an *old* tradition. In several of the caves Roman and early Arab pottery was found.

* For this and similar field names see Plate viii. † *Mugh&re(t)* = a cave.

A few stray notes on some of the other caves in the neighbourhood may not be out of place here. They will be found on Plate viii. That between tombs 89 and 93 in *Waret Darwisk esh-Sharkiyeh* is a large natural hollow, measuring 38' 1" x 27' 7" x 4' 10",* with three entrances. Nothing was found in it. The rock above is a smooth horizontal surface and curtains some cupmarks.—The cave between tombs 150 and 153 in *Waret 'Othman* is a natural crack in the rock, but it contained some Roman potsherds.—The cave just east of tomb 154 has been artificially squared: it measures 11' 5" x 3' 7".—The most south-easterly cave in *Waret Shakif Hammad* has two entrances: inside it is a row of stones, probably a modern partition.—The most northerly cave in the same field has two cupmarks, one large, one small, above the entrance. It is a large irregular cave, apparently formed, at least partly, by quarrying.—The cave underlined in the same field, just west of tomb 160, is *Shakif Hammad*, which gives its name to the field: the cave just west of it is *Mugh&ret et-Tahrawi*, mentioned above.—The cave in *Waret 'Othman*, to the north of the indication "Rock-scarp and cupmarks," measures 10' TO" X 15' 1" x 5' 2". It has an artificially squared door, but is otherwise natural. I had it cleared out, but nothing was found within it.

But of the caves surrounding the city by far the most remarkable is the enormous *Mugh&ret el-Jaiyah*, which has already been described by Professor Clermont-Ganneau † as an old quarry. It is a huge irregular excavation, about 225' long, the outer two-thirds of which has fallen in: near the entrance is a cistern: there is an extension to the east, now closed up to prevent cattle straying into it. This I had opened. It is of considerable size, but so cumbered with rubbish that it is impossible to get satisfactory measurements. Professor Clermont-Ganneau has recovered a legend of an "artillery duel" between the Jews entrenched in this cave, and Noah, established in his city of Gezer. I was told another story of how a boy had pursued a calf into the chamber now closed up and had ultimately made his exit in Jerusalem: the calf had in the meanwhile become an aged cow and the boy was a grey-haired old man.

The caves were either utilized in their natural state, or trimmed to a

* The measurements of rock-cut chambers given in this work are always in the following order: from entrance to back wall—transversely from side to side—vertical height. The *maximum* dimensions of chambers of irregular plan are given.

† ARP, Vol. II, p. 235.

greater or less extent so as to adapt them to serve more conveniently as dwellings. To judge by the presence or absence of tool-marks in the walls, very few of them were beyond question completely artificial ; but it must not be forgotten that in its upper strata the limestone of the hill is soft and friable ; pieces can easily be broken off with the fingers, and it is possible that in many cases the walls of the caves present no



FIG. 19.-VIEW OF MUGUARET EL-JAIIAH

tool-marks because the original surface of the rock has gradually scaled away.

The diameter of the caves is generally about 18'-40'. The roofs are low, though not so low that it is necessary, except occasionally, to stoop when standing. (It will be remembered that the Troglodytes were a people of small stature). In the majority there is a rude rock-cut stair-way at the entrance. The doorway is generally in the roof, rather than in the side of the chamber ; and approach to the floor is gained by the stair-way, which is cut back into the side of the chamber immediately under the opening. This stair-way is rarely wide enough to allow two

persons to pass ; the steps have a rise of about 6" and a tread of about 12". The riser is always convex, and slopes outward from top to bottom. Instead of the steps, some caves have a sloping passage, with or without a step at the bottom, whereby the chamber below is entered; while others, where the roof is not very high, have merely a drop, into and out of which a visitor must climb as best he can.

The smaller of the two chambers east of the alignment of the Great High Place possesses a remarkably well-cut doorway, with a hole bored through one jamb (perhaps for a thong by which a moveable wooden door was secured *). This is the only cave found in which any suggestion of a method of securing the entrance was noticed (see *b* in fig. 36).

Water-grooves over the doorways seem to be unknown, though they might have been regarded as a necessary adjunct : in the winter the rain streams unrestrained down the stair-ways, and always, when the winter rains came to an end, there was about six inches or a foot of mud and water on the floor of any caves that happened to have been left open after excavation. It may perhaps be guessed that the first buildings on the mound consisted of temporary winter breakwaters of mud and stone to check this annual inflow of water into the habitations: they could scarcely have been used by human beings in any stage of civilization during the rainy season without some such precaution. On the other hand it must not be overlooked that the dump-heaps left from the excavation of a cave, surrounding its mouth, made large catchment surfaces and directed all the water that fell upon them straight into the cave. These naturally did not exist when the cave was in use.

Some descriptive notes on the caves found in the excavation and their contents must now be subjoined. They will all be found in Plate i, and are denoted by Roman letters, those in each trench being numbered separately from north to south. Caves extending over the area of more than one trench are assigned to the trench that contains their principal entrance. The notation used throughout this work to distinguish individual caves follows the formula "3 I," which denotes "Cave I [the most northerly] in trench 3."^t The caves are described in the order in which

* But possibly a loophole for inspection, to see whether any one seeking admittance was friend or foe.

^t To be distinguished carefully from the formula I 3, in which the Roman figure precedes the Arabic. This means "trench 3 in Plan I."

they occur in the trenches. Cisterns are indicated by the letter *c* in the plans: all that need be said about them will be given later in this chapter.

It will be necessary to anticipate some descriptive particulars that more properly belong to later chapters, in order not to divorce the descriptions of the caves from those of their contents.

2 I. This cave, important as being one of the Troglodyte burial-places, is not far from the eastward limit of the city, and about 140' south of the outer city wall.

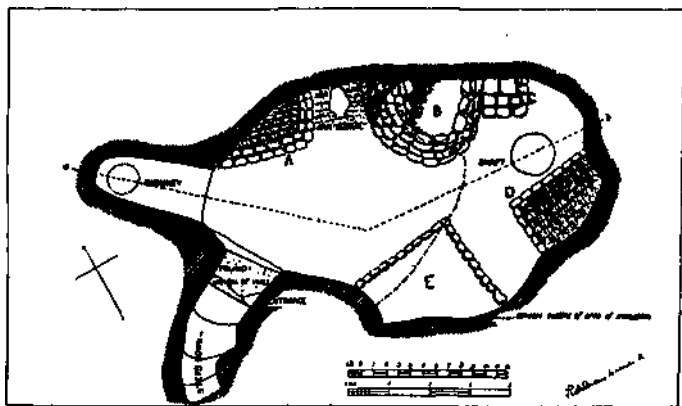


FIG. 20.—PLAN OF CAVE 2 I

It consists of one chamber, the long axis lying about north-west and south-east: it is 31' in length, 24' 6" in breadth, and 2'-5' in height. How far the excavation is artificial it is impossible to say, owing to the limestone being too friable to preserve pick-marks. The plan is shewn in fig. 20.

The entrance (Plate xv, fig. 2), which is at the south-west corner, is in the form of a stair-way cut in the rock (Plate xv, fig. 3). The stair-way is rather wider than is usual in these rock-caves of Gezer. There are some cupmarks in the rock round the entrance, the number and disposition of which are shewn in fig. 21. Close by the entrance is a standing stone, 2' high, 1' 7" in diameter at the top and bottom, but swelling slightly like a barrel in the middle.

The rock on the left-hand side of the steps (as one enters the cave) is rotten,

and has been faced with rude masonry.* Just under the roof of the cave is a stratum of soft rock, which to the left of the doorway is about 2' in thickness. In this stratum is a narrow passage 9' long, at the end of which there is in its roof a conical chimney 2' 5" in diameter at the bottom, 8" at the top.

Just below the sill of this passage were piled up many human bones. They were all burnt; and bones similarly treated were found spread over the whole floor within the limits of the dot-and-dash line marked on the plan. Details regarding the interments in the cave belong, however, to Chapter V, to which reference should be made. The built enclosures indicated by letters in the plan are also there described. (See p. 285).

When the method of disposal of the dead was altered, cremation giving place to inhumation, some changes seem to have been made in the cave. The old stepped entrance was blocked by a wall, the foundations of which remained at the bottom; and a new entrance—a shaft in the roof—was cut as a substitute.

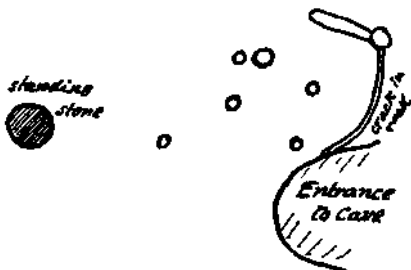


FIG. 21.—CUPMARKS OUTSIDE THE ENTRANCE OF CAVE 21

The reasons for such an alteration are obvious. The space occupied by the old entrance and the chimney shaft was required for the buildings by which they were covered; and the roof-shaft would not afford such easy access to the cave for dogs or for thieves as did the staircase. The bones of a dog were found just inside the stepped entrance, shewing that these animals occasionally found their way in. The roof-shaft was closed by a great slab of stone 5' 5" across. It is possible that the definite limit to which the stratum of ashes was confined on the surface of the cave floor indicates the original extent of the chamber, and

* It may be as well to remark here that in the first account of this cave (published QS, 1902, pp. 347 sqq.) I mentioned that a cross appeared to be cut on one stone of this piece of masonry. It is simply a rough crossing of two short lines, and after repeated examinations of it I am convinced that it is not merely unimportant; it is not even artificial, being composed of two flaws in the stone.

that the additional area beyond was quarried out when the alterations were made. The surroundings of the cave are represented in Plate xv, fig. i.

The two small caves at the north end of I 3 are of no special importance. They resemble small irregular cisterns, and indeed appear to have been used in later times as water stores. The eastern cave contained a small bronze figure of a squatting animal (fig. 22), but otherwise there was nothing of any interest to note about them. They were too insignificant to denote by special numbers.



FIG. 22.—BRONZE ANIMAL FIGURE
FROM CAVE IN TRENCH 3

part of the cave is about 8' high; but to the south this is reduced, as there is here a raised platform 2' 9" high, filling up the whole of the triangular space in this part of the cave. The entire floor, with the exception of this platform, is occupied by a group of cupmarks, most of them shallow circular depressions, about 10" deep and 1' 6" in diameter. There is one cup in the S.W. corner, oval in shape, measuring 2' 8½" x 3' 7" and 1' 6" deep; and a long rectangular channel running between two cups in the middle of the floor.

Unfortunately the cave contained casual potsherds only. A hint at its high antiquity, however, was afforded by an adjacent cistern, which will be found indicated close by in Plate i. This cistern contained some very early pottery, and was not provided with a built entrance shaft to carry it up to overlying strata. These two facts proved that it was a water store belonging to the earliest settlement built on that part of the hill. Now this cistern differed in one respect from all of the otherwise similar excavations found in multitudes on the surface of the mound. The neck, instead of being only some 3' deep, was no less than 13'; shewing clearly that it was neces-

3 I. (Plate xiii, fig. 7). A rapidly sloping passage, 7' 3" long, leads downward to a dome-shaped cell 5' 6" across, from which a round-headed doorway admits to the cave itself. This is an irregular oval excavation, 32' long. The greater



FIG. 23.—ENTRANCE TO CAVE 3 :

sary to carry down the shaft to a considerable depth before expanding the width of the excavation. The only possible reason for this was the necessity of avoiding the cave just described; so that the cave must have antedated this very early cistern.*

3 II. This cave is of no special importance; a single chamber of the usual kind, with entrance to the west, containing early potsherds, rubbing stones, and the usual equipment of a Troglodyte home. In the debris filling the cave was a fragment of bronze—one of the very few traces of metal found in the whole series of caves.† It had obviously silted in with the earth filling the opening. The maximum dimensions of this cave were 22' x 24' x 7' 4".

3 III. (Plate xvi). This is an illustration of a common case—the adaptation for sepulture in a later period of a cave used for occupation in an earlier. It consists of two chambers (*a*, *b* in the Plate) united by a sunk passage (*c*) which is 9' 6" deep and is open to the sky. Chamber *a* is entered by a winding staircase: its floor was covered with a layer of lime: when this was broken up, two cupmarks were found underneath it, as well as one or two rude flint flakes. The doorway from this chamber to the passage had evidently at some time been partly blocked up by masonry.

The contents were in two series—one belonging to the Troglodyte period of the cave, the other referable to the First Semitic interments. The objects of the older series consisted of a number of fine flaked flint knives, 4"-6" in length (these were in the central passage just outside the chamber door); some bars of limestone; in pottery, a large number of sherds, a hemispherical handmade saucer, also a spherical vessel of red burnished ware with ear-handles, narrow neck, and rounded mouth. The two latter were with the flint flakes. There were a few human bones probably referable to this occupation—the fragment of an infant's skull, the jaw of a child about six years of age, and some broken long bones of an adult. There were also some pieces of cow bones. The remarkable human head in red pottery, fig. 24, also came from here.

These objects were all in the chamber with the staircase: the other contained nothing but potsherds of early type, some small rounded stones, a fragment of a stone mortar, and a circular disc of stone, 2¼" in diameter and 1" thick, apparently from the curvature cut from the side of a stone vessel, with a slight depression resembling a finger-print on each face.

* Of course this argument must not be made to bear more than its due burden. It does not give us any clue to the length of time that elapsed between the excavation of the cave and of the cistern. The cistern would display the same peculiarities if the cave were older by a week or by a thousand years. The other dimensions of the cistern may be here noted—depth (including well-shaft) 27' 10", diameter at bottom 13' 8".

† Another was found in cave 30 II. Of course funeral deposits (such as those in 28 II) do not come within the scope of this statement, as they belong to a later adaptation of the chamber.

Chamber *a* was adapted for sepulture in the First Semitic Period. The bones had been collected in halves of large jars, divided longitudinally for the purpose: this form of sepulture was not found elsewhere. They must have been deposited in their final resting-place after the flesh had disappeared; the half-jars were neither large nor strong enough to hold complete bodies, and the bones were broken and disordered. Round the wall was a small but representative series of characteristic First Semitic vessels. These are illustrated in figs. 1-9 of the plate and may be briefly described as follows: (1) Jug with flat base and two small loop-handles, $7\frac{1}{8}$ " high, drab ware, with very slightly expanding body and cylindrical neck. (2) Globular jug of slightly burnished red ware, flattened base, expanding neck; one wide loop-handle. Height $5\frac{7}{8}$ ". This was deposited in the central passage at the entrance to chamber *b*. (3) Jug $4\frac{5}{8}$ " high, of burnished red ware, with globular body and narrow cylindrical neck topped by a slight rim; two small loop-

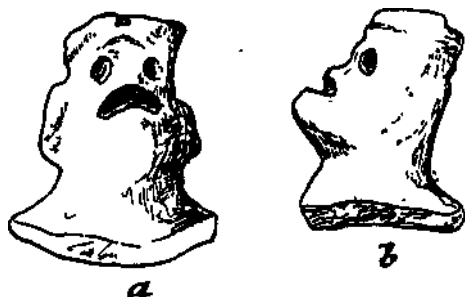


FIG. 24.—POTTERY HEAD FROM CAVE 3 III

handles. (4) Globular vessel with flat base, round mouth without lip, small conical spout, and one very small ledge-handle; red burnished ware. Height $6\frac{1}{8}$ ". (5, 6) Flat saucers with rounded bases and turned-up sides having a sharp edge all round. One of these (of which there was an exact duplicate not here drawn) was of brown ware, $3\frac{3}{4}$ " in diameter. The other is of unburnished red ware, $6\frac{1}{8}$ " in diameter. (7) A bowl of red ware burnished horizontally round the rim and vertically on the sides, 2 $\frac{1}{2}$ " high.

Figs. 8, 9, which represent an ornamental ledge-handle and a loop-handle with herring-bone ornamentation, are selected from among the many potsherds that were found in the cave. These, however, belong rather to the earlier than to the later occupation.

4 I. (Plate xvii). This cave forms part of a group of cuttings that is very difficult to explain. It is shewn in the plan, Plate xvii, no. 1, and a view is given in fig. 25. It consists of a rectangular area, 25' long and 15' 5" across, scarped in

the rock to a maximum depth of 5'. The long axis of this area deviates by 8 degrees from magnetic north. The surface of the rock dips towards the south, and, as the diagram shews, the scarp in the rock has had to be eked out with rude masonry. There is a very slight fall to the south in the floor of the scarped area. There is a cupmark in each of the northern angles of the scarped area: the cups are 1' 6" across and 1' 4" deep. There are two much larger marks of a similar character, 4' across, connected with the system: their positions are marked in the plan. There are also two cisterns, one outside the area to the north, the other near its southern extremity: the latter, which is 23' deep, has some rough steps at the entrance, suggesting that

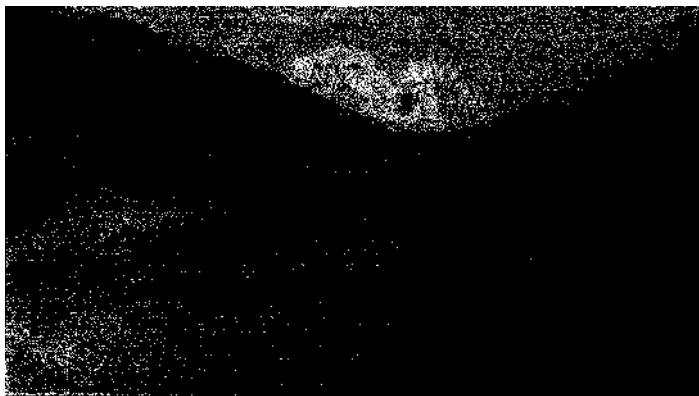


FIG. 25.—ROCK-CUTTING ASSOCIATED WITH CAVE 4 I

it has been deepened from a previously existing Troglodyte cave. In the northern cistern, 21' 6" deep, were found several skulls of the thick type associated with the pre-Semitic inhabitants. The north wall of the scarped area has been continued westward, and in it the small cave numbered 4 I has been cut. This cave is oval on plan, and measures 11' x 6' 9" x 3' 8". There is another cupmark in the floor of this cave, at the western end. The scarp continues farther, trends northward, and finally disappears in a curve which will be seen in I 5. There is a deep cylindrical pit in the middle of this curved area.

The simplest explanation of this elaborate system of cuttings is that it is the foundation of an important dwelling—of which unfortunately the buildings them-

selves have utterly disappeared. The cupmarks in the corners of the courtyard may simply have been intended for standing vessels in. There is no reason to see any religious purpose in the system.

There is another small cave—a mere hollow in the rock—to the west of the cave just described. It will be seen in I 5.

6 I. A large excavation, apparently of one chamber only. It collapsed at a very early date—so early that no consequent "fault" is noticeable in the overlying debris, which must therefore have accumulated after the accident. This fall produced an extensive hollow in the rock in which no antiquities of any importance were

found, except a hand-modelled saucer in drab ware and one fine Troglodyte jar (the latter is shewn in the accompanying photograph, fig. 26), and a polishing tool of bone, with a chisel edge worn smooth by use. The last-named object is shewn on PLatc xlviii. Owing to the rock all round being flawed, cracked, and starred, and resting on the underlying earth, it was not possible without time-wasting and troublesome precautions to excavate to the original sides of the chamber: the result of the examination of the outer part of this debris did not seem to justify the delay it would produce, as the cave was found when only three months of the permit remained to run, and there was still a large part of the mound not turned

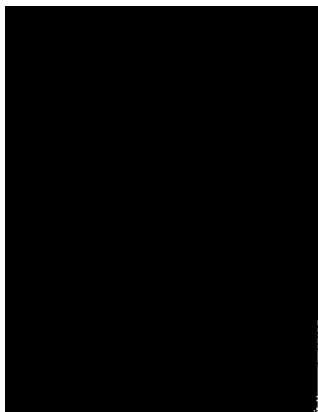


FIG. 2C.—JAR FROM CAVE 6 I

12' 4" x 9' 0" x 5' 10". Judging from the pottery, it was occupied in the First Semitic Period exclusively: sherds, and a fragment of a weaver's weight, of the characteristic types, were found in it, and nothing older.

7 I. A small excavation, unusually neat and regular. The doorway is made in a scarp of rock: it is at the western end of the chamber. The plan is oval,

7 II. A dome-shaped chamber with a hole in the roof. The floor measures 17' x 11'. The chamber is 6' 6" high, so that it cannot have been used as a dwelling, there being no other entrance to it but through the roof. Potsherds of the earliest type and wcl!-m;ule flints were found within it: there was one circular sherd cut from the side of a neatly made Troglodyte vase with painted drip-lines. This, and the sherd of a yellowish red vessel, hand-modelled, with a row of knobs just under the rim, are shewn on PlatE xlviii. The cave was used for an interment

when it had become almost full of earth, a skeleton being found just under the entrance.

8 I. This, like several others, was later discovered and deepened and enlarged to make a cistern. Two holes were cut in the roof to make well-shafts: I suspect that these were cut at different times, the cistern having *twice* been re-discovered. The fact that both 3rd and 4th Semitic pottery was found in it agrees with this theory. The length of the cave in its final form is 35'; the breadth at the widest point, that is, under the southern roof-hole, is 19' 10" : under the northern hole it is only 10' 8". The depth is 23' below the surface of the rock, 19' 6" below the ceiling of the chamber. The steps at the entrance at the southern end remain, to attest its original residential character. A square stone pillar was found cast in at the entrance door, measuring 5' 3" x 1' x 1' 4½". The walls were carefully cemented.

The objects found were of little interest, being for the greater part commonplace vessels and fragments in pottery. The most remarkable of the contents of the cave was a great pile of bones, human and animal (sheep, goat, and cow), indiscriminately heaped up under the southern roof entrance, through which they had evidently been cast. There was nothing to explain this hoard of bones, which were almost all too rotten to remove for examination: only a few could be obtained. With the bodies, great stones had also been thrown in, apparently to make a heap over them. We probably have here the remains of some destructive massacre.

The principal contents of this cave are collected together on Plate xviii. As will be obvious at a glance, all belong to the comparatively late period in which it was used as a cistern.

Fig. 1 is a Hathor-Ashtoreth plaque, of an unusual type, with a high head-dress (now broken) above the wig, whose streamers fall over the shoulders. The hands press the breasts. 2: torso of one of the late Cypriote "pillar" Astartes. Notice the indication of pregnancy, which is rather rare among the figures of this type from Gezer. The head of a similar (not the same) figure, with its usual combination of Egyptian headdress and Phœnician smile, was also found in the cistern. 28 is the torso of another more normal statuette of this type. 3: the lower part of a rude female figure cut out of a block of clunch. 4 is a small head modelled on a bar of the same material. 5, 8, 25, 26 are small jugs of various types: fig. 8 is ornamented with the coarse horizontal burnishing of the 4th Semitic Period; fig. 25 (which on account of its size is drawn to half the scale of the other objects) is ornamented with vertical black lines now nearly effaced; fig. 26 is a small jug with ear-handles in light brown ware. The other objects in pottery are: 16, a rattle; 23, a curious pendent object of pottery, unique at Gezer, the use of which I cannot guess—the downward-hanging mouth is trefoil-shaped; and 21, a small rude cylindrical vessel with a knob for a handle. 7 is one of the not very common bell-shaped weavers' weights; and 18 is the impression of a scarab on the top of another weavers' weight. 9 is a large flat bead, green-enamelled; 10, 13 are barrel-shaped beads, the first in mottled-grey paste, the second green-enamelled; 12 is a small spheroidal bead of green-glass paste, ornamented with blue dots and circles. The pendant, 15, is a shuttle-shaped weight of bronze, with

a bronze ring fitted to it for suspension. 14 is a curious object, being half of a sphere of ivory hollowed and filled with lead. It is shewn in section in the drawing. 17 represents one of the rare cases of two potters' marks on one jar-handle. 19: a spiral fossil shell which has been perforated at its upper end for suspension. 20: part of a pottery jar-stand. 22: one of the common bone "styli." 24: a curious object—a piece of quartzite, almost cylindrical, with a perforation running about half-way along the axis, and another perforation joining it diagonally through the side. This is perhaps the head of a staff, the perforation at the side being for a rivet or other fastening to secure it. 27: the very rude head of an animal in pottery. 29: a spoon made of shell. 30: part of the rim of a bowl with a small horizontal ear-handle, the two attachments of which alone remain, the central part being broken away. 31: a bronze bracket-handle. 32: a bone pricker. 11: a small flat scarab of cyanus without inscription. 6: an iron arrowhead.

Besides these were found certain objects that being duplicates of others found elsewhere are not drawn on the plate. These were specimens of commonplace late types of pottery, including a fragment of a double vessel with an opening between the two receptacles, fragments of iron knives and a scrap of Egyptian green-enamelled porcelain, with no special character. The pottery included two or three sherds of a very fine homogeneous hard-baked ware of an olive-green colour, almost as thin as an ostrich egg. This type of ware is very uncommon.

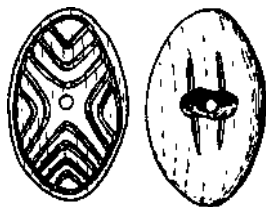


FIG. 27.—IVORY ORNAMENT FROM
CAVE 8 II

8 IL A small oval chamber 13' 11"X9' 10"
x 6' 6" high. Two steps lead into it through
the doorway to the south. In the roof a vat, cut
in the rock, had broken through. The cave had

been used for First Semitic interments, three skeletons being found side by side in a crouching attitude. Some characteristic fragments of First Semitic ware were found, but no whole vessels, and a curious little oval ornament of ivory (fig. 27) 2¼" long. Two fragments of brick, each with the usual key-groove on the side, had probably fallen later through the hole in the roof. A vertebra of a goat was also found in the cave.

9 I, the only cave in this trench, consisted of one very large chamber and four of smaller size. The disposition of these chambers can be understood from the plan on Plate xiv, fig. 1.

The large chamber is in length, north to south, 36'. It is of very irregular shape, the sides being recessed into triangular, rectangular, and curved bays. The entrance, at the south end, descends rather by irregular shelves than by a regular flight of steps. Besides this, there is a circular hole cut in the roof (marked HOLE in the plan) near the northern end. Just inside the entrance, on the right side, is a short dwarf wall: compare a similar feature in the northern chamber of

28 II. On the left side is a depression in the floor 5' wide and 2' deep; it is marked CUP in the plan. There are three similar depressions, which might preferably be described as vats. The first is in a shallow receptacle, raised above the level of the floor, at the north-east corner: this vat measures 3' 3" across and 3' deep. The other two are close together just behind a projecting tongue of rock in the right wall: the larger of these is 3' 10" across and 3' deep; the smaller 2' 8" across and 1' deep.

There is, further, a cistern in the floor of this cave. It is a shaft 17' deep. It is not bell-shaped like the later cisterns, but descends at a uniform diameter of 4' 7" till it reaches the depth of 5' 8", where it narrows, there being at this point a ledge about 1 foot broad all the way round. This is no doubt the water store of the original inhabitants: rainwater could without difficulty be directed into it during the winter, and probably a sufficient quantity would fall during the wet months to fill it up. The narrow part at the bottom was probably meant to receive sediments.

At the right-hand side, just behind the two vats already mentioned, are two narrow entrances, one of which admits to one, the other to a series of three small cells. The single chamber is the largest of these: it is 4' long and expands round to a maximum breadth of 7' 10". The row of three cells is 3' below the floor of the cave. These little chambers are only 4' in average height.

The contents of the cave shewed that, whatever its original date and purpose, it had been used for interment during the Second Semitic Period. A considerable quantity of potsherds of this period as well as grindstones and similar commonplace objects were found. The much decayed bones of two persons were discovered in the long recess west of the roof-hole.

II I. Like so many others, this cave had become a cistern in the later periods of occupation. The walls were cemented, the old stepped entrance was blocked with building, and two openings made in the roof. It is probable also that at the time of its conversion the cave was deepened (the present height is 10' 4") The maximum length is 36'. There are two pits in the floor, no doubt made, in the cistern period, for receiving silt: one of these is immediately under the northern roof-aperture. The other is of considerable size, being 4' 3" broad and 1' 2" deep. A built drain conveyed water to the southern aperture, probably from the roofs of adjacent houses. There was nothing of the Troglodyte period left in the cave, and of the cistern period nothing but potsherds and a circular stone, plano-convex in section, 1' in diameter, with a depression in the middle of the convex side—possibly some kind of millstone. For the plan see Plate xiv, fig. 2.

II II. This cave consisted of a series of three chambers. The entrance chamber, 12' in maximum diameter, had fallen in: a doorway from it gives admission to a narrow cell, about 6' 6" in average diameter and only 3' 7" high. Out of this opens an oval chamber 21' 11" x 10' 6" x 4' 4". The contents of the cave were the ordinary contents of a Troglodyte abode—rude pottery made without the wheel, ornamented in some cases with drip-lines and mouldings made with the

fingers, flint knives, rubbing and throwing stones, and needles and prickers of pointed bone.

Specimens of the pottery from this cave are collected together on Plate xix, figs. 1-9. Fig. 1 is a fragment of the neck of a large vessel in coffee-brown ware, with vertical burnished bands at intervals terminating in a horizontal burnished line, encircling the vessel at the intersection of neck and shoulders. Fig. 2 is a small flat handmade saucer $3\frac{7}{8}$ " in diameter. Fig. 3 is the forequarters of an animal in the characteristic "porridge"* ware of the Troglodytes: it is painted red. It has had panniers or waterpots at the sides. Fig. 4 is a sherd of red ware with a convex small knob; fig. 5 a jar-handle ornamented with a deep groove; fig. 6 a pebble with two holes drilled in it—possibly a rude *taraph*; fig. 7 a small pot, which has had a loop-handle, now broken away. Fig. 8 is part of a V-shaped bowl of light red ware, ornamented with lines of darker red. Fig. 9 is the handle of a vessel on which a peculiar device is marked with punctures, as the figure best shews.

Beside the above there was a considerable number of early flints and potsherds, and a human jaw-bone too broken to be measured; also one of the common little jugs with two ear-handles in drab ware, not painted.

II III. This was an excavation of some importance, the complete clearance of which was unfortunately not possible. It consisted of a low chamber, 14' 5" in maximum diameter, and 7' high. A low recess was cut in the left-hand (western) wall, just in front of which was a plaster pavement. To the left of the entrance was the opening of a tunnel, at first low and narrow, but expanding both in width and height inward. At a distance of 17' 5" from the entrance, the tunnel was blocked by a fall of rock from the roof, which could not be penetrated without elaborate casing to support the earth above. As this would probably have occupied more time than it was worth—the end of the concession being at the moment well within sight—I reluctantly abandoned the examination of the further extension of this cave. For the plan see Plate xiv, fig. 3 (where for 11 II read 11 III).

On the eastern side of the tunnel another passage opens, which bifurcates as the plan shews. The left-hand branch is a *cul de sac*: the right opens into a dome-shaped shell with an independent roof-hole. This is sunk to a depth of 4' below the floor of the passage and has a total height of 7' 8".

The cave had been used in the Second Semitic Period for interments, and nothing of an earlier period was found in it except a few fragments of painted pottery of the ordinary Troglodyte kind. The bones of four people, much disintegrated, were stretched on the plaster pavement we have already mentioned on the first chamber. With them were about 20 jars, an alabaster pot, and a bronze spearhead.

We now come to a singular feature of this cave. Just at the foot of the entrance staircase, and almost completely preventing passage into the cave thereby, was sunk a cistern 24' deep. It is of the usual bottle shape, but expands less than usual. Nothing was found in it, except a few flints and potsherds. It is

* For the meaning of this expression see the section on pottery.

difficult to imagine that the original inhabitants of the cave should have made this dangerous obstacle to the use of their chief doorway: it must be a subsequent addition to the excavation. In two other caves, 15 IV and 28 II, cisterns are likewise found in untoward places at the entrance. It has occurred to me that these might primarily have been pitfalls, meant to prevent easy access, *e.g.* to a cave for sepulture where valuable deposits had been made.

12 I. This cave had been converted into a cistern of the usual bottle shape, but rather more cylindrical than usual. It can never have been of great size. Every vestige of the original plan and contents had completely disappeared, except a flight of steps cut with unusual neatness in the entrance shaft.

12 II. An insignificant chamber, roughly oval on plan, 9' 3" x 8' 6" x 6' 9". There is a circular cup at the northern end, and two square depressions, the larger 1' 6" deep, at the southern. A recess, apparently due to a flaw in the rock, exists at the northern end about half-way up the wall. On the right-hand (eastern) side is the entrance to a tunnel, which I found too narrow to allow my workmen to manipulate the pick. If it be really an excavated passage it must originally have been cut out by young boys. I hoped another cave would be found with which it communicated, but was disappointed. Nothing Troglodyte was found in the cave, which contained only late First and early Second Semitic potsherds. See Plate xiv, fig. 4.

12 III. A large chamber approached from the north by rock-cut steps. In the rock-surface outside is a group of cupmarks. At the side of the staircase the rock is cut back to make a wide elevated shelf, through the roof of which a circular aperture is pierced • upon this shelf is cut an olive-press vat 6' 7" in diameter (fig. 28). At the foot of the staircase two stones are set as an extra step. The chamber itself is 5' 6" high: the maximum diameter is 37' 1", so that this ranks among the larger caves. In the floor on the right side of the foot of the stairs is a pit 5' deep perhaps meant for receiving rainwater: two similar pits will be seen in 30 IV. There is also another pit and two cups at the western side. In the north-western corner is a Small passage giving admission to two minute cells *en suite*. The cave contained First Semitic pottery only. See Plate xiv, fig. 5.

14 I. The outer chamber of this cave was adapted as a cistern in the Hellenistic period, and contained nothing but Hellenistic potsherds and objects of that period. It was 20' in diameter, of an irregular shape. The entrance was to the south. The opening to the inner chambers was built up with masonry, set as usual in mud and plastered over. A flaw in the rock at the north side was also stopped with masonry. There is a silt-pit in the centre of the floor, and a roof-aperture just over it. The height of this chamber is 8'. On removing the block of masonry, the chamber was found to extend about 9' 10" eastward, and to open into three small chambers, the plan and disposition of which will best be understood from Plate xiv, fig. 6. The inner chambers contained Troglodyte potsherds and flints. The late objects in the outer chamber are shewn in Plate xlv, figs. 11-17. Figs. 14, 15

are scarab seals impressed on jar-handles. Figs. 16 and 17 are in limestone—the latter perhaps a fragment of a small domestic table of offerings. The cup fig. 11 is in very fine ware; the others are more commonplace.

The rock-surface above this cave shewed a remarkable series of cupmarks and natural hollows which I have endeavoured to represent to an enlarged scale on Plate xiv. The dimensions of the most noteworthy cuttings are marked. The

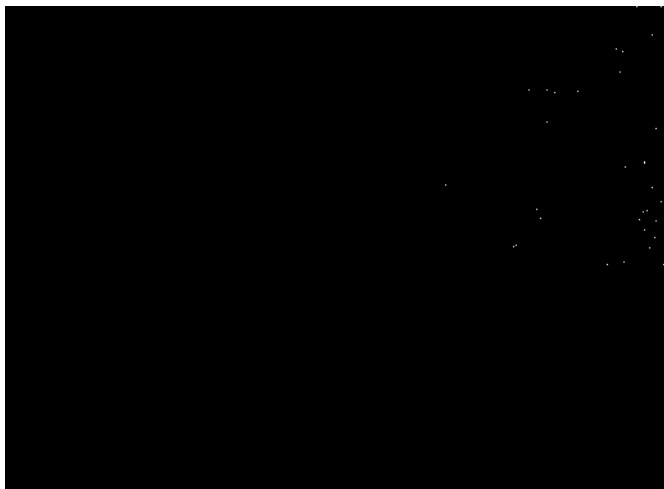


FIG. 28.—OLIVE-PRESS VAT IN CAVE 12 III

most remarkable are an olive-press with two small cups in the floor (more than *one* cup in these circular olive-presses is rare), and the roof-opening, bridged by a tongue of rock, breaking into the cave below just over the doorway of the innermost chamber.

14 II. A small natural hollow about 7' 1" long. It is approached from the north. There is a hole cut through the roof, too narrow however to admit a human body.

15 I. A complicated excavation of considerable importance. It had had the history of so many of the caves of Gezer—at first a dwelling, then a burial place, it was finally re-discovered by cistern-diggers, who looted whatever valuables it may have contained. For the plan see Plate xiv, fig. 9.

The entrance staircase admits to a chamber of triangular shape, 18' in maximum length (east to west), at the apex of which, towards the west, is a small circular cell. This seems to have been enclosed, at the end of the cave's occupation, by a wall founded on the silt with which the chamber was encumbered. From this cell a narrow tunnel runs northward, 8' long, ending in a tiny circular expansion: a hole in the side of this breaks into cave 16 II, but it is so narrow that it is impossible to regard it as a communication: the two excavations are quite independent.

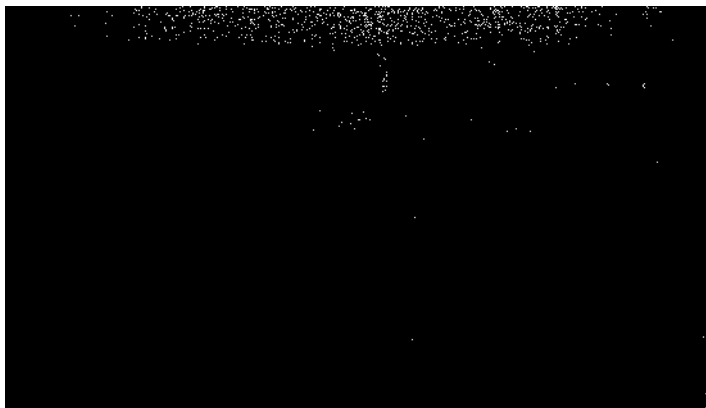


FIG. 29.—ROCK-SURFACE ABOVE CAVE 15 I

There is also a small cupboard recess in the wall of the cell, measuring 1' 2" high by 3' broad.

In the floor of the outer chamber behind the line of the wall just mentioned is a cupmark.

At the south end of the cave is a more or less circular chamber 6' 3" high and about 13' 6" across. It has two independent doorways; one of them is to the east, about 3' 3" across, with a rather steep stairway leading down to it. Quite close to this is a circular hole in the roof 4' 5" broad. The other doorway is an irregular hole 5' 6" wide which does not give easy access to the cave, the sill being raised about 4' 11" above the floor of the cave. In all probability it is a hole broken by accident in the rock. The surface of the rock, shewing these various doorways and openings, appears in fig. 29.

This section of the cave is separated from the northern chamber by a raised ridge, which will be seen in the accompanying photographic view (fig. 30). It is about 2' 6" high and 4' 11" broad. It was noteworthy that Troglodyte fragments were found on the floor of the cave on each side of the ridge, but not on the ridge itself. This suggested to me that originally the two chambers were independent, but that in the period of sepulture (Second Semitic) the two were united by partially quarrying away the partition between them.

Almost under the opening in the roof just mentioned there is a circular pit in the rock 1' 6" deep and 2' 7" across. To the north there is another hole in

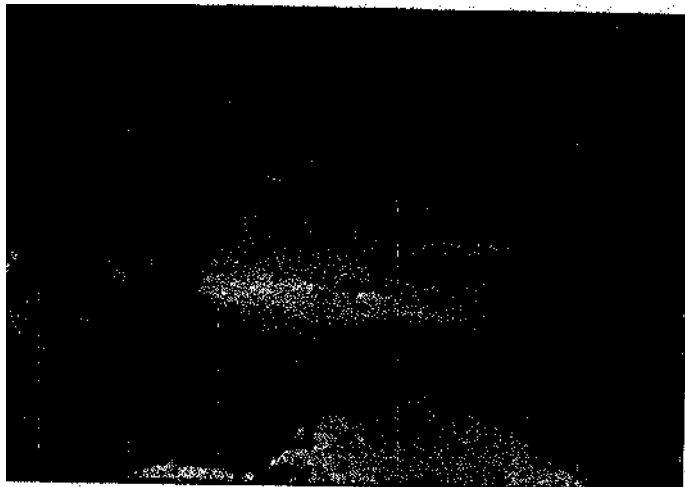


FIG. 30.—INTERIOR OF CAVE 15 I

the roof, which however is only accidental : it is a rock-cut vat for a fruitpress, that has been made in the surface of the rock, and being incautiously made too deep, has broken through into the cave.

In the N.E. corner of the first chamber is the entrance to a passage communicating with another part of the cave; and just south of this passage is the shaft of a cistern that was dug some time about the 13th century B.C. Between it and the passage is a small circular cupboard. The cave itself being unsuitable for a cistern, the well-sinkers passed through it and deepened their excavation to 20' below the floor of the cave, or 29' 6" below the surface of the rock. The cistern is square, 10' 4" across at bottom. In the centre there is, as usual, a silt-cup 2' 2" across and 4' 9½" deep.

A narrow passage, 11'6" long, along which it is necessary to go on hands and knees, conducts eastward to an extension of the system. This consists of a row of two large chambers, with two smaller chambers opening out of the second. The two larger chambers are separated by a dwarf wall. There is an independent entrance with the usual long staircase cut in the second chamber. There are cup-marks (as shewn in the plan) in each of the two larger chambers. Of the two smaller chambers, the first, which is 4' 3" in diameter, is 2'6" below the level of the floor of the large chamber from which it opens. It communicates by a hole in the partition as well as by an apparently useless crooked passage with the second chamber, which is long and narrow (the length is 13' 4") and at a level 4' below the floor of the first small chamber. This second small chamber was unfinished, two blocks of rock being left uncut, at the inner (southern) end, as an inspection of the plan shews.

The principal objects found in this complex system of chambers are drawn on Plates xx-xxiii, and some notes on them will not be here amiss.

Just inside the entrance to the cave first described, and between that and the cistern, was arranged a series of pottery, consisting of a number of large jars on end supporting one another, with smaller vessels in and about them. Of the large jars only one was perfect—PI. xx, fig. 1. It is a fine vessel of light reddish brown ware with grits of black sand in its texture. The vessel had suffered only a few chips to the rim. The base is flattened at the extreme tip to a diameter of 2½". From that it swells upward with a slight curved line to the shoulders, which have a diameter of 11½". It then narrows again, and at the top expands to a circular mouth 4½" broad. This mouth is strengthened by being slightly thickened. The total height is 9½". There are two handles, long and narrow, on the broadest part of the vessel: their section, as the figure shews, is triangular. The point of junction of the lower and upper parts of the vessel, which have evidently been made separately, is marked by a groove round the vessel. Above and below this, to the level of the lower attachment of the handles, the sides are ornamented with faint comb-marks.

The jar that stood next and to the west of this was similar in every respect, except for a ridge ornamenting the middle of the neck (PI. xx, fig. *la*). The ware was slightly lighter in colour and seemed less gritty. Another jar stood to the east of the first, rather larger but otherwise similar to it. Top and bottom were both crushed by a fall of stones from the roof, and the sides were cracked as well. Inside this was a small jug (PI. xx, fig. 2) 8¼" high, with spouted mouth. It is in a very compact whitish yellow ware, burnt Venetian red in irregular patches on the outside about the broadest part. Next to this jar was another, similar in every respect to the first but slightly larger and thicker. It was all broken away from the shoulder upward. A fragment of the mouth lying in it resembled that of the first. This jar was empty save for the earth and stones that had silted into it.

A fifth jar of considerable size, but broken to below the level of the handles, stood almost under the entrance to the cistern. It resembled the other four: in it was a smaller vessel identical in form with PI. xx, fig. 2, but larger (10½" long), of a rather porous homogeneous red earth.

Interspersed (with this collection of jars, and in and among them, were other vessels; namely, a small jug, 8½" high, of a compact light drab clay, slightly gritty, identical in shape with Pl. xx, fig. 2. Fragments of a similar jug (7½" high) of light yellow gritty clay, burnt Venetian red on the outer surface. The lower part of a larger jug of the same type, of gritty ware, burnt black inside, red on surface: height to lower attachment of the handle 7½". A jug (Pl. xx, fig. 6) about 10" high, of red section, with a light brown slip burnished. One handle, sharply curved, is on the shoulder. The mouth is nearly all broken away, and the vessel much cracked. A jug (Pl. xx, fig. 14), 11½" high, of gritty ware with very little cohesion in it, there being quite large grains of sand in its texture. The bottom is rounded, and inside the vessel (which is of drab colour) is strongly ribbed. Above the jars was standing a bowl, inside which was placed a lamp (Pl. xx, fig. 8). Marks of fire were on the spout of the lamp, which is of the Second Semitic type. The bowl is of red earth with white grits; the outside is a dull yellow colour, but the hollow under the lip is picked out in light brown. The upper surface of the lip is a warm red colour, burnished. There were also the bottom of a bowl of large size, combed, on a disc base, containing cow-bones; a bowl like fig. 8, broken, of red ware, black in the middle, 6½" in diameter and 8" high; a few fragments of a vessel bearing horizontal comb-marks, apparently like one of the large jars but about one-third the size; an alabaster pot, about one-third of which seemed to be broken away (Pl. xxi, fig. 1); and a bowl, rude and flat, on a slightly hollow disc base of Venetian red ware, yellow inside. This was close to the last of the large jars above mentioned.

Near the mouth of the cistern was the very fine Troglodyte bowl here figured (fig. 31). It is of the yellow-brown "porridge" ware, and is covered with a white wash of lime-cream on which are roughly painted groups of vertical red lines. It is made without the wheel, and has two ledge-handles and a spout, the latter now broken.

Beside the last-named were a number of fragments of thin flat discs of ivory and Egyptian porcelain, apparently the decorative inlaying of some wooden object which had entirely perished. They had fallen into a heap with the decay of the object that supported them, and were all broken. All attempts to fit them together—much more to determine the nature of the object to which they belonged—proved futile. None of them were decorated in any way: a few were perforated for the pin with which they had been attached to their bed. The porcelain slips seemed to have been originally green, but the colour had faded to a dirty white. The representation of these irregular fragments would teach nothing: the only complete specimens whose original shape could be recovered are shewn on Pl. xxi, figs. 9, 10. The perforation will be noticed in the side of the first of these. Both these inlays were in ivory.

The latest object found in this part of the cave was a cylindrical stem evidently belonging to a Mycenaean standing cup: it was of the usual glazed buff colour, with two horizontal red lines. This was quite near the doorway, and may have washed in with rain at some time later than the original deposits.

Under the mouth above the cistern was the fragment PL xxi, fig. 2, lying

on its side. It was of red ware, of a grey colour outside. Beside it was a humerus 335 mm. long, which however had lost its upper epiphysis, and the much broken fragments of another bowl like PI. xx, fig. 8.

Behind the row of jars above described a second row of five was found similar to the first. Three of them had small jugs identical with PI. xx, fig. 2, inside them. All these jugs had had their tops crushed and stove in by the fall of stones from the roof of the cave.

Farther in the cave, near the southern end, were five jugs like PI. xx, fig. 2, ranging in length from 10" to 7½". A similar jug, 7" high, differing however in the rare peculiarity of having a foot (PI. xx, fig. 3). Two jars of gritty red

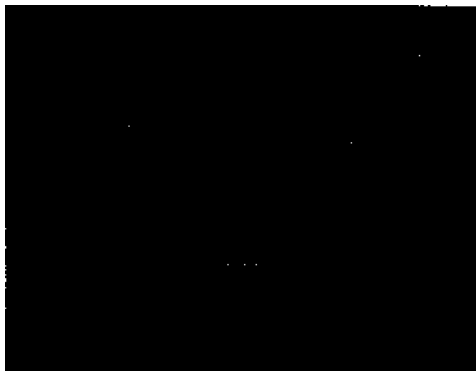


FIG. 31.—BOWL FROM CAVE 15 I

ware, one much broken, of the type of PI. xxii, fig. 4—a miniature copy of the large jars, 1' 1½" high. Ten bowls of the type of PI. xx, fig. 7, all more or less broken. These ranged from 8½" to 11" in diameter. One of them contained a smaller bowl of the type PI. xx, fig. 8, with its edge picked out in dark red. Two small bowls of similar type in yellowish ware were found under the southern roof-hole. The characteristically Troglodyte vessel PI. xx, fig. 10, of yellowish ware with red burnished slip, was found on the rock, near the cistern mouth. The handle is grooved to appear double. Near it was a fragment of a large jar of the type PI. xx, fig. 2: the height without the neck (which was gone) was 9³/₈". The ware was slightly gritty, shading gradually from Venetian red on the outside surface through grey into black.

At the southern end under the southern roof-hole were also four pins of bronze bent like modern hairpins (PI. xxi, fig. 21): what these may have been meant for I am unable to say. With them was a stone pounder (PI. xxi, fig. 26).

From the neighbourhood of the cistern came three fragment of bowls of the type of Pl. xx, fig. 8.

In the southern part of the cave were found a boar's tooth, and two more saucers like Pl. xx, fig. 7. Also a conical spindlewhorl or button of ivory with two concentric circles cut on the base (Pl. xxi, fig. 22); an antler tine, that had possibly been used as a quarrying pick (Pl. xxi, fig. 31); and another fragment of horn which had been trimmed to serve as a chisel (Pl. xxi, fig. 28). There was also half of a hemispherical saucer, of fulvous yellow ware, black in the middle, ornamented on the sides with red drip-lines. This vessel, which had been moulded without the use of the wheel, is of a characteristic Troglodyte type. There is a slight hollowing under the rim (Pl. xxiii, fig. 1).

Other objects from this cave belonging to the Troglodyte Period are the small rude brick-red cup Pl. xx, fig. 5, the sherd with ropelike incisions Pl. xx, fig. 11, the jar with two ear-handles, in gritty brown ware, Pl. xx, fig. 12, and the flat saucer Pl. xx, fig. 15. Several of the last-mentioned kind were found, in the usual light yellowish brown gritty ware with burnished red surface. There was also a fragment of one, of rather compact brown ware, which seemed to belong to a later period, to which also I would ascribe the rude little vessel with four handles, Pl. xx, fig. 13. Certainly Pl. xx, fig. 4, which is of light homogeneous brown ware, burnished, $4\frac{1}{2}$ " high, and has a double handle and button base, belongs to the later period of the interments. On the other hand, Pl. xx, fig. 9, a globular vessel, with a collar of rope work round the neck, a broad handle, covered with a highly burnished red slip, is of the characteristic Troglodyte light brown "porridge" pottery.

Plate xxi, fig. 3, is a sherd of drab ware with a row of triangular knobs on it—evidently a conventionalized rope moulding. Fig. 4 on the same plate is a handle with a hollow wave in it. Fig. 5 is a fragment of the edge of a bowl of red ware, through which a hole is perforated—evidently it had been broken and afterwards riveted. Fig. 6 is the lower half of a rude "Hathor-Ashtoreth" plaque. Figs. 7, 8 are a pricker and a gouge of bone. Figs. 11-14 are specimens of some of the numerous flints found in this cave: most noteworthy are the chisel (fig. 12), and the scraper (fig. 14) with a cross marked on the calcareous surface adhering to one side. Fig. 15 is a nondescript fragment of stone. Fig. 16 is one of those bars of stone so frequent in the High Place precinct, possibly phallic. Fig. 17 is the neck of a vessel similar to Pl. xx, fig. 9. Figs. 18, 19, 20, 23, miscellaneous objects in bronze—the most characteristic being the curved knife, which is a type found in tombs of about 2000 B.C. Fig. 24 is a granite mortar; 25, a pottery disc spindlewhorl (several of which were found); 27, half of a small limestone saucer; 29, an ivory inlaying slip; and 30, a flint scraper.

In Plate xxii are represented a number of vessels belonging to both the earlier and the later periods of occupation, the drawings of which speak for themselves. It may be noted that fig. 1 is a bowl of gritty ware, light yellowish brown on the two surfaces, black at the heart, on a slightly hollow disc base. Fig. 2 is an alabaster jar 6" high, found in the upper stratum near the cistern. Fig. 3 is a fragment of a bowl of the characteristic Troglodyte ware, red, very porous, gritty, with a

moulding round just under the rim, and covered with a white wash decorated with red lines. Fig. 6 is of coarse reddish ware; fig. 7 is handmade, not wheel-turned; fig. 8 is reddish brown; fig. 9 drab with incised lines; fig. 10 yellowish brown; fig. 13 is a small conical pot that has lost its handle; fig. 14 is a peculiarly shaped ledge-handle with rectangular ends; fig. 15 a button handle covered with a red wash; fig. 16 is ornamented with punchmarks—a rare form of ornamentation on such early ware—in addition to the more common incised strokes. The spoon-like object fig. 20 *a*, 6, in drab ware is curious: the end of the handle is broken.

The remaining objects illustrated on Plate xxiii are of less importance. They include the rude hand-made saucer already mentioned (fig. 1); a hand-made jug with rounded base, of red ware (fig. 2); the top of a jug of red porous pottery (fig. 3); a fragment of painted ware (purplish black lines on light buff) with a strainer-spout attached (fig. 4); a "button handle," red burnished, on the fragment of the rim of a bowl (fig. 5); a flat disc of bone, no doubt an inlay, with a small perforation for the attaching pin (fig. 6); a fragment of painted ware (red and black lines on a buff background, fig. 7); a smooth well-made bowl of light red ware, wheel-turned, the outside surface touched up with a fine comb, the inside surface slightly burnished (fig. 8); an alabaster mace-head (fig. 9); the bottom of a broken bowl, with comb-facing (fig. 10); a flint knife (fig. 11); an ivory inlay (fig. 12); various types of ledge-handles, of which examples are shewn in figs. 13-15, a handsome jug of black ware with button base and dot ornamentation (fig. 16), and a triangular flat disc of bronze with an aperture of the same shape in the middle, perhaps a girdle-fastening (fig. 17).

The eastern part of this cave—the easternmost of the two larger chambers, from which the two smaller chambers opened out—was used as a burial place in First Semitic times. A considerable quantity of early Semitic potsherds and flint knives were found in it as well as a number of bones.

Besides the objects from this cave drawn on the plates we must mention two ostrich eggs in fragments, one of which was found near the row of jars at the entrance, the other farther south in the cave; a number of spherical and cubical blocks of Stone from $2\frac{1}{2}$ " to $3\frac{1}{2}$ " in diameter, adapted for throwing stones; a slip of bone, semicircular in section, $1\frac{1}{2}$ " long, with two small perforations in the plane side; and another similar but shorter and broader.

15 II. This cave consists of a series of seven chambers, *en suite*. They are all small—in three of them it is impossible to stand upright, and the doorways and creep-passages which connect them are very awkward owing to their narrowness. There are entrances at each end. The southern entrance (indicated by a dotted circle in Plate xiii, fig. 6) is a mere circular hole in the roof. The northern entrance, of which a sketch is added to the above figure, is of the ordinary step form, but differs from all the others that have been found in consisting of a *double* staircase, ladiating like the arms of a Y. In the plan will also be seen a small olive-press, cut in the surface of the rock above the entrance, and a circular vat cut in the rock close by. The olive-press is 5' 3" across, and has, near one side, a cup hollowed out for the reception of the expressed juice, as is usual in such

cuttings, which are more particularly described in Chapter VI. It is cut on the top of a little knoll of rock, in the side of which is the entrance to the cave. The vat is 11" across, and was probably used for some domestic purpose analogous to the olive-press. There is a rudely cut channel which directs the overflow from the olive-press into the mouth of the cave.

At a period dateable by the associated objects to the nineteenth Egyptian dynasty, this northern chamber was discovered by cistern-diggers, and deepened to a depth, below the surface of the rock, of 18' 11", with a breadth at the bottom of 22' 3". The entrance to the other chambers was stopped up by rude masonry (the chambers being, naturally, previously looted of any valuables they may have contained), and the wall was covered with a thick coating of cement. A few human bones were found in the cistern, probably belonging to people who had fallen in and been drowned. The cistern when first opened was full almost to the top with slimy silt, and probably had never been cleaned out.

Of the objects found in this cistern the most representative will be found figured on Plate xxiv. First in importance comes a fragment of an alabaster jar bearing the cartouche of Ramessu II (fig. 1). This gives us an indication of the period of the other associated objects. This fragment is 3½" high. A larger fragment (probably of the same vase, as the thickness is the same) was found in the cistern, but this was quite plain. Next in interest is the Hathor-Ashtoreth plaque fig. 2.

Whether fig. 6, a flat shovel-shaped object, be a figure or not it is unfortunately too broken to decide. The probability is that it is a rude figure which has lost its head and lower portion. It is modelled in hard pottery, of a black colour. Fig. 7 is the central portion of a priapic (?) object, with a tube running along its axis. A fragment of the tip of another specimen was also found; and a rudely modelled bar of unbaked clay, about 3¹/₈" long, which perhaps had a similar significance.

The objects in pottery from this cistern are as follows: A fragment of one of the common large Pseudo-Mycenaean bowls with "metope" decoration (fig. 3). A pyx (fig. 4): this type of vessel was relatively much rarer at Gezer than in the Shephelah *tells* (see *EP*, Plate 43, where several specimens are figured). Fig. 5 is the neck, and handle attachments, of a large lentoid flask. Of this or a similar vessel a large part of one side was found. It was ornamented in the common way, with a group of concentric circles surrounding the apex of the flattened side. The circles were in dark brownish red colour: there was first a group of six, then after an interval two, and outside, after a wider interval, three more. Fig. 8 is a specimen of jar-handle with a cross-bar ornament painted on it in reddish brown; and fig. 9 shews a strainer-spout attached to a fragment of a bowl or cup—the rim is missing. This is of a homogeneous red ware. Two fragments of such vessels were found.

Several fragments of bowls, in coarse gritty drab ware, made their appearance: one, which will serve as a pattern for all the rest, will be found in fig. 10. They are all more or less broad in proportion to their depth, have a flat disc base, and a slight hollow indented round the outside just under the rim. The jug (fig. 14)

with cylindrical body, two handles, and slightly concave conical base is also a well-known but not one of the commonest of types. It is in the same drab ware as the bowl already described, and is 6" in height. Of similar ware is the peculiar object fig. 15. This may be a very flat saucer; or it may be it is drawn upside down in the plate, and be really the stopper of a jar designed (contrary to the usual arrangement) to catch on the *outside* of the lip of the vessel.

Fig. 17, also, is in gritty drab ware. It is the central portion of a "cup-and-saucer" jar-stand,* a type of vessel frequent at Tell el-Hesi, very rare in the Shephelah *tells*, and rather commoner, but still infrequent, in Gezer. As it happens, fragments of several specimens (about eight) were found in this particular cistern.

The same ware, but free from grits, was used in the vessel of which fig. 18 is a fragment. It has a pattern, almost effaced, in red lines upon it: there is a fret, to the left of which is an object very difficult to make out—possibly a bird.

Fig. 19 is a fragment of a very large vessel of a coarse ware full of large limestone grits—drab, but rather redder than the pieces above described. The side is ornamented by grooved lines surrounding it at the widest place.

Several other fragments of large bowls in the same ware made their appearance. One which, when complete, must have been of great weight, had a disc base 5" across and a wall $7\frac{3}{8}$ " in thickness. There were some portions of a lamp—it is important to notice, of the *later* type, with parallel sides to the spout—in drab ware.

Deserving of special remark are the three small saucers figs. 16, 23, 24. These are rudely modelled by hand, without the use of a wheel. The first of these is of a coarse, hard but rather flaky ware, burnt black: it is $3\frac{3}{8}$ " broad, and is very roughly moulded, being, so to speak, pinched into shape. Fig. 24, which is roughly triangular in shape, is also black; fig. 23 is of a yellowish colour.

Fig. 12 is one of the ubiquitous Mycenaean fragments. It is of a fine red ware, and has a highly glazed orange-red band painted on it. A series of circles, with dots at the centre, are drawn upon the band in sgraffito (*i.e.* the colour of the band is scratched away so as to allow the original surface of the pottery to shew through).

Fig. 22 is the spout of a small vessel, perhaps a Bugelkanne, in homogeneous red ware.

Fig. 28 is another imported fragment, being a specimen of the common "Graeco-Phoenician" bowls of Cypriote origin, with "ladder" pattern on a greyish white slip.

Of the secondary use of pottery we may instance the button, fig. 33, cut from a sherd with two countersunk holes; and a spindlewhorl made by perforating in the middle the disc base of a vessel.

Two jar-handles were found, at the upper attachment of which the potter had impressed in one case his forefinger, in the other his thumb.

Beside the Ramessu vase, there were other Egyptian objects in this cistern:

* It is probably *not* really a jar-stand: the term is used here for convenience.

namely, the two rings, fig. 13—one a mere fragment, the other a plain thin band, too narrow for an adult finger; possibly the small flat bead, fig. 32; and the fragment of a bowl, fig. 34. All these were of porcelain covered with green enamel. The lines on fig. 34 were (as usual in such objects) traced in dark brown.

The stone objects need not delay us long. There were several of the common flint knives, of which fig. 11 is a specimen: with one exception (a small neatly chipped saw-toothed knife) these were all very roughly chipped specimens of the long knife-blade, with two or three facets on the back. The perforated millstone, of which several specimens were found, either complete (fig. 20) or unfinished (fig. 21) is too uncharacteristic of any special age to call for more than passing notice: the same remark applies to the pestles or hand grinding stones, whether conical (fig. 25: note the small depression in the centre of the base), cubical (fig. 26), or discoidal (fig. 27). The same remark may apply to the bronze arrowhead (fig. 31), the axe-like lamina of bronze (fig. 30), and the bone pricker (fig. 29).

The object represented in fig. 35 is the moveable base of an alabaster saucer, with a mortice for receiving a tenon projecting from the bottom of the saucer itself.

There is a hole whereby the central chamber of the series of seven breaks into the staircase of cave 16 III. The hole being too small to admit a human body, this can only be an accident.

The objects found in this cave (excepting of course those of later date belonging to the cistern period of the northern chamber) were scanty, and indeed consisted of nothing but potsherds of the ordinary pre-Semitic kind. These therefore need not detain us. There was one skull in one of the small chambers.

15 III. A small hollow under a shelf of rock, with a cupmark and a vat in its floor, and in the middle a passage leading to a small cell 8' x 6' 9" x 3' 5". This is clearly shewn in Plate xiii, fig. 8. Nothing was found in this cave.

15 IV. A large irregular excavation of which a plan will be found on Plate xxv, and a view of the interior in fig. 32. Some of the objects found within it are shewn on Plate xxv, and others on Plate xxvi. As will be seen, it is a rough oval excavation 26' 6" long, about 24' in maximum breadth, with an annexe 9' 10" long on its western side. The height is 7' 5½". At the foot of the ancient staircase, and now rendering it quite impassable, a cistern has been dug, apparently in the Second Semitic Period: and all the objects found in the cave belonged to that period. Of older date were the cup-hollows and olive-press sinkings on the inside of the floor. These may be thus described (the letters referring to the plan). A is a long shallow depression 8' x 4' 9" x 1'. 13 is a circular pit, no doubt an olive-press, 5' 5" in diameter and 2' 5" deep. C is 1' 10" in diameter and 1' 3" deep. D is a well-shaft, a section of which is added to the plate. It is 2' 4" in width, and descends at that width to a depth of 7' 34", after which it widens slightly. The total depth is 11' 1". E is a rather irregular pit 6' 6" long and 5' 6" across: it is 1' 6" deep. The roof of the cave above it is fallen in, affording the only practicable entrance on account of the cistern just

mentioned. This cistern is 21' 3" deep below the level of the cave, 29' below the level of the rock : the breadth at the bottom is 14' 7". There is no silt-pit in the middle of the floor.

A few notes may here be given on the objects found in this cave, some of which were not without interest, though they told us nothing about its earliest occupants. In Plate xxv, fig. 1 is a jug of a dark gritty drab ware. The large jar, fig. 2, is of a light grey ware, full of grits. Fig. 3 is more homogeneous. It is of a light grey colour, the inside of the broken section being burnt black. The globular jug, fig. 4, is of black ware, which is not common in the Second Semitic



FIG. 32.—INTERIOR of CAVE 15 IV

Period. Fig. 5 is a rattle, also in black ware. A loop-handle, which it has had, is broken off. Fig. 6 is a spout of the characteristic lamp of this period. Fig. 7 is a small jug, also of black ware. Fig. 8 is a fragment of a vessel in dark yellow, with a decoration of lines and triangles painted in black. It has a long spout. Fig. 9, which in type approximates rather to a First Semitic vessel, is light drab, very gritty, hand-modelled, and painted with red lines ; indeed it is highly probable that this vessel is a chance survival from the earlier occupants of the cave. Fig. 10 is the front part of an animal vase, at present 3" in total length. The neck is broken off at the stump. There was a projection on each side with a spout at the

end, probably representing panniers, and a representation of a cord tying these together, of which a V-shaped fragment remains, crossing the back. Part of the stumps of the two front legs remain.

On Plate xxvi are represented: fig. 1, a two-handled jug (one handle broken off) of Venetian red ware. This vessel contained the tip of a human ulna. Fig. 2 is the disc base of a vessel which has been broken away and perforated in the middle: six such objects were found. Fig. 3 is a small pot of alabaster, and fig. 5 a long narrow vase of black slate. Fig. 4 is a bowl in compact reddish ware. Fig. 6 is the fragment of a flat-bottomed cylindrical jug which has had one handle. Fig. 7 is a well-made vessel with wide mouth, covered with a smooth polished yellow slip. Fig. 8 is one of the common Hathor-Ashtoreth plaques. Fig. 9 is a scarab in amethyst, of 12th-dynasty type, plain, and mounted on a swivel in a gold ring, similar to the rings found in the great burial cave on the W. Hill. Fig. 10 is a similar scarab, similarly mounted, which however has lost its ring. It bears on the base a *hpr* between two dots, all enclosed in a border of spirals. These two scarabs were found in the vertical shaft D. In fig. 11 a number of inlaying slips of ivory are collected together, which no doubt once adorned an ornamental wooden box or coffer. One or two others besides those drawn, and of the same form, were also found. These were all quite plain. Fig. 12 is a well-made bronze spearhead with lozenge-shaped tang. Fig. 13 is an object especially interesting, being apparently an ornament in the form of a serpent. The body of the serpent is lozenge-shape in outline. This may have been a sympathetic prophylactic against the bite of these creatures. Fig. 14 is part of the handle of a vessel, ornamented with niched ridges, in red ware. Fig. 15 is a small block of limestone with six depressions in it. Fig. 16, a curious flat dish on three looped feet. Fig. 17, a pyx, of Mycenaean type, with decoration in red paint. Fig. 18 is an amulet with a groove for suspension near the top. It is made of pumice stone. Fig. 19 is a minute hand-modelled saucer. Fig. 20, a flat pebble with a countersunk hole drilled through it. Fig. 21, the side of a large vessel ornamented with brown lines on a cream ground: the stump of a handle remains on the left-hand edge. Fig. 22 is a lump of brick with depressions upon it as shewn. Fig. 23, a bronze axehead. Fig. 24, a fragment with a line of moulding on it: this likewise may possibly be a legacy from the earlier period, as also may be a ledge-handle covered with the usual white lime wash, not drawn here. Fig. 25 is the cylindrical stand for a round-bottomed vessel. Besides the objects figured there were others which it has not been thought necessary to draw: such as certain fragments of the grey slip Cypriote ware with white basket work upon it, of the white slip ladder-pattern bowls, and of ordinary Mycenaean ware; one of the very common cyma-bowls; four of the common one-handled jugs, three of which were of the usual Second Semitic type with long tapering bases, one approximating more to the blunt stumpy base of the later periods; a spherical slingstone of flint, 3" in diameter; a lump of limestone $4\frac{3}{4}" \times 4\frac{1}{8}" \times 3\frac{1}{8}"$, with a conical depression in the upper surface; a flat smooth sea-worn pebble; fragment of comb-faced pottery; many flints of common types; a fragment of an *Anodonta* shell; a number of goat bones; and a large lump of bitumen.

16 I. A small oval chamber 16' 6" in maximum diameter. The roof is 4' 9" above the level of the floor: there is a circular pit in the middle of the floor, 6' 3" across and 10" deep. There is a deep flaw in the rock on the right-hand side. See Plate xiv, fig. 8. About 2' above the rock there was a regularly laid platform of stones on which bodies had been laid: they were much disturbed by rats. Most of the bones were of children; just inside the entrance on the left was the skeleton of a child aged about 6; near it part of the skull of another child about the same age. Farther in, on the same side, was a rather older child, near it being an infant's clavicle. Between the child first mentioned and the older child was found the calcaneum and one or two other small bones of an adult, and underneath was an adult's skeleton, the skull of which was perfect; beside it, head to head, a child about 10; and behind these, between them and the wall, two children, and a fragment of an adult's skull. These bodies, so far as their disordered and rotten state permitted one to judge, had been doubled up in the way characteristic of these early interments.

A considerable quantity of pottery was deposited with them: it was of the Troglodyte and First Semitic Periods exclusively.

The most remarkable objects found were as follows: (1) Fragments of a very large jar like the example figured in *EF*, p. 3, from Tell es-Safi, deposited near the top of the silt. The ware is the common gritty drab, lightish brown on the surface. It is covered with the lime cream wash. The diameter of the base is 10½". (2) A remarkable number and variety of ledge-handles. (3) Small fragments of a jar similar to that first described, covered with white cream wash and with red painted lines. (4) Small fragments of a vessel which has had red lines painted on it, shading gradually to yellow. (5) Half of a granite grindstone which seems to have been circular in form, 6½" in diameter. (6) Fragments of a fine bowl of homogeneous yellow ware, burnt black in the middle, with few grits and covered on the surface with a red wash. There is a small loop-handle on one side. (7) Fragments of a bowl covered with white lime cream wash, and with a handle formed of a double strip of pottery which just turns over on to the inner surface of the bowl. (8) Two fragments of a bowl similar to No. 6 but smaller, the surfaces varying from light yellowish brown to light red and brightly burnished. (9) Fragments of a small jug with one handle in yellow homogeneous ware. (10) Fragments of a bowl with the bottom pinched up: yellow ware, rather grittier than the preceding. (11) Spout of a light Venetian-red vessel in gritty ware; and (12) some quite commonplace flints. The rest of the pottery sherds were of the usual types.

16 II. Although connected with 15 I by a passage, this cave must be treated as a separate excavation. The passage breaks into one side of the southernmost chamber, by a hole so small that it is impossible to pass through. It is probable that the junction is purely accidental. See the plan, Plate xiv, fig. 7.

The cave consists of three chambers, with a roof-entrance to the first and third. The northernmost has been deepened to a depth of 4' below the level of the others to serve as a cistern—or, possibly, has been made quite independently and has

merely a fortuitous connexion with the other two. The intermediate chamber is a small cell, 4' 9" high : here were lying a jar and part of the skeleton of a woman. The southern chamber, the roof-entrance of which was at one side, is 6' 3" in height. It is the largest of the three, being *if* 1" in diameter.

We must now describe a remarkable group of rock-cuttings, situated just north of the great Maccabean reservoir that is so conspicuous a feature in the excavation of the Central Valley. Essentially it consists of a rather irregular rock-surface, broken up by knobs and hollows, about 86' 3" long and 76' 2" broad. It is pitted all over with cupmarks : and underneath the surface is a row of three remarkable caves. These are numbered 16 III, 17 III, and 17 IV respectively, but must be taken together. On this account we shall describe the two last out of their numerical order. The fact that several strata, including one containing very ancient Early Semitic pottery, overlay the rock-surface, makes it evident that we must ascribe its formation to the Troglodytes.

The cupmarks are eighty-three in number. They are mapped in Plate xxvii, which also shews the outlines of the associated caves, and the later buildings erected on the rock. They are of very varying sizes and shapes. The largest, which is partly covered by a later wall that runs over it, is 8' in diameter and 9" deep. Two more, one of them at the north end of the system and one in the middle, are 5' 11" in diameter. At the western end of the system are two others, 2' 11" across: these are partly surrounded with stones set on edge and cemented with mud. The remaining cups are all small, on an average 6-8" across and 5½" deep. A few of the smaller cups, and all of the larger, are circular: the majority of the small cups are oval, or even rectangular, and shaped like the segment of a cylinder, the two long sides of the hollow being vertical, the short sides curving regularly downwards to the middle. In two there is a deeper hollow at one end of a cup, and in two cases four cups are cut so close together that they break into one another and practically form one composite cup. As a general rule the cups are cut on projecting ledges and the high parts of the rock-surface. With one exception, the deepest hollows are avoided in selecting positions on which to cut the marks.

We now proceed to describe the three caves associated with this group of rock-cuttings.

16 III. This is one of the most interesting rock-cuttings found on the *tell*. It may be described as a large rectangular chamber, partly divided by a partition, that runs through the northern half of it, into two roughly square bays: a subordinate bay is excavated on the west side (see the plan). Exclusive of this projection the length of the whole cave is 36', and the breadth (north to south) 38'. The height of the roof is n'5½", this being the most lofty cave discovered in the excavatipn. Apparently it projected yet farther towards the south when originally quarried out; but owing to a subsidence or earthquake the rock roof became badly cracked, part of it falling in : a crude masonry wall was built up to support the

remainder. As this wall cuts the small hollow 17 III off from the cave under discussion, it is possible that they originally formed one excavation. A flight of steps has been made in this wall, but these fall short of the floor by about 4' 11": they would appear to have been made when the cave was, as I found it, partly filled with silt, to the upper surface of which these steps afford ready access.* The original entrance is at the end of a passage leading off at the south-east corner, where is a flight of eleven steps cut on the rock. This stairway is identical in style with the steps at the entrances of the Troglodyte dwellings, except that

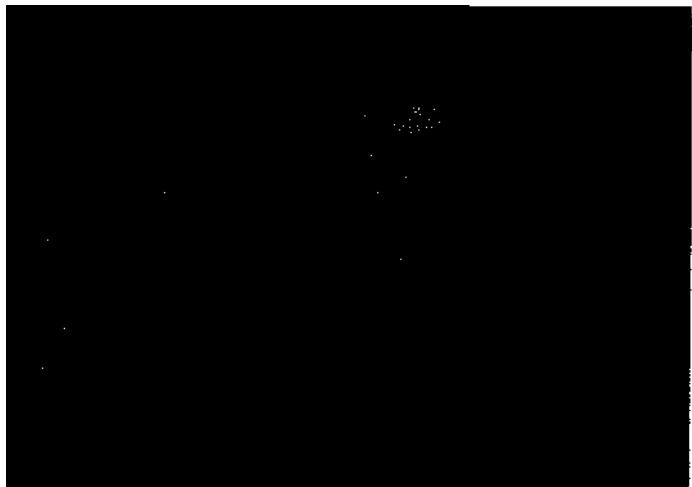


FIG. 33.—VIEW OF THE STAIRCASE IN CAVE 16 III

it bends at right angles at the top in a way not found in the other caves. A view from the interior is shewn in fig. 33.

The floor of the cave was originally carefully worked smooth, as the fragments remaining round the walls indicate. Except these fragments, however, it has been broken up and deepened carelessly, perhaps by later treasure-seekers. Between the end of the central partition and the built south side, an oval pit of considerable size, apparently meant for water, has been sunk in the floor. As this pit interferes

* *I.e.* when buildings had been erected on the surface and the cave adapted as a cellar.

with free passage between the various parts of the cavern, it is perhaps a later addition to the scheme.

By good fortune the cave is not cut in the stratum of friable limestone, but in a bed of soft compact chalk, easily worked and retaining the impressions of the tools as sharply as sealing wax. These toolmarks are very instructive. It is evident that metal tools were not employed, as the marks display irregularities, grooves, and ridges that indicate irregularities in the edge of the tool such as no metal chisel would have displayed: *one* or two chisels might have been so nicked, but we could hardly believe that the whole armoury of the quarrymen's tools was thus imperfect. Like the great water-passages described later in this chapter, the cave was excavated with *flint* knives, the ridges being the marks of the teeth in their edges, or else possibly with wedges of wood which had been trimmed by means of flint knives into shape.

The primitive nature of the instruments employed is corroborative evidence of the high antiquity to which we have assigned this cave and the system of rock-cuttings with which it is associated.

Beside the chisel marks, the only traces left by the occupants of the cave are a figure like an X, with above it a mark like a very narrow V, cut low down on the wall of the inner bay. These symbols have no apparent meaning.

The similarity of the plan of this cave with a very remarkable but no doubt much later cave at Tell Sandafrannah, even if it be a mere coincidence, is very striking. In both we find a rectangular chamber, divided by a partition into bays. The description of the latter cave will be found in *EP*, pp 248-250, and the plan on Plate 102 of the same work. As no light on either cave is to be expected from a minute comparison between them, it will be unnecessary to go beyond calling attention to the Sandahannah cave, referring the reader who may desire to examine the question more closely to the place where a full description of the latter cave is to be found. The end of the partition is shewn in fig. 34.

17 III. This is a small hollow sunk in the rock, only about half covered by the rock-table, and lined on the northern and eastern sides with crude masonry. There are two broad shallow cupmarks in the floor of the cave. It is 14' 2" long (the eastern half being open to the sky) and 9' broad.

17 IV. This cave is 32' long, 20' broad, and 7' 11" in maximum height. The long axis lies north-west to south-east. There are two entrances: one of these, on the east, is a tall narrow doorway, approached by a passage sloping downwards; the southern side of this doorway is built up with rough rubble, set as usual in mud. The other entrance, on the west, is a low narrow creep-passage under a projecting shelf of the rock-table, and opening just under the roof of the cave. It is just wide enough to pass through.

At the northern end of this cave is an apsidal projection, in which the floor is stepped upward about 2'. In the roof of this apse is an orifice, 1' wide, at the bottom of a funnel-shaped perforation that passes through to the upper surface. The roof here is 3' 5½" thick. The perforation at the upper surface

is 2' 8" in diameter. Into this orifice a channel, 4' 6" long, 1' 2" broad, cut in the rock-surface, leads from the north-west side, and some of the neighbouring cup-

Some guesses regarding the possible use of this remarkable series of rock-cuttings may be given in a later chapter. We must for the present proceed to describe the rest of the caves, beginning with the two, 17 I and 17 II, which have been misplaced in order that the members of the group just described might not be divorced.

17 I. This was originally a dwelling, as is to be inferred from the stepped



FIG. 34.—VIEW OF THIS INTERNAL DIVISION IN CAVE 16 III

entrance, the lowest step of which, being inconveniently high, has a large stone placed before it to serve as an additional step. It was partly adapted for the burial, apparently of a single individual, in the First Semitic Period.

The plan is shewn in Plate xiii, fig. 10. It consists of two chambers—one 28' 11" in maximum length and about 5' 11½" in average height. Nothing was found in it but potsherds, of no special importance, and apparently not connected with the interment. The smaller chamber to the left of the entrance is 8' 2½" long, 4' 11½" broad, and 3' 11½" high. It contained an important series of jars, bowls, and saucers, ranged around the wall. The deceased was buried at the entrance to this chamber. Only fragments of a tibia, fibula, and pelvis were found, the rest having crumbled away; their relative position shewed that the body had

been placed in the usual contracted position. Under the earth in which these bones were found was a pit in the rock 3' 9" across and 1' 4" deep, having in the bottom a small cupmark 10" in diameter. The interment does not appear to have had anything to do with this pit, which is probably an olivc-prcss referable to the time when the cave was inhabited. The pottery with the interment consisted of (a) four large jars, one of them with two handles and 2' 1" high—the other three without handles, measuring 1' 1" to 1' 6" in height; (b) two bowls resembling Pl. xx, fig. 8; (c) two small jugs of the type of Pl. xx, fig. 2, which were found inside two of the jars—they had probably been placed as wine-dippers; (d) three small jugs of the type Pl. xx, fig. 4; (e) a hemispherical bowl on a flat disc base, 4 1/2" across, 7 1/2" high; (f) a flat wide-spread bowl, in fragments; and (g) the two fine bowls shewn in fig. 35. Of these one (that with handles) is of a brown-coloured ware. The breadth is 1' 1 3/8". It stands on a flat disc base. The other

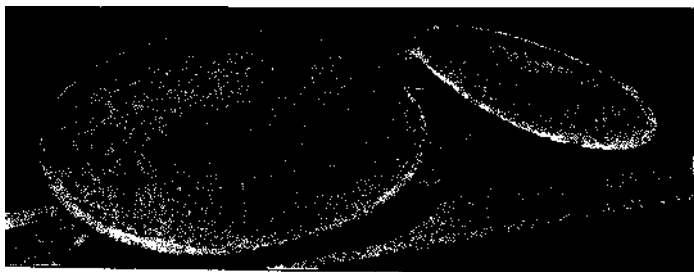


FIG. 35.—BOWLS FROM CAVE 17 I

is of a red ware, standing on a ring base. It is 1' 4 3/4" across. It had been cracked, and holes for riveting were drilled on each side of the crack.

As regards the position of these vessels, they were in two groups; one ranged against the wall to the right of the entrance to the chamber, the other in the corner to the entrance. The first group, from the entrance inward, consisted of b, a, d, a, e,* in this order, with a jug c inside each of the jars a. The second group, also from the entrance inward, was a, a, g, g (the large red dish partly over the smaller handled dish), b, d, f. The remaining jug d was in the middle of the floor, upside down; it was of small size, being only 3" long.

For the sake of completeness it may be as well, before passing from this cave, to chronicle such of the objects found in the larger cave as presented any distinctive features. They consisted of (1) fragments of two small jugs of the type denoted as c above. (2) A narrow loop-handle with a single vertical scratch at its lower attachment. (3) Fragment of a vessel rather like the type denoted above as

These letters refer to the enumeration of types in the preceding paragraph.

d: of porous ware. This was the most archaic-looking of all the pieces (4) Tail and hindquarters of an animal's figure in pottery: enough remains to shew that it was represented with panniers. (5) Fragments of a bowl about one foot across, with a ring base; one loop-handle; a red line painted round the rim. (6) Fragments of a dish with flat angled shelf-handles: only one other specimen of this type was found in the excavation, in tomb number I; it is shewn in Plate lxii, fig. 46. (7) A number of compactly baked bell-shaped weavers' weights. (8) Fragment of a bowl of the type denoted as *b* above. (9) A flat triangular stone 4" long, with a slight depression in one side of the apex. (10) A stone ring spindlewhorl of the common type, 1½" in diameter. (11) A bar of limestone of oval section. (12) Two fragments of bone, each with a circular perforation, and one of them with in addition a saw-cut

on the edge thus .

17 II is entered by a hole in the roof: the chamber measured 8' 2½" x 7'. It contained three large jars, lying on their sides, one of them perfect, the other two broken: stones were built round them to keep them in position. This cave was directly over 16 III, and the greater part of the floor had at some time collapsed and fallen into the cavity below. No trace of bones remained, the fact that it was an interment being only hinted by the type of the jars and the evident intention of their deposit. The jars were quite empty.

18 I and 19 III. These are the two caves which appear to have been of importance in connexion with the High Place. Though now connected by a narrow crooked passage, they seem to have been originally independent, and as they certainly antedated the High Place they may here be described, reserving a consideration of their possible religious uses for a later chapter. See the plan, fig. 36.

The ground plan of 18 I can best be described as resembling a distorted copy of the map of Africa. The entrance is a little west of the middle of the north side. It is a very narrow staircase with five irregularly cut steps: the treads of the steps slope downwards, and the users, which are of convex outline, slope outwards.

The lowermost step is developed into a platform about 1' high, occupying the whole of the western part of the cave. East of the entrance steps it is prolonged into a curious curved seat-like ridge, with a hollow between it and the wall of the cave. Its purpose is not clear: its appearance can be understood from the sketch referred to.

Not only is the floor of the western part of the cave higher, but the roof is also lower, than in the eastern side; so that it is here impossible to stand upright. In the rest of the chamber the height of the cave roof is on an average about 6' 1".

A little east of the entrance is the opening to a narrow passage that leads to 19 III. This passage has great importance in our theoretical reconstruction of the use of the cave, and its description may fittingly be postponed until the second chamber has been examined.

At the north-east corner of Chamber I there is a depression or pit, about two

feet in depth. The purpose of this pit was perhaps the collection of water that during the winter rains found its way into the cave. A considerable quantity of water was received by the cave during the storms of each winter after I had opened it, and the amount of earth silted in was remarkable.*

South of this pit is a small opening in the wall of the cave about 3' 3" in diameter, leading into the subsidiary chamber already mentioned. This is a small circular dome-shaped cell, about 6" 7" in diameter, with an independent entrance in its roof closed by a block of stone. The floor of this cell is raised about 1' 8" above the floor of the principal chamber, and the sill of its entrance is raised a farther height of a few inches.

South of the entrance to this cell the floor of the principal chamber rapidly rises, so that the space tapers almost to a point at the extreme south end. This part of the chamber was almost entirely free from silt when it was first opened. Here were found fragments of a man's skeleton. There was also an infant skeleton laid on a stone lying on the silt just about the position of the figure "I" in the plan, fig. 36.

There was a small cleft in the roof, by which entrance was first effected in the excavation. This was the southern end of the platform already mentioned as occupying the western side of the cave. North of it two other clefts, yet smaller, were afterwards noticed. The maximum diameter of this cave, from north-west to south, is 40'. The objects found in the cave indicate that it was occupied as a dwelling by a people of simple requirements and low civilization, for some time before its adaptation into the scheme of the Semitic High Place.

The second cave of the group, 19 III, to the north of the first, is triangular in plan. The entrance resembles that of the first, but is better cut: the steps are wider and straighter, and the doorway is well formed. In fig. 36 the two doorways are shewn, *a* being that of Chamber I, and *b* that of II. There is a circular hole bored through the northern jamb of this doorway, probably for receiving some primitive form of door-fastening.

This chamber is slightly lower in the roof than the first, though it is possible to stand upright in it over the greater part of its area. Its maximum diameter, north-east to south, is 7' 10". Even more than the first did it fill with water during the winter rains: no drainage basin was provided.

On the northern side there is a large hole broken in the side of the chamber, entering just under the roof. When found, it was seen to have been closed with a large pile of stones on the outside surface of the rock.

The bottom step of the entrance staircase is a moveable block of stone, rising

* It has been already remarked that during the excavation the mouths of these caves were surrounded by lofty "dump-heaps" which collected rainwater and directed it into the mouth of the cave, so that the pools formed during the excavations were probably larger than those formed in the cave when it was a dwelling-place and when there were no such extensive catchment surfaces. However, some water must have run in, and the pit described was well suited for collecting it. Moreover, though very muddy, the water might possibly be useful to the inhabitants of the cave, so long as it remained.

an inch or two above the level of the lowest of the rock-cut steps. The contents of this cave in all respects resembled those of the first

19 I. A large cave, a plan of which will be found in Plate xiii, fig. 4. It is probably for the greater part a natural hollow in the rock. The use of this cave must antedate the building of the second city wall. A tower of this wall is built over the mouth of the cave; and though the entrance to the cave is not concealed by the masonry, but is in a corner of a chamber in the tower, that chamber was entirely filled with small stones, and the entrance in consequence was effectually blocked. The small cave 27 I affords an exact parallel.

The entrance to this cave is a hole in the roof at its north west side. It has no staircase, access being obtained by a rather awkward drop. There is one large irregular chamber, the floor of which is cumbered with a huge mass of rock fallen from the roof. At the south-east corner a narrow extension leads, by a small circular hole, through which it is just possible to squeeze,

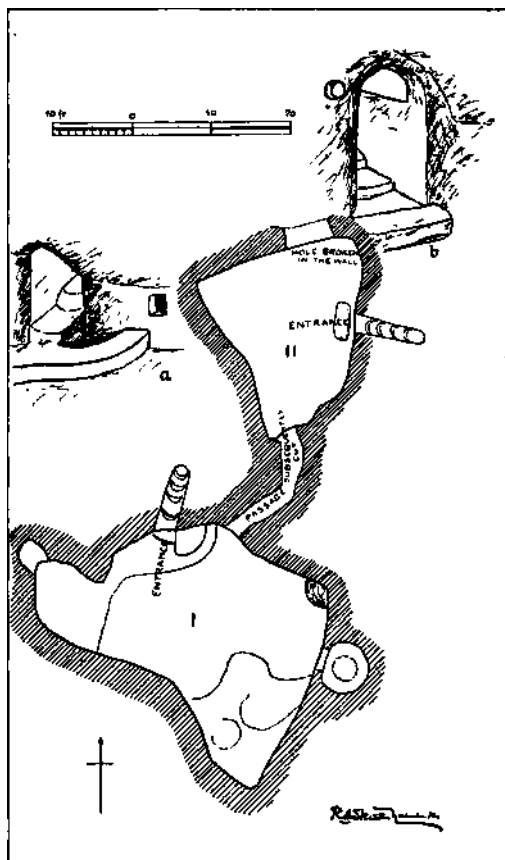


FIG. 36.—PLAN OF CAVES 18 I AND 19 III

into a beehive-shaped cell, 5' in diameter, too small to allow a man to stand upright or to stretch at length.

There was one interment in this cave, on the south side. The bones were much corroded, but it appeared that the skeleton had been extended, and that a fence of stones had been built round it: in fact, that it resembled in all respects the special interments in the Crematorium. A beginning seems to have been made at erecting a second enclosure, which however was abandoned. The pottery

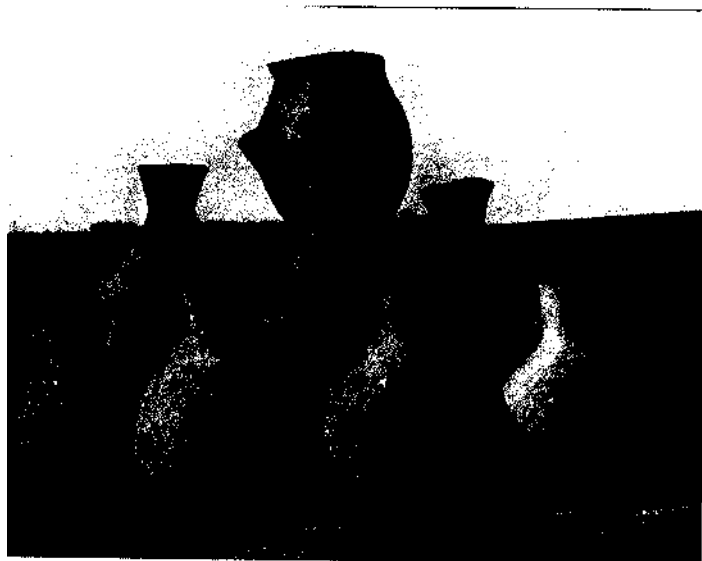


Fig. 37. --VESSELS FROM CAVE 19 I

from this cave was comparable with that of the same interments; and except a number of carnelian beads (also identical with those found with the Crematorium secondary burials), the cave yielded nothing else of interest. The small vessels shewn in the annexed photograph (fig. 37), which are about 2" high, were the principal remains: they are nearly all painted with a fret of red lines. There were also three slender jugs about 6" high, with narrow flat base and one handle, and a vessel about 4" high, globular, with two ear-handles in the sides. From these particulars it appears that, whether or not this particular cave had

been used for a dwelling in the Troglodyte Period, it had been adapted for burial by the earliest Semites before they closed it by building their great wall over the mouth. Indeed, as this cave was accessible through the chamber in the wall tower, it may be questioned whether the interments are really earlier than the wall, the cave on that theory being closed later by piling up the stones with which the chamber was found to be intentionally filled.

19 II. This cave is connected with the last by a single hole through the partition wall such as might have been accidentally broken by a quarrying tool, but too small for any practical purpose. This cave contained two skulls and some early potsherds. The letter A is marked in the plans of these two caves to indicate the spot where they communicate with one another. See Plate xiii, fig. 1.

In the same trench, north of this cave and outside the inner city wall, were two small openings in the rock. These were found to be empty, and in all probability they were natural hollows of no importance.

19 IV. A hollow 20' 4" in maximum diameter, with the entrance at the south. It contained fragments of two skulls and some potsherds, including a jar-handle with + marked on its lower attachment and a large conical weaver's weight. There were also two fine bone pricklers, one of them 5¾" long. Calling for more special mention are an arrowhead, a needle with the eye in the middle of the shank, two pins, and a small bifurcating bar (use unknown), all in bronze, and a nondescript fragment of the same material that lay in the silt filling the cave.

The two caves in trench 21 are described later in this chapter, in dealing with cisterns, they having been much altered to serve that purpose.

27 I. This cave consisted of one irregular chamber, with rock-cut steps at the entrance, made with even less order than usual. That the deposits were of high antiquity is shewn by the fact that a great pile of small stones was heaped over the mouth, upon part of which as foundation the inner city wall was erected. With this accords the fact, among other things, that of the pottery only one fragment displayed any trace of the wheel.

The only traces of building inside the cave was a row of single stones, at the foot of the entrance steps, which with the bottom step intercepted a space 3' 4" broad and a similar row, rather farther in. These are duly marked on the plan (Pl. xiii, fig. 9). It must be noticed that the first row was founded on the rock directly, while the second stood on the earth filling the cave, 2' 4" above the level of the ground.

The cave, which was 31' 4" long and 7' 1" in maximum height, was filled to within 3' 3" of the roof with a dry powdery earth, which contained a considerable number of potsherds and bones. Of the bones one was the skull of a dog, another the front part of the upper jaw of a donkey, and some others belonged to a cow that seems to have been deposited in the inner part of the cave; the remainder were human, laid in a crouching position each on a platform of stones. Five adults

and one child were represented. They were all laid in the powdery earth with which the cave was filled, about 2' from the rocky floor.

There was one cupmark in the floor of the cave.

Besides pottery, the only objects deposited in the cave were the following (they are shewn in Pl. xxviii): four maceheads, two of them (Nos. 2 and 3 in the plate) placed under a skeleton which lay in the middle of the cave, and which very probably belonged to some early king or sheikh of the city—the other two were found each with one of the other interments; a small bar of bone, 2" long, polished, and ornamented with random cuts, most of them horizontal, on the side (Pl. xxviii, fig. 21)*; a ring of limestone (bead or spindle-whorl) of the common type (Pl. xxviii, fig. 22—the shaded part in the drawing represents the section); part of the foot of a stone fire-tray; and an amulet made of the bone of a goat, similar to one found in the cremation cave (Pl. xxviii, fig. 20).

Except some small pots similar to Pl. xxviii, fig. 4, of which one was found with thence of the interments, and figs. 8, 11, which were found with the skeleton with two maceheads, there was no evident connexion between the pottery deposits and the skeletons. The vessels were nearly all broken, and in most cases mere sherds were preserved. A good many large jars with ledge-handles were represented, all by small sherds. The small pot fig. 7 was in lightish brown ware. Fig. 8 was a light "porridge" colour. One of the most remarkable sherds is the upper part of a large jar, figured in Pl. xxix, fig. 1: the handles are placed unusually, at right angles to the axis of the neck, not parallel to it. When complete the bowl of which Pl. xxix, fig. 2, is a sherd must have measured about 1' 8½" in the internal diameter of its lip.

Moulded ornament of various kinds is illustrated by different specimens, such as by Pl. xxviii, figs. 10, 18, consisting of oblique strokes in the side of the vessel, and the reddish-coloured fig. 12, with similar strokes on the edge; rope moulding by fig. 13; wave moulding by the drab fragment fig. 5 or Pl. xxix, fig. 2. Note also the six punctures at the upper attachment of the handle Pl. xxviii, fig. 16.

Painted ornament is restricted, as usual in this very early ware, to lines—vertical drip-lines or a fret—in dull dark red. The types of vessels that shew this form of painting are those of the type of fig. 18, which are often ornamented with drip-lines, and fig. 4, which is ornamented with a fret. Fig. 6 is of reddish brown ware covered with a red wash; fig. 11 also has a red wash.

One fine specimen—only the bottom of a jar with part of the side remaining—was found of burnished ware. This also was the one example of wheel-turned pottery. The ware was covered with a dark red slip, highly burnished—much resembling the colour of Samian vessels.

The rare four-spouted lamp in diab ware (fig. 9) calls for special notice.

28 I. An ordinary oval chamber with a staircase entrance at the east end. It was not wholly excavated, as it was necessary to leave a support for the rather

* The development of the ornamentation of this object is reversed, being drawn from a wax impression made from it.

those that do appear indicate stone rather than metal chisels as the implements adopted by the excavators.

The entrance A¹ is an irregular hole, cut in a vertical face of rock. It is 5' 6" broad and about 4' high. It gives access by a drop of about 2' into the first chamber. Descent is facilitated by three narrow steps—mere "toe-holds"—not more than about 2" across.

The chamber (1) thus entered is one of the most interesting in the entire series. It is an irregular oval, measuring 21' in length (north to south), 14' in

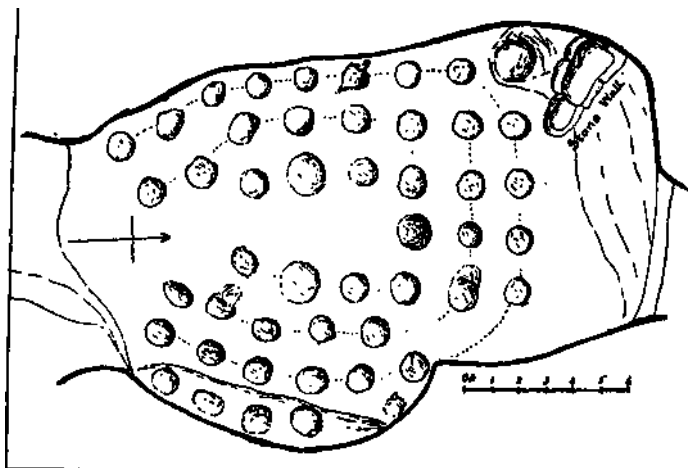


FIG. 39.—PLAN OF CHAMBER WITH CUPMARKS IN CAVE 28 II

breadth—including a narrow strip along the eastern side, the floor of which is sunk slightly lower than the floor in the main chamber. The maximum height is 5' 11".

There is a small stone wall of two courses proceeding diagonally from the western side of the doorway. This is 3' 6" in length. The stones are set together dry, without mud in the interstices, and the second course is slightly narrower than the first.

The chief interest of the chamber, however, is the very remarkable system of cupmarks with which the floor is pitted. In order properly to display the disposition of these hollows, an enlarged plan of the chamber (fig. 39) is here presented, together with a photographic view of the interior (Plate xxx, fig. 2) looking southward.

The group of cups is remarkable for its regularity, both in the shape of the

cups and in their relative disposition. They range between 8" and 12" in breadth. With a few exceptions they are carefully made, with flat bottoms and vertical sides. They are disposed in the form of three concentric ovals, open, like horseshoes, at the south side, surrounding a central space in the floor that has been left vacant: this space, with the inner ring surrounding it, is well shewn in the photographic view. In the plan, fig. 39, the rings have been made clearer by means of dotted lines uniting the cups of which the ovals are composed.

The inner ring contains nine cups, the middle fifteen, and the outer eighteen. In addition there is a row of four, in the narrow eastward extension of the chamber that has already been mentioned. There are also two hollows, one in the angle between the short stone wall and the side of the cave, the other in the angle at the north end of the eastward extension. These have been indicated on the plan, fig. 39; but on account of their irregularity I am inclined to consider them natural hollows in the rock, and not belonging to the scheme of cupmarks at all. They may, I think, be safely neglected in any consideration of the scheme upon which the cups were laid out.

That a definite scheme was followed is obvious. The disposition of the cups into rings is certainly intentional; and there is an indication that the number of cups in each ring is also not a mere matter of chance. It will be seen on examining the plan that in the middle ring there is a long gap at the north-west corner which could easily have been filled with another cup, had it been in accordance with the intentions of the cutter to do so. There is a similar gap in the same place in the outer ring. Further, it is noteworthy that the number of cups in each ring is a multiple of three: nine (3×3) in the inner, fifteen (3×5) in the middle, and eighteen (3×6) in the outer.

The chamber (2) is the centre of the northern section of the cave. It is of very irregular outline, but by ignoring the irregularities of plan we may describe it roughly as rectangular, about 33' east to west, and to-15' north to south. It has evidently been developed from a natural fissure between two strata: the fissure itself can be seen extending eastwards, becoming rapidly so narrow that it is impossible to advance in it or to gauge exactly where it ends. The interior of this chamber is shewn in the photograph fig. 40.

About midway between the doorway between chambers (1) and (2) and the north-west corner of this chamber is the second external entrance to the system, A². This entrance will be found in the photographic view, Plate xxx, fig. 1, about the middle of the picture—to the left of the group of labourers round the crane*. It is a vertical doorway like the first, but higher: the approach to it is a curved passage sloping downward, scarped in the rock-surface. In the north-west corner of the chamber a narrow tunnel, singularly like one of the *kokim* of Maccabacan tombs, 8' 4" in length, runs in a north-westerly direction into the rock.

There is a second entrance to this chamber from the outside, marked A⁴ in the plan. It cannot be seen in the view, Plate xxx, fig. 1, but its position is marked

* This crane is erected over the mouth of a cistern entirely independent of the cave under examination.

by one of the two boys who stand at the left-hand side of the picture, between whom a white-veiled girl is sitting. The boy in question is to the right. This entrance is an oval opening in the roof, 9' 8" x 2' 6", of the chamber: the descent to the floor—a distance of 6' 3"—is made by means of nine steps, rudely built of dry stones. These steps are shewn in Plate xxx, fig. 3. They are of fairly uniform rise and tread (about 8½" to 9¼" respectively), and their width expands from 2' 2" at the top to 4' 2" at the bottom.

At the foot of these steps is a deep cistern, of the ordinary bell-shaped pattern

Bottom of steps from Mouth
entrance A cistern

of

Cup arks in

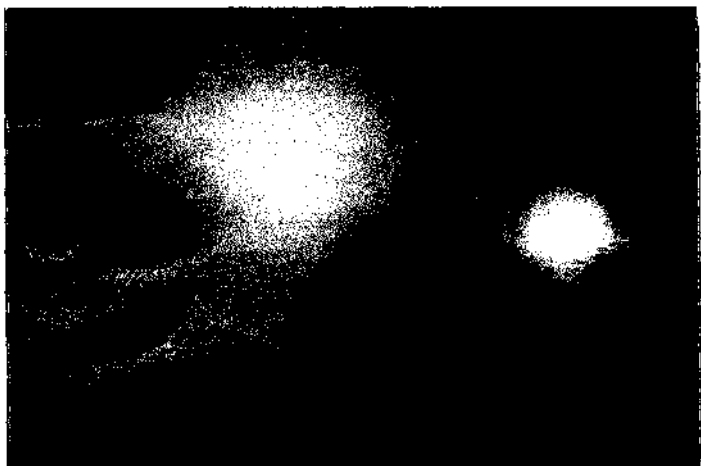


FIG. 40.—INTERIOR OF CHAMBER (2), CAVE 28 II

common at all periods of the city's history. It is midway between the two entrances A^2 and A^3 . The plan does not convey a full idea of the danger in which it involves the use of these entrances. This is especially the case with A^2 : as the plan shews, the passage by which this doorway is approached turns just at the point of entering, where the floor of the passage becomes steep, and a stranger is not aware of the cistern's existence till it is almost too late to stop himself from falling into it. This seems to have struck those who made use of the cave, for the entrance in question, when found, was seen to have been carefully built up. It seems to have been used afterwards as a channel whereby water was conveyed to this underground cistern, for a square shaft, about 6' in height, was built over it, with, in one corner, a

channel evidently for conveying water. Whence the water came it is impossible to determine, as nothing remained of the beginning of the channel. The stones with which the doorway was stopped up were not so tightly wedged as to prevent water from percolating through in a fairly steady stream, which would find its way to the cistern immediately. The photographic view, Plate xxx, fig. 4, shews this shaft as it appeared before the cave was discovered and the stratum concealing its various entrances was removed.

That the cistern is not part of the original scheme of the cave appears certain. There is evidence of an alteration of purpose at the mouth, which indicates some such conclusion. Originally the sinking in the floor, to whatever it may have led, was oval, starting exactly from the foot of the built steps already described—or rather extending a few inches underneath the lowest of the flight. In this linking, the line of steps was continued by six others, beautifully cut in the rock. These, I suspect, led originally to a lower chamber. The steps were afterwards covered by dry stone masonry, which made the shaft truly circular, and the underground chamber was deepened into the cistern as we now see it. The depth of the cistern is 24'.

In the middle of the west wall is a small circular hole, which gives access, not without some squeezing, into an insignificant chamber (3). This chamber is about 10' long by 8' broad at the east end, which is the broadest place. The height is 4' 7". From the west end a tunnel runs, at first in a due westerly direction, then turning north-west. In the first part is a very narrow doorway, the most difficult "squeeze" of the entire excavation—2' 2½" long, 2' broad, and 1' 3" high—after which the tunnel mounts by steps, and ends in chamber (4).

This chamber was originally provided with an independent entrance, which, like A², was built up. From this entrance access was obtained to the floor by a rock-cut staircase running spirally round the walls—the only example of this type of rock-cutting, so common in the Beit Jibrin district, that has been found in Gczer or its immediate neighbourhood. There were eleven steps in the staircase, but the three uppermost had been quarried away, and some of the rest badly broken. The breadth of the staircase at the bottom is 3', the width of the treads 1' 4", the height of rise 8".

There is, in addition to the mouth of the tunnel (which is about 9' above the floor of this chamber) and the doorway at the head of the staircase, a circular well-shaft in the roof. Unquestionably this chamber has been used as a cistern, for the walls are cemented, with potsherds in the cement. Unfortunately the sherds were not very informing in quality, so that the exact period of this use of the cave is not easy to discover: in any case it was subsequent to its original excavation. To judge from certain objects found in the silt that almost filled it, its use as a cistern may be referred to about the middle of the fifteenth century B.C. The mouth of the tunnel was found stopped up with a pile of stones, and these stones were cemented over continuously with the cement on the walls of the chamber. The total dimensions of this chamber are about 25' x 17'.*

* Here and elsewhere approximate dimensions only can be given, which however are sufficient to give an idea of the *sue* of the chambers. The length and breadth vary considerably in every case according to the exact place where they are measured.

Returning now to chamber (2), we find that east of the built staircase that descends from entrance A³, it continues southward in a broad passage, about 26' in length, and in breadth diminishing southward from 10' to 8'. At its southern end there is on the eastern side another external doorway, A¹, approached by a curved passage scarped in the rock. This passage was stopped up by a heavy stone (measuring 4' x 2' 6" x 1' 9") that had to be broken in pieces before it could be moved. This was necessary, to determine if it concealed any steps cut in the rock, as proved actually to be the case. There was most probably a building erected over the entrance passage, of which, however, not a tangible trace remained: the block of stone was perhaps intended to prevent access to such a building from below.

Another great block of stone, measuring 3' 9" x 3' 3" x 2', was placed standing on edge just inside the doorway, and south of it, completely interrupting farther progress inside the cave itself: it divided the excavation into two absolutely distinct parts. The united efforts of six men were necessary to turn it out of its place. A number of smaller stones were placed beside it, and served to make the partition yet more complete.

Behind these stones was a low doorway, 6' 7" broad, which led into a small, roughly circular cell, about 8' in maximum breadth. The middle of the floor of this cell was occupied with a circular vertical shaft, 3' 7" in diameter, which gave access to a second bell-shaped cistern. This resembled the cistern in chamber (2), but there is no evidence of a change in design such as is traceable in the other. It is 11' deep. The walls of this cistern are smooth, and are among the few places where toolmarks are to be seen on the surface of the rock inside this system. These toolmarks shew ridges which seem to indicate that they have been made by means of a flint knife, with the edge chipped into a saw, rather than by means of any metal or wooden tool.

Just south of this cistern is a narrow door, leading to a second small cell, with the floor at a slightly lower level than that of the first. From this cell a tunnel runs which connects the southern portion of the cave with the northern. This tunnel communicates with the cell by an awkward hole, in the roof of the tunnel and the floor of the cell, making it necessary to bend the body backward in an uncomfortable manner when passing through it. The narrowness of the tunnel adds considerably to the difficulty.

The total length of the tunnel is 48' 8". It bends thrice in its course—proceeding first for a short distance south-east, then nearly due south, and then almost due east. In its course it expands gradually from north southwards, both in height and in width.

The system into which this tunnel leads is not easily described, but its disposition can be made clear with the help of the plan. The tunnel opens on a raised platform, which fills the end of the northern stem of a great U-shaped chamber, the apices of which, numbered 5 and 7, are pointed westward. In the middle of the area of the platform on which the tunnel opens is a vat, 2' 8" in diameter and 2' 3" deep. The floor of the greater part of the U-shaped chamber is sunk below the level of this platform. The latter is returned for some little distance along the north wall, and above the return is an opening in the wall 5' in breadth and 3' 2" in height

which leads, by a short passage running in a direction oblique to the axes of the chamber, into another apartment (6).

Chamber (6) seems to have been discovered accidentally in the sixth or seventh century B.C. by well-sinkers, who broke into it when making a cistern. Using the chamber as a basis, they deepened its floor to a total depth of 30' below the surface of the rock—about 45' below the mouth of the cistern shaft which they built through the overlying debris, this being by far the deepest cistern discovered on the mound. The steps by which ingress was obtained to the original chamber still remain high up in the side of the cistern.



FIG. 41.—INTERIOR OF CHAMBER (8), CAVE 28 II

An earthquake, or some such catastrophe, was found to have caused a great fall in the rocky roof of the eastern end of this U-shaped chamber—indeed the connexion that originally existed between the two arms (5 and 7 on the plan) was entirely blocked by great masses and slabs of rock. These had to be quarried away and removed before it was possible to determine the original plan of the chamber, or even to make the remaining members of the system accessible. Under the pile of rubbish a shallow pool was found, roughly rectangular, and about 10' square. Three steps led down to it at the western side. The pool had been silted up, and through the silt in the middle of the pool was dug a shaft, developed downwards into another bell-shaped cistern, similar in type to those already described, but rather

narrower in proportion to its depth. At the east end of the chamber was evidently another external entrance, A⁵, with a flight of rude *built* steps leading down from it.

Above the pool in this part of the cave were found five vertical circular perforations, about 6" in diameter, cut right through the roof of the chamber. These perforations were most probably intended to allow rain-water to drain in, in order to fill the pool and cistern.

A small low doorway in the south wall leads into a crooked passage of varying width, in the course of which occurs a vertical shaft 2' wide and 5' deep, perhaps another cistern begun and abandoned owing to the difficulty of excavating in so constricted a space. This passage opens into a pair of small, irregular, and, I think, partly natural chambers, 25' 2" in total length, of no special interest.

The southern branch of the U-shaped chamber, no. (7), as cut off by the fall of rock, is 14' in length and 22' in breadth. Its floor is irregular and has a few shallow pits, but they can hardly be regarded as "cupmarks": they are not apparently formed with any special intention. This chamber and the next were the richest in deposited objects of any in the whole cave.

At the western end of 7, a step upward of 2', and a well-made square doorway, 3' high and broad, 4' thick, lead into chamber (8). This doorway was probably meant to be blocked by a boulder of stone, lying beside it in (7). This chamber, of which a photograph is reproduced in fig 41, has an independent vertical shaft entrance, 3' 2" in diameter and 3' 6" long. There are three shallow toe-holds in a vertical row on the south side of the shaft. The drop to the floor of the cave, below the lower orifice of the shaft, is about 5' 6". When first discovered this shaft was stopped by a great shapeless boulder, tightly wedged into it with small stones. When these were removed and a few projecting angles of the boulder chipped away, it dropped through the shaft to the floor, and appears in the photographic view lying where it fell.

On account of the great value of the objects found deposited in this chamber, it is of considerable importance—indeed, with the possible exception of the cup-marked chamber (1), it is the most important of the entire series. It therefore deserves description with especial fulness of detail.

The vertical entrance shaft may for convenience be described as opening over a small central area, irregular in shape, but roughly speaking measuring about 13' each way; from which the chamber itself and the adjacent members of the cave radiate. It is this vestibule which appears in the figure. To the north of this central area, and occupying its whole width, is a broad bay or apse (chamber (8) itself, 12' in length north to south, and 5' 6" in height. The floors of this chamber and of the part we have termed the "central area" are continuous; but that of the apsidal part of the chamber is distinguished from the central area by a layer of plaster, 2"-3" thick. I had this plaster floor broken up to make sure that nothing was concealed under it, but found that it was laid on the bare rock floor and had no secrets to disclose.

To the east is the square doorway (which appears in the photograph, fig. 41, behind the large jar) that leads into chamber (7). Southward and just west from the entrance shaft is a doorway 1' 6" high and 2' 8" broad. This opens into a passage

10' long, 4' in maximum breadth, and 4' 9" in maximum height. The floor descends in a slope of about 45°, but the roof descends by steps, and the passage ends in a long narrow cell (apparently natural) in which it is difficult to turn. This is 10' 6" long, 4' in maximum breadth, and 2' in height. The floor of the passage is covered with plaster.

Westward we pass into the remaining portion of the system. A passage about 16' in length leads from the central area of chamber (8). It bends almost through a right angle in its course, and tapers in height from 5' 2" to 2' 3", and in breadth from 12' to 2' 2". At the inner end is a small doorway 1' 6" in height and breadth, which admits to a small cell (9).

This cell is a rude oval excavation, 7' north to south, and 9' east to west: it is 4' 6" in height. The only structural peculiarity of this chamber is two small recesses, one in the north side, the other in the west. The first of these is an apse-shaped cupboard on the floor level, 1' 7" across, 1' 6" high at the entrance, and 2' 6" deep. The second is 3' 6" long, 1' 6" broad, and 2' 2" high. It bends very slightly southward in its course. The floor steps up about 6" between the outside end and the middle of this recess, causing a loss in height which is compensated for by the raising of the roof at the inner end into a sort of dome.

Between these two recesses, and at a rather higher level, is an entrance 1' 6" high and long, 1' 8" broad, admitting to a minute cell 2' 8" long, 2' 4" broad, and 3' high. At the north side of this is a narrow hole, communicating with a long narrow chamber (10), remarkable for its plan, which consists of a series of bays. The total length of this chamber is about 30' 9" • its maximum breadth is about 16'. In the central bay on the east side is a series of stones set on end, ranged in a serpentine line. The roof of this chamber, like that of (6), had fallen in.

Having now described the cave, it remains to give an account of the deposits found within it. We must therefore retrace our steps and proceed through the cave once more, this time concerning ourselves especially with a general view of the objects found deposited in its several parts, and the manner of their deposition.

The cupmarked chamber (1) was unfortunately empty, some rude fragments of vessels with ledge-handles being the only objects found in the earth that covered its floor. This is regrettable, as definite information regarding the purpose of this chamber might possibly have been afforded us had there been suggestive deposits within it. Just inside the entrance was found a small gold rosette, similar to Pl. xxxi, fig. 19.

Chamber 2, also, had not much to offer, except in one place. There were a good many chips and sherds of pottery mingled with the clay of the earth within it, but nothing of any special interest. Between the cistern mouth and the *kok-like* tunnel in the N.W. corner was lying the footed mortar, Pl. xxxii, fig. 6: a little to the south of it were the two saucers, figs. 2 and 3 on the same plate. Near them was the bone stylus, fig. 4

The staircase descending from entrance A¹ was covered with fine earth that had filtered through the stones with which the entrance was blocked. In this earth was found a rich deposit of objects, lying over the three or four lowest steps, which for future reference we shall designate group A. These objects are represented

together on Pl. xxxi. They consist of a fine gold armband (fig. 1); a number of scarabs (figs. 3-8, 18, 30), three of them (figs. 3, 18, 30) set in silver rings; two cylinders, one of them (fig. 15) a seal, the other (fig. 2) plain, enamelled green, mounted in gold and set in a silver ring; some gold beads (figs. 20, 21, 23, 29), and two rosettes (one only of the latter is shown in the plate, fig. 19—the other was identical with it in appearance); a small indefinite fragment of gold (fig. 22), a gold finger-ring (fig. 28), and a quantity of beads in carnelian, jasper, agate, and enamelled paste (figs. 9, 10, 24, 26). One of the latter was in form of a shell (fig. 11). There were also some indefinite fragments of bronze pins, of which only one, with a perforated eye (fig. 17), is worth recording; a fine silver pin of similar character (fig. 12); and some silver crescentic ornaments (figs. 13, 25), and earrings (figs. 14, 16).

In the small chamber (3) nothing was found but the fine jar with ledge-handles (Pl. xxxii, fig. 1) lying on its side just inside and to the north of the entrance. The tunnel which runs from it was nearly full of earth that had silted in, and of stones with which it had been intentionally blocked, but it contained no deposits. The chamber to which it led (the cistern 4) was full of silt, which contained a variety of objects all belonging to a later date than the period of the cave itself. The most interesting of these are shown in fig. 42 and described later.

Returning to the main chamber (2), we must notice that some interesting early waterpots were discovered in the cistern sunk in the middle of its floor. These are figured on Pl. xxxiii

One scarab (Pl. xxxi, fig. 27) was found at the south end of the passage which leads southward out of 2. It lay just inside the entrance A⁴.

The cistern south of this point contained in the earth that partly filled it some fragments of very early pottery, of which the most interesting are shown in Plate xxxii. Some of it was painted (figs. 8, 16, 17, 18), or ornamented with drip-lines of colour (fig. 14); other fragments were combed (figs. 12, 24), or ornamented with rope-patterns incised (figs. 10, 13) or in relief (fig. 11). Other interesting objects from this cistern are the stone weights (?) (figs. 19, 25), a spindlewhorl of clay (fig. 27), a circular disc cut from a potsherd (fig. 23), spouts of early form (figs. 26, 28), and a fragment of the hand of a figure in pottery (fig. 20). There were also some roughly flaked flint knives, of which typical specimens are shown in figs. 15, 21, 22.

The zigzag tunnel connecting the two systems contained a little earth, but no deposits. In dealing with the large U-shaped chamber, it will be convenient to treat its members (5, 7) separately, regarding the two branches as separate rooms, which they virtually became after the fall of the roof at the eastern end.

The northern member had apparently been entered and spoiled of its contents by the well-sinkers, who discovered the chamber (6) and turned it into a cistern. That it had been used for sepulture, like other chambers in the southern division of the system, was demonstrated by the discovery of a skull, a fibula, and a pelvis found in different parts of the room; but the deposits that analogy with the rich interments of (7) and (8) would lead to us to expect to find with these bones were entirely absent. Instead there was a stray painted sherd (Pl. xliii, fig. 1) in this chamber, certainly later in date than the period of these cave deposits: this was probably found in the course of digging the cistern shaft and seized by one of the

well-sinkers as a convenient tool for scraping the soil in the cave in search of treasure.

The skull mentioned above was not, like the other bones, in the floor, but deposited in a fissure between two strata close under the roof of the chamber.

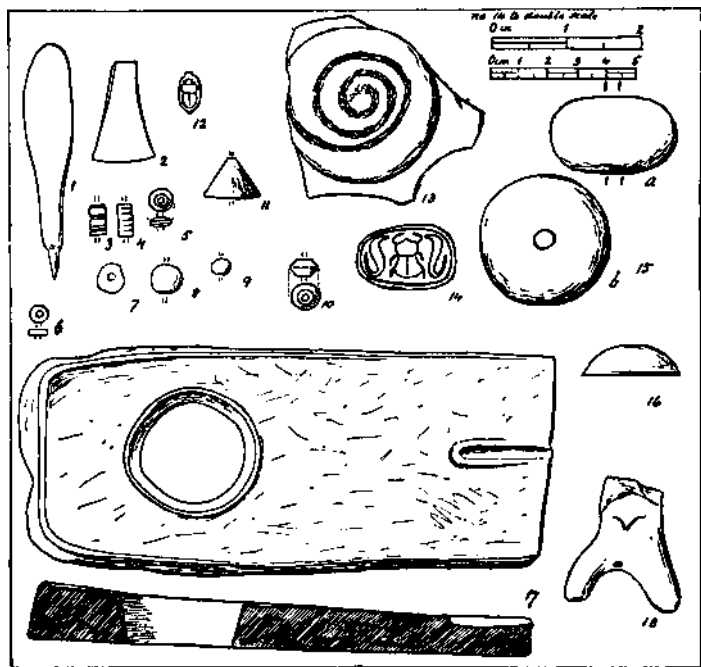


FIG. 42.—OBJECTS FROM CHAMBER (4), CAVE 28 II

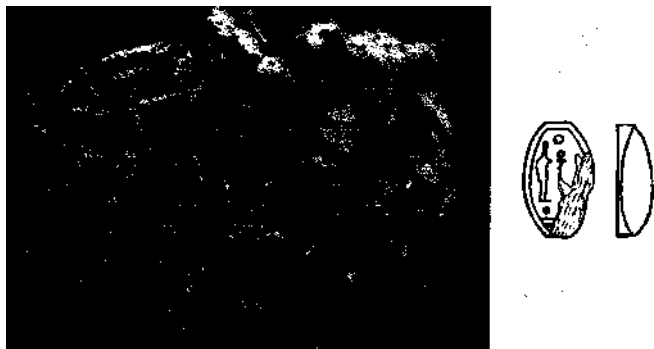
There was nothing in the part of the chamber that lay under the fallen roof. The cistern in this portion of the cave, however, contained a fine bronze pot that apparently had been accidentally dropped in (fig. 43), and a fragment of a green enamelled scarab (fig. 44).

Neither did the small passage extending southward from this portion of the U-shaped chamber yield much of special interest, nor yet the small rooms to which

it leads. In the passage was a large jar resembling Pl. xxxvii, fig. I, but broken, containing a few bones; a jug and some saucers of the commonest type (similar to Pl. xxxviii, fig. 3, and Pl. xxxvii, fig. 4), and a lamp of the ordinary pattern. There was also a fragment of the rim of a very large bowl, which when complete must have been about 1' 8" across.

On the other hand (7), and the room (8) opening out of it, were by far the richest in deposits of any portions of the cave. The happy accident of the fall of rock had sealed the precious contents of these rooms from depredation. The contents of these chambers alone rendered the discovery of the cave one of the most remarkable archaeological "finds" made in Palestine.

In (7) was little but pottery, but of this there was a considerable quantity,



Figs. 43, 44. -BRONZE TOT AND SCARAB FROM THE CISTERN IN CHAMBER (5), CAVE 28 II

forming a valuable series of contemporary types. Some of the jars contained infant bones. The human bones were in fair preservation, and the pottery was grouped about them. Besides the pottery there were a few inlaid strips of ivory shewn in Pl. xxxiv, and a scarab and gold-mounted bead (Pl. xxxvi, figs. 15, 16). In this chamber there was also a horn adze (Pl. xxxiv, fig. 31).

Chamber (8) contained another fine series of pottery and alabaster vessels, collected in groups containing from two to about a dozen fragments and pieces: it is noteworthy that with the unbroken specimens numerous fragmentary vessels and potsherds were found associated. Unfortunately the bones were few, scattered, and perfectly rotten, and the manner of interment could not, therefore, be exactly determined: it is probable that each group of pottery was the collection deposited with a burial. Underneath the pottery lay concealed a considerable number of

scarabs, some of them mounted in gold (see Pl. xxxv): the bronze gilt pin (Pl. xxxv, fig. 27) was found in this chamber also.

At the mouth of the narrow passage south of chamber (8) was a collection of one-handled jugs, near which was a bowl, inverted. There were also some beads and a few scarabs, as well as two bronze spearheads (Pl. xxxiv, figs. 32, 33). The passage itself, and the cell to which it led, were empty.

The passage leading to (9) was also empty, and (9) itself contained nothing but a few fragments of a tibia, shewing that one interment had taken place here. There were a few primitive fragments of pottery (shewn on Pl. xxxvi, fig. 3).

The broken chamber (10) contained a considerable number of primitive fragments of pottery in drab ware, some of them covered with white wash and red drip-lines. Ledge-handles were attached to some of the fragments. There were also fragments of stone rings, anodonta shells, and needles made of the leg-bones of cranes. A small stone corn-rubber must also be mentioned, and a bronze punch.

Covering the entrance shaft to chamber (8), above and around the great stone by which it was stopped, was a pile of potsherds. These had been broken on the spot, as was shewn by the fact that many could be pieced together. The majority of the pieces were coarse drab saucers of very common types. It is possible that this heap of pottery has no connexion with the cave or its contents, but is merely the debris of an ashpit—several similar ashpits were found not far away; but it is also possible that we have here a trace of a very early custom which even yet survives in some places—that of breaking vessels at a shrine or at an interment. Some fragments of cow-bones found mingled with the potsherds seem rather to favour the former alternative. The fact that the fragments can be pieced together does not necessarily weigh against it: a dish might have been broken in two, accidentally; the two fragments would then be naturally thrown into the rubbish heap, and would probably become still further fractured by the fall.

The human remains which were found buried in the cave were all badly decayed, and little could be made of them. They belonged to the early Semitic type described in the previous chapter. There were some curious examples of the deposits of bones in jugs, as under:

In a jug (Pl. xxxviii, fig. 1) from chamber (7): the fast thoracic vertebra of an infant, the last right great-toe joint of an adult, the semilunar bone of the right hand of an adult, the first upper molar of a child of six, the cuboid of the right foot of an adult, the metacarpal of a fourth finger, portion of a rib, the first phalanx of a foetal great toe, the lumbar rib of an adult, and the cartilage of the epiphysis of the lower end of the femur of a child of one year.

In a large jar resembling the great jar from (8) (Pl. xxxvii, fig. 1), found in the tunnel extending southward from (6), was a small clavicle and some vertebrae.

The *stone and metal* objects found in the cave are as follows. In *stone*, a few flint knives, all flaked and of poor quality: representative specimens are shewn in Pl. xxxii, figs. 15, 21, 24, and in Pl. xxxvi, fig. 17. These flints were found in the cistern in (6), and in chambers (2) and (8). In the northern branch of the U-shaped

chamber was found the small chipped flint PI. xxxvi, fig. 20. A flint scraper came from chamber (10).

A few rudely worked nodules of limestone were also discovered in the same part of the cave: such are the fragments of soft limestone with a hollow sunk in each face (PI. xxxvi, fig. 19), a similar piece of stone with a hollow in one face (not illustrated), and a perforated pebble (fig. 18).

Two slightly hollow circular stone dishes supported on three feet were discovered, one in chamber (2) (PI. xxxii, fig. 6), the other in (10). Of these the first was of considerable size, being $12\frac{1}{2}$ " in diameter. The other was *flat* on the upper surface, and was of value as it determined once for all the purpose of these footed trays; for with it was a hemispherical pebble, evidently the associated grinder, for trituration of grain.

The only *metal* objects that were not personal ornaments are the two spearheads from (8), the punch from (10), and the bronze pot found in the cistern in (7).

The spearheads are shewn in PI. xxxiv, figs. 32, 33. They are of a type common at all periods of the city's history—triangular blades with rather rounded tips and flat tapering tangs. The lengths of these spearheads are respectively $5\frac{3}{4}$ " and $7\frac{3}{4}$ ".

The punch is also of a common type (though its association with cave-dwellers' pottery is a little unexpected, and no doubt to be explained as an intrusion). It is $7\frac{1}{8}$ " long.

The pot, on the other hand, is unique. It has been illustrated above, fig. 43. It has a round bottom, a rather cylindrical body, and rounded mouth, strengthened by a slightly thickened rim, pinched at one side into a slight spout. One loop remains to shew that it was originally provided with a handle, like the handle of a bucket (possibly a thong of leather): this, with the corresponding loop, has disappeared. This interesting vessel is $6\frac{1}{2}$ " deep; its diameter through the spout is 9", and the diameter at right angles to this 7".

The principal objects in *ivory* are collected together on PI. xxxiv, which speaks for itself and calls for little description. There are thirty ivory inlays, used probably for decorating sword-hilts and similar objects. These objects are common at all periods and shew little variation from age to age. Punched circles (as in figs. 1, 22, 23) are on the whole the commonest decoration, though diagonal lines parallel (figs. 3, 15) or in zigzags (29) are found almost as frequently. On the other hand, transverse lines parallel to the long sides of the slip (as in 18-21) are rare, and it is still rarer to find them filled in with black enamel, as they are in the present examples. Dots (as in 10, 11) or oval indentations (24, 27) are also uncommon.

The peculiarly shaped slips nos. 2, 24-27, must be members of a pattern formed by a group of specially prepared inlays. No. 5 is unusually broad, no. 25 unusually narrow. These inlays were all found scattered through the earth on the floor of (8), except nos. 1-3 and 28-30, which came from (7).

There is another bone inlay of peculiar shape, shewn on PI. xxxvi, fig. 5. It was found broken in two in (7).

From the same place came the interesting horn adze shewn on PI. xxxiv, fig. 31. It is the base of a large stag's horn, with bevelled edge, and with a rectangular hole cut through it for the handle. A small circular hole cutting the axis of the first at right angles is provided, to hold a rivet whereby the head was prevented from slipping and flying off the handle. This object when found was much decayed and soon after removal fell to pieces. With considerable difficulty I cemented the fragments together in order to make the drawing from them, but the particles had no cohesion, and it was impossible to make the repair permanent. When fresh and strong, however, this tool was well adapted for breaking the soft rock in which the cave was excavated, and I am inclined to believe that we actually have in this adze one of the implements wherewith the cave was originally hollowed.

Two ostrich eggs, broken into many fragments, may be recorded here. They also come from chamber (7).

The objects in *alabaster* collected together on PI. xlii must next be noticed, as well as the black slate vessel, fig. 2 on the same plate, and the alabaster pot PI. xxxix, fig. 15. These all have a flat circular top and round mouth (in fig. 6 the top is broken off) underneath which is a hollow neck. The body is triangular in vertical section (as in figs. 3, 8); elliptical (fig. 9 an especially fine specimen—the small pot PI. xxxix, fig. 16, is somewhat similar); globular with round base (fig. 1) or with flat base (fig. 5); or else inverted conical with flat base (figs. 4, 6, 7).

The black slate vessel is remarkable. It has a turned foot, slightly hollow under the base, which is too narrow to allow the vessel to stand upright. The top is unfortunately broken off.

The most striking object in *gold* is the armlet, PI. xxxi, fig. 1. This is a long strip of flexible gold leaf: the broader end is unfortunately torn away, and has a ragged end, which is slightly under 1" in breadth. From this it tapers along its whole length of 10½". The narrow end is rounded. The armlet is ornamented with a row of repousse dots along each edge and round the surviving end. It evidently was secured by a hook now lost, fastened to the broader end by four rivets (the holes for which remain), and catching in the loop with spiral coils which is still secured to the narrow end. This is not fastened with rivets, but by some welding or soldering process: I was afraid to examine it too closely for fear of detaching it from its place.

The gold flower, such as fig. 19 on the same plate, is another characteristic type. Three of these were found in the cave—one at the outer entrance to chamber (1), the other two with the armlet in group A. They are discs, roughly cut into a cog-wheel shape, with a repousse boss in the middle perforated by a pinhole. They are no doubt intended to represent flowers, and probably were meant for sewing on to garments. A gold flower, of the same general type, but much more realistic and with three thread-holes, was found in slightly later debris elsewhere in the mound.

On the same plate are three gold beads (figs. 20, 21, 23), which also seem to be reminiscent of a vegetable original—in their shape and the ornamental reeding of their surface they resemble unopened buds. These likewise came from group A.

Fig. 22 in the same plate is a plain gold disc, circular, with a segment roughly cut out of it. Possibly it was broken away from some larger ornament.

The bead, fig. 29, is composed of two thin concave plates welded together two minute perforations being left on opposite sides of the edge. The finger-ring, fig. 28, is a plain loop of wire which (as was almost always the case in metal finger-rings formed of a looped wire), was thickest in the middle and tapered to a point at the two ends.

The objects on Pl. xxxv came from chamber (8). The pin, fig. 27, is not of gold, but of bronze, gilt. The point seems to be hollow. The handle is ornamented with a continuous beading. At the junction of the handle and point is a flat guard, to which a moveable ring is suspended. The point tapers regularly from this guard to the tip: at its base is a delicately incised lotus flower ornament. The total length of this object is 5½".

Fig. 33 of the same plate represents a finger-ring about f" in diameter. It essentially resembles the other ring in being made of a wire thickest in the middle and tapering to a point at each end. It differs, however, in the points being prolonged and twisted spirally round each other. The joint is partly concealed by three minute annulets, also of gold, but of a deeper colour, threaded upon the wire.

The *silver* objects are of less varied interest. Beside the scarab mounts, some still retaining their hold on the scarab, others (Pl. xxxvi, figs. 7-9) broken away, there is nothing but the looped hairpin, the pendant crescents, and the earrings, all from group A, and all represented in Pl. xxxi, figs. 12, 13, 14, 16, 25.

Neither do the *bronze* ornaments appear to be of much account. Two fragments are shewn of hairpins, similar to that of silver—one from group A (Pl. xxxi, fig. 17), the other from (7) (Pl. xxxvi, fig. 12). A small double-headed wire, bent into a loop (Pl. xxxvi, fig. 13), came also from (7). A considerable number of featureless fragments of stems of bronze pins were found in various parts of the cave: there were also a few scarab mounts, as Pl. xxxvi, fig. 6.

The *beads* are of a large variety of materials and types. Agate, jasper, crystal, and carnelian are the ornamental stones used: one peculiar bead, shaped like a sea-shell (Pl. xxxi, fig. 11), was of malachite. Paste, covered with enamel of different colours, was also used, the colours being green, blue, yellow, and dark brown.

The shapes of the beads are double conical, cylindrical, oval with flattened facets, spherical, and discoidal: typical specimens of each variety and material will be found in the accompanying Plates, xxxi, xxxv, xxxvi. One of the most interesting was a cylindrical bead, with elliptical transverse section, of green enamelled paste ornamented with brown dots. It had a gold cap at each end (Pl. xxxvi, fig. 15). This, and one scarab (fig. 12), were the only objects other than pottery, bone, and alabaster found in (7). From (5) there was one amethyst bead (Pl. xxxvi, fig. 10).

Two blue cylindrical paste beads (Pl. xxxvi, fig. 14) came from (8), close to the small southward passage. The group of carnelian beads (Pl. xxxv, fig. 32) were from the same place. The rudest bead was the rough perforated pebble (Pl. xxxvi, fig. 18). This was from chamber (7).

Group A yielded three cylinders. One of these (Pl. xxxi, fig. 2) was of green enamelled paste with gold mount, still retaining its silver setting. A second was of the same material and colour, ornamented with delicate crossing diagonal lines (Pl. xxxi, fig. 24). These were evidently merely ornamental. The third, being a seal-cylinder, was more interesting. It was of a brown-coloured stone, and bore four vertical rectangular compartments, three of them containing palm-branches, the other a peculiar device of zigzag lines and crescents which I am unable to explain (see Pl. xxxi, fig. 15).

I now come to the *scarabs*, of which there was a fine collection. The majority were from chamber (8): one was from (7), and a few were from group A in chamber (2). We shall begin with the most important group, which is shewn on Pl. xxxv.

1-7. Plain uninscribed scarabs in amethyst, most of them poor flawed stones. The purple colour varies considerably in intensity. All are mounted in a gold band surrounding the sides and edge of the base, except in the case of no. 6, which is unmounted. This gold band is plain, except in no. 1, which has a line of delicate beading on the vertical and horizontal faces of the gold band; and no. 5, which has a slight projecting horizontal rim all round the base. Attached to the gold mount there is in the perfect specimens a small circlet of gold, which was evidently intended to prevent the ring from fraying away the thin mount by friction. The ring itself is a loop of gold, silver, or bronze, rather more than two-thirds of a circle with flattened perforated ends: through these was a fine gold wire, on which the scarab is threaded. This wire is coiled round the ends of the ring. The wire is generally of gold, but in some, such as no. 3, it is of bronze. The gold band of no. 7, which has lost its circlets, is unusually deep for the size of the scarab. This set of amethyst scarabs varies in length (exclusive of the mounts) from $\frac{1}{2}$ " to $\frac{7}{8}$ ".

8. Carnelian scarab, uninscribed, with gold mount and ring. The legs of the scarabaeus are roughly indicated on the left side, but not on the right. The length is $\frac{1}{2}$ ".

9. Fine green serpentine scarab in a massive gold mount. Length $\frac{7}{8}$ ".

10-12. Three plain scarabs of dark greenish basalt. One of these (no. 12) has a white vein on the right-hand side. The heads and thoraces of the scarabaei are indicated, but the sides and elytra are plain as in all the previous examples. When found, no. 10 had a flimsy gold-leaf mount which snapped and fell off when touched; no. 11 retains its mount, but has lost the ring; no. 12 was found unmounted. Length between $\frac{3}{4}$ " and $\frac{1}{8}$ ".

13. Steatite scarab in gold mount: the head and legs of the insect are indicated but not the elytra. The base seems to have borne a device which is, however, almost totally effaced. Length $\frac{1}{2}$ ".

14. Steatite scarab unmounted: a dab of brown enamel on the elytra. The legs are summarily outlined and left flat, not cut away as in nos. 20 and 23. The base bears a kneeling figure holding a lotus blossom with a long zigzag stalk: below is *nb* ("lord").

15. Steatite scarab mounted in a corroded silver ring. The elytra of the

beetle are not indicated, but the engraving of the legs is a little less elementary than in the preceding example. The device consists of groups of S and C curves forming eight spirals with a figure-of-eight knot in the centre. Length £".

16. Small steatite scarab in gold mount, well formed: the legs of the beetle cut in relief as in nos. 20 and 23. On the base four repetitions of the sign *n(u)b* ("gold"), arranged symmetrically with respect to *nfr* ("good") in the centre. Length $\frac{1}{2}$ ".

17. Unmounted steatite scarab in detail resembling no. 14, though without the brown mark on the back. On the base, fourteen spirals in three rows, formed by S curves. Length £".

18. Unmounted steatite scarab resembling the previous specimen. On the base is the combination of the characters *mht* and *rs*, which typifies the union of Upper and Lower Egypt: this symbol is very roughly drawn. Below is a papyrus sceptre between two crowns of Lower Egypt. Length $\frac{7}{8}$ ".

19. Unmounted steatite scarab resembling the preceding. On the base, inside a beaded border, is a ring of spirals formed of S curves, hooked to a circle at the top, and containing the characters *sn-nfr* ("good circuit"). Length $\frac{7}{8}$ ".

20. Well-cut scarab of steatite resembling the preceding with a symmetrical knot on the base. Length about $\frac{13}{16}$ ".

21. Minute steatite scarab in gold mount, set in a silver ring: well and carefully cut. On the back the now greyish white enamel is scraped off along the division of the elytra. On the back is *nfr* ("good"), flanked on each side with '*nh* ("life"); above is '*mn* ("established power"); below are the letters *t*, *mn*, and *n(u)b* inverted. Length $\frac{1}{2}$ ".

22. A small steatite scarab, plainly executed: the perforation contains the corroded stump of a bronze wire. The device is three S curves with *nfr* ("good") twice repeated. Length $\frac{1}{2}$ ".

23. A large and well-executed scarab of steatite. The anatomical details of the scarabaeus are well indicated. The inscription on the base is in three columns—The two side columns are symmetrical and contain symbolic figures—at the top the divine eyes, then the crown and the flower of Lower Egypt, the bee indicating the king of Lower Egypt, and the character *lit* ("front"). The central column bears the papyrus sceptre *w'd*, and the letter *k'-li-nfri*, perhaps meant for the throne name of Senwosret III, H-k, '-r'. Compare the very similar scarab, also assigned to Senwosret III, in Ward's *Sacred Beetle*, Pl. ix, fig. 403. Length $\frac{1}{4}$ ".

24. Steatite scarab, well executed, in gold mount set in a silver ring. The thick greyish white enamel has been scraped off the middle of the back of the beetle, shewing the brown-coloured stone below—exactly as in no. 21 above. The device is a group of four lotus blossoms with their stalks connected by a figure-of-eight knot similar to that shewn in no. 15. Above is *n(u)b* ("gold"); below, a flying scarabaeus. The cutting of this specimen is very fine. Length $\frac{7}{8}$ ".

25. Polished blue limestone scarab, well cut, unmounted. The device consists of a geometrical ornament above, with an inscription in three columns below. The two outer columns read *sn-nfr*, as in no. 19: the middle is *nfr-hpr*. The length is $\frac{5}{8}$ ".

26. Well-cut steatite scarab: the device is a rather poorly designed pattern of S and C curves, with two circles filling it at each end. Length $\frac{5}{8}$ ".

27 (Pl. xxxv, fig. 28). Steatite scarab, the enamel originally of a yellow colour, which survives in the incisions. The head, thorax, and legs of the beetle are indicated, but not the elytra. The device is a twist of two cords running vertically down the middle, with on each side *nfr* and *w'd* alternating symmetrically: between them *t*. Length $\frac{5}{8}$ ". This is a typical Hyksos scarab: compare Pl. xix, fig. 2, of Newberry's *Scarabs*.

28 (fig. 29). Steatite scarab rudely executed, and inscribed *n(u)b-mn-r*. Length $\frac{1}{2}$ ".

29 (fig. 30). Steatite scarab which has been covered with a black colour that remains in the incisions: it is similar to no. 28 in character. It bears *nfr*, with a uracus and the divine eye. Length 1".

30 (fig. 31). Uninscribed crystal scarab in gold mount. Length $\frac{5}{8}$ ".

31 (Pl. xxxvi, fig. 16). A fine deep-coloured amethyst scarab, uninscribed, in gold mount. Length $\frac{7}{8}$ ".

32 (Pl. xxxi, fig. 27). This is a scarab of grey paste, with traces of yellow inlay in the incisions. It was found at the end of the passage running south from (2), close to the entrance numbered A* in the plan. The device consists of an animal walking to the right: above is *nb*, and in front of it an indistinguishable character. Length $\frac{3}{4}$ ".

33 (Pl. xxxi, fig. 3). This and the remaining scarabs of the series came from group A. It is a plain amethyst scarab, similar to the others of the same material in gold mount and silver ring. Length 1".

34 (Pl. xxxi, fig. 18). A very fine plain scarab of clear crystal, in gold mount, silver ring. Length 1".

35 (Pl. xxxi, fig. 30). Steatite scarab which has been covered with a black-coloured enamel: this clogs and rather obscures the device. It consists of a line of writing between two bands of spirals, ending above with lotus flowers. At the top seems to be *h-r'-?-ti* (?), below which is *w'd*, *'nh*, and *nfr*, then *stn biti*, and below that again *Apr*, flanked by *'nh*.

36 (Pl. xxxi, fig. 4). Steatite scarab bearing the inscription *r-hpr-n-nb* (?).

37-40 (Pl. xxxi, figs. 5-8). Four small plain scarabs, two of amethyst, one of basalt, and one of paste enamelled blue.

The large collection of *pottery* and fragments recovered from the cave was of peculiar value. It afforded ample material for the study of the different types of ware and vessels employed at the time when the cave was in use: for that reason I have deemed it desirable to prepare coloured plates of almost the entire series of the vessels from the cave, in order so far as possible to make them available for study.

The pottery falls distinctly into two series—one, as I understand it, a legacy surviving from the period when the cave was used as a habitation; the other, which forms by far the larger proportion of the collection, being the deposits left when it was adapted for burial.

Of the first series, but one whole vessel was left—the fine jar with ledge-handles (Pl. xxxii, fig. 1). This is a typical specimen of early ware, made of rough coarse

gritty pottery of a light reddish drab colour: it has a flat base, gently swelling body, and cylindrical neck. The mouth is strengthened by a slight thickening. There are two plain ledge-handles. The height of this is $9\frac{5}{8}$ ". The sides are painted with rough vertical lines in dark Indian red, applied directly to the surface of the pottery.

Also early, though perhaps not of equally high antiquity, are the remarkable series of waterpots recovered from the cistern in chamber (2). They are illustrated on PI. xxxiii. This is a perplexing group of pots. The ware, especially of figs. 1 and 4 on the plate, shews the rough grittiness that characterizes the most ancient vessels; but in form they are certainly more comparable with vessels of the second period (represented by the interments)—if, indeed, nos. 2 and 3 could be considered so old. The large pot, fig. 1, with its blunt base and almost Greek-like handles, curving upwards, is unique in shape among Gezerite waterpots. It is $1' 5\frac{1}{2}$ " high. To find so large a vessel in a cistern is extremely rare. As a rule large vessels were not dipped into the water, owing to the difficulty of drawing out their heavy weight when filled: the smaller jugs, such as those with which it is associated, are however frequently found.

A good many fragments, displaying ledge-handles, were found in the earth filling chamber (1), and others, which are drawn on PI. xxxvi, fig. 3, were discovered in the small chamber (9). The cistern in the passage south from (2) also contained a considerable quantity of primitive potsherds, none of them, however, displaying any very characteristic features. The most interesting are shewn on PI. xxxii.

From these scanty relics we turn to the remains of the interment period, which, as already hinted, were of great value and richness.

In describing these, we shall first concern ourselves with the ware, then with the shapes of the vessels. Last, we shall give an account of the grouping of individual vessels within the cave.

The ware in the majority of vessels is coarse and gritty. Nearly all the commoner and ruder vessels shew small pebbles or stone powder in their texture. In some extreme cases the grit seriously interferes with the cohesion of the ware, which snaps under a moderate cross-strain like a biscuit. It is possible to arrange the pieces in a continuous gradation, those shewing many grits at one end of the line, those with perfectly homogeneous clay at the other. At one end of the line would be such vessels as the bowl PI. xli, fig. 4, the jugs PI. xxxix, fig. 13, PI. xl, figs. 7, 10, and some half-dozen others, which are very gritty—in the last-specified each pebble is the centre of a star of flaws that radiate in all directions through the vessel. The broken fragments found outside, above the entrance shaft to chamber 8, would also for the greater part be placed here. In the middle of the line would stand the majority of the pieces, few of which are wholly devoid of grit. The other end would contain two classes of vessels: those made of a clay which, though lacking pebbles, is coarse grained (the bowl PI. xxxviii, fig. 18, is a good example), and those carefully made of a very fine, hard, homogeneous clay, evidently selected with deliberation for the purpose of making ware of superior quality. The bowl PI. xxxviii, fig. 14, is an exceptionally fine example.

Some idea of the proportion of gritty to homogeneous ware will be obtained

from the following table, drawn from an examination of eighty-eight vessels from the cave :—

Very gritty.	11
Fairly numerous grits	5
Gritty.	4
Fairly fine, but gritty.	11
Very few grits	22
Coarse homogeneous	14
Fine homogeneous	21
Total	88

It is to be remarked further that, generally speaking, certain classes of clay appear to be reserved for certain types of vessel. This is specially to be noticed in the case of the fourth type of jugs (see below), of which out of nine specimens all but one are of fine homogeneous clay, the exception being also of homogeneous clay, but rather coarser than the rest. The lamps, too, are almost exclusively of homogeneous or very slightly gritty clay. On the other hand, of the wide-spreading Bowls six were found of which three (one half) were to be classed as "very gritty."

The colour ranges from a very dark drab (almost black) through a regular spectrum of shades of red and yellow to a light cream. A few vessels are of a dark olive-green shade. As is often the case, the centres of fractured edges are generally found to be of a colour different from that of the surfaces—black between two red surfaces is about the commonest.

There is a good deal of difference in the baking of the vessels. Most of them are very hard-baked; but some (such as PL xxxix, fig. 11) are so soft that any attempt to write upon them with a pencil cuts an indentation in the surface. As might be expected, the softer-baked vessels show a tendency to disintegration.

Slip is exceptional. The jug PL xl, fig. 6, has a light red slip covering the yellowish brown pottery: the slip, however, has nearly all perished owing to the decomposition of the surface of the pottery. The bowl PL xxxix, fig. 6, has a red slip on its upper surface; and the two fragmentary jugs PL xl, figs. 16, 18, have a slip of dark Indian red colour highly burnished. The painted jug PL xl, fig. 12, has a brownish red slip, as has the bowl PL xxxvii, fig. 4.

One vessel (PL xxxvii, fig. 3) has been submitted to so severe a fire that it is burnt black throughout.

All the vessels, without exception, have been made on the wheel—the handles being modelled separately and stuck on in place afterwards. In the more carefully made vessels (such as PL xxxviii, fig. 14) the circular lines surrounding the vessels, resulting from the process of manufacture, have been smoothed off. Combed ornamentation is not very common: there is a band of it surrounding the body of the large jar PL xxxvii, fig. 1, at the level of the upper attachment of the handles; and in the jug PL xxxix, fig. 10, a comb has been lightly pressed against the vessel and

moved upwards as the wheel rotated, so that the indentations travel spirally up to about the middle of the vessel. The bowls PI. xxxviii, figs. 5, 15, have been distorted by careless firing.

Burnishing is rare. It is found only on the three ornamental jugs PI. xl, figs. 15, 16, 18, and the jug PI. xxxix, fig. 19, which is burnished horizontally on the shoulders, vertically on the sides. A few vessels bear lines of depression as though they had been treated with a burnishing tool which for some reason failed to burnish: such are the jugs PI. xl, fig. 11, and PI. xli, fig. 9.

Painted ware in this later period is strangely absent. Only two specimens were found: the bowl PI. xxxviii, fig. 18, in which the margin is picked out with a line of dark Indian red, and the jug PI. xl, fig. 12, which has a group of red, white, and black lines upon it.

We may now proceed to a description of the types of vessels discovered in the cave, taking first jars and jugs, then bowls, and finally lamps.

(1) The vessel first calling for notice is the large jar PI. xxxvii, fig. 1: this was the only specimen found entire in (8), though there were considerable fragments of two others and sherds of several more in the same chamber. In the passage running south from the broken chamber east of (5), (7), another specimen was found. It stands 1' 10" high, and has a round, slightly moulded mouth, two handles, and a conical body, ending in a blunt point. The ware is coarse drab, but not very gritty.

(2) Of jugs by far the commonest type is that we shall denote here as type I, specimens of which will be found on almost all the accompanying plates of pottery: PI. xl, fig. 1, may be taken as a good example. These jugs have an oval body with pointed base and pinched-in neck, expanding almost immediately into a mouth, the lip of which is lengthened into a spout. There is one handle which springs from the shoulder and from the side of the mouth, either immediately or, in the great majority, a little below the lip. In PI. xl, fig. 3, the lip is strengthened by a slight internal thickening. The butt end of PI. xxxix, fig. 19, is unusually blunt, but does not attain to the roundness that characterizes similar one-handled jugs of a later date. The largest specimen of this type of jug found in the cave (PI. xl, fig. 1) measures 10¾" in length; the smallest 7".

A variety of the type is shewn in PI. xl, fig. 2, which has a more or less cylindrical neck, and a circular (not spouted) mouth, with the lip flattened outward all round. The base of this vessel is not pointed, the extreme tip being flattened.

(3) The second type of jugs is represented, in this collection, by three specimens only—two large (PI. xxxviii, fig. 1; PI. xli, fig. 10) and one small (PI. xxxvii, fig. 3). Unlike type 1, which of course cannot stand without support, these jugs have a round base which, in the first-named, is a projecting ring, in the other two a flat disc. The body expands into an inverted conical or globular form, and then contracts to a neck: the mouth is spouted in the second and third above-mentioned, and presumably was also spouted in the first, the lip of which is broken.

(4) Four specimens—all but one imperfect—survive of type III of the jugs. This very graceful class of vessel (for the perfect specimen see PI. xxxviii, fig. 17—the

others are shewn on PI. xl, figs. 16-18) has a conical body rounding into flat shoulders from which springs a very narrow neck, expanding at the top into a mouth with round thick lip. There is one handle, which is not (like the handles of type I) cylindrical, but broad and flat with a slight wave down the middle, or else a deep groove which gives the handle the appearance of two cylindrical handles side by side. In the present series the latter variety is illustrated by one specimen only, PI. xl, fig. 17. The base terminates in a cylindrical projection (PI. xxxviii, fig. 17), or a button (PI. xl, fig. 18). It is possible that the broken fragment PI. xxxix, fig. 20 was part of a jug in which this projecting base was greatly exaggerated.

(5) The fourth type of jugs, of which nine specimens were forthcoming, may be regarded as a variety of the third. The neck, handles, and shoulders are identical in appearance; but the body, instead of tapering rapidly into a complete cone, contracts very gently and is the frustum of a cone—indeed, in some specimens it is practically a cylinder. The base is never absolutely flat, but always very slightly convex. The double handle is here the rule rather than the exception (see for example PI. xli, fig. 8). It is found in six of the nine specimens, the waved handle in two. The largest perfect example of this type found is $5\frac{3}{4}$ " high, the smallest $4\frac{1}{2}$ ". It has already been mentioned that this type of jug is invariably modelled in very fine clay.

(6) There remain a few jugs which cannot be classed with these, but are individual specimens of types not otherwise exemplified in the cemetery. Of these the most interesting is the little vessel PI. xl, fig. 12. It is of conical shape with deep rounded base—not unlike a modern claret jug—and measures $5\frac{1}{4}$ " in height. The mouth expands, but is not spouted. Round the body are painted four lines in dark brick-red, with between them three lines in black, smeared over with white. This is a survival of a yet earlier technique of pottery painting which consists in filling up the field to be decorated entirely with lines, straight or zigzag, red, white, and black. The white is a coarse lime-cream. Fragments of similar technique belonging to the earlier period were found in the cistern in (5), and are shewn in PI. xxxii, figs. 8, 17, 18.

PI. xxxvii, fig. 2, is an elegant vessel with wide circular mouth, short neck, flat shoulders, and inverted conical body. A beading, composed of a separate piece of pottery fastened on, is added just at the intersection of the neck and shoulder. There never was a handle. The base is broken away. The whole vessel is covered with a creamy yellow slip.

PI. xxxix, fig. 1, is a standing cup on a hollow trumpet-shaped foot. A fragment only survives, and no part of the rim remains. It is impossible, therefore, to say how it was finished. The ware is fine and homogeneous, but disintegrates easily.

PI. xxxix, fig. 11, is a small vessel in fine reddish yellow ware that might be classed with type II, from which it differs in its minute size only. Its height is $2\frac{5}{8}$ ". The handle, restored in the drawing, has disappeared.

PI. xxxviii, fig. 16, is a curious vessel shaped (in its present form) like a modern oil-can. There was, however, a handle originally, which has been lost. Round the margin of the base on the under surface are exceedingly delicate lines caused by the slight pressure of a fine comb.

(7) Of bowls by far the commonest type is that of which a good specimen is shewn PI. xxxviii, fig. 6. From a round base—in the normal specimens invariably a projecting disc, slightly hollowed in the middle—rises an inverted conical body, the sides of which, at rather more than half the height of the vessel, contract slightly to the top, where they again expand into a horizontal lip. This graceful form of bowl lasted in use for a very long time.

There are several varieties produced by altering the relative proportions of the conical base, the contracting sides, and the horizontal lip. Thus, in the fine example PL xxxix, fig. 4, the lip is exaggerated at the expense of the other two members; and this is even more so in PI. xxxviii, fig. 14, in which the conical base has become flattened out, with a little circular hollow in the middle—a singular anticipation (not only in form but also in the fineness of the ware and carefulness of manufacture) of bowls executed under Greek influence in the Hellenistic age. On the other hand in PI. xxxix, fig. 16, it is the conical part which is exaggerated at the expense of the other members. In PI. xxxviii, fig. 18, the contracting part is "reduced to its lowest terms." In PI. xxxix, fig. 14, a variety is obtained by omitting the disc base altogether and substituting a rounded bottom for the conical lower part. One or two of the abnormal specimens above referred to (such as PI. xxxix, fig. 4, and PI. xxxviii, fig. 18) substitute a projecting ring for the hollow disc base. There is not much variation in height in these bowls, which averages about $2\frac{1}{8}$ " in diameter at the top the perfect specimens range from $5\frac{5}{8}$ " to $6\frac{13}{16}$ ".

(8) The second type of bowls consists of wide dishes on circular bases. The bases are slightly hollow discs (with one exception, which is a ring): the dishes themselves are broad and shallow. PI. xli, fig. 5, is a typical example.

(9) Two bowls remain not referable to either of the foregoing classes. One of them is PI. xxxviii, fig. 15, which has a flat base and slightly concave oblique sides: it is in very coarse drab pottery. The other is essentially similar, but the ware is much finer, and the sides are convex on the outer surface of the bowl. It is represented in PI. xxxix, fig. 12.

(10) Twelve lamps or fragments of lamps were found. All of these are referable to one type, a good specimen of which will be found in PI. xxxix, fig. 2. It is a shallow saucer, wheel-turned, with a slight spout pinched in the edge before firing—a contrast to the long narrow channel into which in later periods this spout developed. This spout almost invariably displays marks of smoke-blackening. A few of the lamps (such as PI. xxxix, fig. 3) are slightly deeper than others, but not sufficiently so to justify their inclusion in a separate class.

Of the broken fragments found above the stone cover of the entrance shaft the three shewn on PI. xxxvi, figs. 1, 2, 4, are the only specimens that require special attention. Of the others the majority were coarse drab saucers or bowls of type I: there was also a fragment of a jug of type I. These add nothing to our knowledge of the forms. The four-handled saucer, however (fig. 1), is unlike anything else found in the mound. The bowl fig. 2 is a specimen of type 11, with a conspicuous thickening inside the lip. The smaller bowl, fig. 4, is a variation of type I.

We must now note the manner in which the objects found were distributed into groups. These were as follows:—

(1) Above the stone filling the entrance shaft of (8), a large pile of potsherds, as already noticed.

(2) In the chamber (8) were six groups, as well as several single vessels: these groups were:—

(a) xl 1 * and the alabaster vase xlii 8, lying on their sides.

(ft) A small group consisting of the alabaster xlii 3, on its side, and xli 15 and xxxvii 3 standing upright. Underneath this group was found the gilt kohl-pin and many of the scarabs, including the important specimens nos. 14 and 23.

(7) Two alabaster pots xlii 4 and 6, lying prostrate.

() Two vessels, xl 8 and a broken jug of type I (not drawn), lying prostrate.

(e) A large and important group comprising the jar xxxvii 1 and bottoms of two similar to it, prostrate—one of the bottoms resting on the lamp xli 3. Underneath the bottom of the large jar, the upper part of another similar to it; and beside it the black slate vessel xlii 2. Around this group was placed, in order, the bowl xli 2, the jug xl 10 (partly covered by a potsherd), the jug xl 11, a lamp of the ordinary type, inverted, the bowl xli 5 (also inverted), the jug xl 7, and the bowl xli 4. There were also several characterless sherds.

() Close by this group was a small collection containing the alabaster vessel xlii 1, the handsome jug xxxvii 2 (inverted), and a jug of type IV (not drawn) on its side.

(3) At the entrance to the small southern passage were three jugs of type I, all lying on their sides—namely xl 3, 4, 5; one of type III, namely xl 16; and also the painted vessel xl 12. Close by was the bowl xli 6, inverted.

(4) In chamber (7) were seven groups and several single vessels. Owing to the fall of the rock a good deal of the earth had silted in, so that these were covered and not, as in chamber (8), lying exposed when the cemetery was first entered. The following are the groups:—

(a) Near the end of the partition between (5) and (7), the jug xxxix 17 and bowl xxxix 16.

(ft) Just south of (a), the bowls xxxix 6, 14, 18, and the jug xxxix 10.

(7) Close to the fallen rock-roof, the alabaster jug xxxix 15, and the pottery objects xxxix 5, 8, 11, 12, 19.

(8) South of (7), xxxix 1, 2, 4, 7, 9, 13.

(e) West of the last, a jug of type I, not drawn, the jug xxxviii 1, also xxxviii 17, 18, and a bowl of type I.

() In the centre of the chamber, two jugs of type I, also xxxviii 12, and a lamp.

(n) At the south side of the chamber, not far from the door to chamber (8), xli 8, 9, 10, II, 16, xl 14, and the alabaster vessel xlii 5.

I may also mention two lamps placed together in the crevice of the rock on the north side. The vessels on Plates xxxvii-xlii not enumerated in the above catalogue were found singly in various parts of the two chambers (7), (8), and were not associated with any special pottery groups.

Two of the chambers—(4) and (6)—had, as already mentioned, been adapted as

* These numbers denote the plate and the figure on the plate.

cisterns at a subsequent period, and their contents belong to an entirely later archaeological stratum.

The most interesting of the objects from (4) are shewn in fig. 42 above (p. 121). They consist of a tanged arrowhead, with ogee-shaped blade (no. 1), and a small axhead-like object (no. 2), both in bronze (the latter is an unusual type in Gezer): beads—no. 3 is in red enamelled paste, as is also no. 10, which, however, is more glazed; no. 4 is yellow enamelled, nos. 5 and 6 green, nos. 8 and 9 grey; no. 10 is a flat disc of bone: spindlewhorls—no. 11 of polished diorite, no. 16 of bone: a fine polished diorite macehead (no. 15): among a great mass of potsherds, of no special interest, three pieces to which attention may be called—the bottom of a bowl with a spiral burnished on it (no. 13), a peculiar handle (?) with a perforation through it (no. 17), and the lower part of a very rudely modelled figure in black ware (no. 18). There is also the bezel of a green enamelled paste seal-ring, bearing a scarabaeus—this indicates the period of Amenhotep IV, which would accord well with the other objects recovered from the cistern, so far as they indicate date at all; and a yellow-coloured scarab, shewing on its base *hpr* between two uraei.

From (6), the "cistern" period of which is considerably later, some specimens were found unlike anything else recovered from the rest of the mound. The most interesting are collected on Plate xliii.

Figs. 1 and 2 of this plate represent two pieces of coloured ware belonging to the Mycenaean technique that in the later Canaanite period spread over Southern Palestine under the influence of the civilization of the Aegean. Fig. 1 is of native manufacture. It was actually found in chamber 5, being probably brought in by one of the well-sinkers who worked in the adjacent room 6, and employed by him in scraping the earth in search of treasure. He may easily have found it, in the first instance, in digging the cistern shaft. The second fragment is an actual importation, and displays the characteristic Aegean glaze.

Figs. 3 and 4 are specimens of portions of waterpots found in the cistern. Fig. 3 is a fragment of a peculiar type with three looped feet, in shape resembling handles. This type of vessel had a limited range of use, being found only about the time of the latter part of the Hebrew monarchy.

Fig. 4 is a round-bottomed pottery bucket, with two corresponding holes under the rim for a strap or metal handle. Several other fragments of waterpots, of no special interest, were found in the well.

Fig. 5 is a fragment of a shallow rectangular stone tray of diorite, with a handle at the surviving end. The three aspects *a*, *b*, *c*, in the plate sufficiently illustrate it. Such a tray is unique so far as the excavations have gone: stone trays are common, but they are generally round.

Fig. 6 is a peculiar object of stone resembling a pedestal. It stands 1' 2½" high. The dotted line in the diagram represents the internal section. What purpose this object served it is impossible to say. I have thought that it might possibly be a spindle, for the rope of the well-bucket: the objection to this suggestion is the absence of rope-marks on the side of the object; such marks would certainly be worn upon the very soft stone. The better to illustrate it a photograph is here subjoined, fig. 45.

It now remains to endeavour to deduce the history of this interesting cave from the indications which its contents afford.

That originally it was the home of a cave-dwelling community there can be no doubt. They have left evidence of their presence all through the system, in rude rubbing stones, fragments of pottery, and other relics, especially in chambers (i), (3), and (10).

The first problem that suggests itself to the explorer of such a cave as this is the explanation of the narrow passages that connect the various members of the system; it would appear so much more convenient to make the chambers open off one another directly as in 15 II.

There are two possible solutions to this question. The first is, that the various systems were originally quite independent and were afterwards united by cutting a passage between them. The second is that the passages were made long and narrow intentionally, in order that they might be easily blocked: when an enemy made his appearance at one entry, the inhabitants escaped by the passage and hastily erected a pile of stones—which no doubt would be ready to hand—at the opposite end. There was of course little or no light in the passages, and the pursuer might well be nonplussed by such a simple device. Such a feature as the cistern in chamber (5) might also have been originally cut as a pitfall for unwar' intruders. It is certainly most inconveniently placed as a receptacle for water: it would not gather much, and what water might fall into it would not easily be drawn out. Perhaps there is some truth in both suggested explanations: the different systems may have been connected in the manner suggested above, and the passages were perhaps made narrow on purpose for facility of blockade.

In the cave under discussion, the loose and friable nature of the limestone prevents our obtaining any definite information from a study of the toolmarks, which in a homogeneous rock would be perfectly sharp and would probably settle several questions. The direction of the chisel-marks would shew the direction in which the quarryers worked, and would indicate, for example, whether the tunnel was excavated from both ends at once, like the Siloam aqueduct at Jerusalem. In the present cave we are left to *a priori* probability as our only guide in deciding the reason for its peculiar plan.

The impression that a study of the cave leaves is, that the various members were excavated independently and afterwards united. We thus begin the history of the cave with three separate communities: the *first* group inhabiting chambers (1) (2), (3); the *second*, chamber (4); and the *third*, chambers (5)-(10).

To judge by the size of the chamber-groups, the last-named was evidently



FIG. 45. — STONE OBJECT FROM CHAMBER (6), CAVE 28 II

the most important. There was an unusual number of chambers, and they were unusually large. Probably there was but one entrance, that into the ruined part of (5): the roof-entrance of (8) was most likely made originally merely for convenience in quarrying, and when the chamber was completed was stopped up. In (5) was a pool for water, fed by the rain which fell through specially made holes in the roof—this pool was afterwards deepened into a cistern. In the great cave 16 111 in the middle of the hill was a similar pool: it does not appear whether there were similar holes in the roof, as the latter is here destroyed.

Why the family of the (5) group joined their residence to that of the (1) group we can but conjecture. Possibly one remarkable peculiarity of the (1) group of chambers, which we will presently discuss, made it a desirable possession, and in consequence the (5) people captured the dwelling of the (1) people and joined it to their own. Possibly, on the other hand, the families became united by inter-marriages. In any case, it is in the highest degree probable that the tunnel was the work of the (5) people. It leaves the (5) group naturally, but breaks into the (1) group of chambers by a most awkward and inconvenient hole. Moreover the tunnel diminishes in cross-dimensions as it advances from (5) to (1). It is evidently natural that such a tunnel should diminish from the outer end inwards, and unnatural that it should expand, owing to the difficulty of passing material through the narrow entrance.

What then are we to say of the linking of (1) and (4)? Here again *a priori* probability is our only guide. In this case it seems to me most likely that the tunnel was cut from both ends. For if it had been cut from the (3) end alone, we should have to imagine that all the material removed from the inner half of the tunnel was passed through the excessively narrow doorway between (3) and (4); whereas if it were cut from the other end the sudden drop downwards in the middle of the tunnel would not be so easily accounted for: it is more likely that a tunnel should begin low and step upwards than that it should begin high and step downwards. If, however, we suppose two sets of workmen starting, the one from chamber (3) and making their way to just beyond the narrow doorway, the other from (4) and advancing to meet them, the change of direction and level would be easily accounted for by a miscalculation such as we would naturally expect under such circumstances. It may be argued that such a miscalculation is a sufficient explanation of the downward stepping of the tunnel quite independently of the direction in which the quarryers worked; but obviously if the tunnel had been cut from one end only, the downward stepping to correct a miscalculation would have been at its extremity. The purpose of the narrow doorway is easily guessed. It could be stopped up by a moderately sized stone, and pursuers would be absolutely prevented from following any one who might take refuge in the chamber beyond.

Whether the different groups of chambers, as we see them now, are exactly as their dwellers first quarried them, is a question that except in one detail cannot be definitely answered. It is most likely that from time to time chambers were added as they were required. That some plans were abandoned before they were completely carried out is indicated by the unfinished cistern shaft in the passage

south from (5). The one thing that can be definitely said is that the steps found in the cistern shaft at (2) must originally have led to a small chamber at a lower level, which was afterwards deepened. Probably it was noticed that water accumulated in this chamber in winter, making it useless for any purpose but that of a water-store, and this led to the idea of turning it formally into a cistern.

We must now consider a difficult question, the solution of which cannot be reached as yet with any certainty. I refer to the purpose and period of the system of cupmarks in chamber (1).

All the available evidence points to this peculiar feature being the work of the Troglodytes. Cupmarks are found in a good many parts of the mound, and whenever they have any connexion with other remains that can be more definitely dated, these remains are assignable to the cave-dwellers. In this cave the presence of pottery of the earliest type in the earth covering the cupmarks, and entire absence of any later objects in connexion with them, corroborated the conclusion to be drawn from a study of the subject in other parts of the mound.

If then we assume that these cups are the work of the cave-men, the more difficult question remains, for what purpose did the cave-men make them?

It has been suggested that they were meant for jars, containing stores of oil or grain, to stand in. In favour of this it might be urged that fragments of just such jars were found in the chamber; and that there is a causeway running to the centre of the middle ring from chamber (2), between the open ends of the rings of cups, so that the jars in the middle of the room could be got at without disturbing the rest. It is, however, open to question whether the rude occupants would take such trouble to make a series of mere sockets with such an obviously purposeful distribution; or indeed whether they would make such sockets at all for jars that could quite as well stand without them.

Various recondite explanations of cupmarks have been given from time to time, which appear to me tenable only in exceptional cases. Such an exceptional case is undoubtedly that now before us, and it is here much less open to objection than in many other places to suppose the cups to have some connexion with sacrifice and offering. Indeed, it seems an admissible conjecture that the whole floor of this chamber is a gigantic table of offerings. If this were so we could easily understand that the (5) people might envy the (1) people the possession of so lucky and desirable an annexe to their dwelling, and would wish to unite themselves with them, whether in a peaceable or hostile manner. Much less likely are the suggestions that there is anything of priapic symbolism in these cups, or that they form the apparatus for some game—a sort of public billiard-table.

The next stage of the cave's history is associated with the beginning of the Semitic occupation. The caves were abandoned for houses; but no doubt some of them were used as cellars, store-chambers, or refuges from the heat of the sun. The northern system certainly was so used by the inhabitants of the houses built on it: whether the southern half was also used for the same purpose there does not appear evidence to shew. But the waterpots in the cistern in chamber (2), which are on the whole rather earlier in type than the burial vases in (5) and (6),

indicate a short period when people descended for water to chamber (2) before the time when they used (5) and (7) for burial.

When (2) was adapted as a cellar, the two entrances above the cistern were closed—no doubt because they were dangerously near that pitfall, and practically useless on account of its position with regard to it. They were not so completely sealed up but that water trickled between the stones. Silt quickly made its way through and covered the steps under the entrance A⁴ in a thick layer, which the presence of group A of the antiquities proves to have already begun to accumulate; and the water-receiver built outside entrance A² shews that the latter was the channel whereby the cistern was filled.

On the whole it is most likely that in this period waterpots were carried to and from the cistern down the broad and high passage running south of (2) to the entrance A⁴. There is no evidence that chamber (1) was used for any purpose, except the accident of a gold rosette having been dropped just outside the entrance A¹.

It is a little doubtful when the great stone was placed across the passage south of (2) in order to cut off all communication with the southern group. It may be that it was at this stage of the history, and that it was intended to prevent underground communication between two adjacent houses. It may also have been in connexion with the succeeding stages.

This third period was characterized by the adaptation of the southern half as a burial place. It is most important to notice that there are no interments whatever in the northern system, and no evidence that there ever were any.

If the people who used the northern half of the cave as a cistern and cellar had not already closed the access to the southern system, they would certainly have done so when that probably derelict part of the cave had begun to be used for burials. Fear of the ghosts of the deceased would no doubt lead them to stop up as firmly as possible every means whereby they might find their way out of the *Sheol* where they were confined. In fact it is very likely that the northern system was altogether closed not long after, as even the big stone stopping the entrance to the long passage might not be thought a sufficient obstacle against the spirits. So little frequented was this part of the cave after the southern part was turned into a cemetery, that some one thought it a safe place for the concealment of treasure. This is the explanation of group A, the solitary deposit found in the northern member of the system. There was no interment with these objects; the silt on a sloping staircase was not, indeed, at all a likely place to deposit a dead body: but if the cave were unfrequented it was just the place which a person wishing to hide precious objects would choose for such a purpose. The loose silt could be easily excavated with the hand, and the hole filled in again after the objects had been placed there. It is legitimate to guess that in his or her haste the person who carried these objects down to the cave dropped a scarab at the very place where we might expect such a misfortune to happen—beside the stone which barred the way to the world of spirits beyond, which our fugitive would probably pass in a hurry. A scarab found here was the only precious object from the northern system, except group A and the gold rosette from outside chamber (1). At first I was inclined to think that this part of the cave had been

looted, but the total absence of any bones or other indications of burial has led me to change my view, and I now think that there probably never was anything in the northern part of the cave more than what was found there. Probably not long after these treasures were deposited—perhaps as a further precaution against ghosts—the second great stone was put in its place in entrance A⁴, by some one who did not know that he was scaling up a precious hoard.

The next event in the history of the cave is the fall of the roof in chamber (5), which took place somewhere about 1450 B.C. The date is fixed by the landslide it caused, which produced a "fault" in the accumulated debris, easily visible in the vertical section of the mound. This fault extends up to the level associated with scarabs and other objects bearing the name of Amenhotep III, and thus indicates when the subsidences took place. The later debris is in no way affected by it.

At about the same period chamber (4) was discovered by well-sinkers. That they deepened it is proved by the fact that the tunnel, which we have shewn to have been partly cut from (4), and therefore was presumably at an accessible height above the original floor, is now quite inaccessible from the bottom of the chamber. In deepening it steps were cut, for convenience, running from the old entrance: perhaps the three broken steps at the top are original, the unbroken steps below having been added. A shaft for drawing water was also cut in the middle of the ceiling. The antiquities found in this cistern are referable to the period of the Tell el-Amarna correspondence.

Lastly we have to notice the unfortunate discovery of chamber (6) by well-sinkers somewhere about 700 B.C. There can be little doubt that they obtained a harvest of precious objects from the northern half of the U-shaped chamber, and not improbably from (5) also.

Of the chronology of the early events of the history of the cave, the scarabs found in (8) give us valuable information. Plate xxxv, no. 23, for instance, is typically twelfth dynasty, and probably bears the name of Senwosret III; nos. 14 and 28 on the same plate are as typically Hyksos. The remainder all range themselves more or less definitely into one or other of these two groups. As the collection must necessarily belong to the latest date indicated, it follows that, as a whole, the interments are to be assigned to the Hyksos period—that is to say, somewhere from 1600 to 1800 B.C.

28 III. A Troglodyte cave, as shewn by the steps at the entrance to the south. It had two chambers: the inner chamber had been sunk about 4' 3½" below the rest to serve as a cistern, a silt hole cut in the bottom and a dipping hole in the top. A bronze knife was found, and several water-jars. These of course belong to the cistern period.

29 I. A long low excavation, 46' in length, 21' 4" in maximum breadth. The outline of the walls is irregular. The floor mounts upwards toward the inside of the cave so that at the inner end it is impossible to stand upright. The long axis lies east and west, the entrance being towards the east. The floor bears a few cupmarks. At the inner end there is on the right-hand side a fruitpress, 5' 11" in diameter, sunk below the level of the highest point of the floor. On the left-

hand side the cave is prolonged through a narrow opening, through which one must creep with difficulty, into a small beehive cell 3' 11" to 5' 9" in diameter and 4' 3½" high. This seems also to have been used as a fruitpress as there is a small cup in the floor. The only contents of the tomb were potsherds of both the Troglydite and First Semitic Periods, and flint chips. There were also a few fragments of human and other bones. See the plan, Plate xiv, fig. 10.

Just under the entrance are two holes in the floor. That to the right was covered with a large slab carefully wedged round with smaller stones: there was a small cupmark in the upper surface of this stone. The other hole was found to be full of earth. On being raided the slab was found to cover a small beehive-shaped cell, measuring 8' 10½" x 6' 5" x 3' 7". A very narrow passage, almost impossible to pass through, opens into this cell from the other hole in the floor. From it a small doorway gives access to a row of three smaller cells: in the floor of the two inner ones a vat is sunk. The first of these three chambers is 5' 9" x 6' 10½" x 3' 7". The second is 5' 3" in diameter, 3' 11½" high. The vat in the floor is sunk in a small recess, 3' 3" across, between it and the entrance chamber to the cistern: a small hole is broken in the partition wall just above this vat. The last chamber is 4' 7" in diameter and only 3' 1½" high: almost the whole floor is taken up with a pit 2' 11½" in diameter and 10" deep. What the purpose of these cells may be it is difficult to say. They were completely empty, notwithstanding the care with which they had been sealed up. It is of course possible to suppose that any treasures they may have contained had been stolen through the narrow passage, which was not closed, except by the silt that had washed in afterwards. This was the only case found at Gezer of caves arranged in two storeys one over the other: the case of 16 III and 17 II is apparent rather than real, as these are quite independent of one another; there are one or two differences of level in the large cave 28 II, but no case of one chamber actually beneath the floor of another.

29 II, the great water-passage, is described later in this chapter in connexion with the other waterworks of the city.

30 I. An oval excavation, 38' 6" long and 9' 6" in maximum height. The usual Troglydite staircase was at the eastern end. This had been blocked up and a shaft for water cut through the roof: the walls were cemented carefully and still held water. Some flint knives and potsherds of the Second Semitic Period—the period of the re-adaptation—were found in it.

This cave contained a considerable number of flints and some late waterpots, all belonging to the time when it was used for a cistern. None of these objects call for special illustration or enumeration: we may perhaps mention the segment of a shallow saucer in black ware, with flat base and vertical sides through which small holes are perforated at intervals—there appear to have been about six such holes round the vessel. The most interesting find in the cave is the small bronze figure here represented (fig. 46). The hands are raised, the arms being covered from elbows onwards. There is a triple girdle round the waist. A horizontal tenon in front of the feet shews that it was attached to some larger object. It may have

been part of a group representing a worshipper in front of his deity. The height of the figure is $2\frac{1}{2}$ ".

30 II. An undisturbed Troglodyte dwelling, which contained many very early sherds of pottery and flint knives, but unfortunately no whole vessels or bones. An awkward and ill-made staircase at the east end gave admission to the main chamber. This was $30' 6\frac{1}{2}"$ long, of rather irregular shape: the maximum height of the roof was $7' 2\frac{1}{2}"$. Just inside the entrance, on the left-hand side, is a raised platform, in front of which are two pits, one $1' 6"$ deep, the other $6'$ deep. An opening on the north side gives access to a smaller chamber, with a short tunnel projecting from it: this is not unlike a grave in appearance, but is rather too short— $5' 4"$. It is $2' 3"$ high, of which $1' 2"$ are below the level of the floor of the chamber. A plan of this cave will be found in Pl. xiii, fig. 11, and the pottery on Pl. xlv. Fig. 1 is of gritty reddish brown ware: there is a white lime-cream over the surface. Fig. 2 is of yellowish brown ware and decorated with red lines. Fig. 3 is yellowish brown, as also is fig. 4. The painted sherds (figs. 6, 7) are coloured black on a brown ground. Besides these objects and the uncharacteristic potsherds there were a loop-handle nearly $7"$ long and $1\frac{1}{7}"$ across, and a buffalo's horn.

30 IIA. Merely a natural shelter in the rock, $10'$ long (cast and west), $8' 6\frac{1}{2}"$ broad, $2' 8"$ high. It contained some early pottery shewn on Pl. xxiii. Fig. 18 is of yellow ware with a red margin; fig. 20 is a pin-head (?) of black clay with two projections, as shewn, on each side. Fig. 21 is of drab ware, also with a red margin. Besides these there was found a sherd of a stone bowl with  ornament on its edge. The entrance is at the north side, but there is a fissure in the roof over the south side as well.

30 III. A chamber roughly circular, ending northwards in an apse with a slight step upwards. The staircase entered from the south side. To the west is a small extra chamber, raised above the level of the floor.

There are three cupmarks in the floor of the principal chamber, one of them in the apse, two outside. The maximum height of the cave is $10'$, its maximum internal dimensions $13' 11"$ north to south by $15' 9"$ east to west. The only objects found in this cave which call for notice are shewn in Pl. xxix, figs. 3-7. Fig. 3 is a ledge-handle of unusual shape with nicks on the edge. Fig. 4 is a fragment of limestone with a groove round it. Fig. 5 is a sherd of drab ware with ornamental rope-moulding on it. Fig. 6 is the interior surface of the sherd of a V-shaped bowl with an incised herringbone pattern upon it. Fig. 7 is the side of a burnished vessel. See plan (Pl. xiv, fig. 11).

30 IV. This cave is by far the most interesting of the whole series. It is



FIG. 46.—BRONZE FIGURE
FROM CAVE 30 I

hollowed in the rock under a depth of 36" of debris, containing eight strata. Of these, three are subsequent to the destruction of the inner city wall, about 1450 B.c.; three lie intermediate between that date and the erection of the same wall, about 2500 B.c.; and two are earlier than the wall referred to. Assuming a uniform rate of accumulation, this leads us back to somewhere between 3200 and 3500 B.C. as the minor limit of date for the cave. It lies in the south end of a small knoll in the rock which rises fairly steeply to a height of about 3' above the rock-surface surrounding it. Just south of the entrance to the cave there is an appearance as though rude steps had been cut to make the ascent of the knoll easier; but I am inclined to think these natural.

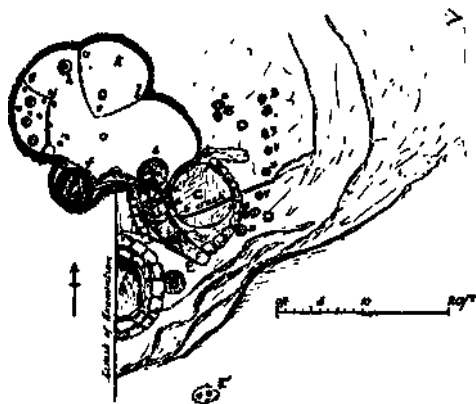


FIG. 47.—PLAN OF CAVE 30 IV

The following cuttings surround the mouth of the cave. They are indicated by reference letters on the plan, fig. 47. (A) A hollow only, half excavated, scarped in the rock to a depth of 1' 6", and 7' in diameter. At the south side the rock fails, and its place is supplied by a row of three stones set on edge completing the circle. A wall is built over this hollow, set back a little behind to edge all round, to a maximum height of 3' above the rock. (B) A hollow, 2' depth and 3' 3" across, with vertical sides and rounded base. This lies partly under the wall that surrounds A, indicating that the latter was built subsequently. (C) A hollow, circular, 6' in diameter, and of a maximum depth of 1' below the original level of the rock. At *na* the rock fails, and its place is supplied by masonry. At *b* it rises to its maximum height above the bottom of the hollow, so that the space *ab* appears (accidentally) to be a channel. A curved wall *cc* partly surrounds the hollow but does not follow its contour exactly. Owing to the irregularity of the rock contour there is an appearance (also accidental) at *d* of another channel leading

out of or into this hollow. A crack runs across the hollow from west to east. It reappears outside the hollow to the east, disappearing on the edge of the rocky knoll, and it is probably a natural flaw, perhaps caused by an earthquake. This hollow is no doubt a fruitpress. (D) A group of cupmarks, thirteen in number. Those marked *x* are shallow circular basins, with breadth greater than the depth: those marked *y* are also circular but with depth greater than the breadth. The others are oval depressions. Beside these there are two conspicuous cups, both similar to those marked *y*, on a small knob of rock south of the knoll: they are marked *E*¹. The largest of these cups is the southernmost of those marked *D*, which is 2' broad and 9" deep. The diameter of the others ranges from 1' to 1' 6". The deepest is the one marked *y* next to the southernmost, immediately under the wall surrounding the fruitpress *C*. This is 1' 2" deep.

The entrance to the cave is marked *EE*. It is a long narrow opening in the rock. Round the northern end rude masonry is built, as the surface of the rock is not of the required height. The floor of the entrance slopes downward, and access to the cave is gained by very rude steps—little better than footholds—cut in the rock.

The cave itself is oval, with a series of irregular apses round the sides. Photographic views from the doorway and from the inner end are given in Plate *xlvi*. On entering, the most conspicuous features are two deep hollows, one on each side of the entrance staircase: the first of these, marked *e* on the plan, is 3' across and 1' 10" deep. This is just under the entrance, and in fact is partly cut out of the staircase. The second, marked *f*, occupies an apse to the left of the staircase. These hollows are evidently meant to intercept rainwater, and prevent it flooding the cave: the second of the two, *f*, is connected with the staircase by a channel cut on the top of a projecting shelf of rock. It is 3' 11" across and 3' deep. The apse *g* at the inner end of the cave has part of its floor raised 10" above the floor of the cave; and this raised step bears three shallow cups measuring 10"—1' 1" across, with five smaller hollows disposed as shewn in the diagram. There are also seven other cups in this part of the cave, one of them, *h*, a double cup (*i.e.* with a secondary cup sunk in the floor of the first) of maximum diameter 1' 9". The floor of the apse, *k*, is sunk 10" below the level of the floor of the cave. It contains three cups. There is in addition one cup in almost the exact middle of the cave area. The total length of the cave is 16' 7": the height is with fair uniformity 5' 5". There is a hole, apparently for tethering cattle, cut through the projecting angle *l*.

We now come to the feature that gives this cave its unique interest. To a height of about 4' above the floor the walls are rough. Above this, however, there is a frieze of smoother rock, and all round the cave this frieze is occupied with rude scribbings: a few similar scribbings are also to be seen on the roof. These scribbings are represented in reduced facsimile on Plates *xlvi*–*xlvi*iii.* They are of three kinds:—

* The following has been the method by which the drawings have been prepared. Rubbings were taken with a soft pencil and inked in on the spot. They were then transferred to a sheet of drawing-paper with the aid of a camera lucida, and carried back to the cave and again inked in on the spot.

(1) Arrangements of lines, grouped apparently at random, though in some they cross vertically and horizontally as in a draughtboard. (2) Arrangements of circular dots, nearly all reducible to one scheme—a square of four, or a row of three dots, with a circle of dots surrounding them, which there seems reason to regard as a degenerated spiral. (3) Drawings of animals. Most of the latter are childish attempts—a rectangle with four strokes below and one above, to denote respectively body, head, and legs; but some shew much more advanced skill, as a glance at the plates will shew. Casts have been deposited in the museum of the Fund.

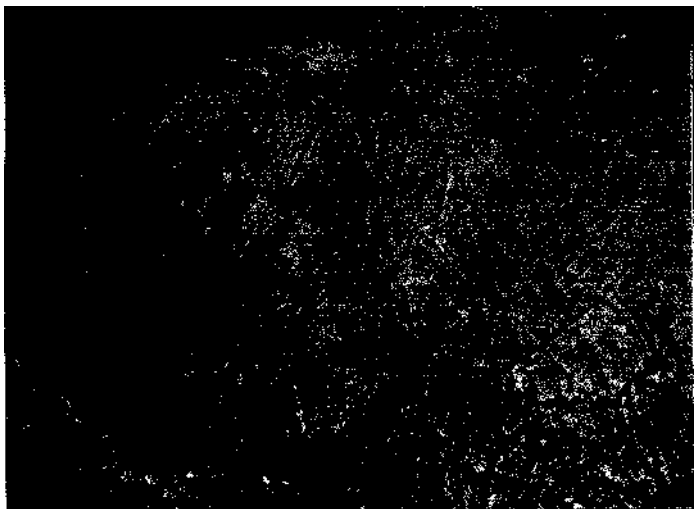


FIG. 48.—GRAFFITO NO. 4, CAVE 30 IV

The following is a detailed descriptive list of the graffiti, with particulars regarding their position inside the cave. The latter is marked on the plan of the cave in Plate xlviii.

1. A random arrangement of lines with no apparent meaning, just under the roof and over the outer edge of the recess containing the pit f.
2. A similar group of random lines beneath the right-hand end of no. 1.
3. Figure of a bird (?) on the outer side of the roof of the apse containing the pit f.
4. The roof of this apse at its right-hand side is covered for a space of 1' 8" x 1' 4'

with a network of random lines, like no. 8, only yet more confused and irregular. After several attempts to secure a drawing of it—which is very difficult, as it is on a horizontal surface face downward—I decided that it was not worth the great expenditure of time it would involve, especially as the most careful scrutiny on several occasions under different conditions of lighting failed to detect the slightest evidence of design in the strokes. I succeeded, however, in obtaining a good photograph which is here reproduced, fig. 48. They may have been made to deface a previous design, as will be seen to be the case in another part of the cave; but if so I could find no trace of the drawing destroyed.

5, 6. Two smaller groups of lines similar to 4, on the roof of the apse.

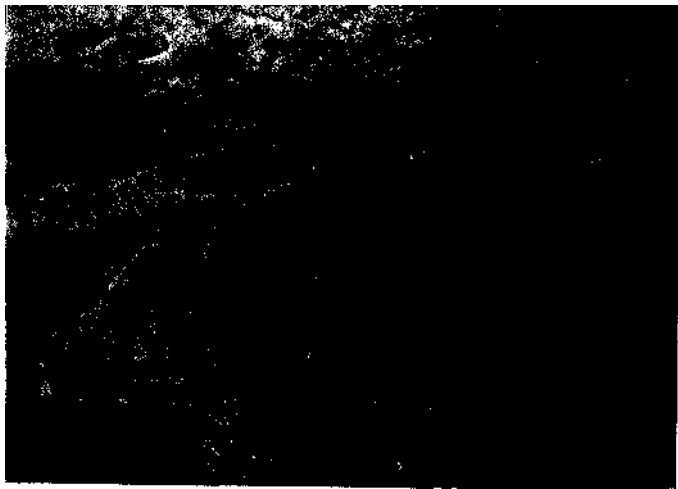


FIG. 49.—GRAFFITI NOS. 7-9, CAVE 30 IV

7. A group of dots on the face of the cusp separating the 'first apse from the second. The largest of these is 1" across by $\frac{3}{8}$ " deep. The design recurs elsewhere in the cave in smaller dots, as we shall see presently: perhaps it is some kind of *wasm* or tribe mark. They appear to be meant to be in a spiral.

8. On the side of the cusp in the second apse, immediately adjacent to 7, a random arrangement of lines, in which no design or order is to be detected. There are two fractures in the middle of this design.

9. At 4" from 8 there has been a similar but slightly smaller group of lines, which, however, has been entirely destroyed, evidently with intention. Nothing is

left but a small strip along each of the vertical cusps, the middle part being all hacked away. The original measured 5" x 6½". Graffiti 7-9 are shewn in fig. 49.

10. At 7" from this is a single stroke not quite straight nor quite vertical, but nearly so.

11. At 5" farther is another group of random lines in which no meaning can be detected. It is narrower and higher than the majority of these random groups.

12. Beside the upper part of the last: the first animal figure we encounter. It is perhaps the rudest and most childish of the whole series, as a glance at the illustration will shew.

13. Under the tail of the animal, and 5½" below it, is a hacked space 3" high by 5½" broad, apparently marking where a figure has been destroyed. There are the ends of three vertical lines shewing below the edge of the hacked space.

14. At 1' from no. 12 is a hole in the rock 5" x 5" x 3", probably marking the place where some design has been cut away.

15. At 4¾" from no. 14 is another hacked space 6" x 6½" x 2".

16. Obliquely below and to the right, and 11" from it, in another hacked space, 4" X 4" X 11"; from the left-hand side projects a line forking into three Y-like branches, thus possibly the tail of a bird. Nothing else of the design can be seen.

17. Immediately beside 16 is a deep hole of about the same cross-dimensions and 4" deep. Possibly here also a figure has been destroyed, but if so there are no traces of it.

18. Just above no. 17 is a group of random lines.

19. At 1' 4" from 18, but rather below its level, was a similar device, measuring 6½" x 5". The middle is hacked out. At the left-hand side of the injury are four oblique lines, sloping downwards from left above to right below: at the other side three similar lines crossed near their upper extremities by a shorter oblique line in the opposite direction.

20. Immediately above this is a device, of which the lower half has been hacked away by a hole 4" x 4" X 2".

21. At 6½" from this, a design has been hacked out, all that remains being a hole 5 ½" x 6" x 2½".

21 A. In the rest of this long apse there are no certain traces of graffiti. There are one or two places where it would seem as though designs had been cut out, but I cannot feel sure about any of them. We find nothing definite till we reach the cusp separating this from the next apse. On the farther side of the cusp is an interesting graffiti. I cannot but think that it is a representation of the common black millipede (*Julus*) which is so conspicuous a member of the smaller fauna of Palestine. See Plate xlvii, fig. 21.

22. Immediately next to 21A and almost on the edge of the cusp is a rude animal figure.

23. Just below 22, an arrangement of random lines.

24. Past the turn of the cusp is boldly engraved a representation of the print of a human foot. The heel is obscure, but can be traced: the ball of the foot and the toes are well marked. It is obvious that this is much more carefully engraved than the

rude scratches which are elsewhere to be found in the cave; and also that the separated toes, with square ends, are much in the Egyptian style of technique—such as is to be seen, for instance, in hundreds of representations of mummies on coffins. I must here record the ingenious theory propounded by Mr. K. T. Frost, formerly of the Egyptian Public Education Department, when he visited this cave under my guidance. It was to the effect that after the beginning of Egyptian settlement in Gezer, this even then ancient cave was adapted as the cellar of a house built above it: that the owner of the house, probably an Egyptian, descending into his cellar, was awed to find the mysterious graffiti on the wall, and in a panic proceeded to destroy them; but either because he wearied, or because he feared to proceed, he stopped when he had finished about half his task, and cut this symbol to avert whatever evil influences might be expected from the unhallowed pictures. This theory will account for the remarkable fact that the drawings are nearly all destroyed till we reach the footprint, after which they are intact; it would, however, be even more acceptable if a *hand* had been cut rather than a foot.

25. At 6" from the foot, and above its level, is another spiral of dots rather smaller than in the previous example. The spiral is in this case unmistakable. This occurrence long before any possibility of Mycenaean culture and influence of a motive so characteristic is of considerable interest. It is also noteworthy that in the Troglodyte Crematorium was found a tray of coarse pottery (fig. 50), with a spiral of knobs just similar to those marked on the walls

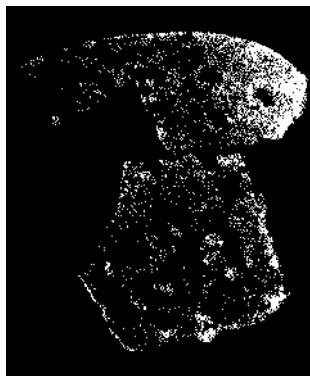


FIG. 50.- BOWL WITH KNOBS IN FORM OF A SPIRAL

of the cave on its upper surface. This may be merely an unimportant coincidence but it seems worth a passing reference.

26. At 3¼" from this spiral is another much less definitely formed.

27. At 3¼" farther on is a fine cow. This is the most artistic of all the graffiti, and shews that the Troglodytes were not incapable of a fair amount of skill, though they cannot possibly rival their Palaeolithic predecessors of the French Bone Caves. The snail-like knobbed horns are curious: did the Troglodytes protect themselves from their half-wild cattle by tying knobs on their horns?

28. Just below the last, and contrasting strangely with it, is a rude headless animal with long tail.

29. At 9½" from these two, and at the level of the space between them, is

a long horizontal stroke with vertical strokes depending from its right-hand end. This may be an unfinished figure of an animal.

30. Above and partly interfering with this figure, as the drawing shews, is another spiral of dots.

31, 32. At $2\frac{1}{2}$ " from no. 30 but at a higher level are two animal figures, one over the other. The upper one, which is actually on the roof of the cave, is reduced to an oval without limbs. The lower is only less summary.

33. Another spiral of dots is just under and to the right of the lower figure.

1.1. Just next to this is another very rude sketch of a horned animal. The hind-



FIG. 51.—GRAFFITI NOS. 38-41, CAVE 30 IV

legs have been broken, which is the only damage the graffiti on the right-hand side of the footprint have sustained.

35. Below and behind this animal is a small spiral of dots.

36. Above the last is another spiral of dots, rather larger.

37-39. Just next to the last are three animal figures, in a vertical row. The uppermost is on the under side of the roof. It has remarkably long horns. The second is quite among the best of the drawings in the cave. The third is larger. It is much interfered with by random scratchings, either with the intent to deface it, or else meant to represent long vegetation in which the animal is partly hidden.

40. There follows immediately one more—the last—spiral of dots, in this case degenerated into a triangle with three dots in a row in the middle.

41. Then follows a long narrow animal figure. Note how the under side of the body is made by a double line, one faint, the other strongly marked. Graffiti 38-41 are shewn in fig. 51.

42. 43. Then come two more animal figures, the hindquarters of the first being just under the snout of no. 41. The horns of the first are made very prominent to distinguish them from the almost random lines around them. It is evident that



FIG. 52.—GRAFFITI NOS. 42-45, CAVE 30 IV

the hinder animal is like one of those mentioned before, standing among long vegetation.

44. At f" farther on, past a crack in the rock, is a very interesting figure. It evidently represents a stag being killed with a bow and arrow, which are visible behind. Unfortunately the modesty of the huntsman has led him to suppress his own person! In front of the stag there is what may possibly be a grove of trees.

45. Just before reaching the cusp separating this apse from the next is a large group of random lines. No design is to be detected in these lines, which are apparently meant to deface a previously existing figure. Faint traces of one cow figure are to be seen underneath, and it is possible there may be others, but one

cannot feel any assurance. This much is, however, certain, that the defacement took place during the Troglodyte Period, and was not the work of our hypothetical Egyptian vandal.

46. Turning the cusp, we find just round its corner end under the roof nine short vertical strokes.

47. Immediately underneath this are some indefinite lines.

48-50. On a level with the last and 1" from them is a remarkable group representing a man (or two men?) doing something (ploughing? or driving? or hunting with a spear?) with two animals. Though rude, these animal figures are among the most ambitious of the series, as there seems to be an attempt made to represent the muscular structure of the animals. They are both confused with vertical slashes, as before suggestive of vegetation.

51. A figure of part of an animal in a smooth hollow place, apparently the matrix of a flint nodule, in the curve between the roof and the wall. Above the space between 49 and 52.

52. At $3\frac{3}{4}$ " from 49-50 is an interesting animal whose long horns proclaim it as a buffalo. I do not know what the triangular object underneath may be.

53. At 7" from the buffalo is a chequer of vertical and horizontal lines. A few random strokes fill the space between 52 and 53.

54. This curious little design follows the chequer at $3\frac{3}{4}$ " from it.

55. Above 52, 53, in a smooth hollow place between roof and wall (similar to that containing 51), a random arrangement of lines.

56. At 4" from 53, but at a higher level. Random lines.

57. Rude animal figure above 56 and almost beside 55.

58. Draughtboard pattern, just beside 56.

59. An animal figure immediately following 58.

60. Immediately after 59, a draughtboard.

61. At 8" from 59, a draughtboard.

62. A random group of lines, resembling no. 63, 4" from 61.

63. A random group of lines $2\frac{1}{2}$ " from 62.

64. On the roof above a point 1' 4" from 63.

65. Close to 64 on the roof.

66. Close to 65.

67. Above the pit on the right-hand side of the staircase, an arrangement of random lines like that photographed above the pit on the left side, not so extensive but quite as meaningless and complicated.

§ 9.—OTHER CUTTINGS IN THE ROCK : CUPMARKS, ETC.

Before we proceed to describe the buildings erected on the surface of the rock, a word or two should be said about the face of the rock itself, as obviously most of the features which it presents must antedate the erection of dwellings above it,

The surface of the rock is very irregular, covered with cracks, grooves, and depressions. Some of the deepest and most inconvenient of these have been bridged by **causeways** in very early times.

Three long parallel **fissures** in the rock, at the N. end of I 27, each about 3" wide and 1" deep, are probably natural; perhaps produced by earthquakes. They do not look as though cut, and have no assignable purpose.

Deep cylindrical vertical **shafts** cut in the rock can be explained in a variety of ways. Some (as I 29 nl), in which the breadth exceeds the depth, are probably rude fruitpresses, even though they may lack the cup in the bottom which, as we shall see in Chapter VI, is an ordinary feature of this type of cutting. The example referred to measures 6' 5" across and 4' 4" deep. Others, where the depth exceeds the breadth, are probably the beginnings of cisterns which, for some reason, were never finished. There is an example so marked in I 14. II 3 C is a pit in the rock, east of which is a small cupmark.

One of the most extraordinary characteristics of early man in Palestine is his fondness for making **cupmarks**. Every hill bears evidence of this singular custom, and to explain it adequately baffles all the ingenuity of the anthropologist. Hollows for votive offerings—recondite emblems of religion—star maps—mortars—waterpots—stands for waterpots—olive-presses—corn-grinders—fullers' vats—these and many more are the explanations that have been suggested, some or all of which may have their place in accounting for individual examples, but none of which completely covers the whole subject. The probability is that there is no one all-embracing explanation, but that different marks and groups of marks were made for different purposes and, there can be little doubt, at widely different times.

The surface of the rock at Gezer bears a perfect wilderness of cupmarks, single and in groups. Most of these are shewn in Map I, being indicated in general by the letter *a*; but I cannot claim that every single example has been recorded. Usually the cups are entirely artificial; but sometimes a natural hollow has been slightly "touched up" and adapted for whatever purpose it may have been required to serve. Thus I 2 A is a hollow, slightly enlarged artificially: it is 3' 6" deep. Again in trench 3 in the same map there is a scarp facing southward, north of which is a large cupmark 3' 3" across and 2' 6" deep: this was full of potsherds when found. North of it is a natural hollow, slightly tooled. South of the scarp is a small oval hollow, probably natural. There was a crooked wall south of this

hollow, which appears in Map I I. It ends at its western extremity in a large stone slab, standing upright: to the south of it are three single stones, probably the remains of a ruined wall. In I I 19, at the north end, was a very early pavement, underneath which was found a cupmark shewn in I 19. South of this is another cup, which, as often happens, is cut in the top of a small natural knob of rock. At I 19 A there is a shallow *natural* hole in the rock, the opening of which has been artificially rounded. Groups of cupmarks are very often cut on a natural surface of rock that rises above the surrounding area; but they are by no means confined to such natural tables.

It is not often that cupmarks are found definitely associated with building. One example will be seen at IV 18 A, which, however, may after all be accidental. It is a square tower-like structure of rude masonry about 4' 10" each way, founded on the rock, in the exact middle of which a cupmark of the ordinary kind was cut. It is difficult to assign a purpose to a building so narrow.

I 30 A, which seems to be closely associated with the cupmarks that surround the very remarkable cave 30 IV, is another example of the connexion of cupmarks and masonry. It is a circular structure 9' 10" in external diameter. Inside of it is a circular cutting in the rock; but as the rock fails on the south side its place is supplied by a row of four stones set on edge.

I 10 A is a natural hollow in the rock with three vats cut in the rock closely associated with it. It is difficult to explain the purpose of these vats. The southernmost is the smallest, 3' across, 1' 8" deep at the bottom of a scarp 2' 4" high; the next is 3' 7" across, 2' 6" deep; the next is 3' 10" across and no less than 6' 6" deep.

Cupmarks are sometimes double, *i.e.* a smaller cup in the floor of a larger. That immediately south of cave 14 I is an example of this.

At I 5 A is a circular basin 6" deep, with two cupmarks and a groove within it: above it to the N.E. are a large cup and five smaller, above which is a rock scarp. I 5 B is a cup hollow in which a jar was found standing.

In two places cupmarks were found united by a passage tunnelled through the rock between them—viz. at I 12 A and I 6, N. end.

Sometimes cupmarks have been found surrounding the mouths of cisterns. The most remarkable specimen of this will be found described in Chapter X, in connexion with the High Place, the cistern in question having been used as a receptacle for the bodies of sacrifices. Another example, which appears at the S. end of I 21, may here be referred to. The shaft of the cistern lies in the unexcavated side of the pit, and in consequence the western extension of the system, if any, was not exposed. In the part which was revealed by excavation there are fifteen cup hollows, all of them oval, measuring about 1' x 10", and about 6" deep; with two exceptions, one of which is square, an unusual shape, and the other circular, 8" in diameter and 1' deep.

That the juxtaposition of these cupmarks with the cistern mouth is not accidental is indicated by the fact that similar combinations are found elsewhere. There is one example (illustrated below) in the hills to the south of Abu Shusheh, and several examples have already been described by me from Tell es-Safi (see

EP, p. 193). It may be suggested that they were meant for watering cattle—the water being drawn and dashed over the surface of the rock, where it would gather in the cups in little pools,* though the cups hardly seem large enough for the purpose. That they are meant for oblations to the spirit of the water may possibly be a theory preferred by some, though I should be sorry to claim it as my own.

In order to display all the rock-markings on one sheet, I have drawn the cistern I 21 in Map I; but it is probable that it is to be referred to the First Semitic Period. In any case the cistern was used in later periods also, a shaft being built up through the accumulating debris. The cupmarks, of course, were covered and forgotten after the first period. The cistern therefore reappears on the successive plans.^f

Another example of the connexion of cupmarks and cisterns—in this case, however, less certainly intentional—will be seen at the south end of trench 4: an enlarged plan is given in fig. 53. The cistern in this case is quite small, and perhaps unfinished: depth of shaft 6', total depth 11'; the plan is rectangular, 9' 6" east to west and 7' 8" north to south. Close to it is a group of five small cups measuring from 1' to 2' in diameter: one of them is of the characteristic oval form. To the west is a scarp in the rock, 1' deep: above it is a double cup; in its edge is a recess in which a jar was lying (see the enlarged sketch above the plan and separated from it by a row of dotted lines). The half of a large basin, 6' 4" in diameter, appears below this—the other half was not cleared out. To the south is another scarp, of the same depth: below it are three small oval cups and one large basin 5' 9" in diameter; and another yet larger—the largest found on the mound—12' 7" in diameter. There are two cupmarks and a curious straight groove in the floor of this basin.

As in the other case, the cistern has been adapted to serve the needs of the overlying stratum.

A curious development of cupmarks or vats in the rock was found at I 29 A. Here there was a short scarp in the rock, 1' 8" deep, from which, at one end, a vat hollowed in the rock projected, 3' in diameter. What purpose this may have served did not appear. There was a remarkable cave close by (29 I), and a

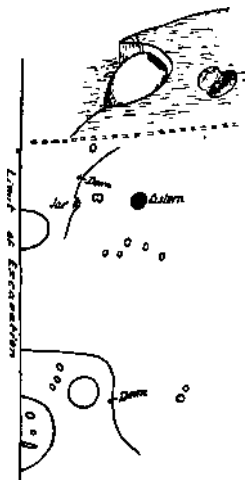


Fig. 53.—ROCK-CUTTINGS IN
TRENCH 4

* I once saw a boy in Jerusalem watering a sheep by pouring water on a pavement from a coffee-pot, the sheep licking it up as it fell!

† The rock-cut shaft of this cistern is of the unusual length of 7' 1"; the total depth is 17' 7", and the diameter 16' 6".

number of cupmarks on the surface of the rock. The vat in question is shewn in fig. 54.



ROCK SCARP

Important and difficult questions are raised by the presence of cupmarks, grouped with evident purpose, in the floors of some of the caves. The most striking example of this is in the great labyrinth 28 I I: this has already been described. It is the only specimen in which the cups are arranged in regular order; save that the three cups in 30 I I I are in a straight line. A single cup, possibly an olive-piess, appears in 17 I; and in addition to those first mentioned we have already seen groups of cups in 3 I, 3 I I I, 15 I V, 17 I I I, 27 I, 29 I, 30 I I, and 30 I I I.

In the plan of the surroundings of Gezer the principal groups of cupmarks are shewn—it would be quite impossible and unnecessary to mark all. In the land called *Wdret et-Tayasheh*, where there are a number of smooth, flat, table-like outcrops of rock with cupmarks cut upon them, one of the cups has a deep groove running out of it.

In the same land is the mouth of a cistern of the ordinary type; in the rock immediately above are a number of oval cupmarks. These, so far as they are exposed, are twelve in number, in a more or less straight row. Probably there are others concealed by the soil. See fig. 55.

The other groups marked on the map need not detain us long. They are exactly of the same nature as have so often been described before—groups of oval or circular depressions arranged without any definite order. The group between tombs 89 and 90 in *Wdret Danuish esh-Sharkiyeh* is cut in a smooth surface of rock that forms the roof above a very large natural cave. The single cups in *Shab VaA'ub*, near tomb 55, are large vats, probably for treading grapes. The group of cupmarks in the rock outcrop of *Wdret 'Aysa* is worthy of notice inasmuch as one has a ring round one of the cups (like the rings so often found round cups in European bronze-age monuments). This is rare in Palestine.

Some groups of cups are unquestionably connected with winepresses and threshing-floors, and will be noticed in their proper place in Chapter V I. Of others the purpose is elusive. But (so far as Palestine is concerned) I must say that the more I study the cup-groups and examine different specimens, the less am I inclined to see a religious or symbolic purpose in them.

There remains to say a few words about some miscellaneous rock-cuttings in the hillsides which cannot be classified under any of the preceding sections.

In the field called *Waret Darwish el-Gharbiyek* will be noticed three "pits in the rock." These were found when searching for tombs. They are very difficult to explain. The most northerly of them is especially

remarkable : it is about 8' 2½" deep. It seems to be square. It was not wholly cleared out, other and more important investigations demanding prior attention : in the surface of the bottom, so far as it was exposed, were two cupmarks. The second pit is probably an unfinished cistern. The third is a large circular hollow, 16' 5" in diameter. There is nothing to shew for what it was made.

The long rock-scarps that abound here and there are in all pro-

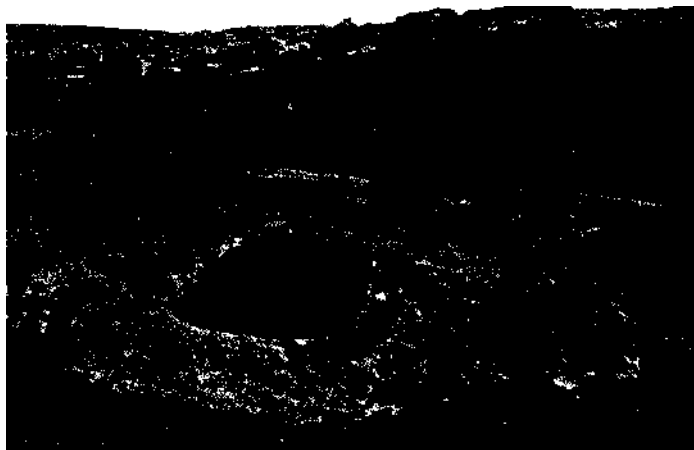


FIG. 55.—CUPMARKS SURROUNDING A CISTERN MOUTH, WA'RET KT-TAYASHEH

bability simply quarries, though some may have been made for receiving the doors of tombs that had never been excavated. They are especially frequent in the field called *Waret Darwlsh esh-Sharkiyeh*.

The cisterns, of which a few were found in the hillsides, seem on the whole to be smaller in size than those within the city, but otherwise do not differ materially from them.

The "steps in the rock" south-east of tomb 143 in *Waret 'Othman* are probably nothing more important than a bit of quarrying.

In *JSP*, p. 198, I have described a mysterious group of marks at

Tell es-Safi to which from their shape I gave the name of **V-marks**. Two such marks exist on the hillside of Gezer. One is in connexion with the winepress / in *Waret Darwish esh-Sharkiyeh*, described in Chapter VI; the other is solitary, on an outcrop of rock in *Ard 'Ain el-Butmeh*. It is a large block, 4' 5" high x 8' 6½" x 2' 5": the mark is U rather than V-shaped; it measures 1' 9½" x 1' 5½". The channel is 3½" broad.

In the hillside on the north and east are a few small **tanks**: they are rectangular in shape and carefully cemented. It is not easy to see for what these would be made: they would not hold much water, and it would soon evaporate in the hot Palestine sun. Measurements of one or two of them are given later in this chapter in the section on Waterworks.

Limekilns—cylindrical pits cut in the rock, about 10' deep—are found here and there. Some of these must be old, as they are filled with earth and seem to have been quite forgotten till they were reopened. That they were as old as the occupation of the city can however scarcely be asserted.

Of the **wine and olive presses** that abound everywhere we shall speak in a later chapter.

§ 10.—STRATIFICATION OF THE DEBRIS: THE PLAN OF THE CITY AT DIFFERENT PERIODS

Having now described the caves hollowed in the rocky core of the hill, and the various cuttings displayed by the surface of the rock, we must next proceed to a description of the buildings that went to make up the city. In this description, after some necessary preliminary generalities, we shall take first the ordinary dwelling-houses; then any other buildings which call for special notice—excluding of course those with a religious purpose, whose proper place is Chapter X; then we proceed to a description of the ramparts by which at successive periods the city was defended, and finally to an account of the various engineering works by which water was procured and stored within the city.

The stratification of Eastern and especially of Palestinian cities is a phenomenon which recent excavations have made so familiar that it is unnecessary to describe it here at length. Let it suffice to say that

houses have always been built over the ruins of their predecessors ; that these houses were built of mud-brick or of stones set in mud, from which the winter rains annually wash out a considerable quantity of clay ; that rubbish and organic matter were allowed to accumulate in the city streets;



FIG. 56.—SECTION SHEWING THE STRATIFICATION OF ACCUMULATED DEBRIS

and that thus the level of the city became raised at a rate variously estimated—at Gezer I reckon it to be about an inch in six years.

The debris proved on excavation to be of very different depths in different parts of the mound. At both ends of the hill, even within the city wall, rock crops out to the surface, shewing that at these parts there were always open spaces. A little west of this outcrop on the Eastern Hill

the soil deepens rapidly to 16'—17', containing from three to six strata of foundations. In the great pit around the alignment of the High Place, the soil was found to be from 5' to 23' deep, and to contain from three to seven strata. On the Western Hill the debris was much deeper than elsewhere, attaining a maximum depth of about 40', with eight strata of building.

The study of the strata at Gezer is in consequence peculiarly complex. In some parts of the hill certain of the epochs of the city's history are completely unrepresented, and we must suppose that during those epochs the regions in question were deserted areas; while on the other hand periods represented by single strata in some parts of the mound are found to involve two or three in others. Sometimes the side of a trench displays as in a geological section a complete history of the city in miniature; and I have thought it instructive to present the photograph fig. 56, which shews one of the best and clearest of all the sections that have been uncovered.* At the bottom is the rock-surface, in which will be seen the mouth of a cave (no. 27 I). This was used as a burial place; and when filled, its mouth was stopped with a great pile of small stones, upon which as a foundation the inner city wall was afterwards built. The original ground surface will be seen below this layer of stones, following the line of the rock. Above the stones is a white lime pavement; this, as well as the underlying pile of stones, is shewn in II 27 p, north end: about 1' above this is another bed, of broken potsherds and charcoal intermingled; over which are the walls of a large structure of brick which was built after the inner wall had fallen into decay. It will be seen in Map IIIa 27, 28. Above this brick structure, of which the walls are standing to a height of about 3', will be seen the flat table-stone of a winepress projecting into the side of the pit (IV 27 m), above which is the vegetable soil.

Reference words printed upon the photograph will enable this description to be followed more easily.

The task of making a series of plans which shall represent the arrangement of the houses and streets at different times is one difficult, if not impossible, to accomplish with accuracy. The problem is complicated by many elements, all of which add to the difficulty of its solution: it may not be amiss to state them here.

If it could be proved that a city was fully occupied during its whole history, and that the stratification of successive layers of building was due to a series of catastrophes by which the whole area of the town was

* I regret that an accidental streak of light has spoiled the appearance of this picture, but it does not destroy its value as an illustration.

wrecked several times, the case would be comparatively simple; and if we were acquainted with the nature and date of each of these catastrophes, we would then have no difficulty in assigning to their proper period the various remains of walls unearthed in excavation. And if architectural ornament of assignable age were used in the different periods of occupation, the question would evidently be simpler still.

There may be cities whose examination is thus reduced to the simplest terms in this way; but Gezer is certainly not one of them. The following are the principal elements which enter into and confuse the problem •—

(1) There is no possibility of distinguishing date from an inspection of the buildings themselves. From first to last all are of the same rude construction and plan, or rather want of plan. I might almost add, to the present day: for the modern village of Abu Shusheh, were it ruined, would present precisely the same appearance as the ancient city of Gezer.

(2) The great area included within the walls was not all occupied at once. There were many open spaces here and there at all times. In consequence, the number of strata ranges from two to eight. I have found that the successive strata of the city can fairly be plotted in six maps, with three intermediate maps for the Western Hill, where there are extra strata. It might be supposed that the antiquities found associated with the ruins would help to date them; but this is not always so. We must remember that the greater part of the walls that remain standing are the underground foundations, sunk into a stratum of earlier date than that to which the building actually belonged: so that the walls are, as a rule, associated with antiquities older than themselves—often considerably so. In the case of open spaces we must remember that they were not kept as municipal playgrounds; rather were they municipal rubbish heaps,* and indeed it is scarcely too much to say that a very large accumulation of potsherds and other worthless antiquities of a definite date in one spot is presumptive evidence that there was no house of that date erected in that spot. It follows, as a moment's thought will shew, that when these waste places were built over, there was an island of houses of one date surrounded by older buildings.

(3) There were no great universal catastrophes which destroyed the whole city at once. There are plenty of signs of large local fires, but no all-covering bed of ashes (like that most welcome layer at Tell el-Hesi). The captives and lootings of successive Pharaohs did a great deal of damage to the structures of the city, but in no case made "a clean sweep" of the whole. Many individual houses survived the storm and stress, and each one is a centre of difficulty and unsuspected inaccuracy to the would-be plotter of the city.

Herein lies the greatest difficulty: namely, that the rebuildings of the city took place gradually, not by a succession of entire reconstructions. A diagram will make

* Probably these open spaces were of use for collecting cattle in time of siege.

clear the confusion which this involves. Suppose a city to have consisted of five "quarters," A, B, C, D, and E; and suppose the rebuilding of these quarters to be indicated by dashes, thus A', B', etc. Then we may graphically represent the history of reconstruction in some such way as this:—

A	B	C	D	E	year	1	of the city
A'	B	C	D	E	"	50	" " "
A"	.		D	E'	"	150	" " "
	B'	C"	D	E'	"	200	" " "
A'''	B'	C"	D'	E"	"	250	" " "

which means that (by the data assumed) in the course of 250 years the city is completely rebuilt; during which one quarter has been rebuilt thrice, two twice, and two once; twice the city has been partially waste: there are thus five stages, so different from one another that to shew them properly a separate map is required for every one. None of the substitutes that might be suggested for this purpose are of any use in the case of a city like Gezer: tracing-paper with the changes printed upon it, to be placed over the map of the rock-surface, is cumbersome, and several thicknesses of it are too opaque to see through; and the use of superposed maps in different colours, with which I myself at first attempted to express the succession of strata, has only the effect of a polychromatic maze, whereby the eye is hopelessly confused.

Be it remembered, moreover, that the case as stated above is comparatively simple. In practice we have not to deal with five quarters, but with hundreds of individual houses; not with conveniently equal intervals of time, but with intervals of anything from, perhaps, a few months to any number of years.

In the maps will here and there be seen the letters X, Y, Z. These are meant to distinguish constructions of earlier or later date within the limits of the period covered by the map. The intermediate letter Y denotes the constructions that appear to belong to about the middle of the period; X indicates walls that appear older, but not old enough to be drawn on the previous map; Z marks walls that appear later, but not late enough to be drawn on the following. Building and rebuilding for some reason appear to have been more active at the western end of the mound than at the eastern: it has therefore been necessary to provide three intermediate maps for this part of the town.

Our troubles do not cease even there. We may assume that there was some sort of official or unofficial municipal council under the control of the *amilu*, or *hazanu*, or whatever name the chief functionary for the time called himself; but this council did not concern itself with the maintenance of highways. There seems to have been nothing to prevent a man building a house so as to obstruct and divert a line of traffic.* Indeed (as a moment's comparison of the maps will shew) the

* In modern Jerusalem, where building operations have been lately carried on to a surprising extent, paths that have been rights-of-way for generations are being closed one by one without any interference on the part of the community or of the Government.

non-permanence of lines of thoroughfare is one of the most striking facts that distinguishes the history of building in Gezer from that of any European city.

Among minor sources of confusion must be mentioned pits dug in the earth in ancient times, which were often responsible for lowering antiquities of one stratum into a context much too early. These pits were rarely distinguishable except when a lucky chance made them coincide with the vertical face of a trench, as in the photograph, fig. 57.



FIG. 57.—TRACE OF A PIT DUG IN THE DEBRIS IN ANCIENT TIMES

It is an instructive task to compare the various plans of the series together, and before going further, to endeavour to gather the general characteristics of city-planning at successive epochs of the history of the community. For though there is a remarkable uniformity—far more so perhaps than one would naturally expect—yet, as we shall see, each age has certain characteristics which distinguish it from the others.

We may pass over the cave-dwelling community, and omit from our consideration the fragments of pavements and walls which are indicated on Map I. These are the meagre remains of the first constructions on the mound; but there is nothing to be made out from these incoherent fragments, many of which consist of four or five stones only. The three intermediate maps of the Western Hill may here also be neglected.

Map II belongs to what may be called the prehistoric period of the Semitic occupation—the period before the veil of illiteracy is raised, and reveals as the first act in the drama the terrors of Yapahi and his contemporaries. One building of great importance—no doubt a palace—at the south end of trenches 27-30, belongs certainly to this period. Otherwise the impression that an inspection of the plan gives is one of *emptiness*. Here and there are important houses, like that in the middle of trenches 3, 4, surrounded by open spaces that, in all probability, contained rude huts of temporary materials, like the reed villages which are characteristic of modern Egyptian scenery, or, it may be, a permanent settlement of tents, like the Nawar encampment opposite Saint-Etienne at Jerusalem or the Bedawin encampment at Wady Hanain near Ramleh. This eloquently speaks of the permanent settlement of a nomadic tribal or sub-tribal * community, under the leadership of a despotic Sheikh, dwelling in the palace just mentioned, and with more or less absolute control over the lives and time of his subjects. Such a constitution must indeed have existed at the time, as nothing but the strong will of a merciless despot can have supplied sufficient motive power for the excavation of the gigantic water-passage within the palace courtyard.

Towards the end of the period the temporary structures give place to stone buildings, as a comparison of Maps II and **IIa**, on the Western Hill, will shew. It is probably to this later part of the First Semitic Period that the crowded structures in trenches 20, 21 are to be assigned.

The Second Semitic Period, Map **III**, is characterized by *few* buildings, with comparatively large rooms. Though the trenches on the Western Hill look empty, they were not so in reality: the houses in **IIa** give place directly to those in **IIIa**, so that there were no intermediate structures erected at the beginning of the period. On the whole the impression one

* I use this expression as a sort of equivalent of the Arabic *hamuli*, or congeries of related families, groups of which make a tribe.

receives from the plan is that of a small and luxurious community; and with this agrees the observation that the richest tomb deposits found have been from this period, as well as the richest pottery from the houses. It was the time when the Aegean trade had introduced new art ideas, which rapidly found well-intentioned imitators among the craftsmen of the city.

In the Third Semitic Period, Map IV, there are obvious signs of a much increased population with more developed organization. Land for building is even stolen from the sacred High Place: the city is too congested within its old wall, and it becomes necessary to build another wall outside it. Various buildings of importance are erected, distinguished from the rest by their thick walls. The chief moves from the old palace site to another, at the north of 15 and 16. A tendency to bizarre plans is indicated by certain structures—notably the peculiar erection south of the middle of trench 27—with long narrow rooms.* These changes can best be accounted for by the entrance into the ancient population of another element, with different ideas: which accords with the statement of the Book of Judges (i. 29), that after the Israelite immigration certain Ephraimites settled in the city, although it was not brought completely under the control of the tribe.

The Fourth Semitic Period (Map V) displays the same general characteristics. The same liking for long narrow rooms will be noted, if anything further developed. One most important difference between this and all the other periods must be noted. There is not—so far, at least, as the excavation has been carried—any outstanding building that can be indicated as certainly a chiefs residence. This accords with the historical fact of the city having been brought within the control of a Central Government.

It will be noticed, on both this and the preceding plans, that the inner city wall, which, as we have said, went out of use at the beginning of the Third Semitic Period, still exists as the apparent limit of building. This is due to natural causes. No doubt the buildings of the later periods originally transgressed this limit; but the winter rain washes off the earth from the edge of the plateau, and exposes a few stones, which are promptly annexed for building purposes by the fellahin of any one of the half-dozen

* This shape is evidently dictated by the difficulty of finding lintels of wood or of stone long enough to roof a *broad* room.

villages within a few miles of the site. The result is that buildings round the edge of the city in time disappear completely. This is especially obvious in the sixth map, representing the last period: the empty line is visible almost all round.

What is left of this period speaks clearly of a dense and comfortable population. Built reservoirs, well-paved rooms, complex house-plans with pillars, all point in this direction. The absence of architectural ornament is easily explained by the same cause as that just mentioned—destructive fellahin. That there were actually ornamental constructions is shewn by an Ionic volute and some moulded stones cast in among the rubbish filling the great reservoir in trench 16.

Into this population burst the destroying vengeance of Simon Maccabaeus, who ransacked the city, deported its inhabitants, and garrisoned it with "men who would keep the law." It is not unlikely that this garrison was insufficiently provided with women having the same qualification—and surely no others would be admitted—to keep the population up to its former level: at any rate this event was the death-blow of the city. A few years later it falls back into Syrian hands so easily that the event is recorded, as it were, only in a footnote; and though the remarkable bath-house shews that the decimated remnants tried to make themselves comfortable within the wide walls that once sheltered so much larger a population, they probably felt themselves unable to defend so great a length of rampart, and abandoned the ancient city in despair, settling on the neighbouring village sites now known as Abu Shusheh and Khurbet Yerdeh. Thus only can we account for the complete disappearance in a very short time of so large a population as is postulated by Map VI.

It is very rarely indeed that a wall is found which can demonstrably be assigned to two different sets of successive buildings, of which it is a common member. An example, however, is the long wall V 4 AB, which has been taken over from the previous stratum; through which it runs to the rock. A wall of the first palace, in II 28, has been adapted to the construction of the second, in III 28. It will also be seen that the older city wall, after being superseded by the later rampart, was used to form one side of quite a series of chambers, built up against it.

Of street-paving there is scarcely a trace, one or two small fragments of foot-worn pavements, here and there, being the only indication that such was ever in use. These consist of rounded stones about 8" in diameter,

and must have been much more uncomfortable to walk upon than the smooth-trodden surface of the earth.

§ 11.—THE GEZERITE HOUSE

We must now proceed to describe and illustrate the normal Gezerite dwelling-house. We divide the subject into the following headings : plan ; construction (masonry and brickwork); floors ; doorways and windows; roofs and the means of supporting them; architectural ornament; and miscellaneous details. Though *cisterns* are an essential part of many of the houses, it will be more convenient to describe these together in a later part of this chapter.

Plan.—The absence of roofs, and still more the absence of doorways—the houses being as a rule ruined to below the thresholds—makes it often very difficult to discover the plan on which any given building was laid out. Indeed sometimes it is by no means easy to determine whether any given point was inside a building or in the street outside. Often, too, what may be called "fictitious rooms" are produced by the interweaving of foundations of successive periods. Thus in the diagram, if the dotted square represent an old foundation, and the square in firm lines a building erected later, evidently when both are ruined to the same level there will be three fictitious chambers, A, B, C, which never had any real existence. On account of the uniformly rude character of the masonry, with random bonding at angles, these fictitious chambers are not always so easy to detect as might be supposed.

In these difficulties it is satisfactory to note that there is one source of illumination from which much help can be obtained in solving the problems connected with the plans of the ancient houses. I refer to the dwellings of the modern fellahin, which seem to reproduce, with tolerable exactness, the main peculiarities of their ancient predecessors. As a preliminary to the study of the Gezerite House, I propose therefore to make some remarks on these dwellings.

The village streets are crooked and narrow. In many it is almost possible to touch both sides of the street at once by stretching the arms out horizontally. They are so artlessly laid out that even the tiny village of Abu Shusheh, which can

hardly contain more than six hundred souls,* is a most confusing labyrinth to the stranger.

The streets run, not between houses, but between the blank walls of courtyards : these walls, like all the constructions in the village, are built of more or less unhewn stone set in mud; very little lime is used in the buildings. The courtyard walls are 8'-10' in height. They are pierced only by the doors giving admission to the courtyards behind. These doorways are, as a rule, roughly arched ; the threshold is generally lofty, perhaps i' high. The door is secured to a vertical wooden beam that turns in a cup-shaped stone socket.

The courtyard varies greatly in both shape and size. And here it is well to remark that such rude buildings as these are never built to any actual measurement, and there is no special reason for considering that those who erected their ancient predecessors were any more particular. It follows that attempts to deduce the length of the cubit from the measurements of lengths of such walls must have results so uncertain as to be valueless.†

In the courtyard are (i) the baking oven, a small dome-shaped hut with the biick bread-pit in the centre, (2) one or two dog-kennels and chicken-coops, and (3) a raised platform of clay, with a lattice surrounding it of the same material, in which branches and reeds are in summer interwoven to make a booth for shelter from the heat of the summer sun.

At the back or sides of the courtyard is the house proper, almost invariably one-storeyed, consisting of one or more rooms, in which a part is set aside for the animals, and another with raised floor, for the family; covered with a flat roof of mud beaten down and kneaded, carefully smoothed with flat stones, and supported on wooden beams. On the rare occasions (one or two in each village at most) on which an upper storey is found, this is approached by a wooden external staircase. The roof is of mud, and each winter fresh layers are put on to prevent leakage during the rain. Sometimes the roofs become in time as much as 3' thick or more. If, as is probable, this be an ancient custom, it would help us to understand how great piles of earth accumulated on the ancient city sites.

If now we apply this modern analogy to the plans of houses which remain in tolerable completeness, we shall have little difficulty in getting

* During the campaign a robbery from the camp property was compensated for by a tax of one beshlik (about *Gd.*) on every adult male in the village community. The number of beshliks collected was 113. Allowing for five to each family, which is a fair average, this gives 565 as the total number of persons in the village. It agrees closely with an estimate made by the administrator of the Bergheim estate from other data.

† Nor have I much faith in the deduction of cubital lengths from measurements of rock-tombs. Even when a common divisor can be found to tables of measurements, a margin of inaccuracy often as great as an inch or two has to be allowed; and often no common divisor is forthcoming at all. Builders built, and tomb-cutters cut, until they had made a chamber large enough to suit the purpose they had in view; but I do not think that the system of measurements they used was as a rule any more scientific than that of the fellah who informed me that the length of a certain rock-cut tomb was "two walking-sticks and a hand-breadth!"

an idea of the disposition of the normal Gezerite house. It must not be forgotten, however, that each man built his own house according to his taste, fancy, and requirements, so that a diversity of detail must be expected throughout the city. The threshold of the entrance doorway was no doubt (as is always the case in modern houses) raised about 1' above the level of the roadway. This accounts for the total disappearance of any indication of the doorway in the masonry when the walls are ruined to the level of the ground. The practice of depositing lamp and bowl groups under the threshold, which will be more fully described in Chapter X, sometimes comes to our aid and indicates where the door should be placed in a reconstruction; but this practice was unfortunately not always followed, and in the absence of these useful indications we are left entirely in the dark as to the proper place for the entrance.

In Plate xlix, figs. 1-7, are collected the plans of representative specimens of houses selected from all the different periods of the city's history. The existing fragments of walls are shewn in firm lines, conjectural restorations are hatched.

Fig. 1 (II 3, 4) is a small and compact house on the Eastern Hill, with five chambers and an elaborate grain-store of small bins on the east side. What seems to be the courtyard is on the north side: the long passage that appears to have given access to it is curious.

Another house in this plan worthy of attention is the large but fragmentary building in II 14, evidently the dwelling of some wealthy notable: it is remarkable for the number of circular cornbins it contains. The buildings in trenches 20, 21 are much confused, and there are probably a good many "fictitious chambers" among them. Even here, however, a little attention shews that the normal plan—a courtyard with smaller chambers grouped around or behind—is followed in the majority. Another good but incompletely excavated example appears in II 1. The great palace, which will presently be specially described, at the south end of the western trenches is in essence merely a development of the same normal plan.

In Map I *la* the building to the south is probably also a palace, and calls for special notice hereafter. At the north end of trench 28 is a small house of the normal pattern, differing however in having the subsidiary chambers on the side of the court to the left of the entrance, not, as seems more usual, in the back.

In Map III note especially a large and important house at the south end of 20, 21. In this case the entrance to the courtyard appears to be through a small guard-room at the eastern side. There are rooms on two sides of the courtyard—the chambers to the south appear to belong to another house. The pile of skulls marked A found in this courtyard is grimly suggestive of some Gezerite Bluebeard. Toward the back of the court is a circular cornpit: the chamber immediately north of it was a granary. This house had a special cistern at its

eastern end—the same cistern as that already mentioned around which on the rock-surface arc cut a number of cupmarks.

The later part of the Second Semitic Period, as illustrated in **IIIa**, is distinguished by the remarkable brick construction on the Western Hill, shewn in Plate xlix, fig. 2, and illustrated in the photograph fig. 58. The walls were very thick, and the rooms much better laid out than usual. It was not possible to excavate it completely. At A, B, there are hollows in the walls, possibly the remains of secret store cupboards. The first of these is oval, 4' 9" x 3' 10", and at



Fig. 58.—LARGE BRICK BUILDING IN **IIIa**

present 2' 3" deep: the other is 2' 3" square, and only 6" deep. In the corner C there was a lamp and bowl deposit. Outside the brick (as will be seen in the photograph) there was a stone revetment wall. At D there was a circular shaft of stone, like a cistern shaft, but not leading to any excavation. It was 4' 4" in diameter. At E there was an oven. The bricks are sun-dried, about 1' 4" as a rule long, in courses 5" high. It is possible that the structure in **IIIa 30** belongs really to the period following; the long narrow chambers are more suggestive of that period. A good example of the courtyard house will be seen at the south end of **IIIa 28**. In **IIIa 30** is part of a house presenting some perplexing features. The chief detail is a wide courtyard with a stone pavement. In this pavement are two

well-sinkers as a convenient tool for scraping the soil in the cave in search of treasure.

The skull mentioned above was not, like the other bones, in the floor, but deposited in a fissure between two strata close under the roof of the chamber.

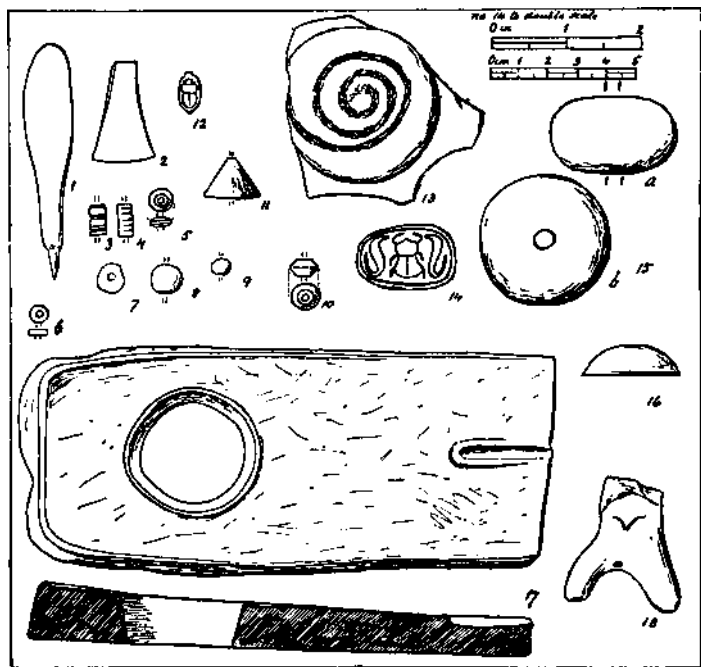


FIG. 42.—OBJECTS FROM CHAMBER (4), CAVE 28 II

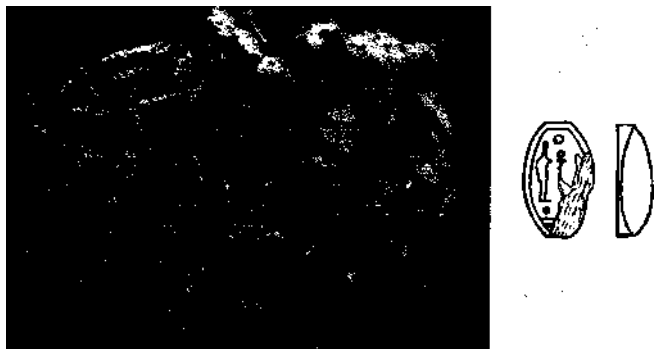
There was nothing in the part of the chamber that lay under the fallen roof. The cistern in this portion of the cave, however, contained a fine bronze pot that apparently had been accidentally dropped in (fig. 43), and a fragment of a green enamelled scarab (fig. 44).

Neither did the small passage extending southward from this portion of the U-shaped chamber yield much of special interest, nor yet the small rooms to which

it leads. In the passage was a large jar resembling Pl. xxxvii, fig. I, but broken, containing a few bones; a jug and some saucers of the commonest type (similar to Pl. xxxviii, fig. 3, and Pl. xxxvii, fig. 4), and a lamp of the ordinary pattern. There was also a fragment of the rim of a very large bowl, which when complete must have been about 1' 8" across.

On the other hand (7), and the room (8) opening out of it, were by far the richest in deposits of any portions of the cave. The happy accident of the fall of rock had sealed the precious contents of these rooms from depredation. The contents of these chambers alone rendered the discovery of the cave one of the most remarkable archaeological "finds" made in Palestine.

In (7) was little but pottery, but of this there was a considerable quantity,



Figs. 43, 44. -BRONZE TOT AND SCARAB FROM THE CISTERN IN CHAMBER (5), CAVE 28 II

forming a valuable series of contemporary types. Some of the jars contained infant bones. The human bones were in fair preservation, and the pottery was grouped about them. Besides the pottery there were a few inlaid strips of ivory shewn in Pl. xxxiv, and a scarab and gold-mounted bead (Pl. xxxvi, figs. 15, 16). In this chamber there was also a horn adze (Pl. xxxiv, fig. 31).

Chamber (8) contained another fine series of pottery and alabaster vessels, collected in groups containing from two to about a dozen fragments and pieces: it is noteworthy that with the unbroken specimens numerous fragmentary vessels and potsherds were found associated. Unfortunately the bones were few, scattered, and perfectly rotten, and the manner of interment could not, therefore, be exactly determined: it is probable that each group of pottery was the collection deposited with a burial. Underneath the pottery lay concealed a considerable number of

scarabs, some of them mounted in gold (see Pl. xxxv): the bronze gilt pin (Pl. xxxv, fig. 27) was found in this chamber also.

At the mouth of the narrow passage south of chamber (8) was a collection of one-handled jugs, near which was a bowl, inverted. There were also some beads and a few scarabs, as well as two bronze spearheads (Pl. xxxiv, figs. 32, 33). The passage itself, and the cell to which it led, were empty.

The passage leading to (9) was also empty, and (9) itself contained nothing but a few fragments of a tibia, shewing that one interment had taken place here. There were a few primitive fragments of pottery (shewn on Pl. xxxvi, fig. 3).

The broken chamber (10) contained a considerable number of primitive fragments of pottery in drab ware, some of them covered with white wash and red drip-lines. Ledge-handles were attached to some of the fragments. There were also fragments of stone rings, anodonta shells, and needles made of the leg-bones of cranes. A small stone corn-rubber must also be mentioned, and a bronze punch.

Covering the entrance shaft to chamber (8), above and around the great stone by which it was stopped, was a pile of potsherds. These had been broken on the spot, as was shewn by the fact that many could be pieced together. The majority of the pieces were coarse drab saucers of very common types. It is possible that this heap of pottery has no connexion with the cave or its contents, but is merely the debris of an ashpit—several similar ashpits were found not far away; but it is also possible that we have here a trace of a very early custom which even yet survives in some places—that of breaking vessels at a shrine or at an interment. Some fragments of cow-bones found mingled with the potsherds seem rather to favour the former alternative. The fact that the fragments can be pieced together does not necessarily weigh against it: a dish might have been broken in two, accidentally; the two fragments would then be naturally thrown into the rubbish heap, and would probably become still further fractured by the fall.

The human remains which were found buried in the cave were all badly decayed, and little could be made of them. They belonged to the early Semitic type described in the previous chapter. There were some curious examples of the deposits of bones in jugs, as under:

In a jug (Pl. xxxviii, fig. 1) from chamber (7): the fast thoracic vertebra of an infant, the last right great-toe joint of an adult, the semilunar bone of the right hand of an adult, the first upper molar of a child of six, the cuboid of the right foot of an adult, the metacarpal of a fourth finger, portion of a rib, the first phalanx of a foetal great toe, the lumbar rib of an adult, and the cartilage of the epiphysis of the lower end of the femur of a child of one year.

In a large jar resembling the great jar from (8) (Pl. xxxvii, fig. 1), found in the tunnel extending southward from (6), was a small clavicle and some vertebrae.

The *stone and metal* objects found in the cave are as follows. In *stone*, a few flint knives, all flaked and of poor quality: representative specimens are shewn in Pl. xxxii, figs. 15, 21, 24, and in Pl. xxxvi, fig. 17. These flints were found in the cistern in (6), and in chambers (2) and (8). In the northern branch of the U-shaped

chamber was found the small chipped flint PI. xxxvi, fig. 20. A flint scraper came from chamber (10).

A few rudely worked nodules of limestone were also discovered in the same part of the cave: such are the fragments of soft limestone with a hollow sunk in each face (PI. xxxvi, fig. 19), a similar piece of stone with a hollow in one face (not illustrated), and a perforated pebble (fig. 18).

Two slightly hollow circular stone dishes supported on three feet were discovered, one in chamber (2) (PI. xxxii, fig. 6), the other in (10). Of these the first was of considerable size, being $12\frac{1}{2}$ " in diameter. The other was *flat* on the upper surface, and was of value as it determined once for all the purpose of these footed trays; for with it was a hemispherical pebble, evidently the associated grinder, for trituration of grain.

The only *metal* objects that were not personal ornaments are the two spearheads from (8), the punch from (10), and the bronze pot found in the cistern in (7).

The spearheads are shewn in PI. xxxiv, figs. 32, 33. They are of a type common at all periods of the city's history—triangular blades with rather rounded tips and flat tapering tangs. The lengths of these spearheads are respectively $5\frac{3}{4}$ " and $7\frac{3}{4}$ ".

The punch is also of a common type (though its association with cave-dwellers' pottery is a little unexpected, and no doubt to be explained as an intrusion). It is $7\frac{1}{8}$ " long.

The pot, on the other hand, is unique. It has been illustrated above, fig. 43. It has a round bottom, a rather cylindrical body, and rounded mouth, strengthened by a slightly thickened rim, pinched at one side into a slight spout. One loop remains to shew that it was originally provided with a handle, like the handle of a bucket (possibly a thong of leather): this, with the corresponding loop, has disappeared. This interesting vessel is $6\frac{1}{2}$ " deep; its diameter through the spout is 9", and the diameter at right angles to this 7".

The principal objects in *ivory* are collected together on PI. xxxiv, which speaks for itself and calls for little description. There are thirty ivory inlays, used probably for decorating sword-hilts and similar objects. These objects are common at all periods and shew little variation from age to age. Punched circles (as in figs. 1, 22, 23) are on the whole the commonest decoration, though diagonal lines parallel (figs. 3, 15) or in zigzags (29) are found almost as frequently. On the other hand, transverse lines parallel to the long sides of the slip (as in 18-21) are rare, and it is still rarer to find them filled in with black enamel, as they are in the present examples. Dots (as in 10, 11) or oval indentations (24, 27) are also uncommon.

The peculiarly shaped slips nos. 2, 24-27, must be members of a pattern formed by a group of specially prepared inlays. No. 5 is unusually broad, no. 25 unusually narrow. These inlays were all found scattered through the earth on the floor of (8), except nos. 1-3 and 28-30, which came from (7).

There is another bone inlay of peculiar shape, shewn on PI. xxxvi, fig. 5. It was found broken in two in (7).

From the same place came the interesting horn adze shewn on PI. xxxiv, fig. 31. It is the base of a large stag's horn, with bevelled edge, and with a rectangular hole cut through it for the handle. A small circular hole cutting the axis of the first at right angles is provided, to hold a rivet whereby the head was prevented from slipping and flying off the handle. This object when found was much decayed and soon after removal fell to pieces. With considerable difficulty I cemented the fragments together in order to make the drawing from them, but the particles had no cohesion, and it was impossible to make the repair permanent. When fresh and strong, however, this tool was well adapted for breaking the soft rock in which the cave was excavated, and I am inclined to believe that we actually have in this adze one of the implements wherewith the cave was originally hollowed.

Two ostrich eggs, broken into many fragments, may be recorded here. They also come from chamber (7).

The objects in *alabaster* collected together on PI. xlii must next be noticed, as well as the black slate vessel, fig. 2 on the same plate, and the alabaster pot PI. xxxix, fig. 15. These all have a flat circular top and round mouth (in fig. 6 the top is broken off) underneath which is a hollow neck. The body is triangular in vertical section (as in figs. 3, 8); elliptical (fig. 9 an especially fine specimen—the small pot PI. xxxix, fig. 16, is somewhat similar); globular with round base (fig. 1) or with flat base (fig. 5); or else inverted conical with flat base (figs. 4, 6, 7).

The black slate vessel is remarkable. It has a turned foot, slightly hollow under the base, which is too narrow to allow the vessel to stand upright. The top is unfortunately broken off.

The most striking object in *gold* is the armlet, PI. xxxi, fig. 1. This is a long strip of flexible gold leaf: the broader end is unfortunately torn away, and has a ragged end, which is slightly under 1" in breadth. From this it tapers along its whole length of 10½". The narrow end is rounded. The armlet is ornamented with a row of repousse dots along each edge and round the surviving end. It evidently was secured by a hook now lost, fastened to the broader end by four rivets (the holes for which remain), and catching in the loop with spiral coils which is still secured to the narrow end. This is not fastened with rivets, but by some welding or soldering process: I was afraid to examine it too closely for fear of detaching it from its place.

The gold flower, such as fig. 19 on the same plate, is another characteristic type. Three of these were found in the cave—one at the outer entrance to chamber (1), the other two with the armlet in group A. They are discs, roughly cut into a cog-wheel shape, with a repousse boss in the middle perforated by a pinhole. They are no doubt intended to represent flowers, and probably were meant for sewing on to garments. A gold flower, of the same general type, but much more realistic and with three thread-holes, was found in slightly later debris elsewhere in the mound.

On the same plate are three gold beads (figs. 20, 21, 23), which also seem to be reminiscent of a vegetable original—in their shape and the ornamental reeding of their surface they resemble unopened buds. These likewise came from group A.

Fig. 22 in the same plate is a plain gold disc, circular, with a segment roughly cut out of it. Possibly it was broken away from some larger ornament.

The bead, fig. 29, is composed of two thin concave plates welded together two minute perforations being left on opposite sides of the edge. The finger-ring, fig. 28, is a plain loop of wire which (as was almost always the case in metal finger-rings formed of a looped wire), was thickest in the middle and tapered to a point at the two ends.

The objects on Pl. xxxv came from chamber (8). The pin, fig. 27, is not of gold, but of bronze, gilt. The point seems to be hollow. The handle is ornamented with a continuous beading. At the junction of the handle and point is a flat guard, to which a moveable ring is suspended. The point tapers regularly from this guard to the tip: at its base is a delicately incised lotus flower ornament. The total length of this object is $5\frac{1}{2}$ ".

Fig. 33 of the same plate represents a finger-ring about f" in diameter. It essentially resembles the other ring in being made of a wire thickest in the middle and tapering to a point at each end. It differs, however, in the points being prolonged and twisted spirally round each other. The joint is partly concealed by three minute annulets, also of gold, but of a deeper colour, threaded upon the wire.

The *silver* objects are of less varied interest. Beside the scarab mounts, some still retaining their hold on the scarab, others (Pl. xxxvi, figs. 7-9) broken away, there is nothing but the looped hairpin, the pendant crescents, and the earrings, all from group A, and all represented in Pl. xxxi, figs. 12, 13, 14, 16, 25.

Neither do the *bronze* ornaments appear to be of much account. Two fragments are shewn of hairpins, similar to that of silver—one from group A (Pl. xxxi, fig. 17), the other from (7) (Pl. xxxvi, fig. 12). A small double-headed wire, bent into a loop (Pl. xxxvi, fig. 13), came also from (7). A considerable number of featureless fragments of stems of bronze pins were found in various parts of the cave: there were also a few scarab mounts, as Pl. xxxvi, fig. 6.

The *beads* are of a large variety of materials and types. Agate, jasper, crystal, and carnelian are the ornamental stones used: one peculiar bead, shaped like a sea-shell (Pl. xxxi, fig. 11), was of malachite. Paste, covered with enamel of different colours, was also used, the colours being green, blue, yellow, and dark brown.

The shapes of the beads are double conical, cylindrical, oval with flattened facets, spherical, and discoidal: typical specimens of each variety and material will be found in the accompanying Plates, xxxi, xxxv, xxxvi. One of the most interesting was a cylindrical bead, with elliptical transverse section, of green enamelled paste ornamented with brown dots. It had a gold cap at each end (Pl. xxxvi, fig. 15). This, and one scarab (fig. 12), were the only objects other than pottery, bone, and alabaster found in (7). From (5) there was one amethyst bead (Pl. xxxvi, fig. 10).

Two blue cylindrical paste beads (Pl. xxxvi, fig. 14) came from (8), close to the small southward passage. The group of carnelian beads (Pl. xxxv, fig. 32) were from the same place. The rudest bead was the rough perforated pebble (Pl. xxxvi, fig. 18). This was from chamber (7).

Group A yielded three cylinders. One of these (Pl. xxxi, fig. 2) was of green enamelled paste with gold mount, still retaining its silver setting. A second was of the same material and colour, ornamented with delicate crossing diagonal lines (Pl. xxxi, fig. 24). These were evidently merely ornamental. The third, being a seal-cylinder, was more interesting. It was of a brown-coloured stone, and bore four vertical rectangular compartments, three of them containing palm-branches, the other a peculiar device of zigzag lines and crescents which I am unable to explain (see Pl. xxxi, fig. 15).

I now come to the *scarabs*, of which there was a fine collection. The majority were from chamber (8): one was from (7), and a few were from group A in chamber (2). We shall begin with the most important group, which is shewn on Pl. xxxv.

1-7. Plain uninscribed scarabs in amethyst, most of them poor flawed stones. The purple colour varies considerably in intensity. All are mounted in a gold band surrounding the sides and edge of the base, except in the case of no. 6, which is unmounted. This gold band is plain, except in no. 1, which has a line of delicate beading on the vertical and horizontal faces of the gold band; and no. 5, which has a slight projecting horizontal rim all round the base. Attached to the gold mount there is in the perfect specimens a small circlet of gold, which was evidently intended to prevent the ring from fraying away the thin mount by friction. The ring itself is a loop of gold, silver, or bronze, rather more than two-thirds of a circle with flattened perforated ends: through these was a fine gold wire, on which the scarab is threaded. This wire is coiled round the ends of the ring. The wire is generally of gold, but in some, such as no. 3, it is of bronze. The gold band of no. 7, which has lost its circlets, is unusually deep for the size of the scarab. This set of amethyst scarabs varies in length (exclusive of the mounts) from $\frac{1}{2}$ " to $\frac{7}{8}$ ".

8. Carnelian scarab, uninscribed, with gold mount and ring. The legs of the scarabaeus are roughly indicated on the left side, but not on the right. The length is $\frac{1}{2}$ ".

9. Fine green serpentine scarab in a massive gold mount. Length $\frac{7}{8}$ ".

10-12. Three plain scarabs of dark greenish basalt. One of these (no. 12) has a white vein on the right-hand side. The heads and thoraces of the scarabaei are indicated, but the sides and elytra are plain as in all the previous examples. When found, no. 10 had a flimsy gold-leaf mount which snapped and fell off when touched; no. 11 retains its mount, but has lost the ring; no. 12 was found unmounted. Length between $\frac{3}{4}$ " and $\frac{1}{8}$ ".

13. Steatite scarab in gold mount: the head and legs of the insect are indicated but not the elytra. The base seems to have borne a device which is, however, almost totally effaced. Length $\frac{1}{2}$ ".

14. Steatite scarab unmounted: a dab of brown enamel on the elytra. The legs are summarily outlined and left flat, not cut away as in nos. 20 and 23. The base bears a kneeling figure holding a lotus blossom with a long zigzag stalk: below is *nb* ("lord").

15. Steatite scarab mounted in a corroded silver ring. The elytra of the

beetle are not indicated, but the engraving of the legs is a little less elementary than in the preceding example. The device consists of groups of S and C curves forming eight spirals with a figure-of-eight knot in the centre. Length £".

16. Small steatite scarab in gold mount, well formed: the legs of the beetle cut in relief as in nos. 20 and 23. On the base four repetitions of the sign *n(u)b* ("gold"), arranged symmetrically with respect to *nfr* ("good") in the centre. Length $\frac{1}{2}$ ".

17. Unmounted steatite scarab in detail resembling no. 14, though without the brown mark on the back. On the base, fourteen spirals in three rows, formed by S curves. Length £".

18. Unmounted steatite scarab resembling the previous specimen. On the base is the combination of the characters *mht* and *rs*, which typifies the union of Upper and Lower Egypt: this symbol is very roughly drawn. Below is a papyrus sceptre between two crowns of Lower Egypt. Length $\frac{7}{8}$ ".

19. Unmounted steatite scarab resembling the preceding. On the base, inside a beaded border, is a ring of spirals formed of S curves, hooked to a circle at the top, and containing the characters *sn-nfr* ("good circuit"). Length $\frac{7}{8}$ ".

20. Well-cut scarab of steatite resembling the preceding with a symmetrical knot on the base. Length about $\frac{13}{16}$ ".

21. Minute steatite scarab in gold mount, set in a silver ring: well and carefully cut. On the back the now greyish white enamel is scraped off along the division of the elytra. On the back is *nfr* ("good"), flanked on each side with '*nh* ("life"); above is '*mn* ("established power"); below are the letters *t*, *mn*, and *n(u)b* inverted. Length $\frac{1}{2}$ ".

22. A small steatite scarab, plainly executed: the perforation contains the corroded stump of a bronze wire. The device is three S curves with *nfr* ("good") twice repeated. Length $\frac{1}{2}$ ".

23. A large and well-executed scarab of steatite. The anatomical details of the scarabaeus are well indicated. The inscription on the base is in three columns—The two side columns are symmetrical and contain symbolic figures—at the top the divine eyes, then the crown and the flower of Lower Egypt, the bee indicating the king of Lower Egypt, and the character *lit* ("front"). The central column bears the papyrus sceptre *w'd*, and the letter *k'-li-nfri*, perhaps meant for the throne name of Senwosret III, H-k, '-r'. Compare the very similar scarab, also assigned to Senwosret III, 'in Ward's *Sacred Beetle*, Pl. ix, fig. 403. Length $\frac{1}{4}$ ".

24. Steatite scarab, well executed, in gold mount set in a silver ring. The thick greyish white enamel has been scraped off the middle of the back of the beetle, shewing the brown-coloured stone below—exactly as in no. 21 above. The device is a group of four lotus blossoms with their stalks connected by a figure-of-eight knot similar to that shewn in no. 15. Above is *n(u)b* ("gold"); below, a flying scarabaeus. The cutting of this specimen is very fine. Length $\frac{7}{8}$ ".

25. Polished blue limestone scarab, well cut, unmounted. The device consists of a geometrical ornament above, with an inscription in three columns below. The two outer columns read *sn-nfr*, as in no. 19: the middle is *nfr-hpr*. The length is $\frac{5}{8}$ ".

26. Well-cut steatite scarab: the device is a rather poorly designed pattern of S and C curves, with two circles filling it at each end. Length $\frac{5}{8}$ ".

27 (Pl. xxxv, fig. 28). Steatite scarab, the enamel originally of a yellow colour, which survives in the incisions. The head, thorax, and legs of the beetle are indicated, but not the elytra. The device is a twist of two cords running vertically down the middle, with on each side *nfr* and *w'd* alternating symmetrically: between them *t*. Length $\frac{5}{8}$ ". This is a typical Hyksos scarab: compare Pl. xix, fig. 2, of Newberry's *Scarabs*.

28 (fig. 29). Steatite scarab rudely executed, and inscribed *n(u)b-mn-r*. Length $\frac{1}{2}$ ".

29 (fig. 30). Steatite scarab which has been covered with a black colour that remains in the incisions: it is similar to no. 28 in character. It bears *nfr*, with a uracus and the divine eye. Length 1".

30 (fig. 31). Uninscribed crystal scarab in gold mount. Length $\frac{5}{8}$ ".

31 (Pl. xxxvi, fig. 16). A fine deep-coloured amethyst scarab, uninscribed, in gold mount. Length $\frac{7}{8}$ ".

32 (Pl. xxxi, fig. 27). This is a scarab of grey paste, with traces of yellow inlay in the incisions. It was found at the end of the passage running south from (2), close to the entrance numbered A* in the plan. The device consists of an animal walking to the right: above is *nb*, and in front of it an indistinguishable character. Length $\frac{3}{4}$ ".

33 (Pl. xxxi, fig. 3). This and the remaining scarabs of the series came from group A. It is a plain amethyst scarab, similar to the others of the same material in gold mount and silver ring. Length 1".

34 (Pl. xxxi, fig. 18). A very fine plain scarab of clear crystal, in gold mount, silver ring. Length 1".

35 (Pl. xxxi, fig. 30). Steatite scarab which has been covered with a black-coloured enamel: this clogs and rather obscures the device. It consists of a line of writing between two bands of spirals, ending above with lotus flowers. At the top seems to be *h-r'-?-ti* (?), below which is *w'd*, *'nh*, and *nfr*, then *stn biti*, and below that again *Apr*, flanked by *'nh*.

36 (Pl. xxxi, fig. 4). Steatite scarab bearing the inscription *r-hpr-n-nb* (?).

37-40 (Pl. xxxi, figs. 5-8). Four small plain scarabs, two of amethyst, one of basalt, and one of paste enamelled blue.

The large collection of *pottery* and fragments recovered from the cave was of peculiar value. It afforded ample material for the study of the different types of ware and vessels employed at the time when the cave was in use: for that reason I have deemed it desirable to prepare coloured plates of almost the entire series of the vessels from the cave, in order so far as possible to make them available for study.

The pottery falls distinctly into two series—one, as I understand it, a legacy surviving from the period when the cave was used as a habitation; the other, which forms by far the larger proportion of the collection, being the deposits left when it was adapted for burial.

Of the first series, but one whole vessel was left—the fine jar with ledge-handles (Pl. xxxii, fig. 1). This is a typical specimen of early ware, made of rough coarse

gritty pottery of a light reddish drab colour: it has a flat base, gently swelling body, and cylindrical neck. The mouth is strengthened by a slight thickening. There are two plain ledge-handles. The height of this is $9\frac{5}{8}$ ". The sides are painted with rough vertical lines in dark Indian red, applied directly to the surface of the pottery.

Also early, though perhaps not of equally high antiquity, are the remarkable series of waterpots recovered from the cistern in chamber (2). They are illustrated on PI. xxxiii. This is a perplexing group of pots. The ware, especially of figs. 1 and 4 on the plate, shews the rough grittiness that characterizes the most ancient vessels; but in form they are certainly more comparable with vessels of the second period (represented by the interments)—if, indeed, nos. 2 and 3 could be considered so old. The large pot, fig. 1, with its blunt base and almost Greek-like handles, curving upwards, is unique in shape among Gezerite waterpots. It is $1' 5\frac{1}{2}$ " high. To find so large a vessel in a cistern is extremely rare. As a rule large vessels were not dipped into the water, owing to the difficulty of drawing out their heavy weight when filled: the smaller jugs, such as those with which it is associated, are however frequently found.

A good many fragments, displaying ledge-handles, were found in the earth filling chamber (1), and others, which are drawn on PI. xxxvi, fig. 3, were discovered in the small chamber (9). The cistern in the passage south from (2) also contained a considerable quantity of primitive potsherds, none of them, however, displaying any very characteristic features. The most interesting are shewn on PI. xxxii.

From these scanty relics we turn to the remains of the interment period, which, as already hinted, were of great value and richness.

In describing these, we shall first concern ourselves with the ware, then with the shapes of the vessels. Last, we shall give an account of the grouping of individual vessels within the cave.

The ware in the majority of vessels is coarse and gritty. Nearly all the commoner and ruder vessels shew small pebbles or stone powder in their texture. In some extreme cases the grit seriously interferes with the cohesion of the ware, which snaps under a moderate cross-strain like a biscuit. It is possible to arrange the pieces in a continuous gradation, those shewing many grits at one end of the line, those with perfectly homogeneous clay at the other. At one end of the line would be such vessels as the bowl PI. xli, fig. 4, the jugs PI. xxxix, fig. 13, PI. xl, figs. 7, 10, and some half-dozen others, which are very gritty—in the last-specified each pebble is the centre of a star of flaws that radiate in all directions through the vessel. The broken fragments found outside, above the entrance shaft to chamber 8, would also for the greater part be placed here. In the middle of the line would stand the majority of the pieces, few of which are wholly devoid of grit. The other end would contain two classes of vessels: those made of a clay which, though lacking pebbles, is coarse grained (the bowl PI. xxxviii, fig. 18, is a good example), and those carefully made of a very fine, hard, homogeneous clay, evidently selected with deliberation for the purpose of making ware of superior quality. The bowl PI. xxxviii, fig. 14, is an exceptionally fine example.

Some idea of the proportion of gritty to homogeneous ware will be obtained

from the following table, drawn from an examination of eighty-eight vessels from the cave :—

Very gritty.	11
Fairly numerous grits	5
Gritty.	4
Fairly fine, but gritty.	11
Very few grits	22
Coarse homogeneous	14
Fine homogeneous	21
Total	88

It is to be remarked further that, generally speaking, certain classes of clay appear to be reserved for certain types of vessel. This is specially to be noticed in the case of the fourth type of jugs (see below), of which out of nine specimens all but one are of fine homogeneous clay, the exception being also of homogeneous clay, but rather coarser than the rest. The lamps, too, are almost exclusively of homogeneous or very slightly gritty clay. On the other hand, of the wide-spreading Bowls six were found of which three (one half) were to be classed as "very gritty."

The colour ranges from a very dark drab (almost black) through a regular spectrum of shades of red and yellow to a light cream. A few vessels are of a dark olive-green shade. As is often the case, the centres of fractured edges are generally found to be of a colour different from that of the surfaces—black between two red surfaces is about the commonest.

There is a good deal of difference in the baking of the vessels. Most of them are very hard-baked; but some (such as PL xxxix, fig. 11) are so soft that any attempt to write upon them with a pencil cuts an indentation in the surface. As might be expected, the softer-baked vessels show a tendency to disintegration.

Slip is exceptional. The jug PL xl, fig. 6, has a light red slip covering the yellowish brown pottery: the slip, however, has nearly all perished owing to the decomposition of the surface of the pottery. The bowl PL xxxix, fig. 6, has a red slip on its upper surface; and the two fragmentary jugs PL xl, figs. 16, 18, have a slip of dark Indian red colour highly burnished. The painted jug PL xl, fig. 12, has a brownish red slip, as has the bowl PL xxxvii, fig. 4.

One vessel (PL xxxvii, fig. 3) has been submitted to so severe a fire that it is burnt black throughout.

All the vessels, without exception, have been made on the wheel—the handles being modelled separately and stuck on in place afterwards. In the more carefully made vessels (such as PL xxxviii, fig. 14) the circular lines surrounding the vessels, resulting from the process of manufacture, have been smoothed off. Combed ornamentation is not very common: there is a band of it surrounding the body of the large jar PL xxxvii, fig. 1, at the level of the upper attachment of the handles; and in the jug PL xxxix, fig. 10, a comb has been lightly pressed against the vessel and

moved upwards as the wheel rotated, so that the indentations travel spirally up to about the middle of the vessel. The bowls PI. xxxviii, figs. 5, 15, have been distorted by careless firing.

Burnishing is rare. It is found only on the three ornamental jugs PI. xl, figs. 15, 16, 18, and the jug PI. xxxix, fig. 19, which is burnished horizontally on the shoulders, vertically on the sides. A few vessels bear lines of depression as though they had been treated with a burnishing tool which for some reason failed to burnish: such are the jugs PI. xl, fig. 11, and PI. xli, fig. 9.

Painted ware in this later period is strangely absent. Only two specimens were found: the bowl PI. xxxviii, fig. 18, in which the margin is picked out with a line of dark Indian red, and the jug PI. xl, fig. 12, which has a group of red, white, and black lines upon it.

We may now proceed to a description of the types of vessels discovered in the cave, taking first jars and jugs, then bowls, and finally lamps.

(1) The vessel first calling for notice is the large jar PI. xxxvii, fig. 1: this was the only specimen found entire in (8), though there were considerable fragments of two others and sherds of several more in the same chamber. In the passage running south from the broken chamber east of (5), (7), another specimen was found. It stands 1' 10" high, and has a round, slightly moulded mouth, two handles, and a conical body, ending in a blunt point. The ware is coarse drab, but not very gritty.

(2) Of jugs by far the commonest type is that we shall denote here as type I, specimens of which will be found on almost all the accompanying plates of pottery: PI. xl, fig. 1, may be taken as a good example. These jugs have an oval body with pointed base and pinched-in neck, expanding almost immediately into a mouth, the lip of which is lengthened into a spout. There is one handle which springs from the shoulder and from the side of the mouth, either immediately or, in the great majority, a little below the lip. In PI. xl, fig. 3, the lip is strengthened by a slight internal thickening. The butt end of PI. xxxix, fig. 19, is unusually blunt, but does not attain to the roundness that characterizes similar one-handled jugs of a later date. The largest specimen of this type of jug found in the cave (PI. xl, fig. 1) measures 10¾" in length; the smallest 7".

A variety of the type is shewn in PI. xl, fig. 2, which has a more or less cylindrical neck, and a circular (not spouted) mouth, with the lip flattened outward all round. The base of this vessel is not pointed, the extreme tip being flattened.

(3) The second type of jugs is represented, in this collection, by three specimens only—two large (PI. xxxviii, fig. 1; PI. xli, fig. 10) and one small (PI. xxxvii, fig. 3). Unlike type 1, which of course cannot stand without support, these jugs have a round base which, in the first-named, is a projecting ring, in the other two a flat disc. The body expands into an inverted conical or globular form, and then contracts to a neck: the mouth is spouted in the second and third above-mentioned, and presumably was also spouted in the first, the lip of which is broken.

(4) Four specimens—all but one imperfect—survive of type III of the jugs. This very graceful class of vessel (for the perfect specimen see PI. xxxviii, fig. 17—the

others are shewn on PI. xl, figs. 16-18) has a conical body rounding into flat shoulders from which springs a very narrow neck, expanding at the top into a mouth with round thick lip. There is one handle, which is not (like the handles of type I) cylindrical, but broad and flat with a slight wave down the middle, or else a deep groove which gives the handle the appearance of two cylindrical handles side by side. In the present series the latter variety is illustrated by one specimen only, PI. xl, fig. 17. The base terminates in a cylindrical projection (PI. xxxviii, fig. 17), or a button (PI. xl, fig. 18). It is possible that the broken fragment PI. xxxix, fig. 20 was part of a jug in which this projecting base was greatly exaggerated.

(5) The fourth type of jugs, of which nine specimens were forthcoming, may be regarded as a variety of the third. The neck, handles, and shoulders are identical in appearance; but the body, instead of tapering rapidly into a complete cone, contracts very gently and is the frustum of a cone—indeed, in some specimens it is practically a cylinder. The base is never absolutely flat, but always very slightly convex. The double handle is here the rule rather than the exception (see for example PI. xli, fig. 8). It is found in six of the nine specimens, the waved handle in two. The largest perfect example of this type found is $5\frac{1}{4}$ " high, the smallest $4\frac{1}{2}$ ". It has already been mentioned that this type of jug is invariably modelled in very fine clay.

(6) There remain a few jugs which cannot be classed with these, but are individual specimens of types not otherwise exemplified in the cemetery. Of these the most interesting is the little vessel PI. xl, fig. 12. It is of conical shape with deep rounded base—not unlike a modern claret jug—and measures $5\frac{1}{4}$ " in height. The mouth expands, but is not spouted. Round the body are painted four lines in dark brick-red, with between them three lines in black, smeared over with white. This is a survival of a yet earlier technique of pottery painting which consists in filling up the field to be decorated entirely with lines, straight or zigzag, red, white, and black. The white is a coarse lime-cream. Fragments of similar technique belonging to the earlier period were found in the cistern in (5), and are shewn in PI. xxxii, figs. 8, 17, 18.

PI. xxxvii, fig. 2, is an elegant vessel with wide circular mouth, short neck, flat shoulders, and inverted conical body. A beading, composed of a separate piece of pottery fastened on, is added just at the intersection of the neck and shoulder. There never was a handle. The base is broken away. The whole vessel is covered with a creamy yellow slip.

PI. xxxix, fig. 1, is a standing cup on a hollow trumpet-shaped foot. A fragment only survives, and no part of the rim remains. It is impossible, therefore, to say how it was finished. The ware is fine and homogeneous, but disintegrates easily.

PI. xxxix, fig. 11, is a small vessel in fine reddish yellow ware that might be classed with type II, from which it differs in its minute size only. Its height is $2\frac{5}{8}$ ". The handle, restored in the drawing, has disappeared.

PI. xxxviii, fig. 16, is a curious vessel shaped (in its present form) like a modern oil-can. There was, however, a handle originally, which has been lost. Round the margin of the base on the under surface are exceedingly delicate lines caused by the slight pressure of a fine comb.

(7) Of bowls by far the commonest type is that of which a good specimen is shewn PI. xxxviii, fig. 6. From a round base—in the normal specimens invariably a projecting disc, slightly hollowed in the middle—rises an inverted conical body, the sides of which, at rather more than half the height of the vessel, contract slightly to the top, where they again expand into a horizontal lip. This graceful form of bowl lasted in use for a very long time.

There are several varieties produced by altering the relative proportions of the conical base, the contracting sides, and the horizontal lip. Thus, in the fine example PL xxxix, fig. 4, the lip is exaggerated at the expense of the other two members; and this is even more so in PI. xxxviii, fig. 14, in which the conical base has become flattened out, with a little circular hollow in the middle—a singular anticipation (not only in form but also in the fineness of the ware and carefulness of manufacture) of bowls executed under Greek influence in the Hellenistic age. On the other hand in PI. xxxix, fig. 16, it is the conical part which is exaggerated at the expense of the other members. In PI. xxxviii, fig. 18, the contracting part is "reduced to its lowest terms." In PI. xxxix, fig. 14, a variety is obtained by omitting the disc base altogether and substituting a rounded bottom for the conical lower part. One or two of the abnormal specimens above referred to (such as PI. xxxix, fig. 4, and PI. xxxviii, fig. 18) substitute a projecting ring for the hollow disc base. There is not much variation in height in these bowls, which averages about $2\frac{1}{8}$ " in diameter at the top the perfect specimens range from $5\frac{5}{8}$ " to $6\frac{13}{16}$ ".

(8) The second type of bowls consists of wide dishes on circular bases. The bases are slightly hollow discs (with one exception, which is a ring): the dishes themselves are broad and shallow. PI. xli, fig. 5, is a typical example.

(9) Two bowls remain not referable to either of the foregoing classes. One of them is PI. xxxviii, fig. 15, which has a flat base and slightly concave oblique sides: it is in very coarse drab pottery. The other is essentially similar, but the ware is much finer, and the sides are convex on the outer surface of the bowl. It is represented in PI. xxxix, fig. 12.

(10) Twelve lamps or fragments of lamps were found. All of these are referable to one type, a good specimen of which will be found in PI. xxxix, fig. 2. It is a shallow saucer, wheel-turned, with a slight spout pinched in the edge before firing—a contrast to the long narrow channel into which in later periods this spout developed. This spout almost invariably displays marks of smoke-blackening. A few of the lamps (such as PI. xxxix, fig. 3) are slightly deeper than others, but not sufficiently so to justify their inclusion in a separate class.

Of the broken fragments found above the stone cover of the entrance shaft the three shewn on PI. xxxvi, figs. 1, 2, 4, are the only specimens that require special attention. Of the others the majority were coarse drab saucers or bowls of type I: there was also a fragment of a jug of type I. These add nothing to our knowledge of the forms. The four-handled saucer, however (fig. 1), is unlike anything else found in the mound. The bowl fig. 2 is a specimen of type 11, with a conspicuous thickening inside the lip. The smaller bowl, fig. 4, is a variation of type I.

We must now note the manner in which the objects found were distributed into groups. These were as follows:—

(1) Above the stone filling the entrance shaft of (8), a large pile of potsherds, as already noticed.

(2) In the chamber (8) were six groups, as well as several single vessels: these groups were:—

(a) xl 1 * and the alabaster vase xlii 8, lying on their sides.

(ft) A small group consisting of the alabaster xlii 3, on its side, and xli 15 and xxxvii 3 standing upright. Underneath this group was found the gilt kohl-pin and many of the scarabs, including the important specimens nos. 14 and 23.

(7) Two alabaster pots xlii 4 and 6, lying prostrate.

() Two vessels, xl 8 and a broken jug of type I (not drawn), lying prostrate.

(e) A large and important group comprising the jar xxxvii 1 and bottoms of two similar to it, prostrate—one of the bottoms resting on the lamp xli 3. Underneath the bottom of the large jar, the upper part of another similar to it; and beside it the black slate vessel xlii 2. Around this group was placed, in order, the bowl xli 2, the jug xl 10 (partly covered by a potsherd), the jug xl 11, a lamp of the ordinary type, inverted, the bowl xli 5 (also inverted), the jug xl 7, and the bowl xli 4. There were also several characterless sherds.

() Close by this group was a small collection containing the alabaster vessel xlii 1, the handsome jug xxxvii 2 (inverted), and a jug of type IV (not drawn) on its side.

(3) At the entrance to the small southern passage were three jugs of type I, all lying on their sides—namely xl 3, 4, 5; one of type III, namely xl 16; and also the painted vessel xl 12. Close by was the bowl xli 6, inverted.

(4) In chamber (7) were seven groups and several single vessels. Owing to the fall of the rock a good deal of the earth had silted in, so that these were covered and not, as in chamber (8), lying exposed when the cemetery was first entered. The following are the groups:—

(a) Near the end of the partition between (5) and (7), the jug xxxix 17 and bowl xxxix 16.

(ft) Just south of (a), the bowls xxxix 6, 14, 18, and the jug xxxix 10.

(7) Close to the fallen rock-roof, the alabaster jug xxxix 15, and the pottery objects xxxix 5, 8, 11, 12, 19.

(8) South of (7), xxxix 1, 2, 4, 7, 9, 13.

(e) West of the last, a jug of type I, not drawn, the jug xxxviii 1, also xxxviii 17, 18, and a bowl of type I.

() In the centre of the chamber, two jugs of type I, also xxxviii 12, and a lamp.

(n) At the south side of the chamber, not far from the door to chamber (8), xli 8, 9, 10, II, 16, xl 14, and the alabaster vessel xlii 5.

I may also mention two lamps placed together in the crevice of the rock on the north side. The vessels on Plates xxxvii-xlii not enumerated in the above catalogue were found singly in various parts of the two chambers (7), (8), and were not associated with any special pottery groups.

Two of the chambers—(4) and (6)—had, as already mentioned, been adapted as

* These numbers denote the plate and the figure on the plate.

cisterns at a subsequent period, and their contents belong to an entirely later archaeological stratum.

The most interesting of the objects from (4) are shewn in fig. 42 above (p. 121). They consist of a tanged arrowhead, with ogee-shaped blade (no. 1), and a small axhead-like object (no. 2), both in bronze (the latter is an unusual type in Gezer): beads—no. 3 is in red enamelled paste, as is also no. 10, which, however, is more glazed; no. 4 is yellow enamelled, nos. 5 and 6 green, nos. 8 and 9 grey; no. 10 is a flat disc of bone: spindlewhorls—no. 11 of polished diorite, no. 16 of bone: a fine polished diorite macehead (no. 15): among a great mass of potsherds, of no special interest, three pieces to which attention may be called—the bottom of a bowl with a spiral burnished on it (no. 13), a peculiar handle (?) with a perforation through it (no. 17), and the lower part of a very rudely modelled figure in black ware (no. 18). There is also the bezel of a green enamelled paste seal-ring, bearing a scarabaeus—this indicates the period of Amenhotep IV, which would accord well with the other objects recovered from the cistern, so far as they indicate date at all; and a yellow-coloured scarab, shewing on its base *hpr* between two uraei.

From (6), the "cistern" period of which is considerably later, some specimens were found unlike anything else recovered from the rest of the mound. The most interesting are collected on Plate xliii.

Figs. 1 and 2 of this plate represent two pieces of coloured ware belonging to the Mycenaean technique that in the later Canaanite period spread over Southern Palestine under the influence of the civilization of the Aegean. Fig. 1 is of native manufacture. It was actually found in chamber 5, being probably brought in by one of the well-sinkers who worked in the adjacent room 6, and employed by him in scraping the earth in search of treasure. He may easily have found it, in the first instance, in digging the cistern shaft. The second fragment is an actual importation, and displays the characteristic Aegean glaze.

Figs. 3 and 4 are specimens of portions of waterpots found in the cistern. Fig. 3 is a fragment of a peculiar type with three looped feet, in shape resembling handles. This type of vessel had a limited range of use, being found only about the time of the latter part of the Hebrew monarchy.

Fig. 4 is a round-bottomed pottery bucket, with two corresponding holes under the rim for a strap or metal handle. Several other fragments of waterpots, of no special interest, were found in the well.

Fig. 5 is a fragment of a shallow rectangular stone tray of diorite, with a handle at the surviving end. The three aspects *a*, *b*, *c*, in the plate sufficiently illustrate it. Such a tray is unique so far as the excavations have gone: stone trays are common, but they are generally round.

Fig. 6 is a peculiar object of stone resembling a pedestal. It stands 1' 2½" high. The dotted line in the diagram represents the internal section. What purpose this object served it is impossible to say. I have thought that it might possibly be a spindle, for the rope of the well-bucket: the objection to this suggestion is the absence of rope-marks on the side of the object; such marks would certainly be worn upon the very soft stone. The better to illustrate it a photograph is here subjoined, fig. 45.

It now remains to endeavour to deduce the history of this interesting cave from the indications which its contents afford.

That originally it was the home of a cave-dwelling community there can be no doubt. They have left evidence of their presence all through the system, in rude rubbing stones, fragments of pottery, and other relics, especially in chambers (i), (3), and (10).

The first problem that suggests itself to the explorer of such a cave as this is the explanation of the narrow passages that connect the various members of the system; it would appear so much more convenient to make the chambers open off one another directly as in 15 II.

There are two possible solutions to this question. The first is, that the various systems were originally quite independent and were afterwards united by cutting a passage between them. The second is that the passages were made long and narrow intentionally, in order that they might be easily blocked: when an enemy made his appearance at one entry, the inhabitants escaped by the passage and hastily erected a pile of stones—which no doubt would be ready to hand—at the opposite end. There was of course little or no light in the passages, and the pursuer might well be nonplussed by such a simple device. Such a feature as the cistern in chamber (5) might also have been originally cut as a pitfall for unwar' intruders. It is certainly most inconveniently placed as a receptacle for water: it would not gather much, and what water might fall into it would not easily be drawn out. Perhaps there is some truth in both suggested explanations: the different systems may have been connected in the manner suggested above, and the passages were perhaps made narrow on purpose for facility of blockade.

In the cave under discussion, the loose and friable nature of the limestone prevents our obtaining any definite information from a study of the toolmarks, which in a homogeneous rock would be perfectly sharp and would probably settle several questions. The direction of the chisel-marks would shew the direction in which the quarryers worked, and would indicate, for example, whether the tunnel was excavated from both ends at once, like the Siloam aqueduct at Jerusalem. In the present cave we are left to *a priori* probability as our only guide in deciding the reason for its peculiar plan.

The impression that a study of the cave leaves is, that the various members were excavated independently and afterwards united. We thus begin the history of the cave with three separate communities: the *first* group inhabiting chambers (1) (2), (3); the *second*, chamber (4); and the *third*, chambers (5)-(10).

To judge by the size of the chamber-groups, the last-named was evidently



FIG. 45. — STONE OBJECT FROM CHAMBER (6), CAVE 28 II

the most important. There was an unusual number of chambers, and they were unusually large. Probably there was but one entrance, that into the ruined part of (5): the roof-entrance of (8) was most likely made originally merely for convenience in quarrying, and when the chamber was completed was stopped up. In (5) was a pool for water, fed by the rain which fell through specially made holes in the roof—this pool was afterwards deepened into a cistern. In the great cave 16 111 in the middle of the hill was a similar pool: it does not appear whether there were similar holes in the roof, as the latter is here destroyed.

Why the family of the (5) group joined their residence to that of the (1) group we can but conjecture. Possibly one remarkable peculiarity of the (1) group of chambers, which we will presently discuss, made it a desirable possession, and in consequence the (5) people captured the dwelling of the (1) people and joined it to their own. Possibly, on the other hand, the families became united by inter-marriages. In any case, it is in the highest degree probable that the tunnel was the work of the (5) people. It leaves the (5) group naturally, but breaks into the (1) group of chambers by a most awkward and inconvenient hole. Moreover the tunnel diminishes in cross-dimensions as it advances from (5) to (1). It is evidently natural that such a tunnel should diminish from the outer end inwards, and unnatural that it should expand, owing to the difficulty of passing material through the narrow entrance.

What then are we to say of the linking of (1) and (4)? Here again *a priori* probability is our only guide. In this case it seems to me most likely that the tunnel was cut from both ends. For if it had been cut from the (3) end alone, we should have to imagine that all the material removed from the inner half of the tunnel was passed through the excessively narrow doorway between (3) and (4); whereas if it were cut from the other end the sudden drop downwards in the middle of the tunnel would not be so easily accounted for: it is more likely that a tunnel should begin low and step upwards than that it should begin high and step downwards. If, however, we suppose two sets of workmen starting, the one from chamber (3) and making their way to just beyond the narrow doorway, the other from (4) and advancing to meet them, the change of direction and level would be easily accounted for by a miscalculation such as we would naturally expect under such circumstances. It may be argued that such a miscalculation is a sufficient explanation of the downward stepping of the tunnel quite independently of the direction in which the quarryers worked; but obviously if the tunnel had been cut from one end only, the downward stepping to correct a miscalculation would have been at its extremity. The purpose of the narrow doorway is easily guessed. It could be stopped up by a moderately sized stone, and pursuers would be absolutely prevented from following any one who might take refuge in the chamber beyond.

Whether the different groups of chambers, as we see them now, are exactly as their dwellers first quarried them, is a question that except in one detail cannot be definitely answered. It is most likely that from time to time chambers were added as they were required. That some plans were abandoned before they were completely carried out is indicated by the unfinished cistern shaft in the passage

south from (5). The one thing that can be definitely said is that the steps found in the cistern shaft at (2) must originally have led to a small chamber at a lower level, which was afterwards deepened. Probably it was noticed that water accumulated in this chamber in winter, making it useless for any purpose but that of a water-store, and this led to the idea of turning it formally into a cistern.

We must now consider a difficult question, the solution of which cannot be reached as yet with any certainty. I refer to the purpose and period of the system of cupmarks in chamber (1).

All the available evidence points to this peculiar feature being the work of the Troglodytes. Cupmarks are found in a good many parts of the mound, and whenever they have any connexion with other remains that can be more definitely dated, these remains are assignable to the cave-dwellers. In this cave the presence of pottery of the earliest type in the earth covering the cupmarks, and entire absence of any later objects in connexion with them, corroborated the conclusion to be drawn from a study of the subject in other parts of the mound.

If then we assume that these cups are the work of the cave-men, the more difficult question remains, for what purpose did the cave-men make them?

It has been suggested that they were meant for jars, containing stores of oil or grain, to stand in. In favour of this it might be urged that fragments of just such jars were found in the chamber; and that there is a causeway running to the centre of the middle ring from chamber (2), between the open ends of the rings of cups, so that the jars in the middle of the room could be got at without disturbing the rest. It is, however, open to question whether the rude occupants would take such trouble to make a series of mere sockets with such an obviously purposeful distribution; or indeed whether they would make such sockets at all for jars that could quite as well stand without them.

Various recondite explanations of cupmarks have been given from time to time, which appear to me tenable only in exceptional cases. Such an exceptional case is undoubtedly that now before us, and it is here much less open to objection than in many other places to suppose the cups to have some connexion with sacrifice and offering. Indeed, it seems an admissible conjecture that the whole floor of this chamber is a gigantic table of offerings. If this were so we could easily understand that the (5) people might envy the (1) people the possession of so lucky and desirable an annexe to their dwelling, and would wish to unite themselves with them, whether in a peaceable or hostile manner. Much less likely are the suggestions that there is anything of priapic symbolism in these cups, or that they form the apparatus for some game—a sort of public billiard-table.

The next stage of the cave's history is associated with the beginning of the Semitic occupation. The caves were abandoned for houses; but no doubt some of them were used as cellars, store-chambers, or refuges from the heat of the sun. The northern system certainly was so used by the inhabitants of the houses built on it: whether the southern half was also used for the same purpose there does not appear evidence to shew. But the waterpots in the cistern in chamber (2), which are on the whole rather earlier in type than the burial vases in (5) and (6),

indicate a short period when people descended for water to chamber (2) before the time when they used (5) and (7) for burial.

When (2) was adapted as a cellar, the two entrances above the cistern were closed—no doubt because they were dangerously near that pitfall, and practically useless on account of its position with regard to it. They were not so completely sealed up but that water trickled between the stones. Silt quickly made its way through and covered the steps under the entrance A⁴ in a thick layer, which the presence of group A of the antiquities proves to have already begun to accumulate; and the water-receiver built outside entrance A² shews that the latter was the channel whereby the cistern was filled.

On the whole it is most likely that in this period waterpots were carried to and from the cistern down the broad and high passage running south of (2) to the entrance A⁴. There is no evidence that chamber (1) was used for any purpose, except the accident of a gold rosette having been dropped just outside the entrance A¹.

It is a little doubtful when the great stone was placed across the passage south of (2) in order to cut off all communication with the southern group. It may be that it was at this stage of the history, and that it was intended to prevent underground communication between two adjacent houses. It may also have been in connexion with the succeeding stages.

This third period was characterized by the adaptation of the southern half as a burial place. It is most important to notice that there are no interments whatever in the northern system, and no evidence that there ever were any.

If the people who used the northern half of the cave as a cistern and cellar had not already closed the access to the southern system, they would certainly have done so when that probably derelict part of the cave had begun to be used for burials. Fear of the ghosts of the deceased would no doubt lead them to stop up as firmly as possible every means whereby they might find their way out of the *Sheol* where they were confined. In fact it is very likely that the northern system was altogether closed not long after, as even the big stone stopping the entrance to the long passage might not be thought a sufficient obstacle against the spirits. So little frequented was this part of the cave after the southern part was turned into a cemetery, that some one thought it a safe place for the concealment of treasure. This is the explanation of group A, the solitary deposit found in the northern member of the system. There was no interment with these objects; the silt on a sloping staircase was not, indeed, at all a likely place to deposit a dead body: but if the cave were unfrequented it was just the place which a person wishing to hide precious objects would choose for such a purpose. The loose silt could be easily excavated with the hand, and the hole filled in again after the objects had been placed there. It is legitimate to guess that in his or her haste the person who carried these objects down to the cave dropped a scarab at the very place where we might expect such a misfortune to happen—beside the stone which barred the way to the world of spirits beyond, which our fugitive would probably pass in a hurry. A scarab found here was the only precious object from the northern system, except group A and the gold rosette from outside chamber (1). At first I was inclined to think that this part of the cave had been

looted, but the total absence of any bones or other indications of burial has led me to change my view, and I now think that there probably never was anything in the northern part of the cave more than what was found there. Probably not long after these treasures were deposited—perhaps as a further precaution against ghosts—the second great stone was put in its place in entrance A⁴, by some one who did not know that he was scaling up a precious hoard.

The next event in the history of the cave is the fall of the roof in chamber (5), which took place somewhere about 1450 B.C. The date is fixed by the landslide it caused, which produced a "fault" in the accumulated debris, easily visible in the vertical section of the mound. This fault extends up to the level associated with scarabs and other objects bearing the name of Amenhotep III, and thus indicates when the subsidences took place. The later debris is in no way affected by it.

At about the same period chamber (4) was discovered by well-sinkers. That they deepened it is proved by the fact that the tunnel, which we have shewn to have been partly cut from (4), and therefore was presumably at an accessible height above the original floor, is now quite inaccessible from the bottom of the chamber. In deepening it steps were cut, for convenience, running from the old entrance: perhaps the three broken steps at the top are original, the unbroken steps below having been added. A shaft for drawing water was also cut in the middle of the ceiling. The antiquities found in this cistern are referable to the period of the Tell el-Amarna correspondence.

Lastly we have to notice the unfortunate discovery of chamber (6) by well-sinkers somewhere about 700 B.C. There can be little doubt that they obtained a harvest of precious objects from the northern half of the U-shaped chamber, and not improbably from (5) also.

Of the chronology of the early events of the history of the cave, the scarabs found in (8) give us valuable information. Plate xxxv, no. 23, for instance, is typically twelfth dynasty, and probably bears the name of Senwosret III; nos. 14 and 28 on the same plate are as typically Hyksos. The remainder all range themselves more or less definitely into one or other of these two groups. As the collection must necessarily belong to the latest date indicated, it follows that, as a whole, the interments are to be assigned to the Hyksos period—that is to say, somewhere from 1600 to 1800 B.C.

28 III. A Troglodyte cave, as shewn by the steps at the entrance to the south. It had two chambers: the inner chamber had been sunk about 4' 3½" below the rest to serve as a cistern, a silt hole cut in the bottom and a dipping hole in the top. A bronze knife was found, and several water-jars. These of course belong to the cistern period.

29 I. A long low excavation, 46' in length, 21' 4" in maximum breadth. The outline of the walls is irregular. The floor mounts upwards toward the inside of the cave so that at the inner end it is impossible to stand upright. The long axis lies east and west, the entrance being towards the east. The floor bears a few cupmarks. At the inner end there is on the right-hand side a fruitpress, 5' 11" in diameter, sunk below the level of the highest point of the floor. On the left-

hand side the cave is prolonged through a narrow opening, through which one must creep with difficulty, into a small beehive cell 3' 11" to 5' 9" in diameter and 4' 3½" high. This seems also to have been used as a fruitpress as there is a small cup in the floor. The only contents of the tomb were potsherds of both the Troglydite and First Semitic Periods, and flint chips. There were also a few fragments of human and other bones. See the plan, Plate xiv, fig. 10.

Just under the entrance are two holes in the floor. That to the right was covered with a large slab carefully wedged round with smaller stones: there was a small cupmark in the upper surface of this stone. The other hole was found to be full of earth. On being raided the slab was found to cover a small beehive-shaped cell, measuring 8' 10½" x 6' 5" x 3' 7". A very narrow passage, almost impossible to pass through, opens into this cell from the other hole in the floor. From it a small doorway gives access to a row of three smaller cells: in the floor of the two inner ones a vat is sunk. The first of these three chambers is 5' 9" x 6' 10½" x 3' 7". The second is 5' 3" in diameter, 3' 11½" high. The vat in the floor is sunk in a small recess, 3' 3" across, between it and the entrance chamber to the cistern: a small hole is broken in the partition wall just above this vat. The last chamber is 4' 7" in diameter and only 3' 1½" high: almost the whole floor is taken up with a pit 2' 11½" in diameter and 10" deep. What the purpose of these cells may be it is difficult to say. They were completely empty, notwithstanding the care with which they had been sealed up. It is of course possible to suppose that any treasures they may have contained had been stolen through the narrow passage, which was not closed, except by the silt that had washed in afterwards. This was the only case found at Gezer of caves arranged in two storeys one over the other: the case of 16 III and 17 II is apparent rather than real, as these are quite independent of one another; there are one or two differences of level in the large cave 28 II, but no case of one chamber actually beneath the floor of another.

29 II, the great water-passage, is described later in this chapter in connexion with the other waterworks of the city.

30 I. An oval excavation, 38' 6" long and 9' 6" in maximum height. The usual Troglydite staircase was at the eastern end. This had been blocked up and a shaft for water cut through the roof: the walls were cemented carefully and still held water. Some flint knives and potsherds of the Second Semitic Period—the period of the re-adaptation—were found in it.

This cave contained a considerable number of flints and some late waterpots, all belonging to the time when it was used for a cistern. None of these objects call for special illustration or enumeration: we may perhaps mention the segment of a shallow saucer in black ware, with flat base and vertical sides through which small holes are perforated at intervals—there appear to have been about six such holes round the vessel. The most interesting find in the cave is the small bronze figure here represented (fig. 46). The hands are raised, the arms being covered from elbows onwards. There is a triple girdle round the waist. A horizontal tenon in front of the feet shews that it was attached to some larger object. It may have

been part of a group representing a worshipper in front of his deity. The height of the figure is $2\frac{1}{2}$ ".

30 II. An undisturbed Troglodyte dwelling, which contained many very early sherds of pottery and flint knives, but unfortunately no whole vessels or bones. An awkward and ill-made staircase at the east end gave admission to the main chamber. This was $30' 6\frac{1}{2}"$ long, of rather irregular shape: the maximum height of the roof was $7' 2\frac{1}{2}"$. Just inside the entrance, on the left-hand side, is a raised platform, in front of which are two pits, one $1' 6"$ deep, the other $6'$ deep. An opening on the north side gives access to a smaller chamber, with a short tunnel projecting from it: this is not unlike a grave in appearance, but is rather too short— $5' 4"$. It is $2' 3"$ high, of which $1' 2"$ are below the level of the floor of the chamber. A plan of this cave will be found in Pl. xiii, fig. 11, and the pottery on Pl. xlv. Fig. 1 is of gritty reddish brown ware: there is a white lime-cream over the surface. Fig. 2 is of yellowish brown ware and decorated with red lines. Fig. 3 is yellowish brown, as also is fig. 4. The painted sherds (figs. 6, 7) are coloured black on a brown ground. Besides these objects and the uncharacteristic potsherds there were a loop-handle nearly $7"$ long and $1\frac{1}{7}"$ across, and a buffalo's horn.

30 IIA. Merely a natural shelter in the rock, $10'$ long (cast and west), $8' 6\frac{1}{2}"$ broad, $2' 8"$ high. It contained some early pottery shewn on Pl. xxiii. Fig. 18 is of yellow ware with a red margin; fig. 20 is a pin-head (?) of black clay with two projections, as shewn, on each side. Fig. 21 is of drab ware, also with a red margin. Besides these there was found a sherd of a stone bowl with  ornament on its edge. The entrance is at the north side, but there is a fissure in the roof over the south side as well.

30 III. A chamber roughly circular, ending northwards in an apse with a slight step upwards. The staircase entered from the south side. To the west is a small extra chamber, raised above the level of the floor.

There are three cupmarks in the floor of the principal chamber, one of them in the apse, two outside. The maximum height of the cave is $10'$, its maximum internal dimensions $13' 11"$ north to south by $15' 9"$ east to west. The only objects found in this cave which call for notice are shewn in Pl. xxix, figs. 3-7. Fig. 3 is a ledge-handle of unusual shape with nicks on the edge. Fig. 4 is a fragment of limestone with a groove round it. Fig. 5 is a sherd of drab ware with ornamental rope-moulding on it. Fig. 6 is the interior surface of the sherd of a V-shaped bowl with an incised herringbone pattern upon it. Fig. 7 is the side of a burnished vessel. See plan (Pl. xiv, fig. 11).

30 IV. This cave is by far the most interesting of the whole series. It is



FIG. 46.—BRONZE FIGURE
FROM CAVE 30 I

hollowed in the rock under a depth of 36" of debris, containing eight strata. Of these, three are subsequent to the destruction of the inner city wall, about 1450 B.c.; three lie intermediate between that date and the erection of the same wall, about 2500 B.c.; and two are earlier than the wall referred to. Assuming a uniform rate of accumulation, this leads us back to somewhere between 3200 and 3500 B.C. as the minor limit of date for the cave. It lies in the south end of a small knoll in the rock which rises fairly steeply to a height of about 3' above the rock-surface surrounding it. Just south of the entrance to the cave there is an appearance as though rude steps had been cut to make the ascent of the knoll easier; but I am inclined to think these natural.

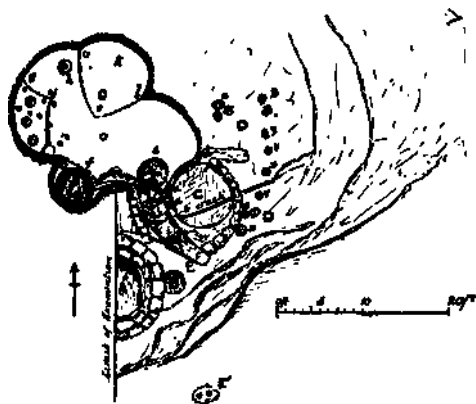


FIG. 47.—PLAN OF CAVE 30 IV

The following cuttings surround the mouth of the cave. They are indicated by reference letters on the plan, fig. 47. (A) A hollow only, half excavated, scarped in the rock to a depth of 1' 6", and 7' in diameter. At the south side the rock fails, and its place is supplied by a row of three stones set on edge completing the circle. A wall is built over this hollow, set back a little behind to edge all round, to a maximum height of 3' above the rock. (B) A hollow, 2' depth and 3' 3" across, with vertical sides and rounded base. This lies partly under the wall that surrounds A, indicating that the latter was built subsequently. (C) A hollow, circular, 6' in diameter, and of a maximum depth of 1' below the original level of the rock. At *na* the rock fails, and its place is supplied by masonry. At *b* it rises to its maximum height above the bottom of the hollow, so that the space *ab* appears (accidentally) to be a channel. A curved wall *cc* partly surrounds the hollow but does not follow its contour exactly. Owing to the irregularity of the rock contour there is an appearance (also accidental) at *d* of another channel leading

out of or into this hollow. A crack runs across the hollow from west to east. It reappears outside the hollow to the east, disappearing on the edge of the rocky knoll, and it is probably a natural flaw, perhaps caused by an earthquake. This hollow is no doubt a fruitpress. (D) A group of cupmarks, thirteen in number. Those marked *x* are shallow circular basins, with breadth greater than the depth: those marked *y* are also circular but with depth greater than the breadth. The others are oval depressions. Beside these there are two conspicuous cups, both similar to those marked *y*, on a small knob of rock south of the knoll: they are marked *E*¹. The largest of these cups is the southernmost of those marked *D*, which is 2' broad and 9" deep. The diameter of the others ranges from 1' to 1' 6". The deepest is the one marked *y* next to the southernmost, immediately under the wall surrounding the fruitpress *C*. This is 1' 2" deep.

The entrance to the cave is marked *EE*. It is a long narrow opening in the rock. Round the northern end rude masonry is built, as the surface of the rock is not of the required height. The floor of the entrance slopes downward, and access to the cave is gained by very rude steps—little better than footholds—cut in the rock.

The cave itself is oval, with a series of irregular apses round the sides. Photographic views from the doorway and from the inner end are given in Plate *xliv*. On entering, the most conspicuous features are two deep hollows, one on each side of the entrance staircase: the first of these, marked *e* on the plan, is 3' across and 1' 10" deep. This is just under the entrance, and in fact is partly cut out of the staircase. The second, marked *f*, occupies an apse to the left of the staircase. These hollows are evidently meant to intercept rainwater, and prevent it flooding the cave: the second of the two, *f*, is connected with the staircase by a channel cut on the top of a projecting shelf of rock. It is 3' 11" across and 3' deep. The apse *g* at the inner end of the cave has part of its floor raised 10" above the floor of the cave; and this raised step bears three shallow cups measuring 10"—1' 1" across, with five smaller hollows disposed as shewn in the diagram. There are also seven other cups in this part of the cave, one of them, *h*, a double cup (*i.e.* with a secondary cup sunk in the floor of the first) of maximum diameter 1' 9". The floor of the apse, *k*, is sunk 10" below the level of the floor of the cave. It contains three cups. There is in addition one cup in almost the exact middle of the cave area. The total length of the cave is 16' 7": the height is with fair uniformity 5' 5". There is a hole, apparently for tethering cattle, cut through the projecting angle *l*.

We now come to the feature that gives this cave its unique interest. To a height of about 4' above the floor the walls are rough. Above this, however, there is a frieze of smoother rock, and all round the cave this frieze is occupied with rude scribbings: a few similar scribbings are also to be seen on the roof. These scribbings are represented in reduced facsimile on Plates *xlvi*-*xlvi*iii.* They are of three kinds:—

* The following has been the method by which the drawings have been prepared. Rubbings were taken with a soft pencil and inked in on the spot. They were then transferred to a sheet of drawing-paper with the aid of a camera lucida, and carried back to the cave and again inked in on the spot.

(1) Arrangements of lines, grouped apparently at random, though in some they cross vertically and horizontally as in a draughtboard. (2) Arrangements of circular dots, nearly all reducible to one scheme—a square of four, or a row of three dots, with a circle of dots surrounding them, which there seems reason to regard as a degenerated spiral. (3) Drawings of animals. Most of the latter are childish attempts—a rectangle with four strokes below and one above, to denote respectively body, head, and legs; but some shew much more advanced skill, as a glance at the plates will shew. Casts have been deposited in the museum of the Fund.

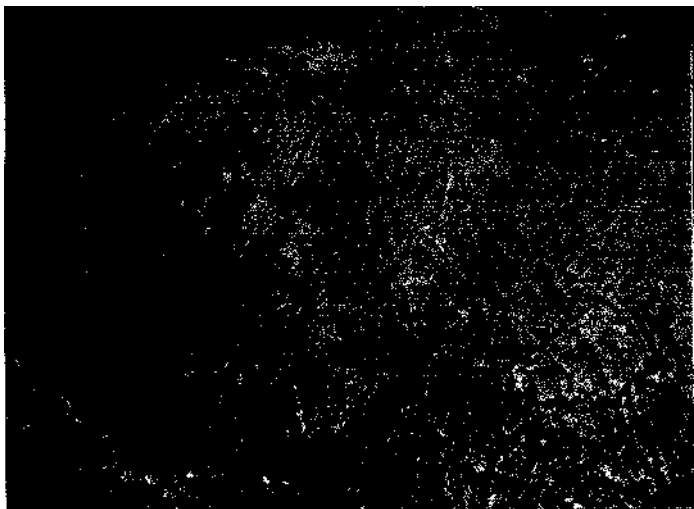


FIG. 48.—GRAFFITO NO. 4, CAVE 30 IV

The following is a detailed descriptive list of the graffiti, with particulars regarding their position inside the cave. The latter is marked on the plan of the cave in Plate xlviii.

1. A random arrangement of lines with no apparent meaning, just under the roof and over the outer edge of the recess containing the pit f.
2. A similar group of random lines beneath the right-hand end of no. 1.
3. Figure of a bird (?) on the outer side of the roof of the apse containing the pit f.
4. The roof of this apse at its right-hand side is covered for a space of 1' 8" x 1' 4"

with a network of random lines, like no. 8, only yet more confused and irregular. After several attempts to secure a drawing of it—which is very difficult, as it is on a horizontal surface face downward—I decided that it was not worth the great expenditure of time it would involve, especially as the most careful scrutiny on several occasions under different conditions of lighting failed to detect the slightest evidence of design in the strokes. I succeeded, however, in obtaining a good photograph which is here reproduced, fig. 48. They may have been made to deface a previous design, as will be seen to be the case in another part of the cave; but if so I could find no trace of the drawing destroyed.

5, 6. Two smaller groups of lines similar to 4, on the roof of the apse.

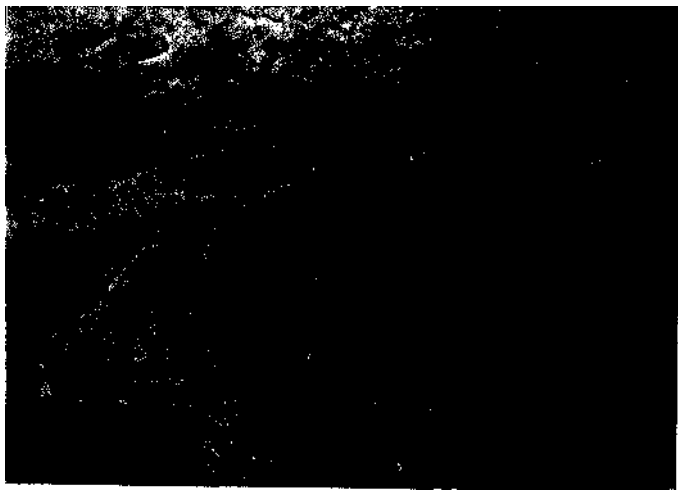


FIG. 49.—GRAFFITI NOS. 7-9, CAVE 30 IV

7. A group of dots on the face of the cusp separating the 'first apse from the second. The largest of these is 1" across by $\frac{3}{8}$ " deep. The design recurs elsewhere in the cave in smaller dots, as we shall see presently: perhaps it is some kind of *wasm* or tribe mark. They appear to be meant to be in a spiral.

8. On the side of the cusp in the second apse, immediately adjacent to 7, a random arrangement of lines, in which no design or order is to be detected. There are two fractures in the middle of this design.

9. At 4" from 8 there has been a similar but slightly smaller group of lines, which, however, has been entirely destroyed, evidently with intention. Nothing is

left but a small strip along each of the vertical cusps, the middle part being all hacked away. The original measured 5" x 6½". Graffiti 7-9 are shewn in fig. 49.

10. At 7" from this is a single stroke not quite straight nor quite vertical, but nearly so.

11. At 5" farther is another group of random lines in which no meaning can be detected. It is narrower and higher than the majority of these random groups.

12. Beside the upper part of the last: the first animal figure we encounter. It is perhaps the rudest and most childish of the whole series, as a glance at the illustration will shew.

13. Under the tail of the animal, and 5½" below it, is a hacked space 3" high by 5½" broad, apparently marking where a figure has been destroyed. There are the ends of three vertical lines shewing below the edge of the hacked space.

14. At 1' from no. 12 is a hole in the rock 5" x 5" x 3", probably marking the place where some design has been cut away.

15. At 4¾" from no. 14 is another hacked space 6" x 6½" x 2".

16. Obliquely below and to the right, and 11" from it, in another hacked space, 4" X 4" X 11"; from the left-hand side projects a line forking into three Y-like branches, thus possibly the tail of a bird. Nothing else of the design can be seen.

17. Immediately beside 16 is a deep hole of about the same cross-dimensions and 4" deep. Possibly here also a figure has been destroyed, but if so there are no traces of it.

18. Just above no. 17 is a group of random lines.

19. At 1' 4" from 18, but rather below its level, was a similar device, measuring 6½" x 5". The middle is hacked out. At the left-hand side of the injury are four oblique lines, sloping downwards from left above to right below: at the other side three similar lines crossed near their upper extremities by a shorter oblique line in the opposite direction.

20. Immediately above this is a device, of which the lower half has been hacked away by a hole 4" x 4" X 2".

21. At 6½" from this, a design has been hacked out, all that remains being a hole 5 ½" x 6" x 2½".

21 A. In the rest of this long apse there are no certain traces of graffiti. There are one or two places where it would seem as though designs had been cut out, but I cannot feel sure about any of them. We find nothing definite till we reach the cusp separating this from the next apse. On the farther side of the cusp is an interesting graffiti. I cannot but think that it is a representation of the common black millipede (*Julus*) which is so conspicuous a member of the smaller fauna of Palestine. See Plate xlvii, fig. 21.

22. Immediately next to 21A and almost on the edge of the cusp is a rude animal figure.

23. Just below 22, an arrangement of random lines.

24. Past the turn of the cusp is boldly engraved a representation of the print of a human foot. The heel is obscure, but can be traced: the ball of the foot and the toes are well marked. It is obvious that this is much more carefully engraved than the

rude scratches which are elsewhere to be found in the cave; and also that the separated toes, with square ends, are much in the Egyptian style of technique—such as is to be seen, for instance, in hundreds of representations of mummies on coffins. I must here record the ingenious theory propounded by Mr. K. T. Frost, formerly of the Egyptian Public Education Department, when he visited this cave under my guidance. It was to the effect that after the beginning of Egyptian settlement in Gezer, this even then ancient cave was adapted as the cellar of a house built above it: that the owner of the house, probably an Egyptian, descending into his cellar, was awed to find the mysterious graffiti on the wall, and in a panic proceeded to destroy them; but either because he wearied, or because he feared to proceed, he stopped when he had finished about half his task, and cut this symbol to avert whatever evil influences might be expected from the unhallowed pictures. This theory will account for the remarkable fact that the drawings are nearly all destroyed till we reach the footprint, after which they are intact; it would, however, be even more acceptable if a *hand* had been cut rather than a foot.

25. At 6" from the foot, and above its level, is another spiral of dots rather smaller than in the previous example. The spiral is in this case unmistakable. This occurrence long before any possibility of Mycenaean culture and influence of a motive so characteristic is of considerable interest. It is also noteworthy that in the Troglodyte Crematorium was found a tray of coarse pottery (fig. 50), with a spiral of knobs just similar to those marked on the walls

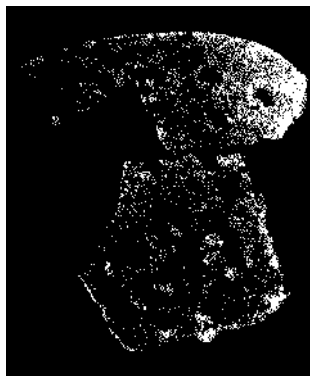


FIG. 50.- BOWL WITH KNOBS IN FORM OF A SPIRAL

of the cave on its upper surface. This may be merely an unimportant coincidence but it seems worth a passing reference.

26. At 3¼" from this spiral is another much less definitely formed.

27. At 3¼" farther on is a fine cow. This is the most artistic of all the graffiti, and shews that the Troglodytes were not incapable of a fair amount of skill, though they cannot possibly rival their Palaeolithic predecessors of the French Bone Caves. The snail-like knobbed horns are curious: did the Troglodytes protect themselves from their half-wild cattle by tying knobs on their horns?

28. Just below the last, and contrasting strangely with it, is a rude headless animal with long tail.

29. At 9½" from these two, and at the level of the space between them, is

a long horizontal stroke with vertical strokes depending from its right-hand end. This may be an unfinished figure of an animal.

30. Above and partly interfering with this figure, as the drawing shews, is another spiral of dots.

31, 32. At $2\frac{1}{2}$ " from no. 30 but at a higher level are two animal figures, one over the other. The upper one, which is actually on the roof of the cave, is reduced to an oval without limbs. The lower is only less summary.

33. Another spiral of dots is just under and to the right of the lower figure.

1.1. Just next to this is another very rude sketch of a horned animal. The hind-



FIG. 51.—GRAFFITI NOS. 38-41, CAVE 30 IV

legs have been broken, which is the only damage the graffiti on the right-hand side of the footprint have sustained.

35. Below and behind this animal is a small spiral of dots.

36. Above the last is another spiral of dots, rather larger.

37-39. Just next to the last are three animal figures, in a vertical row. The uppermost is on the under side of the roof. It has remarkably long horns. The second is quite among the best of the drawings in the cave. The third is larger. It is much interfered with by random scratchings, either with the intent to deface it, or else meant to represent long vegetation in which the animal is partly hidden.

40. There follows immediately one more—the last—spiral of dots, in this case degenerated into a triangle with three dots in a row in the middle.

41. Then follows a long narrow animal figure. Note how the under side of the body is made by a double line, one faint, the other strongly marked. Graffiti 38-41 are shewn in fig. 51.

42. 43. Then come two more animal figures, the hindquarters of the first being just under the snout of no. 41. The horns of the first are made very prominent to distinguish them from the almost random lines around them. It is evident that



FIG. 52.—GRAFFITI NOS. 42-45, CAVE 30 IV

the hinder animal is like one of those mentioned before, standing among long vegetation.

44. At f" farther on, past a crack in the rock, is a very interesting figure. It evidently represents a stag being killed with a bow and arrow, which are visible behind. Unfortunately the modesty of the huntsman has led him to suppress his own person! In front of the stag there is what may possibly be a grove of trees.

45. Just before reaching the cusp separating this apse from the next is a large group of random lines. No design is to be detected in these lines, which are apparently meant to deface a previously existing figure. Faint traces of one cow figure are to be seen underneath, and it is possible there may be others, but one

cannot feel any assurance. This much is, however, certain, that the defacement took place during the Troglodyte Period, and was not the work of our hypothetical Egyptian vandal.

46. Turning the cusp, we find just round its corner end under the roof nine short vertical strokes.

47. Immediately underneath this are some indefinite lines.

48-50. On a level with the last and 1" from them is a remarkable group representing a man (or two men?) doing something (ploughing? or driving? or hunting with a spear?) with two animals. Though rude, these animal figures are among the most ambitious of the series, as there seems to be an attempt made to represent the muscular structure of the animals. They are both confused with vertical slashes, as before suggestive of vegetation.

51. A figure of part of an animal in a smooth hollow place, apparently the matrix of a flint nodule, in the curve between the roof and the wall. Above the space between 49 and 52.

52. At $3\frac{3}{4}$ " from 49-50 is an interesting animal whose long horns proclaim it as a buffalo. I do not know what the triangular object underneath may be.

53. At 7" from the buffalo is a chequer of vertical and horizontal lines. A few random strokes fill the space between 52 and 53.

54. This curious little design follows the chequer at $3\frac{3}{4}$ " from it.

55. Above 52, 53, in a smooth hollow place between roof and wall (similar to that containing 51), a random arrangement of lines.

56. At 4" from 53, but at a higher level. Random lines.

57. Rude animal figure above 56 and almost beside 55.

58. Draughtboard pattern, just beside 56.

59. An animal figure immediately following 58.

60. Immediately after 59, a draughtboard.

61. At 8" from 59, a draughtboard.

62. A random group of lines, resembling no. 63, 4" from 61.

63. A random group of lines $2\frac{1}{2}$ " from 62.

64. On the roof above a point 1' 4" from 63.

65. Close to 64 on the roof.

66. Close to 65.

67. Above the pit on the right-hand side of the staircase, an arrangement of random lines like that photographed above the pit on the left side, not so extensive but quite as meaningless and complicated.

§ 9.—OTHER CUTTINGS IN THE ROCK: CUPMARKS, ETC.

Before we proceed to describe the buildings erected on the surface of the rock, a word or two should be said about the face of the rock itself, as obviously most of the features which it presents must antedate the erection of dwellings above it,

The surface of the rock is very irregular, covered with cracks, grooves, and depressions. Some of the deepest and most inconvenient of these have been bridged by **causeways** in very early times.

Three long parallel **fissures** in the rock, at the N. end of I 27, each about 3" wide and 1" deep, are probably natural; perhaps produced by earthquakes. They do not look as though cut, and have no assignable purpose.

Deep cylindrical vertical **shafts** cut in the rock can be explained in a variety of ways. Some (as I 29 nl), in which the breadth exceeds the depth, are probably rude fruitpresses, even though they may lack the cup in the bottom which, as we shall see in Chapter VI, is an ordinary feature of this type of cutting. The example referred to measures 6' 5" across and 4' 4" deep. Others, where the depth exceeds the breadth, are probably the beginnings of cisterns which, for some reason, were never finished. There is an example so marked in I 14. II 3 C is a pit in the rock, east of which is a small cupmark.

One of the most extraordinary characteristics of early man in Palestine is his fondness for making **cupmarks**. Every hill bears evidence of this singular custom, and to explain it adequately baffles all the ingenuity of the anthropologist. Hollows for votive offerings—recondite emblems of religion—star maps—mortars—waterpots—stands for waterpots—olive-presses—corn-grinders—fullers' vats—these and many more are the explanations that have been suggested, some or all of which may have their place in accounting for individual examples, but none of which completely covers the whole subject. The probability is that there is no one all-embracing explanation, but that different marks and groups of marks were made for different purposes and, there can be little doubt, at widely different times.

The surface of the rock at Gezer bears a perfect wilderness of cupmarks, single and in groups. Most of these are shewn in Map I, being indicated in general by the letter *a*; but I cannot claim that every single example has been recorded. Usually the cups are entirely artificial; but sometimes a natural hollow has been slightly "touched up" and adapted for whatever purpose it may have been required to serve. Thus I 2 A is a hollow, slightly enlarged artificially: it is 3' 6" deep. Again in trench 3 in the same map there is a scarp facing southward, north of which is a large cupmark 3' 3" across and 2' 6" deep: this was full of potsherds when found. North of it is a natural hollow, slightly tooled. South of the scarp is a small oval hollow, probably natural. There was a crooked wall south of this

hollow, which appears in Map I I. It ends at its western extremity in a large stone slab, standing upright: to the south of it are three single stones, probably the remains of a ruined wall. In I I 19, at the north end, was a very early pavement, underneath which was found a cupmark shewn in I 19. South of this is another cup, which, as often happens, is cut in the top of a small natural knob of rock. At I 19 A there is a shallow *natural* hole in the rock, the opening of which has been artificially rounded. Groups of cupmarks are very often cut on a natural surface of rock that rises above the surrounding area; but they are by no means confined to such natural tables.

It is not often that cupmarks are found definitely associated with building. One example will be seen at IV 18 A, which, however, may after all be accidental. It is a square tower-like structure of rude masonry about 4' 10" each way, founded on the rock, in the exact middle of which a cupmark of the ordinary kind was cut. It is difficult to assign a purpose to a building so narrow.

I 30 A, which seems to be closely associated with the cupmarks that surround the very remarkable cave 30 IV, is another example of the connexion of cupmarks and masonry. It is a circular structure 9' 10" in external diameter. Inside of it is a circular cutting in the rock; but as the rock fails on the south side its place is supplied by a row of four stones set on edge.

I 10 A is a natural hollow in the rock with three vats cut in the rock closely associated with it. It is difficult to explain the purpose of these vats. The southernmost is the smallest, 3' across, 1' 8" deep at the bottom of a scarp 2' 4" high; the next is 3' 7" across, 2' 6" deep; the next is 3' 10" across and no less than 6' 6" deep.

Cupmarks are sometimes double, *i.e.* a smaller cup in the floor of a larger. That immediately south of cave 14 I is an example of this.

At I 5 A is a circular basin 6" deep, with two cupmarks and a groove within it: above it to the N.E. are a large cup and five smaller, above which is a rock scarp. I 5 B is a cup hollow in which a jar was found standing.

In two places cupmarks were found united by a passage tunnelled through the rock between them—viz. at I 12 A and I 6, N. end.

Sometimes cupmarks have been found surrounding the mouths of cisterns. The most remarkable specimen of this will be found described in Chapter X, in connexion with the High Place, the cistern in question having been used as a receptacle for the bodies of sacrifices. Another example, which appears at the S. end of I 21, may here be referred to. The shaft of the cistern lies in the unexcavated side of the pit, and in consequence the western extension of the system, if any, was not exposed. In the part which was revealed by excavation there are fifteen cup hollows, all of them oval, measuring about 1' x 10", and about 6" deep; with two exceptions, one of which is square, an unusual shape, and the other circular, 8" in diameter and 1' deep.

That the juxtaposition of these cupmarks with the cistern mouth is not accidental is indicated by the fact that similar combinations are found elsewhere. There is one example (illustrated below) in the hills to the south of Abu Shusheh, and several examples have already been described by me from Tell es-Safi (see

EP, p. 193). It may be suggested that they were meant for watering cattle—the water being drawn and dashed over the surface of the rock, where it would gather in the cups in little pools,* though the cups hardly seem large enough for the purpose. That they are meant for oblations to the spirit of the water may possibly be a theory preferred by some, though I should be sorry to claim it as my own.

In order to display all the rock-markings on one sheet, I have drawn the cistern I 21 in Map I; but it is probable that it is to be referred to the First Semitic Period. In any case the cistern was used in later periods also, a shaft being built up through the accumulating debris. The cupmarks, of course, were covered and forgotten after the first period. The cistern therefore reappears on the successive plans.^f

Another example of the connexion of cupmarks and cisterns—in this case, however, less certainly intentional—will be seen at the south end of trench 4: an enlarged plan is given in fig. 53. The cistern in this case is quite small, and perhaps unfinished: depth of shaft 6', total depth 11'; the plan is rectangular, 9' 6" east to west and 7' 8" north to south. Close to it is a group of five small cups measuring from 1' to 2' in diameter: one of them is of the characteristic oval form. To the west is a scarp in the rock, 1' deep: above it is a double cup; in its edge is a recess in which a jar was lying (see the enlarged sketch above the plan and separated from it by a row of dotted lines). The half of a large basin, 6' 4" in diameter, appears below this—the other half was not cleared out. To the south is another scarp, of the same depth: below it are three small oval cups and one large basin 5' 9" in diameter; and another yet larger—the largest found on the mound—12' 7" in diameter. There are two cupmarks and a curious straight groove in the floor of this basin.

As in the other case, the cistern has been adapted to serve the needs of the overlying stratum.

A curious development of cupmarks or vats in the rock was found at I 29 A. Here there was a short scarp in the rock, 1' 8" deep, from which, at one end, a vat hollowed in the rock projected, 3' in diameter. What purpose this may have served did not appear. There was a remarkable cave close by (29 I), and a

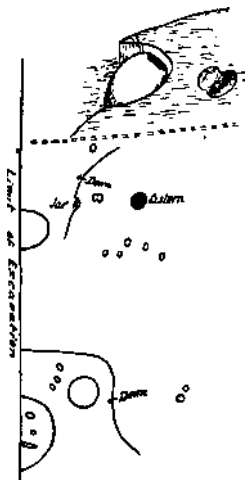


Fig. 53.—ROCK-CUTTINGS IN
TRENCH 4

* I once saw a boy in Jerusalem watering a sheep by pouring water on a pavement from a coffee-pot, the sheep licking it up as it fell!

† The rock-cut shaft of this cistern is of the unusual length of 7' 1"; the total depth is 17' 7", and the diameter 16' 6".

number of cupmarks on the surface of the rock. The vat in question is shewn in fig. 54.



ROCK SCARP

Important and difficult questions are raised by the presence of cupmarks, grouped with evident purpose, in the floors of some of the caves. The most striking example of this is in the great labyrinth 28 I I: this has already been described. It is the only specimen in which the cups are arranged in regular order; save that the three cups in 30 I I I are in a straight line. A single cup, possibly an olive-piess, appears in 17 I; and in addition to those first mentioned we have already seen groups of cups in 3 I, 3 I I I, 15 I V, 17 I I I, 27 I, 29 I, 30 I I, and 30 I I I.

In the plan of the surroundings of Gezer the principal groups of cupmarks are shewn—it would be quite impossible and unnecessary to mark all. In the land called *Wdret et-Tayasheh*, where there are a number of smooth, flat, table-like outcrops of rock with cupmarks cut upon them, one of the cups has a deep groove running out of it.

In the same land is the mouth of a cistern of the ordinary type; in the rock immediately above are a number of oval cupmarks. These, so far as they are exposed, are twelve in number, in a more or less straight row. Probably there are others concealed by the soil. See fig. 55.

The other groups marked on the map need not detain us long. They are exactly of the same nature as have so often been described before—groups of oval or circular depressions arranged without any definite order. The group between tombs 89 and 90 in *Wdret Danuish esh-Sharkiyeh* is cut in a smooth surface of rock that forms the roof above a very large natural cave. The single cups in *Shab VaA'ub*, near tomb 55, are large vats, probably for treading grapes. The group of cupmarks in the rock outcrop of *Wdret 'Aysa* is worthy of notice inasmuch as one has a ring round one of the cups (like the rings so often found round cups in European bronze-age monuments). This is rare in Palestine.

Some groups of cups are unquestionably connected with winepresses and threshing-floors, and will be noticed in their proper place in Chapter V I. Of others the purpose is elusive. But (so far as Palestine is concerned) I must say that the more I study the cup-groups and examine different specimens, the less am I inclined to see a religious or symbolic purpose in them.

There remains to say a few words about some miscellaneous rock-cuttings in the hillsides which cannot be classified under any of the preceding sections.

In the field called *Waret Darwish el-Gharbiyek* will be noticed three "pits in the rock." These were found when searching for tombs. They are very difficult to explain. The most northerly of them is especially

remarkable : it is about 8' 2½" deep. It seems to be square. It was not wholly cleared out, other and more important investigations demanding prior attention : in the surface of the bottom, so far as it was exposed, were two cupmarks. The second pit is probably an unfinished cistern. The third is a large circular hollow, 16' 5" in diameter. There is nothing to shew for what it was made.

The long rock-scarps that abound here and there are in all pro-

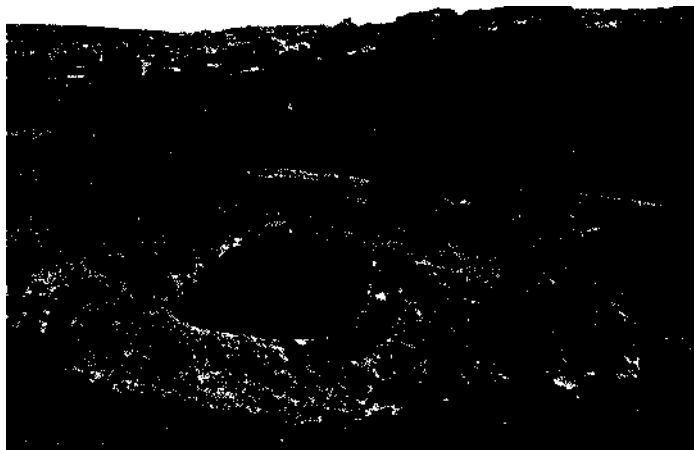


FIG. 55.—CUPMARKS SURROUNDING A CISTERN MOUTH, WA'RET KT-TAYASHEH

bability simply quarries, though some may have been made for receiving the doors of tombs that had never been excavated. They are especially frequent in the field called *Waret Darwlsh esh-Sharkiyeh*.

The cisterns, of which a few were found in the hillsides, seem on the whole to be smaller in size than those within the city, but otherwise do not differ materially from them.

The "steps in the rock" south-east of tomb 143 in *Waret 'Othman* are probably nothing more important than a bit of quarrying.

In *JSP*, p. 198, I have described a mysterious group of marks at

Tell es-Safi to which from their shape I gave the name of **V-marks**. Two such marks exist on the hillside of Gezer. One is in connexion with the winepress / in *Waret Darwish esh-Sharkiyeh*, described in Chapter VI; the other is solitary, on an outcrop of rock in *Ard 'Ain el-Butmeh*. It is a large block, 4' 5" high x 8' 6½" x 2' 5": the mark is U rather than V-shaped; it measures 1' 9½" x 1' 5½". The channel is 3½" broad.

In the hillside on the north and east are a few small **tanks**: they are rectangular in shape and carefully cemented. It is not easy to see for what these would be made: they would not hold much water, and it would soon evaporate in the hot Palestine sun. Measurements of one or two of them are given later in this chapter in the section on Waterworks.

Limekilns—cylindrical pits cut in the rock, about 10' deep—are found here and there. Some of these must be old, as they are filled with earth and seem to have been quite forgotten till they were reopened. That they were as old as the occupation of the city can however scarcely be asserted.

Of the **wine and olive presses** that abound everywhere we shall speak in a later chapter.

§ 10.—STRATIFICATION OF THE DEBRIS: THE PLAN OF THE CITY AT DIFFERENT PERIODS

Having now described the caves hollowed in the rocky core of the hill, and the various cuttings displayed by the surface of the rock, we must next proceed to a description of the buildings that went to make up the city. In this description, after some necessary preliminary generalities, we shall take first the ordinary dwelling-houses; then any other buildings which call for special notice—excluding of course those with a religious purpose, whose proper place is Chapter X; then we proceed to a description of the ramparts by which at successive periods the city was defended, and finally to an account of the various engineering works by which water was procured and stored within the city.

The stratification of Eastern and especially of Palestinian cities is a phenomenon which recent excavations have made so familiar that it is unnecessary to describe it here at length. Let it suffice to say that

houses have always been built over the ruins of their predecessors ; that these houses were built of mud-brick or of stones set in mud, from which the winter rains annually wash out a considerable quantity of clay ; that rubbish and organic matter were allowed to accumulate in the city streets;



FIG. 56.—SECTION SHEWING THE STRATIFICATION OF ACCUMULATED DEBRIS

and that thus the level of the city became raised at a rate variously estimated—at Gezer I reckon it to be about an inch in six years.

The debris proved on excavation to be of very different depths in different parts of the mound. At both ends of the hill, even within the city wall, rock crops out to the surface, shewing that at these parts there were always open spaces. A little west of this outcrop on the Eastern Hill

the soil deepens rapidly to 16'—17', containing from three to six strata of foundations. In the great pit around the alignment of the High Place, the soil was found to be from 5' to 23' deep, and to contain from three to seven strata. On the Western Hill the debris was much deeper than elsewhere, attaining a maximum depth of about 40', with eight strata of building.

The study of the strata at Gezer is in consequence peculiarly complex. In some parts of the hill certain of the epochs of the city's history are completely unrepresented, and we must suppose that during those epochs the regions in question were deserted areas; while on the other hand periods represented by single strata in some parts of the mound are found to involve two or three in others. Sometimes the side of a trench displays as in a geological section a complete history of the city in miniature; and I have thought it instructive to present the photograph fig. 56, which shews one of the best and clearest of all the sections that have been uncovered.* At the bottom is the rock-surface, in which will be seen the mouth of a cave (no. 27 I). This was used as a burial place; and when filled, its mouth was stopped with a great pile of small stones, upon which as a foundation the inner city wall was afterwards built. The original ground surface will be seen below this layer of stones, following the line of the rock. Above the stones is a white lime pavement; this, as well as the underlying pile of stones, is shewn in II 27 p, north end: about 1' above this is another bed, of broken potsherds and charcoal intermingled; over which are the walls of a large structure of brick which was built after the inner wall had fallen into decay. It will be seen in Map IIIa 27, 28. Above this brick structure, of which the walls are standing to a height of about 3', will be seen the flat table-stone of a winepress projecting into the side of the pit (IV 27 m), above which is the vegetable soil.

Reference words printed upon the photograph will enable this description to be followed more easily.

The task of making a series of plans which shall represent the arrangement of the houses and streets at different times is one difficult, if not impossible, to accomplish with accuracy. The problem is complicated by many elements, all of which add to the difficulty of its solution: it may not be amiss to state them here.

If it could be proved that a city was fully occupied during its whole history, and that the stratification of successive layers of building was due to a series of catastrophes by which the whole area of the town was

* I regret that an accidental streak of light has spoiled the appearance of this picture, but it does not destroy its value as an illustration.

wrecked several times, the case would be comparatively simple; and if we were acquainted with the nature and date of each of these catastrophes, we would then have no difficulty in assigning to their proper period the various remains of walls unearthed in excavation. And if architectural ornament of assignable age were used in the different periods of occupation, the question would evidently be simpler still.

There may be cities whose examination is thus reduced to the simplest terms in this way; but Gezer is certainly not one of them. The following are the principal elements which enter into and confuse the problem •—

(1) There is no possibility of distinguishing date from an inspection of the buildings themselves. From first to last all are of the same rude construction and plan, or rather want of plan. I might almost add, to the present day: for the modern village of Abu Shusheh, were it ruined, would present precisely the same appearance as the ancient city of Gezer.

(2) The great area included within the walls was not all occupied at once. There were many open spaces here and there at all times. In consequence, the number of strata ranges from two to eight. I have found that the successive strata of the city can fairly be plotted in six maps, with three intermediate maps for the Western Hill, where there are extra strata. It might be supposed that the antiquities found associated with the ruins would help to date them; but this is not always so. We must remember that the greater part of the walls that remain standing are the underground foundations, sunk into a stratum of earlier date than that to which the building actually belonged: so that the walls are, as a rule, associated with antiquities older than themselves—often considerably so. In the case of open spaces we must remember that they were not kept as municipal playgrounds; rather were they municipal rubbish heaps,* and indeed it is scarcely too much to say that a very large accumulation of potsherds and other worthless antiquities of a definite date in one spot is presumptive evidence that there was no house of that date erected in that spot. It follows, as a moment's thought will shew, that when these waste places were built over, there was an island of houses of one date surrounded by older buildings.

(3) There were no great universal catastrophes which destroyed the whole city at once. There are plenty of signs of large local fires, but no all-covering bed of ashes (like that most welcome layer at Tell el-Hesi). The captives and lootings of successive Pharaohs did a great deal of damage to the structures of the city, but in no case made "a clean sweep" of the whole. Many individual houses survived the storm and stress, and each one is a centre of difficulty and unsuspected inaccuracy to the would-be plotter of the city.

Herein lies the greatest difficulty: namely, that the rebuildings of the city took place gradually, not by a succession of entire reconstructions. A diagram will make

* Probably these open spaces were of use for collecting cattle in time of siege.

clear the confusion which this involves. Suppose a city to have consisted of five "quarters," A, B, C, D, and E; and suppose the rebuilding of these quarters to be indicated by dashes, thus A', B', etc. Then we may graphically represent the history of reconstruction in some such way as this:—

A	B	C	D	E	year	1	of the city
A'	B	C	D	E	"	50	" " "
A"	.		D	E'	"	150	" " "
	B'	C"	D	E'	"	200	" " "
A'''	B'	C"	D'	E"	"	250	" " "

which means that (by the data assumed) in the course of 250 years the city is completely rebuilt; during which one quarter has been rebuilt thrice, two twice, and two once; twice the city has been partially waste: there are thus five stages, so different from one another that to shew them properly a separate map is required for every one. None of the substitutes that might be suggested for this purpose are of any use in the case of a city like Gezer: tracing-paper with the changes printed upon it, to be placed over the map of the rock-surface, is cumbersome, and several thicknesses of it are too opaque to see through; and the use of superposed maps in different colours, with which I myself at first attempted to express the succession of strata, has only the effect of a polychromatic maze, whereby the eye is hopelessly confused.

Be it remembered, moreover, that the case as stated above is comparatively simple. In practice we have not to deal with five quarters, but with hundreds of individual houses; not with conveniently equal intervals of time, but with intervals of anything from, perhaps, a few months to any number of years.

In the maps will here and there be seen the letters X, Y, Z. These are meant to distinguish constructions of earlier or later date within the limits of the period covered by the map. The intermediate letter Y denotes the constructions that appear to belong to about the middle of the period; X indicates walls that appear older, but not old enough to be drawn on the previous map; Z marks walls that appear later, but not late enough to be drawn on the following. Building and rebuilding for some reason appear to have been more active at the western end of the mound than at the eastern: it has therefore been necessary to provide three intermediate maps for this part of the town.

Our troubles do not cease even there. We may assume that there was some sort of official or unofficial municipal council under the control of the *amilu*, or *hazanu*, or whatever name the chief functionary for the time called himself; but this council did not concern itself with the maintenance of highways. There seems to have been nothing to prevent a man building a house so as to obstruct and divert a line of traffic.* Indeed (as a moment's comparison of the maps will shew) the

* In modern Jerusalem, where building operations have been lately carried on to a surprising extent, paths that have been rights-of-way for generations are being closed one by one without any interference on the part of the community or of the Government.

non-permanence of lines of thoroughfare is one of the most striking facts that distinguishes the history of building in Gezer from that of any European city.

Among minor sources of confusion must be mentioned pits dug in the earth in ancient times, which were often responsible for lowering antiquities of one stratum into a context much too early. These pits were rarely distinguishable except when a lucky chance made them coincide with the vertical face of a trench, as in the photograph, fig. 57.



FIG. 57.—TRACE OF A PIT DUG IN THE DEBRIS IN ANCIENT TIMES

It is an instructive task to compare the various plans of the series together, and before going further, to endeavour to gather the general characteristics of city-planning at successive epochs of the history of the community. For though there is a remarkable uniformity—far more so perhaps than one would naturally expect—yet, as we shall see, each age has certain characteristics which distinguish it from the others.

We may pass over the cave-dwelling community, and omit from our consideration the fragments of pavements and walls which are indicated on Map I. These are the meagre remains of the first constructions on the mound ; but there is nothing to be made out from these incoherent fragments, many of which consist of four or five stones only. The three intermediate maps of the Western Hill may here also be neglected.

Map II belongs to what may be called the prehistoric period of the Semitic occupation—the period before the veil of illiteracy is raised, and reveals as the first act in the drama the terrors of Yapahi and his contemporaries. One building of great importance—no doubt a palace—at the south end of trenches 27-30, belongs certainly to this period. Otherwise the impression that an inspection of the plan gives is one of *emptiness*. Here and there are important houses, like that in the middle of trenches 3, 4, surrounded by open spaces that, in all probability, contained rude huts of temporary materials, like the reed villages which are characteristic of modern Egyptian scenery, or, it may be, a permanent settlement of tents, like the Nawar encampment opposite Saint-Etienne at Jerusalem or the Bedawin encampment at Wady Hanain near Ramleh. This eloquently speaks of the permanent settlement of a nomadic tribal or sub-tribal * community, under the leadership of a despotic Sheikh, dwelling in the palace just mentioned, and with more or less absolute control over the lives and time of his subjects. Such a constitution must indeed have existed at the time, as nothing but the strong will of a merciless despot can have supplied sufficient motive power for the excavation of the gigantic water-passage within the palace courtyard.

Towards the end of the period the temporary structures give place to stone buildings, as a comparison of Maps II and **IIa**, on the Western Hill, will shew. It is probably to this later part of the First Semitic Period that the crowded structures in trenches 20, 21 are to be assigned.

The Second Semitic Period, Map **III**, is characterized by *few* buildings, with comparatively large rooms. Though the trenches on the Western Hill look empty, they were not so in reality : the houses in **IIa** give place directly to those in **IIIa**, so that there were no intermediate structures erected at the beginning of the period. On the whole the impression one

* I use this expression as a sort of equivalent of the Arabic *hamuli*, or congeries of related families, groups of which make a tribe.

receives from the plan is that of a small and luxurious community; and with this agrees the observation that the richest tomb deposits found have been from this period, as well as the richest pottery from the houses. It was the time when the Aegean trade had introduced new art ideas, which rapidly found well-intentioned imitators among the craftsmen of the city.

In the Third Semitic Period, Map IV, there are obvious signs of a much increased population with more developed organization. Land for building is even stolen from the sacred High Place: the city is too congested within its old wall, and it becomes necessary to build another wall outside it. Various buildings of importance are erected, distinguished from the rest by their thick walls. The chief moves from the old palace site to another, at the north of 15 and 16. A tendency to bizarre plans is indicated by certain structures—notably the peculiar erection south of the middle of trench 27—with long narrow rooms.* These changes can best be accounted for by the entrance into the ancient population of another element, with different ideas: which accords with the statement of the Book of Judges (i. 29), that after the Israelite immigration certain Ephraimites settled in the city, although it was not brought completely under the control of the tribe.

The Fourth Semitic Period (Map V) displays the same general characteristics. The same liking for long narrow rooms will be noted, if anything further developed. One most important difference between this and all the other periods must be noted. There is not—so far, at least, as the excavation has been carried—any outstanding building that can be indicated as certainly a chiefs residence. This accords with the historical fact of the city having been brought within the control of a Central Government.

It will be noticed, on both this and the preceding plans, that the inner city wall, which, as we have said, went out of use at the beginning of the Third Semitic Period, still exists as the apparent limit of building. This is due to natural causes. No doubt the buildings of the later periods originally transgressed this limit; but the winter rain washes off the earth from the edge of the plateau, and exposes a few stones, which are promptly annexed for building purposes by the fellahin of any one of the half-dozen

* This shape is evidently dictated by the difficulty of finding lintels of wood or of stone long enough to roof a *broad* room.

villages within a few miles of the site. The result is that buildings round the edge of the city in time disappear completely. This is especially obvious in the sixth map, representing the last period: the empty line is visible almost all round.

What is left of this period speaks clearly of a dense and comfortable population. Built reservoirs, well-paved rooms, complex house-plans with pillars, all point in this direction. The absence of architectural ornament is easily explained by the same cause as that just mentioned—destructive fellahin. That there were actually ornamental constructions is shewn by an Ionic volute and some moulded stones cast in among the rubbish filling the great reservoir in trench 16.

Into this population burst the destroying vengeance of Simon Maccabaeus, who ransacked the city, deported its inhabitants, and garrisoned it with "men who would keep the law." It is not unlikely that this garrison was insufficiently provided with women having the same qualification—and surely no others would be admitted—to keep the population up to its former level: at any rate this event was the death-blow of the city. A few years later it falls back into Syrian hands so easily that the event is recorded, as it were, only in a footnote; and though the remarkable bath-house shews that the decimated remnants tried to make themselves comfortable within the wide walls that once sheltered so much larger a population, they probably felt themselves unable to defend so great a length of rampart, and abandoned the ancient city in despair, settling on the neighbouring village sites now known as Abu Shusheh and Khurbet Yerdeh. Thus only can we account for the complete disappearance in a very short time of so large a population as is postulated by Map VI.

It is very rarely indeed that a wall is found which can demonstrably be assigned to two different sets of successive buildings, of which it is a common member. An example, however, is the long wall V 4 AB, which has been taken over from the previous stratum; through which it runs to the rock. A wall of the first palace, in II 28, has been adapted to the construction of the second, in III 28. It will also be seen that the older city wall, after being superseded by the later rampart, was used to form one side of quite a series of chambers, built up against it.

Of street-paving there is scarcely a trace, one or two small fragments of foot-worn pavements, here and there, being the only indication that such was ever in use. These consist of rounded stones about 8" in diameter,

and must have been much more uncomfortable to walk upon than the smooth-trodden surface of the earth.

§ 11.—THE GEZERITE HOUSE

We must now proceed to describe and illustrate the normal Gezerite dwelling-house. We divide the subject into the following headings : plan ; construction (masonry and brickwork); floors ; doorways and windows; roofs and the means of supporting them; architectural ornament; and miscellaneous details. Though *cisterns* are an essential part of many of the houses, it will be more convenient to describe these together in a later part of this chapter.

Plan.—The absence of roofs, and still more the absence of doorways—the houses being as a rule ruined to below the thresholds—makes it often very difficult to discover the plan on which any given building was laid out. Indeed sometimes it is by no means easy to determine whether any given point was inside a building or in the street outside. Often, too, what may be called "fictitious rooms" are produced by the interweaving of foundations of successive periods. Thus in the diagram, if the dotted square represent an old foundation, and the square in firm lines a building erected later, evidently when both are ruined to the same level there will be three fictitious chambers, A, B, C, which never had any real existence. On account of the uniformly rude character of the masonry, with random bonding at angles, these fictitious chambers are not always so easy to detect as might be supposed.

In these difficulties it is satisfactory to note that there is one source of illumination from which much help can be obtained in solving the problems connected with the plans of the ancient houses. I refer to the dwellings of the modern fellahin, which seem to reproduce, with tolerable exactness, the main peculiarities of their ancient predecessors. As a preliminary to the study of the Gezerite House, I propose therefore to make some remarks on these dwellings.

The village streets are crooked and narrow. In many it is almost possible to touch both sides of the street at once by stretching the arms out horizontally. They are so artlessly laid out that even the tiny village of Abu Shusheh, which can

hardly contain more than six hundred souls,* is a most confusing labyrinth to the stranger.

The streets run, not between houses, but between the blank walls of courtyards : these walls, like all the constructions in the village, are built of more or less unhewn stone set in mud; very little lime is used in the buildings. The courtyard walls are 8'-10' in height. They are pierced only by the doors giving admission to the courtyards behind. These doorways are, as a rule, roughly arched ; the threshold is generally lofty, perhaps i' high. The door is secured to a vertical wooden beam that turns in a cup-shaped stone socket.

The courtyard varies greatly in both shape and size. And here it is well to remark that such rude buildings as these are never built to any actual measurement, and there is no special reason for considering that those who erected their ancient predecessors were any more particular. It follows that attempts to deduce the length of the cubit from the measurements of lengths of such walls must have results so uncertain as to be valueless.†

In the courtyard are (i) the baking oven, a small dome-shaped hut with the biick bread-pit in the centre, (2) one or two dog-kennels and chicken-coops, and (3) a raised platform of clay, with a lattice surrounding it of the same material, in which branches and reeds are in summer interwoven to make a booth for shelter from the heat of the summer sun.

At the back or sides of the courtyard is the house proper, almost invariably one-storeyed, consisting of one or more rooms, in which a part is set aside for the animals, and another with raised floor, for the family; covered with a flat roof of mud beaten down and kneaded, carefully smoothed with flat stones, and supported on wooden beams. On the rare occasions (one or two in each village at most) on which an upper storey is found, this is approached by a wooden external staircase. The roof is of mud, and each winter fresh layers are put on to prevent leakage during the rain. Sometimes the roofs become in time as much as 3' thick or more. If, as is probable, this be an ancient custom, it would help us to understand how great piles of earth accumulated on the ancient city sites.

If now we apply this modern analogy to the plans of houses which remain in tolerable completeness, we shall have little difficulty in getting

* During the campaign a robbery from the camp property was compensated for by a tax of one beshlik (about *Gd.*) on every adult male in the village community. The number of beshliks collected was 113. Allowing for five to each family, which is a fair average, this gives 565 as the total number of persons in the village. It agrees closely with an estimate made by the administrator of the Bergheim estate from other data.

† Nor have I much faith in the deduction of cubital lengths from measurements of rock-tombs. Even when a common divisor can be found to tables of measurements, a margin of inaccuracy often as great as an inch or two has to be allowed; and often no common divisor is forthcoming at all. Builders built, and tomb-cutters cut, until they had made a chamber large enough to suit the purpose they had in view; but I do not think that the system of measurements they used was as a rule any more scientific than that of the fellah who informed me that the length of a certain rock-cut tomb was "two walking-sticks and a hand-breadth!"

an idea of the disposition of the normal Gezerite house. It must not be forgotten, however, that each man built his own house according to his taste, fancy, and requirements, so that a diversity of detail must be expected throughout the city. The threshold of the entrance doorway was no doubt (as is always the case in modern houses) raised about 1' above the level of the roadway. This accounts for the total disappearance of any indication of the doorway in the masonry when the walls are ruined to the level of the ground. The practice of depositing lamp and bowl groups under the threshold, which will be more fully described in Chapter X, sometimes comes to our aid and indicates where the door should be placed in a reconstruction; but this practice was unfortunately not always followed, and in the absence of these useful indications we are left entirely in the dark as to the proper place for the entrance.

In Plate xlix, figs. 1-7, are collected the plans of representative specimens of houses selected from all the different periods of the city's history. The existing fragments of walls are shewn in firm lines, conjectural restorations are hatched.

Fig. 1 (II 3, 4) is a small and compact house on the Eastern Hill, with five chambers and an elaborate grain-store of small bins on the east side. What seems to be the courtyard is on the north side: the long passage that appears to have given access to it is curious.

Another house in this plan worthy of attention is the large but fragmentary building in II 14, evidently the dwelling of some wealthy notable: it is remarkable for the number of circular cornbins it contains. The buildings in trenches 20, 21 are much confused, and there are probably a good many "fictitious chambers" among them. Even here, however, a little attention shews that the normal plan—a courtyard with smaller chambers grouped around or behind—is followed in the majority. Another good but incompletely excavated example appears in II 1. The great palace, which will presently be specially described, at the south end of the western trenches is in essence merely a development of the same normal plan.

In Map I *la* the building to the south is probably also a palace, and calls for special notice hereafter. At the north end of trench 28 is a small house of the normal pattern, differing however in having the subsidiary chambers on the side of the court to the left of the entrance, not, as seems more usual, in the back.

In Map III note especially a large and important house at the south end of 20, 21. In this case the entrance to the courtyard appears to be through a small guard-room at the eastern side. There are rooms on two sides of the courtyard—the chambers to the south appear to belong to another house. The pile of skulls marked A found in this courtyard is grimly suggestive of some Gezerite Bluebeard. Toward the back of the court is a circular cornpit: the chamber immediately north of it was a granary. This house had a special cistern at its

eastern end—the same cistern as that already mentioned around which on the rock-surface arc cut a number of cupmarks.

The later part of the Second Semitic Period, as illustrated in **IIIa**, is distinguished by the remarkable brick construction on the Western Hill, shewn in Plate xlix, fig. 2, and illustrated in the photograph fig. 58. The walls were very thick, and the rooms much better laid out than usual. It was not possible to excavate it completely. At A, B, there are hollows in the walls, possibly the remains of secret store cupboards. The first of these is oval, 4' 9" x 3' 10", and at



Fig. 58.—LARGE BRICK BUILDING IN **IIIa**

present 2' 3" deep: the other is 2' 3" square, and only 6" deep. In the corner C there was a lamp and bowl deposit. Outside the brick (as will be seen in the photograph) there was a stone revetment wall. At D there was a circular shaft of stone, like a cistern shaft, but not leading to any excavation. It was 4' 4" in diameter. At E there was an oven. The bricks are sun-dried, about 1' 4" as a rule long, in courses 5" high. It is possible that the structure in **IIIa 30** belongs really to the period following; the long narrow chambers are more suggestive of that period. A good example of the courtyard house will be seen at the south end of **IIIa 28**. In **IIIa 30** is part of a house presenting some perplexing features. The chief detail is a wide courtyard with a stone pavement. In this pavement are two

pits A, B, respectively 2' 11" and 3' 6" in diameter. Remains of an older pavement run under it. West of the western wall of this courtyard are two small columns, CC. The bifid wall at D is curious. In the photograph accompanying (fig. 59) corresponding index letters are inserted. See the plan, Plate xlix, fig. 3.

The Third Semitic Period (Map IV) presents more constructions than its predecessors; and several good specimens of houses may be selected from it. A fine example, with a few later walls interfering with one corner, appears at the north end of IV 28. At the south end of the same trench are other houses—all of the same

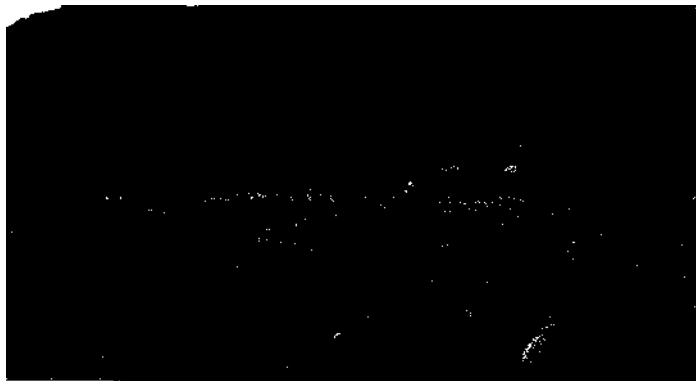


FIG. 59.—FLOOR OF A BUILDING IN IIIa 30

type, but much ruined. The series of chambers in IV 13 is not a little remarkable: the predilection for long narrow rooms, already noticed as being characteristic of this period, is here well illustrated; but it is curious to find so many chambers together not broken by a courtyard. Another good specimen of the courtyard house will be found at the south end of IV 21.

In the Fourth Semitic Period (Map V) again, numerous good examples, in a fair state of preservation, meet the eye. An important house occurs at the south end of V 2, 3, but owing to the loss of the north wall its limits are uncertain. Other houses will be noticed at the north end of 2, 3, and 4: the first of these, which is drawn to an enlarged scale Pl. xlix, fig. 4, is remarkable for the number

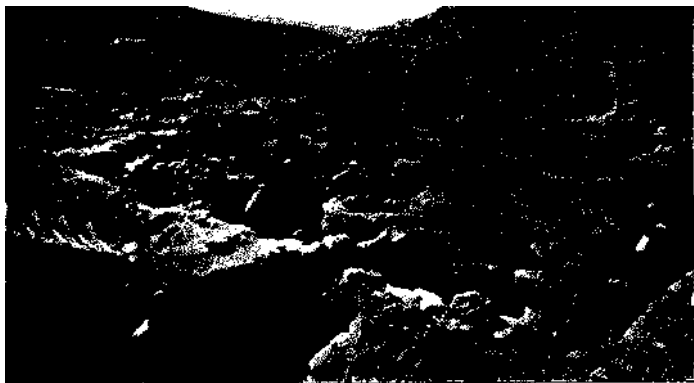


FIG. 60. -LARGE HOUSE IN V 27, 28

of ovens it contains. It is unnecessary to do more than point out others, in trenches 15 and 18, which all illustrate the one principle of planning followed regularly throughout. In a double house at the south end of V 21, there are two sets of chambers arranged each round its own courtyard, divided by a party wall. There is an interesting dwelling-place in V 27, 28, of which an enlarged plan is given Pl. xlix, fig. 5. The latter is evidently the residence of an important personage. It has three large corn-bins, a vat built into the west wall of the courtyard, and three square pillars, conspicuous in the annexed photograph, fig. 60. Being carefully squared, these can hardly be for any religious purpose: they probably supported a penthouse of some sort. They are 3' 6" high.

In Va there are few constructions. In the middle of trench 20 is an elaborate structure which, exceptionally, does not appear to be associated with a courtyard: on the contrary the no less elaborate but much ruined—almost incoherent—building south of this has evidently an important and ornate courtyard with chambers on at least two sides.

The Hellenistic Period seems to shew houses in which the importance of the courtyard is rather less as compared with the rooms. Though they obviously exist

—and in trench 19, west of the Maccabaeae Castle, there is a remarkably large open space—yet as a whole they are not conspicuously larger than the rooms of the houses to which they belong. In some houses—notably the large one on the East Hill, VI 2, 3, which has been chosen for illustration, Pl. xlix, fig. 6—there appears no courtyard at all. The elaborate structure in VI 30, south end, may possibly be rather earlier in date than the majority of the buildings with which it is associated.

One of the most complete residential buildings found in the city was the house which forms almost the only building of the Hellenistic Period remaining in the northern halves of trenches 10-12. This ruin made a small mound on the surface of the hill, which will be found indicated in Pl. viii as *Rujm 'Abd Allah* or "'Abd Allah's Cairn"—after a certain 'Abd Allah who, a generation ago, died here from the bite of a snake. This, being an unusually complete example of an ancient Palestinian house, deserves careful study. The plan is subjoined (fig. 61). The main entrance is at A. This gives admission to a space which from its breadth was probably an open courtyard, on the left-hand side of which is a doorway admitting to a building that evidently was independent of the main dwelling. This doorway is shewn in the photographic view, fig. 62, which gives a good idea of the masonry. This doorway opens into a plain chamber, with doors to the right and left. That to the right (west) admits to a room in the floor of which is a cylindrical pit cemented, 3' 7" in diameter and 6' 11" deep. This probably was for storage of grain. That to the left admits to a stepped reservoir of a type that will be more fully described later in the present chapter. In the example under discussion (a photograph of which is shewn in fig. 65) the water was collected from the roof by a conduit the lower end of which remains (marked H both in the plan fig. 61 and the photograph fig. 63). At the point where the existing fragment remains, the water fell into the small square cemented receptacle K, through a narrow hole in its corner (indicated in the plan). Here the washings from the roof

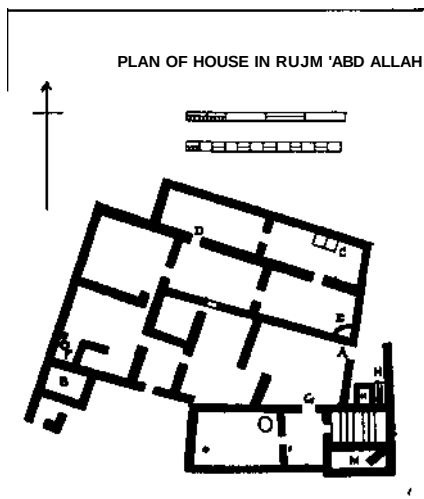


Fig. 61

were collected and prevented from falling into the cistern. The water, purified from its sediment, was allowed to run into the cistern through the hole I... The small opening into the vat K could (if the cistern were too full) be closed with a stone or pad, in which case the water would continue to run along the conduit H, along a canal through the wall of the cistern, and finally escape into the additional reservoir M. The cistern itself measures 13' 2" long, 8' 9" broad, and is 7' 3½" deep below the bottom of the topmost step. It is built of square blocks and cemented. Six steps lead down to the bottom, with a rise ranging from 9"



FIG. 62.—Doorw, IN RUJM 'ABD ALLAH

to 12" (except the lowest step, which is 2' high) and a head of 1' 3" to 2' 7", leaving 3' 3" clear of steps at the lower end. The steps are arranged in threes, one broad and two narrow.

Returning to the entrance courtyard, we enter the main building through an opening between the ends of two overlapping walls. This opening admits to a second court, from which doorways admit to the house rooms, twelve in number. These communicate by doorways, all of which are preserved except that of 13, where the walls are ruined. As usual the masonry consists of rough field stones set in mud. This unsightly masonry was no doubt covered with plaster smoothed and painted—and a small fragment of plaster, about the size of the palm of a man's

hand, was found loose in one of the chambers. This was adorned with green and red stripes, which gives a hint as to the style of mural decoration.

At C were two masonry steps, perhaps the bottom of a staircase leading to the roof or to an upper storey. If the latter, this is the only indication of a second storey found in any house in Gezer.

In the western jamb of the doorway D a hole was drilled in the face of a stone. This may have been for a bolt: otherwise there is no indication to shew how the doorways were closed. The structure E was a row of stones on edge, making a



FIG. 63.—CISTERN OF HOUSE IN RUJM 'ABD ALLAH

circular quadrant that filled the angle in which it was erected: it was possibly a hearth. V was a brick oven of common type.

Examples are occasionally found of alterations of plan or reconstructions. Thus in the curious structure VI 30 D (drawn to an enlarged scale in Plate xlix, fig. 7) there has evidently been more than one alteration, as is shewn by the walls butting against one another. A doorway (a) has evidently had an inner chamber built against it, with a doorway (6), which in its turn has been blocked.

Foundations.—As a rule the foundations of houses do not go deep ;

but sometimes, especially in the case of large walls, they are carried down even to the rock. This is the case of IIIa 30 AA.

No special treatment of the foundations, such as the beds of sand described from Tell el-rlesy (MMC, pp. 71-73) or the remarkable wooden footings from Tell Mutasellim (VC, p. 38), was discovered at Gezer; unless we may count a series of larger stones found under the foundation of the chamber IV 8 B—one under the south wall and two under the west wall.

On the eastern slope of the hill, near 'Ain Yerdeh, are certain rock-cuttings, which were long ago seen by Professor Clermont-Ganneau and by him identified as the foundations of extra-mural houses. I am not sure that it was the exact cuttings which the Professor saw that I have identified; though I think I have examined all the evidences of rock-cutting to be seen above ground on the hill. Perhaps some of those which I prefer to regard as simple quarries were among the number. But there are three in the region referred to, which I have marked *foundations* on the map, and which I have little doubt are actually the foundations of such buildings. It may be perhaps more correct to regard them as the foundations of watch-towers, erected in the vineyards (which the numerous presses in this region shew were planted here). Such watch-towers (the "lodge in the garden of cucumbers" of Isaiah i 8) are often very elaborate structures in modern Palestine, consisting of several rooms. There are some remarkable specimens in the hills around 'Ain Karim, near Jerusalem.

Of these rock-cuttings, the first (proceeding northwards) is in a long narrow outcrop of rock about 3' breadth running E. and W. Near its western end two square sinkings are made in it, separated by a bridge $7\frac{1}{2}$ " across. There is a square hollow in one angle (see the cut, fig. 64). This seems to me the threshold of a doorway giving admission to a room on the north side that was apparently about 11' 6" long east to west: the other dimensions cannot be discovered, as the rock sinks below the surface and was in consequence not trimmed.

The second cutting was more elaborate; but the plan of the building cannot be made out with certainty as naturally the rock is cut only where in the original outcrop there were projecting bosses which it was desirable to clear away. There are traceable parts of four rooms, one of these of very small size, and a doorsill and socket similar to that above described and illustrated.

Farther to the north, and just at the point where the hill rises from the valley, there was a lodge of yet more pretentiousness. All that remains of it are a rock-cut flight of steps and a now almost totally destroyed pavement of mosaic. The steps were four in number, the longest being $9\frac{1}{6}$ " in length with a tread 1' 4" broad.

They lead up to an artificially smoothed surface of rock, no doubt the foundation of a room or building: the length of this surface, east to west, is 30' 10"; the breadth cannot be determined with accuracy as there is no edge of uncut rock at either side; it is not less than 14' 5".

There is a bit of mosaic pavement to the north of the flight of steps and at the level of the lowest step. It is so much cut up and destroyed that no exact dimensions of the room can be given; but it was of small size, between 9' and 12' square.



FIG. 64. —ROCK-CUT FOUNDATIONS

Masonry.—The walls consist of rough stones of a great variety of sizes, from small pebbles to large boulders which a strong man can scarcely lift. About 1' 8" is perhaps the commonest dimension. Mortar and cement are never used—this rule is invariable from first to last—except in the lining of cisterns: the stones of house walls are always set in mud. Very few of the stones shew evidence of any but the very roughest hammer-dressing. Well-dressed stones, even at the corners and doorposts, are very rare.* The stones are fitted together without much art, the masonry being a rough rubble construction; and the joints, which are very wide and irregular, are packed with smaller stones and pebbles. If anything, the average size of the stone appears to be rather less in the lower strata; and here also some of the best-built walls are to be found.

Some of the walls in VI 29, north end, were remarkable for the large stones used in their construction—in all probability taken from the ruined temple in the neighbourhood. The following are measurements of the seven largest of these stones: 2' 8" x 1' 3" x 1' 10½", 3' 6¾" x 1' 3" x 1' 10½", 4' 9" x 1' 6⅛" x 1' 2", 4' 0" x 1' 6⅞" x 2' 0", 3' 1" x 1' 5" x 1' 6⅞", 2' 7,4" x 1' 4" x 1' 4", 3' 6" x 0' 11" x 0' 10¼".

It is very rare to find ornamental stone-dressing—indeed almost the only places where it appeared were in (1) the Solomonic towers of the outer city wall, (2) the late constructions of the Maccabaeon Palace, and (3) a reservoir of the same period on the Eastern Hill; in all of which drafted stones were found. The wall V 29 A is therefore specially noteworthy, for having drafted stones in its course. As it runs under

* Stone doorposts, wherever they occur, are indicated in the plans by the letter s. The walls are ruined to the average height of about 3'. The wall V 17 B, however, runs up through the upper strata almost to the surface of the earth.

the village cemetery it was impossible to find to what building it belonged ; probably a building of importance.

Though no doubt the lazy and pernicious custom of taking stones from earlier buildings, which is one of the most potent influences in destroying ancient remains, was freely practised by the Gezerites, building stones were quarried as well from the rock outcrops in the hills around. A number of these quarries, denoted by the initial Q, are indicated on the plan of the surroundings of Gezer; but it has not been thought necessary to indicate all. There is a fine quarry at the mouth of the Wady el-Jaijah, and the two great caves, Mugharet el-Jaijah and Shakif ez-Zutt, have



FIG. 6—WALL CONSISTING OF A ROW OF LARGE STONES WITH SMALLER STONES BETWEEN THEM

been used for quarries ; but usually the quarrying may be described as mere " nibbling " on the surface—one stone being cut here, one there, wherever the natural form of the outcrop seemed to offer a convenient shape.

VI 29 A is a wall which illustrates a curious and unusual type of construction—a row of small standing stones with masonry between them. These stones may originally have stood free, like the row of pillars supported in a dwarf wall a little to the north of them, and afterwards were joined by masonry ; or the construction may be merely a builder's freak. Fig. 65 shews a photograph of this. To make them clearer, a mark has been placed on each of the stones. Va 29 A is a row of

three long stones lying end to end, measuring respectively 2', 4', and 5' 4½", so that the whole row measures 11' 4½".

Analogous, but even rarer, is a horizontal stone extending through the whole width of a thick wall: one such case is at VI 27 A, where a large stone stretches right through the wall, otherwise built of comparatively small stones; the wall is 6' 10" thick.

The cement used in the lining of cisterns is made of burnt lime: in some of the later reservoirs, *e.g.* in the remarkable system of baths near the Maccabaeian Castle, a hard cement is made of sea-shells. A large pile of shells was found in a corner of the courtyard of the Maccabaeian Castle, probably brought up from the seashore in order to make cement.

Masons' marks were not found, except in the Maccabaeian buildings to be described later; unless indeed the mark cut on a building stone found near the mouth of the great water-passageway, here figured (fig. 66), be of this nature. The inscribed surface measures 7" broad and 1' high.

Brick began to be used very early. Thus, at the south end of II 14 is a simple wall of very rough masonry, of large stones roughly put together. Its foundation was 2' 8" above the rock. Underneath, and therefore older than, this very ancient structure, was a quantity of shapeless brick debris, which could not be planned. It is not improbable that the superstructure of most of the walls was of brick, in a stone base. In one instance the brick was below and a course of stones above: I cannot account for this anomaly except by supposing that for ornamental purposes there were courses of stones at intervals in the brick building. Brick so far as it survives is denoted on the maps by the letter *k*.

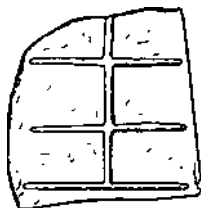


FIG. 66.—MARK CUT ON A BUILDING STONE

Near the south end of IIa 29, just south of the larger granary, there had evidently been a large brick construction, for a number of fragments of sun-dried bricks were found here. The broad surface of these bricks was slightly recessed behind a projecting margin. There were in almost every case two strokes impressed on one side. The average size seemed to be 10" x 1' 1" x 4". One of the bricks bore the impression of the paw of a dog. This example measured 1' 9" x 10½" x 4". This, and another, shewing two strokes—a very common mark, probably intended to key the mud used for mortar—are shewn in fig. 67. A square is drawn enclosing the dog's paw-mark. Another brick (fig. 68), similarly marked by the hoof of a calf, was found in the Maccabaeian Castle. One of the largest bricks found was projecting from a wall in V 4, N. end. It was 2' 5" high, 6" thick; it projected 1' 5", and of course had an additional breadth embedded in the wall.

Another instance of brick construction, from V 2, is shewn in the photographic view fig. 69. A man is standing facing the spectator in the left hand of the picture: to his left is a wall of the kind described, two courses of brick running above as many courses of stones; the individual bricks can easily be detected in the photograph. But the number of cases in which brick was thus found *in situ* was comparatively small. A certain number of houses were found filled with brick earth—evidently the walls had been built in the method described and the superstructures had collapsed

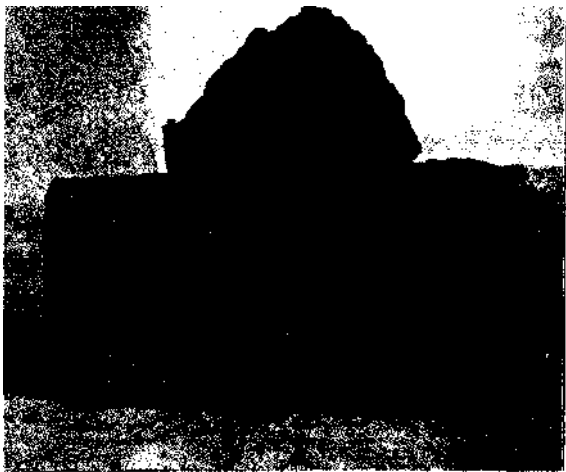


FIG. 69. —SPECIMENS OF BRICKS

completely. This was especially the case in the later structures, of the Fourth Semitic and the Hellenistic Periods.

At two places in V 2, near the south end, were found large solid masses of brickwork, irregular in outline. They were much broken, and there was no fair face to the surface. Each was about 5' 11" high, and their cross-dimensions measured respectively 8' x 3' 6" and 9' 3" x 7'. In the top of one of these was sunk a circular vat about 2' across.

The bricks are rarely kiln-burnt, most of them being merely sun-baked, and having now no more cohesion than the earth in which they

are embedded. The colours of these bricks are red, dark brown, light brown, yellow, and dirty white : bricks of different hues are mixed together in the same construction without any order or arrangement, though one rude oblong structure of two rooms just under the surface at the south side of the Eastern Hill (VI 2 kk, south end) was remarkable for having the courses alternately red and white. The red courses were 4" high, the white rather more—about 5". The lengths of the bricks ranged between



FIG. 68.—SPECIMENS OF BRICKS

1' and 1' 5½". In some buildings brick was used in part of the structure—possibly indicative of a reconstruction while the building was in use. Thus in a curious house at the north end of V 3 two adjacent walls of one of the chambers are of brick, the rest being of stone.

Mural Decoration.—In the latest period, and probably also in the earlier, the walls of the house rooms were covered with stucco. A fragment found in the large house above described, north of the baths, was made of a very gritty plaster, with many grains of flinty sand in it. The

outer surface was smoothed carefully, apparently with the edge of a batten of wood, and then covered with a thick dark cream paste. Upon this was painted a band of dark green, about $\frac{1}{2}$ " in breadth: on one side of this band the surface of the stucco had been washed over with dark brick-red, on the other side with a green rather lighter than the band. This gives some idea of the colour scheme adopted in decorating the insides of superior houses.



FIG. 69.—SPECIMEN OF BRICK CONSTRUCTION

Floors.—The floors of the houses were usually the bare surface of earth over which they were erected; and in the great majority of cases no definite indications of them were to be seen when they were cut through in the course of excavation. Sometimes, however, they consisted of beaten mud mixed with lime-cream, and in others a regular pavement of cobble-stones or else of small stones and lime clippings was found. I had a demonstration of the way in which such floors were made, in the course of erecting my own hut by the fellahin under my direction. The floor was made of

a mixture of clay and powdered limestone, passed through a sieve, and mixed with water; it was then smoothed off by rubbing down with a flat stone. Such floors were always easily recognizable.

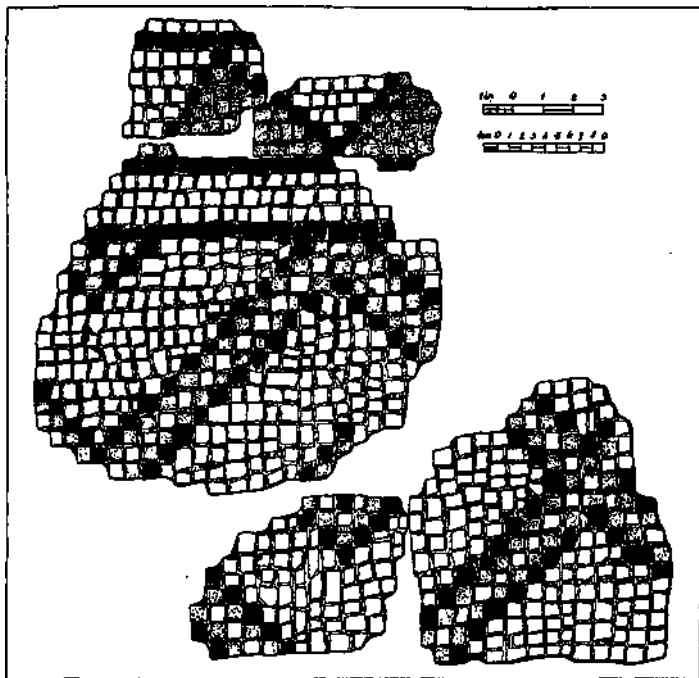


FIG. 70.—FRAGMENT OF MOSAIC PAVEMENT

In the house already shewn in the photograph, fig. 69 (it is in the middle of V 2, at the east side of the trench), there was a floor of beaten mud, small stones, and lime, in the centre of which a vat was formed in the ground 3' 6" across: the five-foot rod in the photograph is just behind the depression. Pavements, whether of plaster or of stone, are denoted in the map by the letter p. **IIIa 30 B** is a pavement 5' 1" square, of four large flat stones.

Another example of a vat sunk in a plastered pavement will be seen at **IIa 29 A.**

In this case the vat is 1' 4" wide and 10" deep. Another, rather larger, occurs at VI 29 B: this measures 3' 11" broad and 2' 10" deep. In the plastered floor of the peculiar building in the middle of IV 27 there was sunk a rectangular vat of thick pottery with flat bottom and rounded corners. It measured 1' 9" x 1' 6½", and was 5" deep. Underneath the pavement was a great mass of cow-bones.

At IIIa 30 AA there are two circular pits in the pavement, the northern one 3' 6" across, the southern 2' 11".



Fig. 71.—Cur FOR RECEIVING THE HORN OF A DOOR

Pavements are not always truly horizontal. The fragment VI 28 A slopes upwards toward the west at an angle of about 30°.

Mosaic.—The use of mosaic for the decoration of floors was not introduced into Palestine till the Roman period. No examples therefore exist in the hill itself. It was, however, used in the houses of the Roman settlements near by. White tesserae—generally about $\frac{3}{8}$ " cube—are often turned up by the plough in the surrounding fields; larger blocks, about 1½"

cube, are also found occasionally. Mosaic of white tesserae is to be found in two of the rock-cut winepresses on the hillside that will be described in Chapter VI. The mosaic in the bath near 'Ain Yerdeh is described in connexion with that interesting structure, later in the present chapter.

Of the domestic uses of mosaic decoration only two examples survive in the neighbourhood of Gezer. One is in the floor of a house in the middle of the village of Abu Shusheh, and is the only indication remaining above ground, known to me, of the existence of a village on that site in Roman times. It consists of white tesserae with blue lozenges, containing at their centres blue V-marks: the tesserae inside the Vs are red. The other example (a very fragmentary specimen, having been broken up by fellahin in the hope of finding, a tomb underneath) is at the east end of the hill, in what seems to have been a small Roman house. The pattern of the fragments is here represented (fig. 70): the colours are dirty yellowish white, indigo, and light brownish red. A fifteenth-century Arab coin and a few fragments of Arab wart: were found in the chamber.



Doors and Doorways.—

Doorways were absent in the majority of cases. The threshold, as in the houses of the fellahin, was raised some inches above the surface of the ground, and usually the walls were ruined to below this level. A *fortiori* the evidences of the nature and number of windows were yet more scanty; but that they differed from doorways only in size and position in the wall can scarcely be doubted.

As a rule the jamb of the doorway was simply an opening with vertical sides left in the masonry. There was nothing to shew how the door-frame was secured; no doubt, however, it was by pegs driven into the interstices between the stones. The doors themselves must have rested on projecting horns turning in stone cups, of which large numbers were found—few, however, *in situ*. Fig. 71 represents such a cup.

FIG 72-SOCKET FOR DOOR-HORN

At I 8 A is a built step with the hole for the door-horn at the end. In VI 30 was found a specimen (fig. 72) in which the hole was (unusually) bored *through* the stone. It measured about $8\frac{5}{8}$ " each way, was $2\frac{1}{2}$ ' thick, and had a hole 3 $\frac{3}{4}$ " diameter through it. The sides of this hole shew evident marks of friction.

Two curious stones will be seen at V I 30 C, not easy to explain. They are not placed anywhere where it is natural to expect a door, else might they be considered as sockets for the staples of a more elaborate type than usual. They are 3' *oh*" apart. Each stone measures 1' $8\frac{1}{2}$ " x



FIG-73.. STONES AT VI 30 C

1' $4\frac{1}{2}$ " x 8" high. They stand against a wall; and in the side of the stone towards the wall is cut a horseshoe-shaped curve, $6\frac{1}{2}$ " long and $8\frac{1}{2}$ " across, with a raised collar surrounding it $2\frac{3}{8}$ " broad and 1" high. The photograph fig. 73, shews their disposition and appearance: a mark is put upon them. Fig. 74 is a diagrammatic representation of one of them.

To secure the door when closed a bolt was used, and no doubt it is to receive such a bolt that holes are sometimes found drilled in the ends of walls.

Doorposts of stone are indicated by the letter *s* when it occurs in the course of a wall. The letter *s* when not connected with a wall denotes a loose stone which is not certainly a pillar-base.

Iron **keys** appear in the Hellenistic Period. These are evidently intended to fit into a lock like the well-known Arab type: tumblers of a certain number and order of arrangement fall through the frame into holes in the tail of the bolt, when the latter is shot; these can be lifted by rods projecting from the key, arranged to correspond with them. FIG. 74—DETAIL OF STONES

In the Maccabaeae keys the stem of the key is at right angles to the bar bearing the projections, in the modern they are in the same straight line, but otherwise the two are identical.



An example which has two tumblers will be figured in Vol. II. It comes from near the baths north of the Maccabaeae Castle. A different type of key is shewn in fig. 75.

A stone with two holes one above the other is the standing slab marked IV I s. This stone is pentagonal in shape, 2' 10" high, 2' 1" broad, and 10" thick: there are two bolt-holes in an almost vertical line in the middle, probably for a door-fastening.

Doorways were no doubt covered by lintels of stone or wood; but the latter would have long since decayed, and the former would naturally be removed when the buildings to which they belonged became ruined, as the long stone was too valuable to leave derelict. Only a single instance of a lintel stone remaining was found. This was in the stratum overlying the temple on the Eastern Hill; and in all probability the stone originally formed one of the alignment of massebdth belonging to this structure. The exact place of the lintel is marked VI 17 B, and it is indicated with an arrow in the annexed photograph, fig. 76. The stone is 5' 11" long,



FIG. 75—IRON KEY 1' 3" high, 1' 6" thick; the clear space beneath it is 3' 6" broad. It is supported on the east side by two stones, on the west by a single stone 2' 6" high: the opening under the lintel is thus very low, and can hardly be a true doorway. There are numerous large stones in the walls of the building to which this lintel belongs, all probably taken from the temple underneath. Three

small rudely built magazines will be seen in a line from north to south, west of the wall containing the lintel. This is shewn in fig. 76.

As a rule the doorway is of the simple kind above described ; but cases exist where it is lined with standing stones. This is usually in the later strata : a fine example from the south end of IIIa 28 will be seen in fig. 77. This consists of two stones about 5' 1" high: one is cut as though an attempt had been made to divide it into two. The width of the doorway ranges as a rule from 1' 7½' to



FIG. 76.-LINTEL STONE AT VI 17 B

3' 3". An exceptionally wide doorway, with stone doorpost, was found in the Maccabaeon Castle : it measured 3' 9".

In most of the excavations in Palestine broken fragments (and a few whole specimens) of a certain type of stone object have been found in the Hellenistic strata. These are rectangular discs of the rough micaceous Hauran stone of which corn-grinders are usually made. A specimen is figured in *EP*, Pl. 73, fig. 2 : no whole specimen was found in Gezer. The disc is usually about 15" long by 10"-12" broad, and about 4" thick. A narrow slit, with the long sides bevelled on one face of the stone, is cut through the stone, along its central major axis, stopping about 2½" from the edge of the stone at each end. There is a marginal frame round the bevelled parts, in which a shallow square sinking continues the line of the

perforation. It is possible that these objects are window-frames, but till one happens to be found *IN situ* this can only be recorded as a guess.

Roofs.—The roofing of the houses was probably, like other details, comparable with that of the modern huts, except in one particular: while the majority of the village houses are covered with flat mud roofs supported on wooden beams, a few here and there may have stone domed roofs.



Fig. 77.—STONE-LINED DOORWAY IN IIIa 28

There is, however, no evidence of the use of the arch in Gezer at any time previous to the Hellenistic Period.*

That the roofs were covered with mud may be inferred from the discovery of limestone rollers, similar to those with which the roofs of modern houses are flattened and smoothed. These rollers were confined to the Hellenistic stratum. One fine example, from east of the High Place

* The rock-cut arch in the great water-passage can hardly be taken into consideration in this connexion.

alignment (fig. 78), measured 1' 7½" long by 9" broad at the ends: in the middle the diameter is a little more, the roller being slightly barrel-shaped. In the earlier period the roofs were no doubt smoothed off with small flat rubbing stones. The roofs of the huts of the excavating party were smoothed with such stones, taken from the excavations. The framework bearing the mud-covering must have been supported on wooden rafters lying across the chamber, and resting their ends on the tops of opposite walls. One such roof remained, or rather enough of it remained to give an idea of its construction. The house to which it belonged had been burnt, and the charred rafters were still embedded in the earth when the



FIG. 78.—STONE ROOF ROLLER

latter was removed. They were oval in section, 6" in horizontal diameter, 4½" in vertical, and laid 2' 7" apart centre to centre.

Frequently it happened that a chamber was too wide to be spanned by a single length of roofing-timber. In that case two lengths had to be used, with their ends meeting in the middle and supported on a plate resting on columns. It is probable that these columns were of wood, but a flat stone was placed under their feet to support them and to prevent the weight of the roof above from pressing them into the soft earth floor. Such stones occur frequently, singly or in rows, in the centre of chambers. The commonest number for such rows of pillar-bases is *three*, and in fig. 79 a row of this number of stones is represented: its place in the plans is IV 21 A. It is worth noticing in passing that to slip the pillars from the footstones would not be an impossible task for a strong man, and to do so would obviously bring the roof of the house down. Evidently

this is what Samson is supposed to have done by the author of the Book of Judges. There is nothing in the narrative to justify the popular idea, countenanced by many pictures, either that the pillars were of stone or that Samson *broke* them.*

The most elaborate example of a colonnade was that marked V 28 A. This, however, is not meant for the support of a roof. There must have been here a



FIG. 79.—PART OF A HOUSE SHEWING THE ROW OF STONES IN THE FLOOR

verandah running round two sides of the structure to which it belonged, supported on four pillars on each side. Pillar-bases, when not denoted by special letters (capitals) for particular reference, are indicated in the map by the letter *b*. Sometimes large single loose stones are found lying about which are not certainly pillar-bases. These, as already mentioned, are denoted by the letter *s*. A remarkable series of such stones will be seen in VI 5 marked by the letter *s*. Possibly this series is earlier, and should be on Map V: there was nothing to indicate its age or purpose. II 3 B is a heap of stones. II 21 C is a flat stone 2' 4" across.

* See Judges xvi 26-30 and Moore's *Commentary*, pp. 360-363.

There is another remarkable series at the north end of VI 4, which may possibly be the remains of a short street of columns or covered market. The buildings are so ruined that the fragments remaining are quite incoherent. It reminds one of the curious building in Tell el-Ilesy (*MMC*, p 91).

Beside the pillar-bases, there are sometimes to be found single blocks of stone, as VI 18 E, which have no such obvious constructional purpose. They have probably no special significance, perhaps stones provided for a building found to be superfluous and so left derelict.

Only twice were pillars found with drum standing on drum: one with two circular drums at IV 18 b; the other, two pillars with square drums at Va 30 A.

As a rule pillar-bases such as we have been describing arc simply flat blocks with no attempt at making them

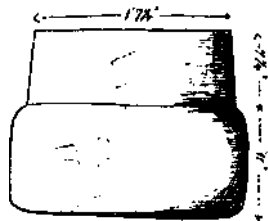


FIG. 80.—BASE OF A COLUMN

architecturally ornamental: we should therefore specially notice the few cases where some more ambitious effort seems to be made. Such is the easternmost stone of the series in the middle of VI 4 A, which is the frustum of a cone on a square base. A similar stone is fig. 80, which represents the column-base III 18 A: the dimensions are noted on the drawing. The other stone, to the east of this, is a plain block. The rarity of architectural ornament at all periods makes this rather early example noteworthy. Commoner are round stones, resembling column-drum: such is the base (marked *b*) in the middle of V 3. The pillar-base IV 30 B is a frustum of a cone, 1' 8" in diameter at top, 1' high, on a round base 1' high and 2' 6" in diameter. To the east is a similar pillar-base, indicated in the map by the ordinary symbol *b*. A similar but rather larger pillar-base, the lower member of which was square, 11" high, the conical part 7½" high and 1' 7½" broad at the top, will be found at III 18 A. The circular structures in this neighbourhood were ruined early, and there was a thick layer of accumulation, empty of wall, between this and the next stratum above. The pillar-base III 30 A is simply a cylinder, 1' 2" high and 1' 4" in diameter. The two pillar-bases II 17 CC are nicely rounded stones, 2' in diameter and 61" high.

The reference letter V 20 C is placed between two dots which represent column-stones of a more important kind than those we have been considering. They are shown in the photographic view, fig. 81. They are squared stones, roughly hammer-dressed, 3' 8" high and 1' 6" in both cross-dimensions. They appear to be standing in the middle of a passage, the walls of which are built of larger blocks than usual, especially on the south side. There is another stone, similar to these but longer (5' 9"), built into the east end of the wall to the north: it will be seen behind the head of a man that stands between the pillars, in the background about the middle of the picture. V 20 D marks a similar column, rather shorter (2' 10"), at a little distance, which may belong to the same series. These seem to belong to an attempt at

a colonnaded entrance to the house the centre of whose courtyard contains the reference letter V 21 B. It is analogous in some degree to the curious row of three pillars in the courtyard of a large house in the Western Hill, already described above. That these stones were in any way connected with religion I do not believe: such *squared* pillars can hardly have any but a constructional purpose, although (like the pillar with double axes in the palace at Cnossos) it is not impossible that religious emblems might be carved on them. None such, however, appear in the pillars under discussion, which simply form part of a colonnade. At VI 29 C is a curious colonnade, the two westernmost pillars of which are strongly built, of square stones (fig. 82),* the others smaller and flimsier. The latter stand on a dwarf wall, and



FIG. 81. COLONNADÉ.

may represent a series of window-like openings (fig. 83). Pillar-bases such as we have been describing are generally found singly or in rows in the middles of chambers; but this is not always the case. They are sometimes found at the ends of walls: an example will be seen at the north end of V 20, marked by the usual symbol *b*. In this case we must suppose the pillar to be a support for two lintels, spanning the entrances to the two chambers separated by the wall. Sometimes the base is found standing on the wall: an example occurs in V 4, also denoted by *d*, a short distance south of the large thick wall in the middle of the trench. This is probably the base of a mullion dividing a small double window.

Stairs.—Very rarely was anything in the nature of a staircase found,

* These pillars consisted, when found, of two stones each. The upper stone of the easternmost pillar was thrown down by an accident before the photograph was taken.

and in no instance was there sufficient to indicate that the building to which it belonged had an upper storey. As a rule there was but one step, or two, which may have simply reached up to a doorway raised above the level of the ground, like an ordinary outer door of a house, or to a platform of beaten mud erected against one side of the chamber. In I la 29 B is



FIG. 82.—WEST END OF COLONNADE IN VI 29 C

a single step, of brick. This is under the level of the foundation to which it is adjacent, so cannot be a true step: it may be a footing for a wooden post, erected for some reason against the wall. In a corner at IV 29 C are two steps of masonry: possibly there was here a doorway, but unfortunately the buildings at this point are so ruined that their exact plan cannot be certainly recovered.

There was one example of steps at the entrance door of a house,

leading into a doorway from a colonnaded porch. It is marked VI 27 B, and appears in fig. 84. At VI 14 A are three stones like a step in the level of the foundation of the long wall to which they are adjacent.

Hearths.—Enclosures of stones on end are sometimes found in the middle or the corners of dwelling-houses. These are perhaps *hearths*. One such was in II 20 A, where there were four, stones on end. Another is at II 20 D. The circle of stones on edge V 9 A may be another.



FIG. 83.—EAST END OF COLONNADB IN VI 29 C

Miscellaneous Details.—Before leaving the subject of the ordinary dwelling-houses we may notice a few special details that could not be considered in the foregoing paragraphs.

The wall marked "*sloping wall*" in II 29 is a sloping glacis, like the Troglodyte rampart. Near it is a circular structure 4' 6" in diameter, probably a granary, lined with cement and floored with a pavement of stones.

In VI 29 D there occurs a small platform of standing stones on edge in the

corner of a square room. This platform measured 3' by 1' 4". It is probably a hearth.

There were some curious details in the large, irregular, and much-ruined house in the middle of IV 4 that call for notice: they are not easy to explain. They are indicated by reference letters in the plan.

A was a fragment of lime pavement, quite soft and ill-cemented together, measuring 5' 9" by 2' 8". It was strewn over with a thick layer of sea-gravel, consisting for the greater part of broken cockle-shells crushed and ground smooth by the action of the waves. On the gravel a bronze knife was found lying. B was a small trough covered with a similar soft cement, and bounded by a wall 1' high. In the centre was one of the vertical drains of jars that are described elsewhere. This



FIG. 84.—STEPS AT THE ENTRANCE OF A HOUSE

trough was partly underneath the thick wall east of it, which thus appears to be a later structure. C was the fragment of a plastered floor, 3' 7" north to south, 4' 6" east to west. Underneath was a layer of loose uncemented rubble with a jar standing upright in the middle. D was a circular structure in diameter 4' 9" externally, 2' 10" internally. It was plastered on its inner surface with a cement made of broken fragments of shell.

The circular structures so often to be seen at all periods were probably beehive-shaped granaries. Some of them (as V 13 A) were plastered on the inside face.

The excessive rarity of architectural ornaments of any kind invests even a poor little fragment like fig. 85 with a certain amount of interest. It was found in the disturbed strata at the north end of trench I—possibly it belonged to the building which covered the large well close by. Some moulded fragments were found in

the large central reservoir and will be noticed in connexion with it (Plate liii). In a house of the Maccabaeon Period was found a fragment with a *cyma reversa* moulding.

Because they resemble corbels more than anything else I describe at this point the three enigmatical objects represented in fig. 86; but I do not feel certain that this is their actual purpose. They were found

among the debris of the Maccabaeon city, overlying the smaller high place on the Western Mill (trench 29). They are made of soft limestone, a fact which is rather against their being corbels, as they could not stand much shearing strain. Two of them are L-shaped: of which one measures 7" x 10 $\frac{1}{8}$ " x 6 $\frac{3}{4}$ ", the other 8" x 9 $\frac{3}{4}$ " x 6 $\frac{3}{4}$ "; the third dimension being the

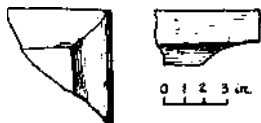


FIG. 85.—FRAGMENT OF MOULDING

breadth at right angles to the plane of the picture in each case. In the middle of the back of the upright limb of the second of these (which is at the left-hand side in the photograph), close to the top, is the first of the two marks in fig. 87; the second is at the side of the bottom of the horizontal limb, near the edge.* The third of these supposed corbels is T-shaped, the arms of the T being broken off. The vertical bar is of an oval section. It measures 9" high, 6" broad (in the plane of the photograph, along the cross-bar), and 5" at right angles to the plane of the photograph.

§ 12.—GRANARIES AND OTHER SPECIAL STRUCTURES

(1) Causeways.—A characteristic of the lowest stratum, especially on the Eastern Hill, is a number of broad stone caviseways, meant to ease



FIG. 86.—CORBELS (?)

* The words "upright," "horizontal," refer to the position of the object in the photograph.

the inconvenient irregularity of the rock-surface on which the city was built. These are from 1' to 3' in height, and of a width determined by the extent of the irregularity which they are meant to

FIG. 87.—MARKS ON THE "CORBELS"

tion by its superior masonry and evident importance. A pit was accordingly dug east of this trench in order to determine the nature of the building to which this wall belonged. It consisted of a four-sided enclosure, not rectangular, though probably intended to be so, with rounded corners.

be observed. The width of the enclosure — exclusive of the thickness of the walls — averaged about 45'. The western half of the enclosure was divided by cross-walls into four irregular chambers, the disposition of which can best be understood from the plan (fig. 88). The eastern half was free from buildings except for a circle of small stones about 1' 6" high, set on end on a platform of beaten mud raised about a foot from the rock. It is marked D in Map II, east of trench I. The stones were cemented together with mud. Smoke-blackening and heat-splintering especially on the end stone of

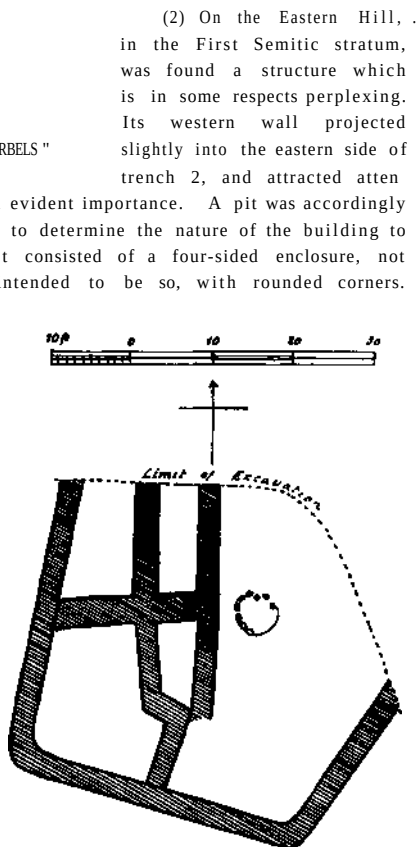


FIG. 88.—STRUCTURE ON THE EASTERN HILL

the curve at the eastern side shewed that this had been used as a hearth. The structure was left open to shew to visitors, but was soon afterwards destroyed by some mischievous boys : I took advantage of **this** to dig under the mud platform, but found nothing within it. Fig. 89 **well** shews the appearance of the structure.

When I first reported this discovery (QS, 1902, p. 321) I treated it as a place of worship. It may be so; but the subsequent discovery of the real temple of the city, as well as the total absence of objects of cult within its precincts, make me inclined to modify this view. I am not sure that it

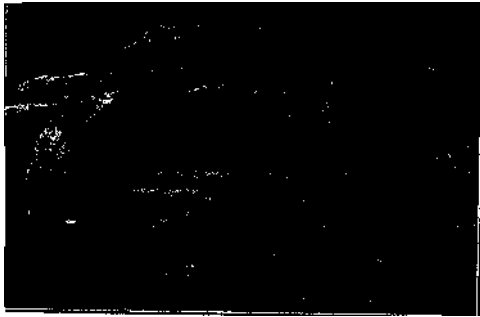


FIG. 89.—CIRCLE OF STONES IN THE BUILDING ON THE EASTERN HILL

is not best to regard it simply as a house, rather superior to the majority, with an open court in front containing the family hearth. Here and there, as has just been mentioned, small curved structures are found that probably are likewise to be explained as hearths. One such is built *on* the end of the short wall V 3 A, which must therefore have been a low dwarf wall and not a partition.

(3) **Granaries** formed an important class of buildings at all periods. Some of these seem to have been private stores, attached to individual houses; **but that** there were public granaries as well is indicated by the size of some of the stores, and the quantity of grain found in them. Some of these magazines seem to have perished by fire, and the charred grain,

retaining perfectly its original shape, is easily recognizable.* We are not here concerned with the varieties of the cereals represented, which is a subject for a later chapter, but only with the structural receptacles in which they were stored.

It is probable that most of the circular structures, which will be seen dotted over all the plans, are grain-stores. Grain was actually found in some

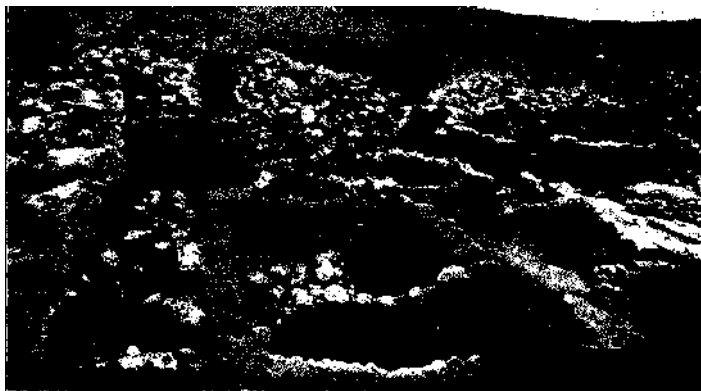


FIG. 90. -GRANARV AT NORTH END OF II 4

of them (notably in those at the north end of II 4 represented in fig. 90), and presumably it was for this purpose that most of them were built. They vary greatly in diameter, some being only about 2 8" across, as in a small example at the south end of V 4. Probably they were built (by means

* I believe, however, that it is not necessary to assume conflagrations in every case to account for the quantity of burnt grain found in the course of excavation; but that the grain if kept covered for an over-long period will in itself generate heat enough to cause incineration. I have been informed that some time ago one of the sheikhs of the village of Beit Jibrin lost his year's stock of wheat by incautiously leaving it covered up in this way.

of oversailing courses) to a dome or beehive-shape with a hole in the apex.

Deep pits, lined with cement, probably for grain, occur here and there. One such is at IV 8 A : it is 4' 9" across and 6' 9" deep. Another use for round structures of this nature is that of ashpits.*

Besides built circular structures, round pits dug in the subjacent earth, not lined with masonry, were occasionally found : they were sometimes filled with a slightly different-coloured earth, which betrayed their presence ; or if they happened to come at the side of a pit the outline of their vertical section was clearly visible in the vertical face of the pit. VI 30 B is a circular pit of this nature, 4' across. A, A, close by, are built circular structures, of a little more than half that diameter.

The notable granary in the middle of II 3 has already been mentioned in the account of the house of which it forms a part. The kinds of grain found in the various receptacles are indicated on the plan, PI. xlix, fig. 1. In IIa 29 there is a large granary (possibly part of the adjacent palace), the walls of which were 2' 6" in thickness: this was full of wheat; a round-ended annexe on the S.E. side contained *kursenni*. The pavement was of beaten mud ; and underneath it, just north of the partition by which the eastern portion of the granary is divided into two, were two drain-pipes, wider at one end than at the other, so as to fit into one another. At the end is a funnel-shaped fragment, turning obliquely downwards. The diagram added to the plan, PI. xlix, fig. 8, will shew the arrangement. These pipes are made of very coarse drab ware, with many grits, ½" thick. The drain is too fragmentary to permit us to be sure whether it was connected with the granary or—which is more likely—with an earlier building. It is laid on a layer of potsherds.

At the south end of IV 4, again, was an interesting granary whose plan is shewn in PI. xlix, fig. 9. The old city wall is adapted as a south wall of the structure. One room was full of corn ; but it was also used to store bricks, and a pile of these was found against one side. These bricks were both baked and unbaked. As is shewn in the sketch added

* A number were found with many fragments of pottery, bronze objects, etc., evidently waste sherds that had been thrown away. The statuette of Hekab, described in a later chapter, was found in one such ashpit. III 30 A was a circular ashpit full of pottery and sherds. At II 20 E was a solid square block of masonry resting in the rock, with a vertical shaft through the middle full of potsherds.

to the figure, several of them had three strokes on the side (perhaps, like the holes in modern bricks, meant as a key for the mud cement). On one of them was marked a spiral. Another room was divided into five compartments by dwarf walls. The two southernmost of these compartments held wheat : the other three contained chopped straw. All had been burnt, and in the N.W. corner were the burnt remains of a skeleton, perhaps



FIG. 91.—GRANARY IN IV 18

the owner of the store who had perished in trying to save his property in a conflagration.

Another granary of great importance—probably a public store—will be seen in the middle of IV 18. It is a four-sided building divided longitudinally into two compartments, each of which is subdivided into bins by walls rather irregularly disposed. Wheat and barley were found in some of these. A photographic view of this structure is given in fig. 91.

(4) At various places in the mound—an example will be seen in the middle

of V 3, 4—are found large **thick walls**, much more massive than any house wall, and approximating almost to the cross-dimensions of a city wall. These no doubt were the boundary walls of important public buildings. There is little that can be said about any of these walls; but a curious detail calls for notice. This is the occurrence of vertical hollow shafts, about 2' 3" in diameter, in their thickness. An example will be seen in the thick wall in the middle of Map V 3, on the boundary line between trench 2 and the adjacent trench to the left. It is difficult to assign a purpose for these shafts: they always seem intentionally made from the

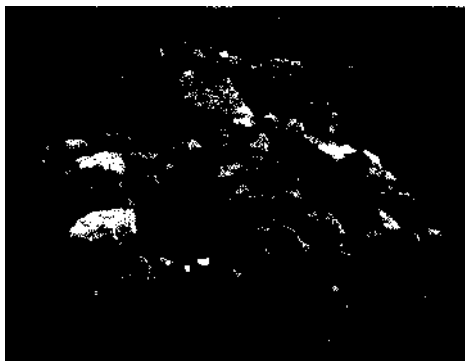


FIG. 92.— -SHAPED STRUCTURE

first, to judge from the appearance of the surrounding masonry; otherwise we might be tempted to take them to have been excavated in the foundation of the wall after it had been ruined, by persons living above its level, to make a store-pit, like the cavities in the top of the south gate of the second wall, to be described hereafter. They are not unknown even in the city walls. In III 21 A will be seen an example in the inner face of the second wall. This runs down through to the rock just like a well-shaft, and the rock-surface is slightly cut away at its bottom.

(5) Another structural detail not easy to explain is the occurrence of circular **platforms**, perhaps 9'-10' across at various places. Such platforms will be seen in V I 19, above the stones of the temple alignment. They



FIG. 93.—STONE SEAT (?)

may possibly be the floors of circular grain-stores, of which the walls have entirely vanished. Another example appears marked **III 4 p** in the southern half of the trench.

(6) At the south end of V 19 will be seen a curious cp-shaped structure, of which fig. 92 is a representation. I can but guess that this is a pair of D-shaped store-chambers.

(7) In fig. 93 is shewn a small solid circle of stones, about 1' 3" in diameter: it was found

in the corner of a room about a foot from the rock. I suggested in mentioning it in a report that it might have been a domestic altar; but the simpler explanation, that it is a rude **seat**, is probably better.

(8) On the plan of the ground known as *El-Kus'a*, there is marked a "Probable site of a **Church**" in Plate viii. This was a place from which the people of el-Kubab had removed a large number of cut stones. Although no trace even of the foundation of a church was left, the fragment of a stone cross of monumental size (fig. 94)—the fragment measured 2' 3" high and was 6" thick—gave a hint as to the nature of the building. Possibly this was the source of a marble Byzantine capital, now adapted as a well-head, lying loose in the precincts of the neighbouring *wely* of Sheikh Musa Tali'a. There has been a cross among the acanthus-leaves on the upper part of this capital, which has been imperfectly battered away (fig. 95).

§ 13.—THE PALACES

We must now proceed to a description of certain buildings found in the mound which by their size and character are marked out as being of special importance, and in all probability the

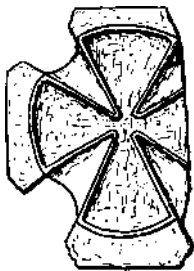


FIG. 94.—STONE CROSS FROM EL-KUS'A, NEAR GEZER

residences or offices of the governors of successive periods. These buildings are (1) the First Semitic Palace at the south end of II 27, 28; (2) the Second Semitic Palace in IIa 27, 28; (3) the Third Semitic Castle in IV 15, 16; (4) the Fourth Semitic Judgment Hall in V 28, 29; and (5) the Castle of Simon Maccabaeus and the neighbouring buildings, which occupy the south side of the middle of Map V I. The last-mentioned is described in the following section.

(1) The First Semitic Palace is the largest complex of chambers found on the mound. There is little that can be said in description of it: the plan speaks for itself. It is erected just within the great brick gateway, and consists of the following members: (a) to the S.E. a number of small chambers, two of them with the bases of pillars supporting the roof. One of the smallest of these chambers was a granary, and contained a row of jars in which was burnt grain. () West of these chambers was a large courtyard of which hardly anything remained: its area could be deduced from the fragments of the boundary walls found here and there. In the centre of



FIG. 95.—MARBLE CAPITAL, AT Sheikh MUSA TALIA

this large courtyard opened the entrance to the great Water-passage, presently to be described, which no doubt was primarily intended for giving water to the royal establishment. To the north was a large hall with two aisles separated by a partition wall: the northern of these aisles had the roof supported on pillars resting on massive stone bases. This probably was some kind of public judgment hall. The foundations of this part of the structure will be seen in fig. 96.

No specially important objects were found in this palace; but a fine fragment of Cretan ware of the later Minoan type was found in its precincts—one of the few specimens of Cretan importation as distinguished from the later Mycenaean.

This palace was not the earliest construction on this part of the mound. Some very early walls underlay the pillared hall.

(2) The second palace, as I judge it to be, is built to the north of the first. It appears in Ha 27. 28. It is smaller and also much more mixed than the first. Part of it is built of brick. A small pillared hall and a large and important granary are the most noteworthy features.

(3) No building was found belonging to the later part of the Second



Semitic Period (Map III) which could be described as a palace; but there can be little doubt as to the nature and purpose of the important structure at the north end of trenches 14-16 in Map IV. This was the most important residence of its period found in the excavation, and it can hardly be other than the residence of the governor of the period.

It consists (fig. 97) of a number of small and irregular chambers, with very thick walls, built around a tower of the much older inner city wall, against whose surface the walls of the building butt without bonding.

As in several other instances, the old rampart has been adapted as the back wall of the structure. The entrance is from the south: the hall into which it opens communicates by doorways with other rooms. Certain chambers—that marked *a* and its neighbour—are now isolated, no doubt because the walls are ruined to below the level of the door-threshold: the same is true of the long narrow apartment 6, which was probably a store-room. The way in which the walls are carefully laid out at right angles, and their remarkable thickness, offer a striking contrast to the

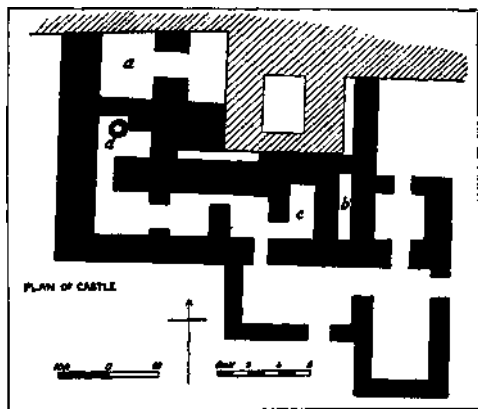


FIG. 97.—PLAN OF LARGE BUILDING IN IV 14-16

careless and flimsy construction of the ordinary houses in the city. The walls range in thickness from about 3' to 9'—the latter by far the greatest wall-thickness found at Gezer, with the exception of the city wall itself. The little circular structure *d*, probably a hearth, is the only architectural feature left.

East of this palace there was a large open courtyard, as will be seen in the general plan of the city. The rock-surface contained cisterns and rock-cut presses, but I suspect that these had already been overlaid with earth when the palace was built and that they therefore were of an earlier date.

This building remained open—probably as a ruin—during the whole

of the Fourth Semitic Period; as did the old towers commonly called "Goliath's Castle" at Jerusalem till its comparatively recent adaptation into the basement of the Ecole des Freres at Jerusalem. Not improbably it served the same ignoble purpose as the desecrated House of Baal at Samaria. This accounts (1) for the absence of later walls overlying the foundations, and (2) for the almost total absence of portable antiquities found in the ruins—with the noteworthy exception of a small store of objects found in chamber *a*. This consisted of two fine axeheads and a spearhead of bronze, a three-legged stone dish, an alabaster vase, some fragments of pottery, and a nondescript fragment of stone ornament (fig. 98). The last is a polished block of a green stone resembling serpentine, measuring $4\frac{1}{2}$ " x $2\frac{1}{2}$ " x $2\frac{1}{2}$ ". On one side is a sunk panel containing a number of incised chevrons: a line is drawn across the other side and round the fractured edge.

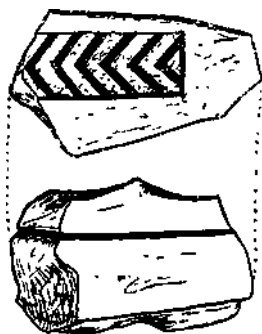


FIG. 98.—ORNAMENTAL FRAGMENT OF STONE

We cannot be for wrong in assigning this elaborate building, of which a general view will be seen in fig. 99, to the time of the Hebrew immigration. It is not impossible that it may actually be the residence of the shadowy Horam; but such a suggestion must be clearly understood to be nothing but a not inadmissible conjecture. Nothing was found to connect the castle definitely with Horam or with any one else.

(4) In the Fourth Semitic Period, no important building was found. This (as has already been said) fits in with the historical fact that Gezer was no longer under an independent Sheikh, but had been brought under the control of a Central Government. But some form of local judgment hall would be necessary, and possibly we may see such in the building whose thick walls break into the north ends of trenches 28 and 29 in Map V. By an unlucky chance the *wely* was built just in this corner, so that the rest of the site of the building was not available for excavation. As the two tablets bearing legal documents in cuneiform character were found in the angle made by these groups of walls, it is possible that they may have been thrown out from within it. This increases the

probability of the building having been a house for archives or judicial proceedings, and makes the presence of the wely the more regrettable.

§ 14.—THE MACCABAEAN CASTLE

In the course of running a trench along the outer face or the outer city wall, a place was found, in the middle of the south side, where there



FIG. 99. —VIEW OF THE BUILDING IN IV 14-16

was absolutely no trace of the rampart. By trenches dug at intervals at right angles to the line of the wall, it was proved that for a length of about 300' the outer wall did not exist. However, some remarkable constructions, in the gap between the two ends of the wall, attracted attention, and it was decided to uncover the whole area at this spot. On this account the southern sections of trenches 10 20, as indicated on Map V I, were opened. They were not deepened to the rock because this would have involved the destruction of the buildings which, as there is every reason to suppose, are of considerable historical interest.

The constructions uncovered in the area consist of:—

(1) A gatehouse with the remains of a causeway mounting the hill, and turning so as to enter the city along the face of the wall.

(2) A long double rampart, divided into compartments, and connected with chambers which evidently formed an important building.

(3) An elaborate bath establishment, which was later than the large building no. (2), as it passes over one of its corners.

The present section is concerned with the first two of these: the third will be described in the following section.

At an early stage of the investigation I formulated the following argument:—

(1) All these structures belong to the Hellenistic Period.

(2) As the gatehouse is evidently a public entrance to the city, it is not likely that the gate in the long double wall is also a public entrance. More probably this is a gate specially reserved for the occupant of the large building. As the gate gave ingress and egress to the city at all times without the necessity of passing through the city gate, this person must have been the military governor.

(3) The military governor in the Maccabaeon Period was John Hyrcanus, acting as deputy for his father Simon (see Chapter I). Simon "built for himself a dwelling-place" in the city, which he would hardly have done had this castle been already in existence and ready prepared for him.

(4) The condition of the city wall at this point recalls the incident of Simon's breaching with his battering-ram; and at this point the nature of the ground affords perhaps the most convenient place in the whole hill for the manipulation of such an engine.

From this the inference was drawn that it was not improbable that the building under investigation was the dwelling-place built by Simon.

Shortly after this conclusion was reached there was found lying loose in the debris a block of stone bearing a graffito in cursive Greek characters. The block is a fragment of a building stone of a kind very common in Palestine in structures of the Maccabaeon age: they were found in profusion in the Acropolis of Tell Zakariya, in the upper city of Tell Sandabannah, and in some of the caves of Beit Jibrin which may be supposed to have been excavated or repaired and adapted for use during this epoch. They are blocks of rather soft limestone, trimmed with a chisel to the shape of an ordinary brick, and measuring about 1' 9" x 7" x 6".

The fragment now described is a wedge-shaped splinter of such a block. Fortunately the end bearing the inscription is perfect, or nearly so: it measures 7½" x 6". Of the length of the stone a maximum of 5½" remains.

The surface bears an inscription in three lines and a diagram, the meaning of which is obscure. The inscription is very difficult to read. The Rev. Peres Germer-Durand and Lagrange have generously given me assistance in deciphering it. Their reading is as follows:—

ΠΑΜΠΡΑΣΙΜΩΝΟΣ
ΚΑΤΟΠΑΙΣΗ[ΥΡ?] 
ΒΑΣΙΛΕΙΟΝ

In the first line a fracture makes it uncertain whether to read or I: on the whole the indications are more in favour of the former. There is another fracture farther on in the line which has carried away the second half of the M and the top of the w. The 1, it should be noticed, is attenuated to a mere dot, joined on to the M.

The second line is very difficult to read. The first word was read by me **ΚΑΤΕΠΑΓΙΙ**: Pere Germer-Durand preferred KATOIIAIIH, and the observation that the inscription is probably meant to read as a hexameter decides in favour of that reading. The letters following are rubbed, and next to impossible to make out; but is the most likely rendering.

The third line is perfectly clear and its reading certain. The whole seems therefore to read thus :—

Πάμπρα(ς) Σίμωνος κατοπάζη πύρ βασίλειον

"[Says] Pampras; may fire follow up Simon's palace!"

The photograph of the inscription (QS, 1905, p. 100) not being very clear, I have substituted here a drawing, made from the stone itself, with the camera lucida (fig. 100).

This inscription is therefore an imprecation, scratched on a building stone by one Pampras—the single C in line 1 is no doubt to be taken in a double sense, as the end of one word and the beginning of the next—and built into the structure for which the curse was intended. Examples of such imprecations are by no means uncommon. Pampras in all probability was one of the dispossessed Syrians, possibly condemned

to forced labour on the castle. The inscription has many points of interest. It is the first contemporary reference yet found to any of the Maccabaeans. And it is a corroboration of the arguments above set forth, by which an attempt was made to establish the identification of the building in which it was found. The formula is curious: probably, like the lovers who wrote that strange dialogue on the wall in the tomb of Apollophanes of Marissa, Pampras found Greek verse difficult of composition. It is curious, however, that the identical formula, translated into Arabic, occurs as an expletive in an Arab folk-tale in Mr. Hanauer's collection—*Ilhak bi-nar**

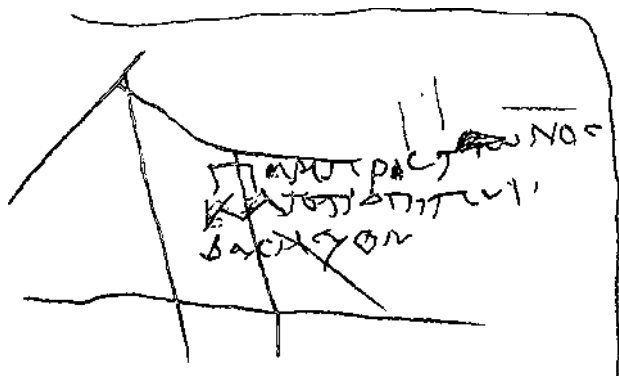


FIG. 100.—THE "PAMPRAS" INSCRIPTION

"follow up with fire." Possibly, therefore, the phrase was not unfamiliar on Semitic lips.

It may here be mentioned that two other inscribed fragments of stone were found in the castle; but they amounted to very little. One was a small wedge-shaped splinter of limestone $7\frac{1}{4}$ " X $2\frac{3}{4}$ " x $4\frac{1}{2}$ ", with the following letters upon it:—

... Α ...
... ΟΝ ...

in capitals which, though small (J" high), were of a formal and monumental type. The stone seemed to be a fragment of an inscribed lintel, the

* *Folklore of the Holy Land*, p. 21.

lettering on which was carved on a panel sunk slightly on its face. It is tempting to restore the first line *βασίλειον* and to see in a whole a dedicatory or explanatory inscription over the entrance to the castle; but such a restoration is mere guesswork. The other inscription is quite unintelligible: it is a row of Greek capitals, scratched on the edge of a building stone like that bearing the graffito of Pampras. Above is a series of lines of the same general character as those accompanying the Pampras

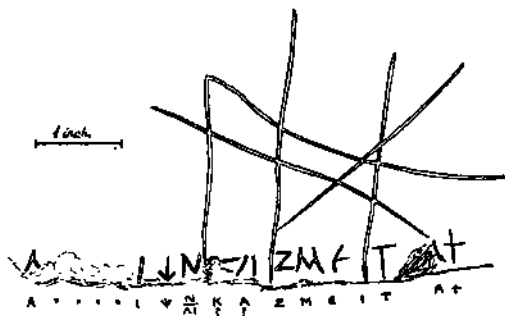


FIG. 101.—GRAFFITO

inscription (fig. 101). The inscribed edge is much chipped, and some letters are lost: what remains is

A . . . IYNKAZMEITA +

which possibly is another magical inscription; the succession of letters appears to be quite meaningless.

We may now proceed to a description of the complex of buildings to the identification of which the imprecation of Pampras has afforded the clue—by a strange piece of irony, truly; for Pampras had in view a purpose directly contrary! We shall describe the buildings in the order enumerated above.

(1) The remains of the gatehouse consist of three courses of well-squared stones, extending for a length of 36' and returning at each end. Two towers, of shallow projection, occur in the course of this wall.

This fragment is marked A B C D E F G H in the accompanying plan, fig. 102, the towers being B C D E and F G H respectively. Their projection ranges from 1' to 3' 4", as they are not set out truly square. The courses of facing-stones are each about 1' 6" high.

In front of this wall is a rough pavement of cobble-stones ($J^1 J^2$), many of which shew marks of polishing by foot-wear. This pavement rises gently from east to west. It begins abruptly near the eastern end of the wall A H, and is interrupted at the western end. There seems

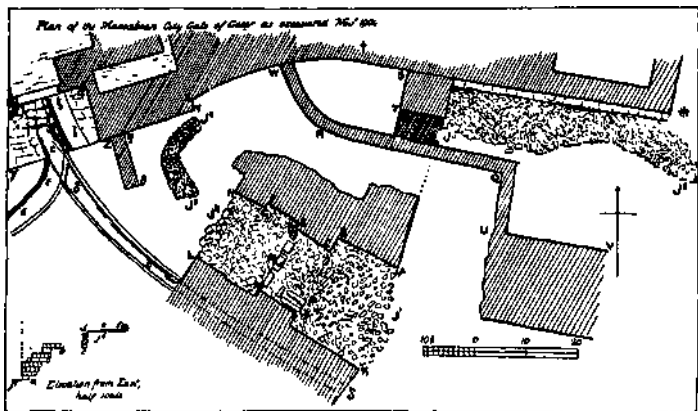


FIG. 102.—PLAN OF THE MACCABEAN CITY GATE

to have been some kind of arcading crossing the pavement between the points D M: at least there is here a threshold of cut stones, resembling the facing-stones of the wall A H, and having in the middle what looks like the much-weathered base of a column N.

On the south side of the pavement is the foundation of a wall that evidently was in all respects the counterpart of the wall A H. This is marked L M P K in the plan. The south face of this wall had not been exposed when the plan (originally prepared to illustrate the current report in the *Quarterly Statement*) was drawn: it was found later to be a plain straight line not broken by towers or otherwise.

Thus we have a passage, 36' long and 14'-15' broad, flanked by stone walls of well-dressed masonry, with two towers projecting inwards.

The recesses in the walls (D E F G and the corresponding recess on the opposite side) may have been meant to receive the *valvae* of a door, closing against the column that stood on the base N. There was no sign of hanging to be seen in the surviving fragments of the structure : this, however, was so ruined that the absence of such indications is not conclusive.

Two stones side by side, 3' 4" long, with a space 3" wide between them, are let into the pavement at P. It is not impossible that these have something to do with a door-fastening.

A little farther to the west is another fragment of paving (J³ J⁴) that seems to shew how the passage continues. It curves abruptly and mounts at a rather steep gradient. After this there is a long gap, till we pick it up again at J⁵ J⁶. The course of the pavement in this gap was marked by a white line (afterwards effaced by a shower of rain) running along the surface of the castle wall behind. This shewed exactly how the pavement had run.* It had thus started between A K, run up under the gatehouse A H K L, proceeded onward by the abrupt bend between Y H, and then at the back of the gatehouse between H W, along the face of the curved wall S W X (mounting at a gradient of about 1 in 6'4). At J⁵ it was just under the present surface of the ground. J⁶ was the last place where it was found, but there can be no doubt that it bent round the end of the castle wall and so entered the city to the east of that building. The difference in level between the uppermost and the lowermost section is 18' 3".

(2) Filling the gap in the city wall, but recessed behind it a short distance, is a series of long narrow chambers with very thick walls. To most of these there is no door remaining: the chambers that are on each side of the entrance gate, however, are provided with entrances, as the plan shews. These chambers were probably cellars under the main floor: they are at a level distinctly lower than that of the threshold of the gate. They may be simply the hollow spaces existing in what may be treated as *one* thick double wall, filling and strengthening the breach in the city rampart.

* And incidentally shews that the pavement and the castle wall were contemporary—a fact also proved by the total absence of any antiquities earlier than the Maccabaeon Period in and around their foundations.

This construction strikingly recalls, in the character of its plan and masonry, the "barrack" of long rooms that was found just inside the gatehouse at Tell Sandahannah.

Under the threshold at the east end is a small drain meant to carry off rainwater from the court inside the gate. This drain stops internally a foot or two after passing under the threshold. As the opening would be large enough for a small boy to squeeze through, who could then open

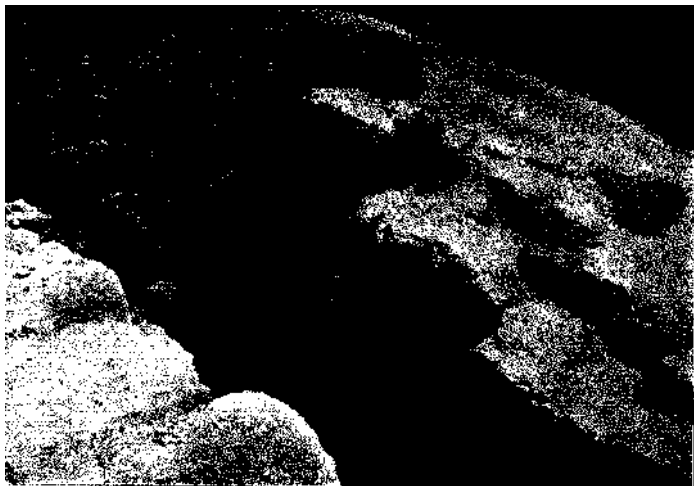


FIG. 103. MASONRY OF THE EASTURN TOWER CHAMBER

the gates for enemies outside, the drain has been blocked immediately inside the door by a large stone which effectually prevents any one coming through ; while it is no obstacle for water to run away, as it does not fit closely.

Proceeding to details, beginning with the western end, the rampart in trenches 18 and 19 is in a very ruinous condition. Being near the surf ice, and very convenient to the modern village, it has evidently been despoiled of its stones, and it is impossible to be certain of the original disposition of its chambers. There is *now* the appearance of an entrance

of the "hit-and-miss" kind in the middle of trench 19; but I think this is an accident, due to the destruction of walls. Till the middle of trench 17 we cannot feel any certainty of the plan. There is then a series of five chambers, of varying length though uniform in width. These display no features that need detain us. We then reach the "cellar" to which allusion has just been made. The only detail which calls for notice is a row of three small shafts, entering the outer wall horizontally at the level of the

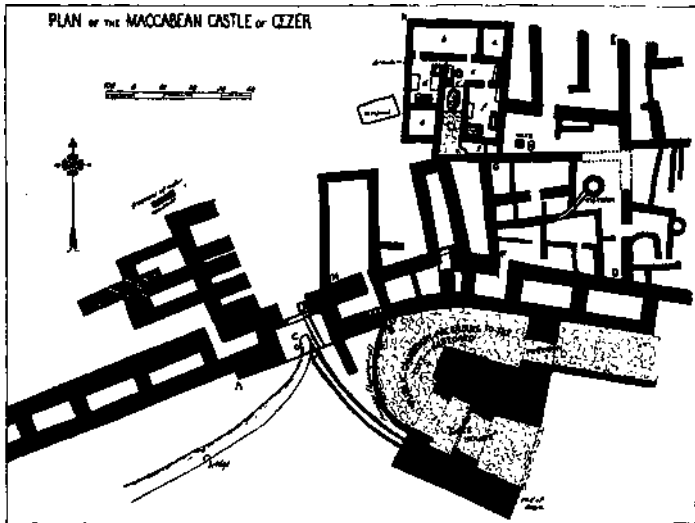


FIG. 104.—PLAN OF THE MACCABEAN CASTLE

floor. They are like nothing so much as miniature *kok* graves. They are 1' 10" in height, about 1' in breadth, and about 2 4" in length. I am unable to suggest any purpose for these hollows, unless they are intended for the secret concealment of some object [? an afterwards rifled foundation deposit]. Nothing but one or two potsherds was found in them. There are similar shafts in the corresponding chamber to the east of the gate, which are shewn in fig. 103.

We then come to the gate which was the entrance to the castle. This is approached by a short pavement C, sloping upwards toward the threshold. There cannot have been any connexion between this pavement and the public causeway running under the Gatehouse, as the levels are different. They were probably shut off from one another by a partition wall, a possible course for which is indicated in the plan. The causeway disappears outside the limits of the gateway tower, but there are not wanting indications that

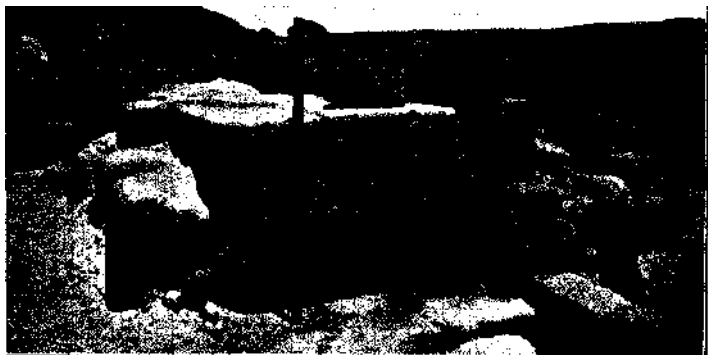


FIG. 105.—EASTERN JAMB OF THE GATE OF THE MACCAUAEAN CASTLE

originally it ran downwards towards the west, whereas the public causeway ran down towards the *east*. Two little breaks in the cement lining of the drain, which possibly are the piers of a small footbridge, may be indicated as suggesting this. They appear in the larger plan of the castle, fig. 104.

The gate itself is 9' 2" in the clear. The hinge and bolt-holes of double doors remain, just inside the threshold. The threshold stone has a similar hole in its outer upright face, shewing that it was taken from some earlier

doorway. The well-dressed blocks of which it is built are shewn in the view of the eastern jamb, fig. 105.

The rooms in the rampart to the east of the gate are similar to those to the west. The second of these chambers is curious. It has been blocked up by two brick partitions, the easternmost of which is just against an opening into a long room of the castle.* This opening is spanned by a stone lintel. Beneath this, and between it and the end of the brick



FIG. 106.—FURNACE IN THE MACCABAEAN CASTLE

partition, there was a large deposit of ashes, shewing that there had here been a large furnace. Probably the lintel, which was broken, had been cracked by the heat (fig. 106). The rest of the rampart is identical in type to the portion already described.

* This opening shews that the long chamber is contemporary with the double rampart. In the same way the crooked chamber marked H must be contemporary with the chamber into which it opens. Bond and all other masonry details shew that the whole system is one, and of one date.

(3) The rampart forms the south wall of a complex structure which was evidently an important building, and, as has already been mentioned, was probably the residence of the governor during the Maccabaeon Period. Unfortunately nothing was found in any of the chambers which would throw light on their purpose or give information as to their occupant. The only objects found, beside the ordinary potsherds of the period, were a few scraps of Greek bowls, some Rhodian jar-handles, and a few bronze



FIG. 107. — DOORWAY OF Supposed POTTER'S OVEN IN OR NEAR THE MAccabaeon CASTLE

and iron arrowheads of commonplace late types. Unexpected in such surroundings were one or two animal figures, and (more curious) a small fragment of a statuette of the Cyprian Astarte : these probably belonged to earlier or later occupations, and by accident became mixed with the castle debris. In fact, the castle was perhaps less prolific in small antiquities than any other part of the mound.

The most curious find was undoubtedly a great pile of cockle-shells in a corner of one of the rooms in the western side of the gate. These

well-sinkers as a convenient tool for scraping the soil in the cave in search of treasure.

The skull mentioned above was not, like the other bones, in the floor, but deposited in a fissure between two strata close under the roof of the chamber.

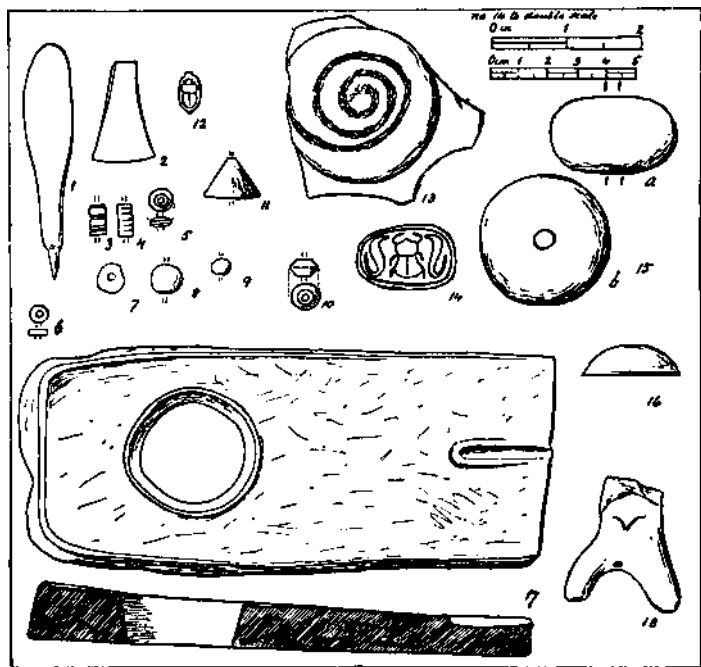


FIG. 42.—OBJECTS FROM CHAMBER (4), CAVE 28 II

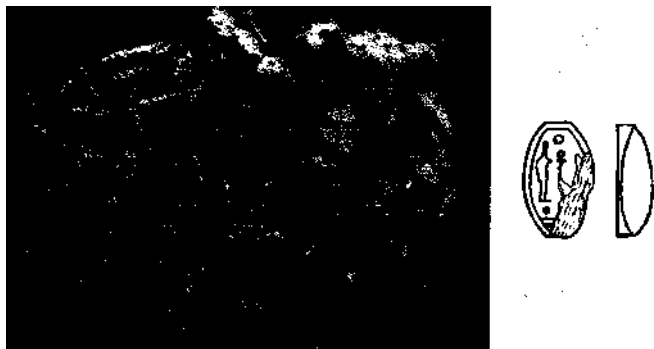
There was nothing in the part of the chamber that lay under the fallen roof. The cistern in this portion of the cave, however, contained a fine bronze pot that apparently had been accidentally dropped in (fig. 43), and a fragment of a green enamelled scarab (fig. 44).

Neither did the small passage extending southward from this portion of the U-shaped chamber yield much of special interest, nor yet the small rooms to which

it leads. In the passage was a large jar resembling Pl. xxxvii, fig. I, but broken, containing a few bones; a jug and some saucers of the commonest type (similar to Pl. xxxviii, fig. 3, and Pl. xxxvii, fig. 4), and a lamp of the ordinary pattern. There was also a fragment of the rim of a very large bowl, which when complete must have been about 1' 8" across.

On the other hand (7), and the room (8) opening out of it, were by far the richest in deposits of any portions of the cave. The happy accident of the fall of rock had sealed the precious contents of these rooms from depredation. The contents of these chambers alone rendered the discovery of the cave one of the most remarkable archaeological "finds" made in Palestine.

In (7) was little but pottery, but of this there was a considerable quantity,



Figs. 43, 44. -BRONZE TOT AND SCARAB FROM THE CISTERN IN CHAMBER (5), CAVE 28 II

forming a valuable series of contemporary types. Some of the jars contained infant bones. The human bones were in fair preservation, and the pottery was grouped about them. Besides the pottery there were a few inlaid strips of ivory shewn in Pl. xxxiv, and a scarab and gold-mounted bead (Pl. xxxvi, figs. 15, 16). In this chamber there was also a horn adze (Pl. xxxiv, fig. 31).

Chamber (8) contained another fine series of pottery and alabaster vessels, collected in groups containing from two to about a dozen fragments and pieces: it is noteworthy that with the unbroken specimens numerous fragmentary vessels and potsherds were found associated. Unfortunately the bones were few, scattered, and perfectly rotten, and the manner of interment could not, therefore, be exactly determined: it is probable that each group of pottery was the collection deposited with a burial. Underneath the pottery lay concealed a considerable number of

scarabs, some of them mounted in gold (see Pl. xxxv): the bronze gilt pin (Pl. xxxv, fig. 27) was found in this chamber also.

At the mouth of the narrow passage south of chamber (8) was a collection of one-handled jugs, near which was a bowl, inverted. There were also some beads and a few scarabs, as well as two bronze spearheads (Pl. xxxiv, figs. 32, 33). The passage itself, and the cell to which it led, were empty.

The passage leading to (9) was also empty, and (9) itself contained nothing but a few fragments of a tibia, shewing that one interment had taken place here. There were a few primitive fragments of pottery (shewn on Pl. xxxvi, fig. 3).

The broken chamber (10) contained a considerable number of primitive fragments of pottery in drab ware, some of them covered with white wash and red drip-lines. Ledge-handles were attached to some of the fragments. There were also fragments of stone rings, anodonta shells, and needles made of the leg-bones of cranes. A small stone corn-rubber must also be mentioned, and a bronze punch.

Covering the entrance shaft to chamber (8), above and around the great stone by which it was stopped, was a pile of potsherds. These had been broken on the spot, as was shewn by the fact that many could be pieced together. The majority of the pieces were coarse drab saucers of very common types. It is possible that this heap of pottery has no connexion with the cave or its contents, but is merely the debris of an ashpit—several similar ashpits were found not far away; but it is also possible that we have here a trace of a very early custom which even yet survives in some places—that of breaking vessels at a shrine or at an interment. Some fragments of cow-bones found mingled with the potsherds seem rather to favour the former alternative. The fact that the fragments can be pieced together does not necessarily weigh against it: a dish might have been broken in two, accidentally; the two fragments would then be naturally thrown into the rubbish heap, and would probably become still further fractured by the fall.

The human remains which were found buried in the cave were all badly decayed, and little could be made of them. They belonged to the early Semitic type described in the previous chapter. There were some curious examples of the deposits of bones in jugs, as under:

In a jug (Pl. xxxviii, fig. 1) from chamber (7): the fast thoracic vertebra of an infant, the last right great-toe joint of an adult, the semilunar bone of the right hand of an adult, the first upper molar of a child of six, the cuboid of the right foot of an adult, the metacarpal of a fourth finger, portion of a rib, the first phalanx of a foetal great toe, the lumbar rib of an adult, and the cartilage of the epiphysis of the lower end of the femur of a child of one year.

In a large jar resembling the great jar from (8) (Pl. xxxvii, fig. 1), found in the tunnel extending southward from (6), was a small clavicle and some vertebrae.

The *stone and metal* objects found in the cave are as follows. In *stone*, a few flint knives, all flaked and of poor quality: representative specimens are shewn in Pl. xxxii, figs. 15, 21, 24, and in Pl. xxxvi, fig. 17. These flints were found in the cistern in (6), and in chambers (2) and (8). In the northern branch of the U-shaped

chamber was found the small chipped flint PI. xxxvi, fig. 20. A flint scraper came from chamber (10).

A few rudely worked nodules of limestone were also discovered in the same part of the cave: such are the fragments of soft limestone with a hollow sunk in each face (PI. xxxvi, fig. 19), a similar piece of stone with a hollow in one face (not illustrated), and a perforated pebble (fig. 18).

Two slightly hollow circular stone dishes supported on three feet were discovered, one in chamber (2) (PI. xxxii, fig. 6), the other in (10). Of these the first was of considerable size, being $12\frac{1}{2}$ " in diameter. The other was *flat* on the upper surface, and was of value as it determined once for all the purpose of these footed trays; for with it was a hemispherical pebble, evidently the associated grinder, for trituration of grain.

The only *metal* objects that were not personal ornaments are the two spearheads from (8), the punch from (10), and the bronze pot found in the cistern in (7).

The spearheads are shewn in PI. xxxiv, figs. 32, 33. They are of a type common at all periods of the city's history—triangular blades with rather rounded tips and flat tapering tangs. The lengths of these spearheads are respectively $5\frac{3}{4}$ " and $7\frac{3}{4}$ ".

The punch is also of a common type (though its association with cave-dwellers' pottery is a little unexpected, and no doubt to be explained as an intrusion). It is $7\frac{1}{8}$ " long.

The pot, on the other hand, is unique. It has been illustrated above, fig. 43. It has a round bottom, a rather cylindrical body, and rounded mouth, strengthened by a slightly thickened rim, pinched at one side into a slight spout. One loop remains to shew that it was originally provided with a handle, like the handle of a bucket (possibly a thong of leather): this, with the corresponding loop, has disappeared. This interesting vessel is $6\frac{1}{2}$ " deep; its diameter through the spout is 9", and the diameter at right angles to this 7".

The principal objects in *ivory* are collected together on PI. xxxiv, which speaks for itself and calls for little description. There are thirty ivory inlays, used probably for decorating sword-hilts and similar objects. These objects are common at all periods and shew little variation from age to age. Punched circles (as in figs. 1, 22, 23) are on the whole the commonest decoration, though diagonal lines parallel (figs. 3, 15) or in zigzags (29) are found almost as frequently. On the other hand, transverse lines parallel to the long sides of the slip (as in 18-21) are rare, and it is still rarer to find them filled in with black enamel, as they are in the present examples. Dots (as in 10, 11) or oval indentations (24, 27) are also uncommon.

The peculiarly shaped slips nos. 2, 24-27, must be members of a pattern formed by a group of specially prepared inlays. No. 5 is unusually broad, no. 25 unusually narrow. These inlays were all found scattered through the earth on the floor of (8), except nos. 1-3 and 28-30, which came from (7).

There is another bone inlay of peculiar shape, shewn on PI. xxxvi, fig. 5. It was found broken in two in (7).

From the same place came the interesting horn adze shewn on PI. xxxiv, fig. 31. It is the base of a large stag's horn, with bevelled edge, and with a rectangular hole cut through it for the handle. A small circular hole cutting the axis of the first at right angles is provided, to hold a rivet whereby the head was prevented from slipping and flying off the handle. This object when found was much decayed and soon after removal fell to pieces. With considerable difficulty I cemented the fragments together in order to make the drawing from them, but the particles had no cohesion, and it was impossible to make the repair permanent. When fresh and strong, however, this tool was well adapted for breaking the soft rock in which the cave was excavated, and I am inclined to believe that we actually have in this adze one of the implements wherewith the cave was originally hollowed.

Two ostrich eggs, broken into many fragments, may be recorded here. They also come from chamber (7).

The objects in *alabaster* collected together on PI. xlii must next be noticed, as well as the black slate vessel, fig. 2 on the same plate, and the alabaster pot PI. xxxix, fig. 15. These all have a flat circular top and round mouth (in fig. 6 the top is broken off) underneath which is a hollow neck. The body is triangular in vertical section (as in figs. 3, 8); elliptical (fig. 9 an especially fine specimen—the small pot PI. xxxix, fig. 16, is somewhat similar); globular with round base (fig. 1) or with flat base (fig. 5); or else inverted conical with flat base (figs. 4, 6, 7).

The black slate vessel is remarkable. It has a turned foot, slightly hollow under the base, which is too narrow to allow the vessel to stand upright. The top is unfortunately broken off.

The most striking object in *gold* is the armlet, PI. xxxi, fig. 1. This is a long strip of flexible gold leaf: the broader end is unfortunately torn away, and has a ragged end, which is slightly under 1" in breadth. From this it tapers along its whole length of 10½". The narrow end is rounded. The armlet is ornamented with a row of repousse dots along each edge and round the surviving end. It evidently was secured by a hook now lost, fastened to the broader end by four rivets (the holes for which remain), and catching in the loop with spiral coils which is still secured to the narrow end. This is not fastened with rivets, but by some welding or soldering process: I was afraid to examine it too closely for fear of detaching it from its place.

The gold flower, such as fig. 19 on the same plate, is another characteristic type. Three of these were found in the cave—one at the outer entrance to chamber (1), the other two with the armlet in group A. They are discs, roughly cut into a cog-wheel shape, with a repousse boss in the middle perforated by a pinhole. They are no doubt intended to represent flowers, and probably were meant for sewing on to garments. A gold flower, of the same general type, but much more realistic and with three thread-holes, was found in slightly later debris elsewhere in the mound.

On the same plate are three gold beads (figs. 20, 21, 23), which also seem to be reminiscent of a vegetable original—in their shape and the ornamental reeding of their surface they resemble unopened buds. These likewise came from group A.

Fig. 22 in the same plate is a plain gold disc, circular, with a segment roughly cut out of it. Possibly it was broken away from some larger ornament.

The bead, fig. 29, is composed of two thin concave plates welded together two minute perforations being left on opposite sides of the edge. The finger-ring, fig. 28, is a plain loop of wire which (as was almost always the case in metal finger-rings formed of a looped wire), was thickest in the middle and tapered to a point at the two ends.

The objects on Pl. xxxv came from chamber (8). The pin, fig. 27, is not of gold, but of bronze, gilt. The point seems to be hollow. The handle is ornamented with a continuous beading. At the junction of the handle and point is a flat guard, to which a moveable ring is suspended. The point tapers regularly from this guard to the tip: at its base is a delicately incised lotus flower ornament. The total length of this object is 5½".

Fig. 33 of the same plate represents a finger-ring about f" in diameter. It essentially resembles the other ring in being made of a wire thickest in the middle and tapering to a point at each end. It differs, however, in the points being prolonged and twisted spirally round each other. The joint is partly concealed by three minute annulets, also of gold, but of a deeper colour, threaded upon the wire.

The *silver* objects are of less varied interest. Beside the scarab mounts, some still retaining their hold on the scarab, others (Pl. xxxvi, figs. 7-9) broken away, there is nothing but the looped hairpin, the pendant crescents, and the earrings, all from group A, and all represented in Pl. xxxi, figs. 12, 13, 14, 16, 25.

Neither do the *bronze* ornaments appear to be of much account. Two fragments are shewn of hairpins, similar to that of silver—one from group A (Pl. xxxi, fig. 17), the other from (7) (Pl. xxxvi, fig. 12). A small double-headed wire, bent into a loop (Pl. xxxvi, fig. 13), came also from (7). A considerable number of featureless fragments of stems of bronze pins were found in various parts of the cave: there were also a few scarab mounts, as Pl. xxxvi, fig. 6.

The *beads* are of a large variety of materials and types. Agate, jasper, crystal, and carnelian are the ornamental stones used: one peculiar bead, shaped like a sea-shell (Pl. xxxi, fig. 11), was of malachite. Paste, covered with enamel of different colours, was also used, the colours being green, blue, yellow, and dark brown.

The shapes of the beads are double conical, cylindrical, oval with flattened facets, spherical, and discoidal: typical specimens of each variety and material will be found in the accompanying Plates, xxxi, xxxv, xxxvi. One of the most interesting was a cylindrical bead, with elliptical transverse section, of green enamelled paste ornamented with brown dots. It had a gold cap at each end (Pl. xxxvi, fig. 15). This, and one scarab (fig. 12), were the only objects other than pottery, bone, and alabaster found in (7). From (5) there was one amethyst bead (Pl. xxxvi, fig. 10).

Two blue cylindrical paste beads (Pl. xxxvi, fig. 14) came from (8), close to the small southward passage. The group of carnelian beads (Pl. xxxv, fig. 32) were from the same place. The rudest bead was the rough perforated pebble (Pl. xxxvi, fig. 18). This was from chamber (7).

Group A yielded three cylinders. One of these (Pl. xxxi, fig. 2) was of green enamelled paste with gold mount, still retaining its silver setting. A second was of the same material and colour, ornamented with delicate crossing diagonal lines (Pl. xxxi, fig. 24). These were evidently merely ornamental. The third, being a seal-cylinder, was more interesting. It was of a brown-coloured stone, and bore four vertical rectangular compartments, three of them containing palm-branches, the other a peculiar device of zigzag lines and crescents which I am unable to explain (see Pl. xxxi, fig. 15).

I now come to the *scarabs*, of which there was a fine collection. The majority were from chamber (8): one was from (7), and a few were from group A in chamber (2). We shall begin with the most important group, which is shewn on Pl. xxxv.

1-7. Plain uninscribed scarabs in amethyst, most of them poor flawed stones. The purple colour varies considerably in intensity. All are mounted in a gold band surrounding the sides and edge of the base, except in the case of no. 6, which is unmounted. This gold band is plain, except in no. 1, which has a line of delicate beading on the vertical and horizontal faces of the gold band; and no. 5, which has a slight projecting horizontal rim all round the base. Attached to the gold mount there is in the perfect specimens a small circlet of gold, which was evidently intended to prevent the ring from fraying away the thin mount by friction. The ring itself is a loop of gold, silver, or bronze, rather more than two-thirds of a circle with flattened perforated ends: through these was a fine gold wire, on which the scarab is threaded. This wire is coiled round the ends of the ring. The wire is generally of gold, but in some, such as no. 3, it is of bronze. The gold band of no. 7, which has lost its circlets, is unusually deep for the size of the scarab. This set of amethyst scarabs varies in length (exclusive of the mounts) from $\frac{1}{2}$ " to $\frac{7}{8}$ ".

8. Carnelian scarab, uninscribed, with gold mount and ring. The legs of the scarabaeus are roughly indicated on the left side, but not on the right. The length is $\frac{1}{2}$ ".

9. Fine green serpentine scarab in a massive gold mount. Length $\frac{7}{8}$ ".

10-12. Three plain scarabs of dark greenish basalt. One of these (no. 12) has a white vein on the right-hand side. The heads and thoraces of the scarabaei are indicated, but the sides and elytra are plain as in all the previous examples. When found, no. 10 had a flimsy gold-leaf mount which snapped and fell off when touched; no. 11 retains its mount, but has lost the ring; no. 12 was found unmounted. Length between $\frac{3}{4}$ " and $\frac{1}{8}$ ".

13. Steatite scarab in gold mount: the head and legs of the insect are indicated but not the elytra. The base seems to have borne a device which is, however, almost totally effaced. Length $\frac{1}{2}$ ".

14. Steatite scarab unmounted: a dab of brown enamel on the elytra. The legs are summarily outlined and left flat, not cut away as in nos. 20 and 23. The base bears a kneeling figure holding a lotus blossom with a long zigzag stalk: below is *nb* ("lord").

15. Steatite scarab mounted in a corroded silver ring. The elytra of the

beetle are not indicated, but the engraving of the legs is a little less elementary than in the preceding example. The device consists of groups of S and C curves forming eight spirals with a figure-of-eight knot in the centre. Length £".

16. Small steatite scarab in gold mount, well formed: the legs of the beetle cut in relief as in nos. 20 and 23. On the base four repetitions of the sign *n(u)b* ("gold"), arranged symmetrically with respect to *nfr* ("good") in the centre. Length $\frac{1}{2}$ ".

17. Unmounted steatite scarab in detail resembling no. 14, though without the brown mark on the back. On the base, fourteen spirals in three rows, formed by S curves. Length £".

18. Unmounted steatite scarab resembling the previous specimen. On the base is the combination of the characters *mht* and *rs*, which typifies the union of Upper and Lower Egypt: this symbol is very roughly drawn. Below is a papyrus sceptre between two crowns of Lower Egypt. Length $\frac{7}{8}$ ".

19. Unmounted steatite scarab resembling the preceding. On the base, inside a beaded border, is a ring of spirals formed of S curves, hooked to a circle at the top, and containing the characters *sn-nfr* ("good circuit"). Length $\frac{7}{8}$ ".

20. Well-cut scarab of steatite resembling the preceding with a symmetrical knot on the base. Length about $\frac{13}{16}$ ".

21. Minute steatite scarab in gold mount, set in a silver ring: well and carefully cut. On the back the now greyish white enamel is scraped off along the division of the elytra. On the back is *nfr* ("good"), flanked on each side with '*nh* ("life"); above is '*mn* ("established power"); below are the letters *t*, *mn*, and *n(u)b* inverted. Length $\frac{1}{2}$ ".

22. A small steatite scarab, plainly executed: the perforation contains the corroded stump of a bronze wire. The device is three S curves with *nfr* ("good") twice repeated. Length $\frac{1}{2}$ ".

23. A large and well-executed scarab of steatite. The anatomical details of the scarabaeus are well indicated. The inscription on the base is in three columns—The two side columns are symmetrical and contain symbolic figures—at the top the divine eyes, then the crown and the flower of Lower Egypt, the bee indicating the king of Lower Egypt, and the character *lit* ("front"). The central column bears the papyrus sceptre *w'd*, and the letter *k'-li-nfri*, perhaps meant for the throne name of Senwosret III, H-k, '-r'. Compare the very similar scarab, also assigned to Senwosret III, 'in Ward's *Sacred Beetle*, Pl. ix, fig. 403. Length $\frac{1}{4}$ ".

24. Steatite scarab, well executed, in gold mount set in a silver ring. The thick greyish white enamel has been scraped off the middle of the back of the beetle, shewing the brown-coloured stone below—exactly as in no. 21 above. The device is a group of four lotus blossoms with their stalks connected by a figure-of-eight knot similar to that shewn in no. 15. Above is *n(u)b* ("gold"); below, a flying scarabaeus. The cutting of this specimen is very fine. Length $\frac{7}{8}$ ".

25. Polished blue limestone scarab, well cut, unmounted. The device consists of a geometrical ornament above, with an inscription in three columns below. The two outer columns read *sn-nfr*, as in no. 19: the middle is *nfr-hpr*. The length is $\frac{5}{8}$ ".

26. Well-cut steatite scarab: the device is a rather poorly designed pattern of S and C curves, with two circles filling it at each end. Length $\frac{5}{8}$ ".

27 (Pl. xxxv, fig. 28). Steatite scarab, the enamel originally of a yellow colour, which survives in the incisions. The head, thorax, and legs of the beetle are indicated, but not the elytra. The device is a twist of two cords running vertically down the middle, with on each side *nfr* and *w'd* alternating symmetrically: between them *t*. Length $\frac{5}{8}$ ". This is a typical Hyksos scarab: compare Pl. xix, fig. 2, of Newberry's *Scarabs*.

28 (fig. 29). Steatite scarab rudely executed, and inscribed *n(u)b-mn-r*. Length $\frac{1}{2}$ ".

29 (fig. 30). Steatite scarab which has been covered with a black colour that remains in the incisions: it is similar to no. 28 in character. It bears *nfr*, with a uracus and the divine eye. Length 1".

30 (fig. 31). Uninscribed crystal scarab in gold mount. Length $\frac{5}{8}$ ".

31 (Pl. xxxvi, fig. 16). A fine deep-coloured amethyst scarab, uninscribed, in gold mount. Length $\frac{7}{8}$ ".

32 (Pl. xxxi, fig. 27). This is a scarab of grey paste, with traces of yellow inlay in the incisions. It was found at the end of the passage running south from (2), close to the entrance numbered A* in the plan. The device consists of an animal walking to the right: above is *nb*, and in front of it an indistinguishable character. Length $\frac{3}{4}$ ".

33 (Pl. xxxi, fig. 3). This and the remaining scarabs of the series came from group A. It is a plain amethyst scarab, similar to the others of the same material in gold mount and silver ring. Length 1".

34 (Pl. xxxi, fig. 18). A very fine plain scarab of clear crystal, in gold mount, silver ring. Length 1".

35 (Pl. xxxi, fig. 30). Steatite scarab which has been covered with a black-coloured enamel: this clogs and rather obscures the device. It consists of a line of writing between two bands of spirals, ending above with lotus flowers. At the top seems to be *h-r'-?-ti* (?), below which is *w'd*, *'nh*, and *nfr*, then *stn biti*, and below that again *Apr*, flanked by *'nh*.

36 (Pl. xxxi, fig. 4). Steatite scarab bearing the inscription *r-hpr-n-nb* (?).

37-40 (Pl. xxxi, figs. 5-8). Four small plain scarabs, two of amethyst, one of basalt, and one of paste enamelled blue.

The large collection of *pottery* and fragments recovered from the cave was of peculiar value. It afforded ample material for the study of the different types of ware and vessels employed at the time when the cave was in use: for that reason I have deemed it desirable to prepare coloured plates of almost the entire series of the vessels from the cave, in order so far as possible to make them available for study.

The pottery falls distinctly into two series—one, as I understand it, a legacy surviving from the period when the cave was used as a habitation; the other, which forms by far the larger proportion of the collection, being the deposits left when it was adapted for burial.

Of the first series, but one whole vessel was left—the fine jar with ledge-handles (Pl. xxxii, fig. 1). This is a typical specimen of early ware, made of rough coarse

gritty pottery of a light reddish drab colour: it has a flat base, gently swelling body, and cylindrical neck. The mouth is strengthened by a slight thickening. There are two plain ledge-handles. The height of this is $9\frac{5}{8}$ ". The sides are painted with rough vertical lines in dark Indian red, applied directly to the surface of the pottery.

Also early, though perhaps not of equally high antiquity, are the remarkable series of waterpots recovered from the cistern in chamber (2). They are illustrated on PI. xxxiii. This is a perplexing group of pots. The ware, especially of figs. 1 and 4 on the plate, shews the rough grittiness that characterizes the most ancient vessels; but in form they are certainly more comparable with vessels of the second period (represented by the interments)—if, indeed, nos. 2 and 3 could be considered so old. The large pot, fig. 1, with its blunt base and almost Greek-like handles, curving upwards, is unique in shape among Gezerite waterpots. It is $1' 5\frac{1}{2}$ " high. To find so large a vessel in a cistern is extremely rare. As a rule large vessels were not dipped into the water, owing to the difficulty of drawing out their heavy weight when filled: the smaller jugs, such as those with which it is associated, are however frequently found.

A good many fragments, displaying ledge-handles, were found in the earth filling chamber (1), and others, which are drawn on PI. xxxvi, fig. 3, were discovered in the small chamber (9). The cistern in the passage south from (2) also contained a considerable quantity of primitive potsherds, none of them, however, displaying any very characteristic features. The most interesting are shewn on PI. xxxii.

From these scanty relics we turn to the remains of the interment period, which, as already hinted, were of great value and richness.

In describing these, we shall first concern ourselves with the ware, then with the shapes of the vessels. Last, we shall give an account of the grouping of individual vessels within the cave.

The ware in the majority of vessels is coarse and gritty. Nearly all the commoner and ruder vessels shew small pebbles or stone powder in their texture. In some extreme cases the grit seriously interferes with the cohesion of the ware, which snaps under a moderate cross-strain like a biscuit. It is possible to arrange the pieces in a continuous gradation, those shewing many grits at one end of the line, those with perfectly homogeneous clay at the other. At one end of the line would be such vessels as the bowl PI. xli, fig. 4, the jugs PI. xxxix, fig. 13, PI. xl, figs. 7, 10, and some half-dozen others, which are very gritty—in the last-specified each pebble is the centre of a star of flaws that radiate in all directions through the vessel. The broken fragments found outside, above the entrance shaft to chamber 8, would also for the greater part be placed here. In the middle of the line would stand the majority of the pieces, few of which are wholly devoid of grit. The other end would contain two classes of vessels: those made of a clay which, though lacking pebbles, is coarse grained (the bowl PI. xxxviii, fig. 18, is a good example), and those carefully made of a very fine, hard, homogeneous clay, evidently selected with deliberation for the purpose of making ware of superior quality. The bowl PI. xxxviii, fig. 14, is an exceptionally fine example.

Some idea of the proportion of gritty to homogeneous ware will be obtained

from the following table, drawn from an examination of eighty-eight vessels from the cave :—

Very gritty.	11
Fairly numerous grits	5
Gritty.	4
Fairly fine, but gritty.	11
Very few grits	22
Coarse homogeneous	14
Fine homogeneous	21
Total	88

It is to be remarked further that, generally speaking, certain classes of clay appear to be reserved for certain types of vessel. This is specially to be noticed in the case of the fourth type of jugs (see below), of which out of nine specimens all but one are of fine homogeneous clay, the exception being also of homogeneous clay, but rather coarser than the rest. The lamps, too, are almost exclusively of homogeneous or very slightly gritty clay. On the other hand, of the wide-spreading Bowls six were found of which three (one half) were to be classed as "very gritty."

The colour ranges from a very dark drab (almost black) through a regular spectrum of shades of red and yellow to a light cream. A few vessels are of a dark olive-green shade. As is often the case, the centres of fractured edges are generally found to be of a colour different from that of the surfaces—black between two red surfaces is about the commonest.

There is a good deal of difference in the baking of the vessels. Most of them are very hard-baked; but some (such as PL xxxix, fig. 11) are so soft that any attempt to write upon them with a pencil cuts an indentation in the surface. As might be expected, the softer-baked vessels show a tendency to disintegration.

Slip is exceptional. The jug PL xl, fig. 6, has a light red slip covering the yellowish brown pottery: the slip, however, has nearly all perished owing to the decomposition of the surface of the pottery. The bowl PL xxxix, fig. 6, has a red slip on its upper surface; and the two fragmentary jugs PL xl, figs. 16, 18, have a slip of dark Indian red colour highly burnished. The painted jug PL xl, fig. 12, has a brownish red slip, as has the bowl PL xxxvii, fig. 4.

One vessel (PL xxxvii, fig. 3) has been submitted to so severe a fire that it is burnt black throughout.

All the vessels, without exception, have been made on the wheel—the handles being modelled separately and stuck on in place afterwards. In the more carefully made vessels (such as PL xxxviii, fig. 14) the circular lines surrounding the vessels, resulting from the process of manufacture, have been smoothed off. Combed ornamentation is not very common: there is a band of it surrounding the body of the large jar PL xxxvii, fig. 1, at the level of the upper attachment of the handles; and in the jug PL xxxix, fig. 10, a comb has been lightly pressed against the vessel and

moved upwards as the wheel rotated, so that the indentations travel spirally up to about the middle of the vessel. The bowls PI. xxxviii, figs. 5, 15, have been distorted by careless firing.

Burnishing is rare. It is found only on the three ornamental jugs PI. xl, figs. 15, 16, 18, and the jug PI. xxxix, fig. 19, which is burnished horizontally on the shoulders, vertically on the sides. A few vessels bear lines of depression as though they had been treated with a burnishing tool which for some reason failed to burnish: such are the jugs PI. xl, fig. 11, and PI. xli, fig. 9.

Painted ware in this later period is strangely absent. Only two specimens were found: the bowl PI. xxxviii, fig. 18, in which the margin is picked out with a line of dark Indian red, and the jug PI. xl, fig. 12, which has a group of red, white, and black lines upon it.

We may now proceed to a description of the types of vessels discovered in the cave, taking first jars and jugs, then bowls, and finally lamps.

(1) The vessel first calling for notice is the large jar PI. xxxvii, fig. 1: this was the only specimen found entire in (8), though there were considerable fragments of two others and sherds of several more in the same chamber. In the passage running south from the broken chamber east of (5), (7), another specimen was found. It stands 1' 10" high, and has a round, slightly moulded mouth, two handles, and a conical body, ending in a blunt point. The ware is coarse drab, but not very gritty.

(2) Of jugs by far the commonest type is that we shall denote here as type I, specimens of which will be found on almost all the accompanying plates of pottery: PI. xl, fig. 1, may be taken as a good example. These jugs have an oval body with pointed base and pinched-in neck, expanding almost immediately into a mouth, the lip of which is lengthened into a spout. There is one handle which springs from the shoulder and from the side of the mouth, either immediately or, in the great majority, a little below the lip. In PI. xl, fig. 3, the lip is strengthened by a slight internal thickening. The butt end of PI. xxxix, fig. 19, is unusually blunt, but does not attain to the roundness that characterizes similar one-handled jugs of a later date. The largest specimen of this type of jug found in the cave (PI. xl, fig. 1) measures 10¾" in length; the smallest 7".

A variety of the type is shewn in PI. xl, fig. 2, which has a more or less cylindrical neck, and a circular (not spouted) mouth, with the lip flattened outward all round. The base of this vessel is not pointed, the extreme tip being flattened.

(3) The second type of jugs is represented, in this collection, by three specimens only—two large (PI. xxxviii, fig. 1; PI. xli, fig. 10) and one small (PI. xxxvii, fig. 3). Unlike type 1, which of course cannot stand without support, these jugs have a round base which, in the first-named, is a projecting ring, in the other two a flat disc. The body expands into an inverted conical or globular form, and then contracts to a neck: the mouth is spouted in the second and third above-mentioned, and presumably was also spouted in the first, the lip of which is broken.

(4) Four specimens—all but one imperfect—survive of type III of the jugs. This very graceful class of vessel (for the perfect specimen see PI. xxxviii, fig. 17—the

others are shewn on Pl. xl, figs. 16-18) has a conical body rounding into flat shoulders from which springs a very narrow neck, expanding at the top into a mouth with round thick lip. There is one handle, which is not (like the handles of type I) cylindrical, but broad and flat with a slight wave down the middle, or else a deep groove which gives the handle the appearance of two cylindrical handles side by side. In the present series the latter variety is illustrated by one specimen only, Pl. xl, fig. 17. The base terminates in a cylindrical projection (Pl. xxxviii, fig. 17), or a button (Pl. xl, fig. 18). It is possible that the broken fragment Pl. xxxix, fig. 20 was part of a jug in which this projecting base was greatly exaggerated.

(5) The fourth type of jugs, of which nine specimens were forthcoming, may be regarded as a variety of the third. The neck, handles, and shoulders are identical in appearance; but the body, instead of tapering rapidly into a complete cone, contracts very gently and is the frustum of a cone—indeed, in some specimens it is practically a cylinder. The base is never absolutely flat, but always very slightly convex. The double handle is here the rule rather than the exception (see for example Pl. xli, fig. 8). It is found in six of the nine specimens, the waved handle in two. The largest perfect example of this type found is $5\frac{3}{4}$ " high, the smallest $4\frac{1}{2}$ ". It has already been mentioned that this type of jug is invariably modelled in very fine clay.

(6) There remain a few jugs which cannot be classed with these, but are individual specimens of types not otherwise exemplified in the cemetery. Of these the most interesting is the little vessel Pl. xl, fig. 12. It is of conical shape with deep rounded base—not unlike a modern claret jug—and measures $5\frac{1}{4}$ " in height. The mouth expands, but is not spouted. Round the body are painted four lines in dark brick-red, with between them three lines in black, smeared over with white. This is a survival of a yet earlier technique of pottery painting which consists in filling up the field to be decorated entirely with lines, straight or zigzag, red, white, and black. The white is a coarse lime-cream. Fragments of similar technique belonging to the earlier period were found in the cistern in (5), and are shewn in Pl. xxxii, figs. 8, 17, 18.

Pl. xxxvii, fig. 2, is an elegant vessel with wide circular mouth, short neck, flat shoulders, and inverted conical body. A beading, composed of a separate piece of pottery fastened on, is added just at the intersection of the neck and shoulder. There never was a handle. The base is broken away. The whole vessel is covered with a creamy yellow slip.

Pl. xxxix, fig. 1, is a standing cup on a hollow trumpet-shaped foot. A fragment only survives, and no part of the rim remains. It is impossible, therefore, to say how it was finished. The ware is fine and homogeneous, but disintegrates easily.

Pl. xxxix, fig. 11, is a small vessel in fine reddish yellow ware that might be classed with type II, from which it differs in its minute size only. Its height is $2\frac{5}{8}$ ". The handle, restored in the drawing, has disappeared.

Pl. xxxviii, fig. 16, is a curious vessel shaped (in its present form) like a modern oil-can. There was, however, a handle originally, which has been lost. Round the margin of the base on the under surface are exceedingly delicate lines caused by the slight pressure of a fine comb.

(7) Of bowls by far the commonest type is that of which a good specimen is shewn PI. xxxviii, fig. 6. From a round base—in the normal specimens invariably a projecting disc, slightly hollowed in the middle—rises an inverted conical body, the sides of which, at rather more than half the height of the vessel, contract slightly to the top, where they again expand into a horizontal lip. This graceful form of bowl lasted in use for a very long time.

There are several varieties produced by altering the relative proportions of the conical base, the contracting sides, and the horizontal lip. Thus, in the fine example PL xxxix, fig. 4, the lip is exaggerated at the expense of the other two members; and this is even more so in PI. xxxviii, fig. 14, in which the conical base has become flattened out, with a little circular hollow in the middle—a singular anticipation (not only in form but also in the fineness of the ware and carefulness of manufacture) of bowls executed under Greek influence in the Hellenistic age. On the other hand in PI. xxxix, fig. 16, it is the conical part which is exaggerated at the expense of the other members. In PI. xxxviii, fig. 18, the contracting part is "reduced to its lowest terms." In PI. xxxix, fig. 14, a variety is obtained by omitting the disc base altogether and substituting a rounded bottom for the conical lower part. One or two of the abnormal specimens above referred to (such as PI. xxxix, fig. 4, and PI. xxxviii, fig. 18) substitute a projecting ring for the hollow disc base. There is not much variation in height in these bowls, which averages about $2\frac{1}{8}$ " in diameter at the top the perfect specimens range from $5\frac{5}{8}$ " to $6\frac{13}{16}$ ".

(8) The second type of bowls consists of wide dishes on circular bases. The bases are slightly hollow discs (with one exception, which is a ring): the dishes themselves are broad and shallow. PI. xli, fig. 5, is a typical example.

(9) Two bowls remain not referable to either of the foregoing classes. One of them is PI. xxxviii, fig. 15, which has a flat base and slightly concave oblique sides: it is in very coarse drab pottery. The other is essentially similar, but the ware is much finer, and the sides are convex on the outer surface of the bowl. It is represented in PI. xxxix, fig. 12.

(10) Twelve lamps or fragments of lamps were found. All of these are referable to one type, a good specimen of which will be found in PI. xxxix, fig. 2. It is a shallow saucer, wheel-turned, with a slight spout pinched in the edge before firing—a contrast to the long narrow channel into which in later periods this spout developed. This spout almost invariably displays marks of smoke-blackening. A few of the lamps (such as PI. xxxix, fig. 3) are slightly deeper than others, but not sufficiently so to justify their inclusion in a separate class.

Of the broken fragments found above the stone cover of the entrance shaft the three shewn on PI. xxxvi, figs. 1, 2, 4, are the only specimens that require special attention. Of the others the majority were coarse drab saucers or bowls of type I: there was also a fragment of a jug of type I. These add nothing to our knowledge of the forms. The four-handled saucer, however (fig. 1), is unlike anything else found in the mound. The bowl fig. 2 is a specimen of type 11, with a conspicuous thickening inside the lip. The smaller bowl, fig. 4, is a variation of type I.

We must now note the manner in which the objects found were distributed into groups. These were as follows:—

(1) Above the stone filling the entrance shaft of (8), a large pile of potsherds, as already noticed.

(2) In the chamber (8) were six groups, as well as several single vessels: these groups were:—

(a) xl 1 * and the alabaster vase xlii 8, lying on their sides.

(ft) A small group consisting of the alabaster xlii 3, on its side, and xli 15 and xxxvii 3 standing upright. Underneath this group was found the gilt kohl-pin and many of the scarabs, including the important specimens nos. 14 and 23.

(7) Two alabaster pots xlii 4 and 6, lying prostrate.

() Two vessels, xl 8 and a broken jug of type I (not drawn), lying prostrate.

(e) A large and important group comprising the jar xxxvii 1 and bottoms of two similar to it, prostrate—one of the bottoms resting on the lamp xli 3. Underneath the bottom of the large jar, the upper part of another similar to it; and beside it the black slate vessel xlii 2. Around this group was placed, in order, the bowl xli 2, the jug xl 10 (partly covered by a potsherd), the jug xl 11, a lamp of the ordinary type, inverted, the bowl xli 5 (also inverted), the jug xl 7, and the bowl xli 4. There were also several characterless sherds.

() Close by this group was a small collection containing the alabaster vessel xlii 1, the handsome jug xxxvii 2 (inverted), and a jug of type IV (not drawn) on its side.

(3) At the entrance to the small southern passage were three jugs of type I, all lying on their sides—namely xl 3, 4, 5; one of type III, namely xl 16; and also the painted vessel xl 12. Close by was the bowl xli 6, inverted.

(4) In chamber (7) were seven groups and several single vessels. Owing to the fall of the rock a good deal of the earth had silted in, so that these were covered and not, as in chamber (8), lying exposed when the cemetery was first entered. The following are the groups:—

(a) Near the end of the partition between (5) and (7), the jug xxxix 17 and bowl xxxix 16.

(ft) Just south of (a), the bowls xxxix 6, 14, 18, and the jug xxxix 10.

(7) Close to the fallen rock-roof, the alabaster jug xxxix 15, and the pottery objects xxxix 5, 8, 11, 12, 19.

(8) South of (7), xxxix 1, 2, 4, 7, 9, 13.

(e) West of the last, a jug of type I, not drawn, the jug xxxviii 1, also xxxviii 17, 18, and a bowl of type I.

() In the centre of the chamber, two jugs of type I, also xxxviii 12, and a lamp.

(n) At the south side of the chamber, not far from the door to chamber (8), xli 8, 9, 10, II, 16, xl 14, and the alabaster vessel xlii 5.

I may also mention two lamps placed together in the crevice of the rock on the north side. The vessels on Plates xxxvii-xlii not enumerated in the above catalogue were found singly in various parts of the two chambers (7), (8), and were not associated with any special pottery groups.

Two of the chambers—(4) and (6)—had, as already mentioned, been adapted as

* These numbers denote the plate and the figure on the plate.

cisterns at a subsequent period, and their contents belong to an entirely later archaeological stratum.

The most interesting of the objects from (4) are shewn in fig. 42 above (p. 121). They consist of a tanged arrowhead, with ogee-shaped blade (no. 1), and a small axhead-like object (no. 2), both in bronze (the latter is an unusual type in Gezer): beads—no. 3 is in red enamelled paste, as is also no. 10, which, however, is more glazed; no. 4 is yellow enamelled, nos. 5 and 6 green, nos. 8 and 9 grey; no. 10 is a flat disc of bone: spindlewhorls—no. 11 of polished diorite, no. 16 of bone: a fine polished diorite macehead (no. 15): among a great mass of potsherds, of no special interest, three pieces to which attention may be called—the bottom of a bowl with a spiral burnished on it (no. 13), a peculiar handle (?) with a perforation through it (no. 17), and the lower part of a very rudely modelled figure in black ware (no. 18). There is also the bezel of a green enamelled paste seal-ring, bearing a scarabaeus—this indicates the period of Amenhotep IV, which would accord well with the other objects recovered from the cistern, so far as they indicate date at all; and a yellow-coloured scarab, shewing on its base *hpr* between two uraei.

From (6), the "cistern" period of which is considerably later, some specimens were found unlike anything else recovered from the rest of the mound. The most interesting are collected on Plate xliii.

Figs. 1 and 2 of this plate represent two pieces of coloured ware belonging to the Mycenaean technique that in the later Canaanite period spread over Southern Palestine under the influence of the civilization of the Aegean. Fig. 1 is of native manufacture. It was actually found in chamber 5, being probably brought in by one of the well-sinkers who worked in the adjacent room 6, and employed by him in scraping the earth in search of treasure. He may easily have found it, in the first instance, in digging the cistern shaft. The second fragment is an actual importation, and displays the characteristic Aegean glaze.

Figs. 3 and 4 are specimens of portions of waterpots found in the cistern. Fig. 3 is a fragment of a peculiar type with three looped feet, in shape resembling handles. This type of vessel had a limited range of use, being found only about the time of the latter part of the Hebrew monarchy.

Fig. 4 is a round-bottomed pottery bucket, with two corresponding holes under the rim for a strap or metal handle. Several other fragments of waterpots, of no special interest, were found in the well.

Fig. 5 is a fragment of a shallow rectangular stone tray of diorite, with a handle at the surviving end. The three aspects *a*, *b*, *c*, in the plate sufficiently illustrate it. Such a tray is unique so far as the excavations have gone: stone trays are common, but they are generally round.

Fig. 6 is a peculiar object of stone resembling a pedestal. It stands 1' 2½" high. The dotted line in the diagram represents the internal section. What purpose this object served it is impossible to say. I have thought that it might possibly be a spindle, for the rope of the well-bucket: the objection to this suggestion is the absence of rope-marks on the side of the object; such marks would certainly be worn upon the very soft stone. The better to illustrate it a photograph is here subjoined, fig. 45.

It now remains to endeavour to deduce the history of this interesting cave from the indications which its contents afford.

That originally it was the home of a cave-dwelling community there can be no doubt. They have left evidence of their presence all through the system, in rude rubbing stones, fragments of pottery, and other relics, especially in chambers (i), (3), and (10).

The first problem that suggests itself to the explorer of such a cave as this is the explanation of the narrow passages that connect the various members of the system; it would appear so much more convenient to make the chambers open off one another directly as in 15 II.

There are two possible solutions to this question. The first is, that the various systems were originally quite independent and were afterwards united by cutting a passage between them. The second is that the passages were made long and narrow intentionally, in order that they might be easily blocked: when an enemy made his appearance at one entry, the inhabitants escaped by the passage and hastily erected a pile of stones—which no doubt would be ready to hand—at the opposite end. There was of course little or no light in the passages, and the pursuer might well be nonplussed by such a simple device. Such a feature as the cistern in chamber (5) might also have been originally cut as a pitfall for unwar' intruders. It is certainly most inconveniently placed as a receptacle for water: it would not gather much, and what water might fall into it would not easily be drawn out. Perhaps there is some truth in both suggested explanations: the different systems may have been connected in the manner suggested above, and the passages were perhaps made narrow on purpose for facility of blockade.

In the cave under discussion, the loose and friable nature of the limestone prevents our obtaining any definite information from a study of the toolmarks, which in a homogeneous rock would be perfectly sharp and would probably settle several questions. The direction of the chisel-marks would shew the direction in which the quarryers worked, and would indicate, for example, whether the tunnel was excavated from both ends at once, like the Siloam aqueduct at Jerusalem. In the present cave we are left to *a priori* probability as our only guide in deciding the reason for its peculiar plan.

The impression that a study of the cave leaves is, that the various members were excavated independently and afterwards united. We thus begin the history of the cave with three separate communities: the *first* group inhabiting chambers (1) (2), (3); the *second*, chamber (4); and the *third*, chambers (5)-(10).

To judge by the size of the chamber-groups, the last-named was evidently



FIG. 45. — STONE OBJECT FROM CHAMBER (6), CAVE 28 II

the most important. There was an unusual number of chambers, and they were unusually large. Probably there was but one entrance, that into the ruined part of (5): the roof-entrance of (8) was most likely made originally merely for convenience in quarrying, and when the chamber was completed was stopped up. In (5) was a pool for water, fed by the rain which fell through specially made holes in the roof—this pool was afterwards deepened into a cistern. In the great cave 16 III in the middle of the hill was a similar pool: it does not appear whether there were similar holes in the roof, as the latter is here destroyed.

Why the family of the (5) group joined their residence to that of the (1) group we can but conjecture. Possibly one remarkable peculiarity of the (1) group of chambers, which we will presently discuss, made it a desirable possession, and in consequence the (5) people captured the dwelling of the (1) people and joined it to their own. Possibly, on the other hand, the families became united by inter-marriages. In any case, it is in the highest degree probable that the tunnel was the work of the (5) people. It leaves the (5) group naturally, but breaks into the (1) group of chambers by a most awkward and inconvenient hole. Moreover the tunnel diminishes in cross-dimensions as it advances from (5) to (1). It is evidently natural that such a tunnel should diminish from the outer end inwards, and unnatural that it should expand, owing to the difficulty of passing material through the narrow entrance.

What then are we to say of the linking of (1) and (4)? Here again *a priori* probability is our only guide. In this case it seems to me most likely that the tunnel was cut from both ends. For if it had been cut from the (3) end alone, we should have to imagine that all the material removed from the inner half of the tunnel was passed through the excessively narrow doorway between (3) and (4); whereas if it were cut from the other end the sudden drop downwards in the middle of the tunnel would not be so easily accounted for: it is more likely that a tunnel should begin low and step upwards than that it should begin high and step downwards. If, however, we suppose two sets of workmen starting, the one from chamber (3) and making their way to just beyond the narrow doorway, the other from (4) and advancing to meet them, the change of direction and level would be easily accounted for by a miscalculation such as we would naturally expect under such circumstances. It may be argued that such a miscalculation is a sufficient explanation of the downward stepping of the tunnel quite independently of the direction in which the quarryers worked; but obviously if the tunnel had been cut from one end only, the downward stepping to correct a miscalculation would have been at its extremity. The purpose of the narrow doorway is easily guessed. It could be stopped up by a moderately sized stone, and pursuers would be absolutely prevented from following any one who might take refuge in the chamber beyond.

Whether the different groups of chambers, as we see them now, are exactly as their dwellers first quarried them, is a question that except in one detail cannot be definitely answered. It is most likely that from time to time chambers were added as they were required. That some plans were abandoned before they were completely carried out is indicated by the unfinished cistern shaft in the passage

south from (5). The one thing that can be definitely said is that the steps found in the cistern shaft at (2) must originally have led to a small chamber at a lower level, which was afterwards deepened. Probably it was noticed that water accumulated in this chamber in winter, making it useless for any purpose but that of a water-store, and this led to the idea of turning it formally into a cistern.

We must now consider a difficult question, the solution of which cannot be reached as yet with any certainty. I refer to the purpose and period of the system of cupmarks in chamber (1).

All the available evidence points to this peculiar feature being the work of the Troglodytes. Cupmarks are found in a good many parts of the mound, and whenever they have any connexion with other remains that can be more definitely dated, these remains are assignable to the cave-dwellers. In this cave the presence of pottery of the earliest type in the earth covering the cupmarks, and entire absence of any later objects in connexion with them, corroborated the conclusion to be drawn from a study of the subject in other parts of the mound.

If then we assume that these cups are the work of the cave-men, the more difficult question remains, for what purpose did the cave-men make them?

It has been suggested that they were meant for jars, containing stores of oil or grain, to stand in. In favour of this it might be urged that fragments of just such jars were found in the chamber; and that there is a causeway running to the centre of the middle ring from chamber (2), between the open ends of the rings of cups, so that the jars in the middle of the room could be got at without disturbing the rest. It is, however, open to question whether the rude occupants would take such trouble to make a series of mere sockets with such an obviously purposeful distribution; or indeed whether they would make such sockets at all for jars that could quite as well stand without them.

Various recondite explanations of cupmarks have been given from time to time, which appear to me tenable only in exceptional cases. Such an exceptional case is undoubtedly that now before us, and it is here much less open to objection than in many other places to suppose the cups to have some connexion with sacrifice and offering. Indeed, it seems an admissible conjecture that the whole floor of this chamber is a gigantic table of offerings. If this were so we could easily understand that the (5) people might envy the (1) people the possession of so lucky and desirable an annexe to their dwelling, and would wish to unite themselves with them, whether in a peaceable or hostile manner. Much less likely are the suggestions that there is anything of priapic symbolism in these cups, or that they form the apparatus for some game—a sort of public billiard-table.

The next stage of the cave's history is associated with the beginning of the Semitic occupation. The caves were abandoned for houses; but no doubt some of them were used as cellars, store-chambers, or refuges from the heat of the sun. The northern system certainly was so used by the inhabitants of the houses built on it: whether the southern half was also used for the same purpose there does not appear evidence to shew. But the waterpots in the cistern in chamber (2), which are on the whole rather earlier in type than the burial vases in (5) and (6),

indicate a short period when people descended for water to chamber (2) before the time when they used (5) and (7) for burial.

When (2) was adapted as a cellar, the two entrances above the cistern were closed—no doubt because they were dangerously near that pitfall, and practically useless on account of its position with regard to it. They were not so completely sealed up but that water trickled between the stones. Silt quickly made its way through and covered the steps under the entrance A⁴ in a thick layer, which the presence of group A of the antiquities proves to have already begun to accumulate; and the water-receiver built outside entrance A² shews that the latter was the channel whereby the cistern was filled.

On the whole it is most likely that in this period waterpots were carried to and from the cistern down the broad and high passage running south of (2) to the entrance A⁴. There is no evidence that chamber (1) was used for any purpose, except the accident of a gold rosette having been dropped just outside the entrance A¹.

It is a little doubtful when the great stone was placed across the passage south of (2) in order to cut off all communication with the southern group. It may be that it was at this stage of the history, and that it was intended to prevent underground communication between two adjacent houses. It may also have been in connexion with the succeeding stages.

This third period was characterized by the adaptation of the southern half as a burial place. It is most important to notice that there are no interments whatever in the northern system, and no evidence that there ever were any.

If the people who used the northern half of the cave as a cistern and cellar had not already closed the access to the southern system, they would certainly have done so when that probably derelict part of the cave had begun to be used for burials. Fear of the ghosts of the deceased would no doubt lead them to stop up as firmly as possible every means whereby they might find their way out of the *Sheol* where they were confined. In fact it is very likely that the northern system was altogether closed not long after, as even the big stone stopping the entrance to the long passage might not be thought a sufficient obstacle against the spirits. So little frequented was this part of the cave after the southern part was turned into a cemetery, that some one thought it a safe place for the concealment of treasure. This is the explanation of group A, the solitary deposit found in the northern member of the system. There was no interment with these objects; the silt on a sloping staircase was not, indeed, at all a likely place to deposit a dead body: but if the cave were unfrequented it was just the place which a person wishing to hide precious objects would choose for such a purpose. The loose silt could be easily excavated with the hand, and the hole filled in again after the objects had been placed there. It is legitimate to guess that in his or her haste the person who carried these objects down to the cave dropped a scarab at the very place where we might expect such a misfortune to happen—beside the stone which barred the way to the world of spirits beyond, which our fugitive would probably pass in a hurry. A scarab found here was the only precious object from the northern system, except group A and the gold rosette from outside chamber (1). At first I was inclined to think that this part of the cave had been

looted, but the total absence of any bones or other indications of burial has led me to change my view, and I now think that there probably never was anything in the northern part of the cave more than what was found there. Probably not long after these treasures were deposited—perhaps as a further precaution against ghosts—the second great stone was put in its place in entrance A⁴, by some one who did not know that he was scaling up a precious hoard.

The next event in the history of the cave is the fall of the roof in chamber (5), which took place somewhere about 1450 B.C. The date is fixed by the landslip it caused, which produced a "fault" in the accumulated debris, easily visible in the vertical section of the mound. This fault extends up to the level associated with scarabs and other objects bearing the name of Amenhotep III, and thus indicates when the subsidences took place. The later debris is in no way affected by it.

At about the same period chamber (4) was discovered by well-sinkers. That they deepened it is proved by the fact that the tunnel, which we have shewn to have been partly cut from (4), and therefore was presumably at an accessible height above the original floor, is now quite inaccessible from the bottom of the chamber. In deepening it steps were cut, for convenience, running from the old entrance: perhaps the three broken steps at the top are original, the unbroken steps below having been added. A shaft for drawing water was also cut in the middle of the ceiling. The antiquities found in this cistern are referable to the period of the Tell el-Amarna correspondence.

Lastly we have to notice the unfortunate discovery of chamber (6) by well-sinkers somewhere about 700 B.C. There can be little doubt that they obtained a harvest of precious objects from the northern half of the U-shaped chamber, and not improbably from (5) also.

Of the chronology of the early events of the history of the cave, the scarabs found in (8) give us valuable information. Plate xxxv, no. 23, for instance, is typically twelfth dynasty, and probably bears the name of Senwosret III; nos. 14 and 28 on the same plate are as typically Hyksos. The remainder all range themselves more or less definitely into one or other of these two groups. As the collection must necessarily belong to the latest date indicated, it follows that, as a whole, the interments are to be assigned to the Hyksos period—that is to say, somewhere from 1600 to 1800 B.C.

28 III. A Troglodyte cave, as shewn by the steps at the entrance to the south. It had two chambers: the inner chamber had been sunk about 4' 3½" below the rest to serve as a cistern, a silt hole cut in the bottom and a dipping hole in the top. A bronze knife was found, and several water-jars. These of course belong to the cistern period.

29 I. A long low excavation, 46' in length, 21' 4" in maximum breadth. The outline of the walls is irregular. The floor mounts upwards toward the inside of the cave so that at the inner end it is impossible to stand upright. The long axis lies east and west, the entrance being towards the east. The floor bears a few cupmarks. At the inner end there is on the right-hand side a fruitpress, 5' 11" in diameter, sunk below the level of the highest point of the floor. On the left-

hand side the cave is prolonged through a narrow opening, through which one must creep with difficulty, into a small beehive cell 3' 11" to 5' 9" in diameter and 4' 3½" high. This seems also to have been used as a fruitpress as there is a small cup in the floor. The only contents of the tomb were potsherds of both the Troglydite and First Semitic Periods, and flint chips. There were also a few fragments of human and other bones. See the plan, Plate xiv, fig. 10.

Just under the entrance are two holes in the floor. That to the right was covered with a large slab carefully wedged round with smaller stones: there was a small cupmark in the upper surface of this stone. The other hole was found to be full of earth. On being raided the slab was found to cover a small beehive-shaped cell, measuring 8' 10½" x 6' 5" x 3' 7". A very narrow passage, almost impossible to pass through, opens into this cell from the other hole in the floor. From it a small doorway gives access to a row of three smaller cells: in the floor of the two inner ones a vat is sunk. The first of these three chambers is 5' 9" x 6' 10½" x 3' 7". The second is 5' 3" in diameter, 3' 11½" high. The vat in the floor is sunk in a small recess, 3' 3" across, between it and the entrance chamber to the cistern: a small hole is broken in the partition wall just above this vat. The last chamber is 4' 7" in diameter and only 3' 1½" high: almost the whole floor is taken up with a pit 2' 11½" in diameter and 10" deep. What the purpose of these cells may be it is difficult to say. They were completely empty, notwithstanding the care with which they had been sealed up. It is of course possible to suppose that any treasures they may have contained had been stolen through the narrow passage, which was not closed, except by the silt that had washed in afterwards. This was the only case found at Gezer of caves arranged in two storeys one over the other: the case of 16 III and 17 II is apparent rather than real, as these are quite independent of one another; there are one or two differences of level in the large cave 28 II, but no case of one chamber actually beneath the floor of another.

29 II, the great water-passage, is described later in this chapter in connexion with the other waterworks of the city.

30 I. An oval excavation, 38' 6" long and 9' 6" in maximum height. The usual Troglydite staircase was at the eastern end. This had been blocked up and a shaft for water cut through the roof: the walls were cemented carefully and still held water. Some flint knives and potsherds of the Second Semitic Period—the period of the re-adaptation—were found in it.

This cave contained a considerable number of flints and some late waterpots, all belonging to the time when it was used for a cistern. None of these objects call for special illustration or enumeration: we may perhaps mention the segment of a shallow saucer in black ware, with flat base and vertical sides through which small holes are perforated at intervals—there appear to have been about six such holes round the vessel. The most interesting find in the cave is the small bronze figure here represented (fig. 46). The hands are raised, the arms being covered from elbows onwards. There is a triple girdle round the waist. A horizontal tenon in front of the feet shews that it was attached to some larger object. It may have

been part of a group representing a worshipper in front of his deity. The height of the figure is $2\frac{1}{2}$ ".

30 II. An undisturbed Troglodyte dwelling, which contained many very early sherds of pottery and flint knives, but unfortunately no whole vessels or bones. An awkward and ill-made staircase at the east end gave admission to the main chamber. This was $30' 6\frac{1}{2}"$ long, of rather irregular shape: the maximum height of the roof was $7' 2\frac{1}{2}"$. Just inside the entrance, on the left-hand side, is a raised platform, in front of which are two pits, one $1' 6"$ deep, the other $6'$ deep. An opening on the north side gives access to a smaller chamber, with a short tunnel projecting from it: this is not unlike a grave in appearance, but is rather too short— $5' 4"$. It is $2' 3"$ high, of which $1' 2"$ are below the level of the floor of the chamber. A plan of this cave will be found in Pl. xiii, fig. 11, and the pottery on Pl. xlv. Fig. 1 is of gritty reddish brown ware: there is a white lime-cream over the surface. Fig. 2 is of yellowish brown ware and decorated with red lines. Fig. 3 is yellowish brown, as also is fig. 4. The painted sherds (figs. 6, 7) are coloured black on a brown ground. Besides these objects and the uncharacteristic potsherds there were a loop-handle nearly $7"$ long and $1\frac{1}{7}"$ across, and a buffalo's horn.

30 IIA. Merely a natural shelter in the rock, $10'$ long (cast and west), $8' 6\frac{1}{2}"$ broad, $2' 8"$ high. It contained some early pottery shewn on Pl. xxiii. Fig. 18 is of yellow ware with a red margin; fig. 20 is a pin-head (?) of black clay with two projections, as shewn, on each side. Fig. 21 is of drab ware, also with a red margin. Besides these there was found a sherd of a stone bowl with  ornament on its edge. The entrance is at the north side, but there is a fissure in the roof over the south side as well.

30 III. A chamber roughly circular, ending northwards in an apse with a slight step upwards. The staircase entered from the south side. To the west is a small extra chamber, raised above the level of the floor.

There are three cupmarks in the floor of the principal chamber, one of them in the apse, two outside. The maximum height of the cave is $10'$, its maximum internal dimensions $13' 11"$ north to south by $15' 9"$ east to west. The only objects found in this cave which call for notice are shewn in Pl. xxix, figs. 3-7. Fig. 3 is a ledge-handle of unusual shape with nicks on the edge. Fig. 4 is a fragment of limestone with a groove round it. Fig. 5 is a sherd of drab ware with ornamental rope-moulding on it. Fig. 6 is the interior surface of the sherd of a V-shaped bowl with an incised herringbone pattern upon it. Fig. 7 is the side of a burnished vessel. See plan (Pl. xiv, fig. 11).

30 IV. This cave is by far the most interesting of the whole series. It is



FIG. 46.—BRONZE FIGURE
FROM CAVE 30 I

hollowed in the rock under a depth of 36" of debris, containing eight strata. Of these, three are subsequent to the destruction of the inner city wall, about 1450 B.c.; three lie intermediate between that date and the erection of the same wall, about 2500 B.c.; and two are earlier than the wall referred to. Assuming a uniform rate of accumulation, this leads us back to somewhere between 3200 and 3500 B.C. as the minor limit of date for the cave. It lies in the south end of a small knoll in the rock which rises fairly steeply to a height of about 3' above the rock-surface surrounding it. Just south of the entrance to the cave there is an appearance as though rude steps had been cut to make the ascent of the knoll easier; but I am inclined to think these natural.

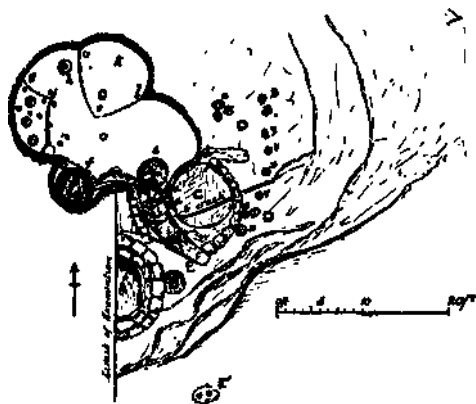


FIG. 47.—PLAN OF CAVE 30 IV

The following cuttings surround the mouth of the cave. They are indicated by reference letters on the plan, fig. 47. (A) A hollow only, half excavated, scarped in the rock to a depth of 1' 6", and 7' in diameter. At the south side the rock fails, and its place is supplied by a row of three stones set on edge completing the circle. A wall is built over this hollow, set back a little behind to edge all round, to a maximum height of 3' above the rock. (B) A hollow, 2' depth and 3' 3" across, with vertical sides and rounded base. This lies partly under the wall that surrounds A, indicating that the latter was built subsequently. (C) A hollow, circular, 6' in diameter, and of a maximum depth of 1' below the original level of the rock. At *na* the rock fails, and its place is supplied by masonry. At *b* it rises to its maximum height above the bottom of the hollow, so that the space *ab* appears (accidentally) to be a channel. A curved wall *cc* partly surrounds the hollow but does not follow its contour exactly. Owing to the irregularity of the rock contour there is an appearance (also accidental) at *d* of another channel leading

out of or into this hollow. A crack runs across the hollow from west to east. It reappears outside the hollow to the east, disappearing on the edge of the rocky knoll, and it is probably a natural flaw, perhaps caused by an earthquake. This hollow is no doubt a fruitpress. (D) A group of cupmarks, thirteen in number. Those marked *x* are shallow circular basins, with breadth greater than the depth: those marked *y* are also circular but with depth greater than the breadth. The others are oval depressions. Beside these there are two conspicuous cups, both similar to those marked *y*, on a small knob of rock south of the knoll: they are marked *E*¹. The largest of these cups is the southernmost of those marked *D*, which is 2' broad and 9" deep. The diameter of the others ranges from 1' to 1' 6". The deepest is the one marked *y* next to the southernmost, immediately under the wall surrounding the fruitpress *C*. This is 1' 2" deep.

The entrance to the cave is marked *EE*. It is a long narrow opening in the rock. Round the northern end rude masonry is built, as the surface of the rock is not of the required height. The floor of the entrance slopes downward, and access to the cave is gained by very rude steps—little better than footholds—cut in the rock.

The cave itself is oval, with a series of irregular apses round the sides. Photographic views from the doorway and from the inner end are given in Plate *xliv*. On entering, the most conspicuous features are two deep hollows, one on each side of the entrance staircase: the first of these, marked *e* on the plan, is 3' across and 1' 10" deep. This is just under the entrance, and in fact is partly cut out of the staircase. The second, marked *f*, occupies an apse to the left of the staircase. These hollows are evidently meant to intercept rainwater, and prevent it flooding the cave: the second of the two, *f*, is connected with the staircase by a channel cut on the top of a projecting shelf of rock. It is 3' 11" across and 3' deep. The apse *g* at the inner end of the cave has part of its floor raised 10" above the floor of the cave; and this raised step bears three shallow cups measuring 10"—1' 1" across, with five smaller hollows disposed as shewn in the diagram. There are also seven other cups in this part of the cave, one of them, *h*, a double cup (*i.e.* with a secondary cup sunk in the floor of the first) of maximum diameter 1' 9". The floor of the apse, *k*, is sunk 10" below the level of the floor of the cave. It contains three cups. There is in addition one cup in almost the exact middle of the cave area. The total length of the cave is 16' 7": the height is with fair uniformity 5' 5". There is a hole, apparently for tethering cattle, cut through the projecting angle *l*.

We now come to the feature that gives this cave its unique interest. To a height of about 4' above the floor the walls are rough. Above this, however, there is a frieze of smoother rock, and all round the cave this frieze is occupied with rude scribbings: a few similar scribbings are also to be seen on the roof. These scribbings are represented in reduced facsimile on Plates *xlvi*-*xlvi*iii.* They are of three kinds:—

* The following has been the method by which the drawings have been prepared. Rubbings were taken with a soft pencil and inked in on the spot. They were then transferred to a sheet of drawing-paper with the aid of a camera lucida, and carried back to the cave and again inked in on the spot.

(1) Arrangements of lines, grouped apparently at random, though in some they cross vertically and horizontally as in a draughtboard. (2) Arrangements of circular dots, nearly all reducible to one scheme—a square of four, or a row of three dots, with a circle of dots surrounding them, which there seems reason to regard as a degenerated spiral. (3) Drawings of animals. Most of the latter are childish attempts—a rectangle with four strokes below and one above, to denote respectively body, head, and legs; but some shew much more advanced skill, as a glance at the plates will shew. Casts have been deposited in the museum of the Fund.

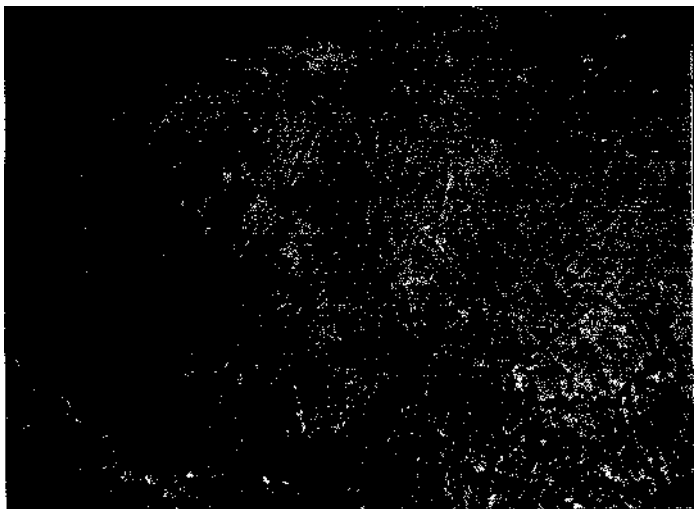


FIG. 48.—GRAFFITO NO. 4, CAVE 30 IV

The following is a detailed descriptive list of the graffiti, with particulars regarding their position inside the cave. The latter is marked on the plan of the cave in Plate xlviii.

1. A random arrangement of lines with no apparent meaning, just under the roof and over the outer edge of the recess containing the pit f.
2. A similar group of random lines beneath the right-hand end of no. 1.
3. Figure of a bird (?) on the outer side of the roof of the apse containing the pit f.
4. The roof of this apse at its right-hand side is covered for a space of 1' 8" x 1' 4'

with a network of random lines, like no. 8, only yet more confused and irregular. After several attempts to secure a drawing of it—which is very difficult, as it is on a horizontal surface face downward—I decided that it was not worth the great expenditure of time it would involve, especially as the most careful scrutiny on several occasions under different conditions of lighting failed to detect the slightest evidence of design in the strokes. I succeeded, however, in obtaining a good photograph which is here reproduced, fig. 48. They may have been made to deface a previous design, as will be seen to be the case in another part of the cave; but if so I could find no trace of the drawing destroyed.

5, 6. Two smaller groups of lines similar to 4, on the roof of the apse.

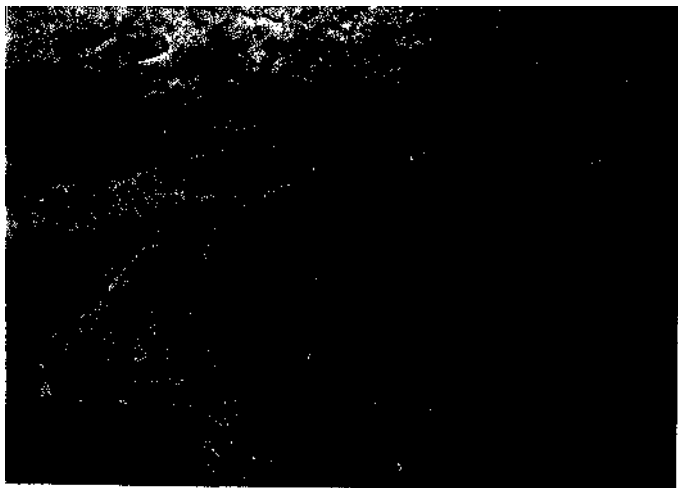


FIG. 49.—GRAFFITI NOS. 7-9, CAVE 30 IV

7. A group of dots on the face of the cusp separating the 'first apse from the second. The largest of these is 1" across by $\frac{3}{8}$ " deep. The design recurs elsewhere in the cave in smaller dots, as we shall see presently: perhaps it is some kind of *wasm* or tribe mark. They appear to be meant to be in a spiral.

8. On the side of the cusp in the second apse, immediately adjacent to 7, a random arrangement of lines, in which no design or order is to be detected. There are two fractures in the middle of this design.

9. At 4" from 8 there has been a similar but slightly smaller group of lines, which, however, has been entirely destroyed, evidently with intention. Nothing is

left but a small strip along each of the vertical cusps, the middle part being all hacked away. The original measured 5" x 6½". Graffiti 7-9 are shewn in fig. 49.

10. At 7" from this is a single stroke not quite straight nor quite vertical, but nearly so.

11. At 5" farther is another group of random lines in which no meaning can be detected. It is narrower and higher than the majority of these random groups.

12. Beside the upper part of the last: the first animal figure we encounter. It is perhaps the rudest and most childish of the whole series, as a glance at the illustration will shew.

13. Under the tail of the animal, and 5½" below it, is a hacked space 3" high by 5½" broad, apparently marking where a figure has been destroyed. There are the ends of three vertical lines shewing below the edge of the hacked space.

14. At 1' from no. 12 is a hole in the rock 5" x 5" x 3", probably marking the place where some design has been cut away.

15. At 4¾" from no. 14 is another hacked space 6" x 6½" x 2".

16. Obliquely below and to the right, and 11" from it, in another hacked space, 4" X 4" X 11"; from the left-hand side projects a line forking into three Y-like branches, thus possibly the tail of a bird. Nothing else of the design can be seen.

17. Immediately beside 16 is a deep hole of about the same cross-dimensions and 4" deep. Possibly here also a figure has been destroyed, but if so there are no traces of it.

18. Just above no. 17 is a group of random lines.

19. At 1' 4" from 18, but rather below its level, was a similar device, measuring 6½" x 5". The middle is hacked out. At the left-hand side of the injury are four oblique lines, sloping downwards from left above to right below: at the other side three similar lines crossed near their upper extremities by a shorter oblique line in the opposite direction.

20. Immediately above this is a device, of which the lower half has been hacked away by a hole 4" x 4" X 2".

21. At 6½" from this, a design has been hacked out, all that remains being a hole 5 ½" x 6" x 2½".

21 A. In the rest of this long apse there are no certain traces of graffiti. There are one or two places where it would seem as though designs had been cut out, but I cannot feel sure about any of them. We find nothing definite till we reach the cusp separating this from the next apse. On the farther side of the cusp is an interesting graffiti. I cannot but think that it is a representation of the common black millipede (*Julus*) which is so conspicuous a member of the smaller fauna of Palestine. See Plate xlvii, fig. 21.

22. Immediately next to 21A and almost on the edge of the cusp is a rude animal figure.

23. Just below 22, an arrangement of random lines.

24. Past the turn of the cusp is boldly engraved a representation of the print of a human foot. The heel is obscure, but can be traced: the ball of the foot and the toes are well marked. It is obvious that this is much more carefully engraved than the

rude scratches which are elsewhere to be found in the cave; and also that the separated toes, with square ends, are much in the Egyptian style of technique—such as is to be seen, for instance, in hundreds of representations of mummies on coffins. I must here record the ingenious theory propounded by Mr. K. T. Frost, formerly of the Egyptian Public Education Department, when he visited this cave under my guidance. It was to the effect that after the beginning of Egyptian settlement in Gezer, this even then ancient cave was adapted as the cellar of a house built above it: that the owner of the house, probably an Egyptian, descending into his cellar, was awed to find the mysterious graffiti on the wall, and in a panic proceeded to destroy them; but either because he wearied, or because he feared to proceed, he stopped when he had finished about half his task, and cut this symbol to avert whatever evil influences might be expected from the unhallowed pictures. This theory will account for the remarkable fact that the drawings are nearly all destroyed till we reach the footprint, after which they are intact; it would, however, be even more acceptable if a *hand* had been cut rather than a foot.

25. At 6" from the foot, and above its level, is another spiral of dots rather smaller than in the previous example. The spiral is in this case unmistakable. This occurrence long before any possibility of Mycenaean culture and influence of a motive so characteristic is of considerable interest. It is also noteworthy that in the Troglodyte Crematorium was found a tray of coarse pottery (fig. 50), with a spiral of knobs just similar to those marked on the walls

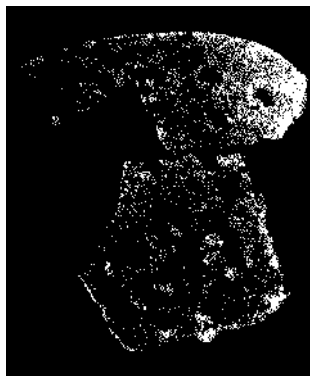


FIG. 50.- BOWL WITH KNOBS IN FORM OF A SPIRAL

of the cave on its upper surface. This may be merely an unimportant coincidence but it seems worth a passing reference.

26. At 3¼" from this spiral is another much less definitely formed.

27. At 3¼" farther on is a fine cow. This is the most artistic of all the graffiti, and shews that the Troglodytes were not incapable of a fair amount of skill, though they cannot possibly rival their Palaeolithic predecessors of the French Bone Caves. The snail-like knobbed horns are curious: did the Troglodytes protect themselves from their half-wild cattle by tying knobs on their horns?

28. Just below the last, and contrasting strangely with it, is a rude headless animal with long tail.

29. At 9½" from these two, and at the level of the space between them, is

a long horizontal stroke with vertical strokes depending from its right-hand end. This may be an unfinished figure of an animal.

30. Above and partly interfering with this figure, as the drawing shews, is another spiral of dots.

31, 32. At $2\frac{1}{2}$ " from no. 30 but at a higher level are two animal figures, one over the other. The upper one, which is actually on the roof of the cave, is reduced to an oval without limbs. The lower is only less summary.

33. Another spiral of dots is just under and to the right of the lower figure.

1.1. Just next to this is another very rude sketch of a horned animal. The hind-



FIG. 51.—GRAFFITI NOS. 38-41, CAVE 30 IV

legs have been broken, which is the only damage the graffiti on the right-hand side of the footprint have sustained.

35. Below and behind this animal is a small spiral of dots.

36. Above the last is another spiral of dots, rather larger.

37-39. Just next to the last are three animal figures, in a vertical row. The uppermost is on the under side of the roof. It has remarkably long horns. The second is quite among the best of the drawings in the cave. The third is larger. It is much interfered with by random scratchings, either with the intent to deface it, or else meant to represent long vegetation in which the animal is partly hidden.

40. There follows immediately one more—the last—spiral of dots, in this case degenerated into a triangle with three dots in a row in the middle.

41. Then follows a long narrow animal figure. Note how the under side of the body is made by a double line, one faint, the other strongly marked. Graffiti 38-41 are shewn in fig. 51.

42. 43. Then come two more animal figures, the hindquarters of the first being just under the snout of no. 41. The horns of the first are made very prominent to distinguish them from the almost random lines around them. It is evident that



FIG. 52.—GRAFFITI NOS. 42-45, CAVE 30 IV

the hinder animal is like one of those mentioned before, standing among long vegetation.

44. At f" farther on, past a crack in the rock, is a very interesting figure. It evidently represents a stag being killed with a bow and arrow, which are visible behind. Unfortunately the modesty of the huntsman has led him to suppress his own person! In front of the stag there is what may possibly be a grove of trees.

45. Just before reaching the cusp separating this apse from the next is a large group of random lines. No design is to be detected in these lines, which are apparently meant to deface a previously existing figure. Faint traces of one cow figure are to be seen underneath, and it is possible there may be others, but one

cannot feel any assurance. This much is, however, certain, that the defacement took place during the Troglodyte Period, and was not the work of our hypothetical Egyptian vandal.

46. Turning the cusp, we find just round its corner end under the roof nine short vertical strokes.

47. Immediately underneath this are some indefinite lines.

48-50. On a level with the last and 1" from them is a remarkable group representing a man (or two men?) doing something (ploughing? or driving? or hunting with a spear?) with two animals. Though rude, these animal figures are among the most ambitious of the series, as there seems to be an attempt made to represent the muscular structure of the animals. They are both confused with vertical slashes, as before suggestive of vegetation.

51. A figure of part of an animal in a smooth hollow place, apparently the matrix of a flint nodule, in the curve between the roof and the wall. Above the space between 49 and 52.

52. At $3\frac{3}{4}$ " from 49-50 is an interesting animal whose long horns proclaim it as a buffalo. I do not know what the triangular object underneath may be.

53. At 7" from the buffalo is a chequer of vertical and horizontal lines. A few random strokes fill the space between 52 and 53.

54. This curious little design follows the chequer at $3\frac{3}{4}$ " from it.

55. Above 52, 53, in a smooth hollow place between roof and wall (similar to that containing 51), a random arrangement of lines.

56. At 4" from 53, but at a higher level. Random lines.

57. Rude animal figure above 56 and almost beside 55.

58. Draughtboard pattern, just beside 56.

59. An animal figure immediately following 58.

60. Immediately after 59, a draughtboard.

61. At 8" from 59, a draughtboard.

62. A random group of lines, resembling no. 63, 4" from 61.

63. A random group of lines $2\frac{1}{2}$ " from 62.

64. On the roof above a point 1' 4" from 63.

65. Close to 64 on the roof.

66. Close to 65.

67. Above the pit on the right-hand side of the staircase, an arrangement of random lines like that photographed above the pit on the left side, not so extensive but quite as meaningless and complicated.

§ 9.—OTHER CUTTINGS IN THE ROCK : CUPMARKS, ETC.

Before we proceed to describe the buildings erected on the surface of the rock, a word or two should be said about the face of the rock itself, as obviously most of the features which it presents must antedate the erection of dwellings above it,

The surface of the rock is very irregular, covered with cracks, grooves, and depressions. Some of the deepest and most inconvenient of these have been bridged by **causeways** in very early times.

Three long parallel **fissures** in the rock, at the N. end of I 27, each about 3" wide and 1" deep, are probably natural; perhaps produced by earthquakes. They do not look as though cut, and have no assignable purpose.

Deep cylindrical vertical **shafts** cut in the rock can be explained in a variety of ways. Some (as I 29 nl), in which the breadth exceeds the depth, are probably rude fruitpresses, even though they may lack the cup in the bottom which, as we shall see in Chapter VI, is an ordinary feature of this type of cutting. The example referred to measures 6' 5" across and 4' 4" deep. Others, where the depth exceeds the breadth, are probably the beginnings of cisterns which, for some reason, were never finished. There is an example so marked in I 14. II 3 C is a pit in the rock, east of which is a small cupmark.

One of the most extraordinary characteristics of early man in Palestine is his fondness for making **cupmarks**. Every hill bears evidence of this singular custom, and to explain it adequately baffles all the ingenuity of the anthropologist. Hollows for votive offerings—recondite emblems of religion—star maps—mortars—waterpots—stands for waterpots—olive-presses—corn-grinders—fullers' vats—these and many more are the explanations that have been suggested, some or all of which may have their place in accounting for individual examples, but none of which completely covers the whole subject. The probability is that there is no one all-embracing explanation, but that different marks and groups of marks were made for different purposes and, there can be little doubt, at widely different times.

The surface of the rock at Gezer bears a perfect wilderness of cupmarks, single and in groups. Most of these are shewn in Map I, being indicated in general by the letter *a*; but I cannot claim that every single example has been recorded. Usually the cups are entirely artificial; but sometimes a natural hollow has been slightly "touched up" and adapted for whatever purpose it may have been required to serve. Thus I 2 A is a hollow, slightly enlarged artificially: it is 3' 6" deep. Again in trench 3 in the same map there is a scarp facing southward, north of which is a large cupmark 3' 3" across and 2' 6" deep: this was full of potsherds when found. North of it is a natural hollow, slightly tooled. South of the scarp is a small oval hollow, probably natural. There was a crooked wall south of this

hollow, which appears in Map I I. It ends at its western extremity in a large stone slab, standing upright: to the south of it are three single stones, probably the remains of a ruined wall. In I I 19, at the north end, was a very early pavement, underneath which was found a cupmark shewn in I 19. South of this is another cup, which, as often happens, is cut in the top of a small natural knob of rock. At I 19 A there is a shallow *natural* hole in the rock, the opening of which has been artificially rounded. Groups of cupmarks are very often cut on a natural surface of rock that rises above the surrounding area; but they are by no means confined to such natural tables.

It is not often that cupmarks are found definitely associated with building. One example will be seen at IV 18 A, which, however, may after all be accidental. It is a square tower-like structure of rude masonry about 4' 10" each way, founded on the rock, in the exact middle of which a cupmark of the ordinary kind was cut. It is difficult to assign a purpose to a building so narrow.

I 30 A, which seems to be closely associated with the cupmarks that surround the very remarkable cave 30 IV, is another example of the connexion of cupmarks and masonry. It is a circular structure 9' 10" in external diameter. Inside of it is a circular cutting in the rock; but as the rock fails on the south side its place is supplied by a row of four stones set on edge.

I 10 A is a natural hollow in the rock with three vats cut in the rock closely associated with it. It is difficult to explain the purpose of these vats. The southernmost is the smallest, 3' across, 1' 8" deep at the bottom of a scarp 2' 4" high; the next is 3' 7" across, 2' 6" deep; the next is 3' 10" across and no less than 6' 6" deep.

Cupmarks are sometimes double, *i.e.* a smaller cup in the floor of a larger. That immediately south of cave 14 I is an example of this.

At I 5 A is a circular basin 6" deep, with two cupmarks and a groove within it: above it to the N.E. are a large cup and five smaller, above which is a rock scarp. I 5 B is a cup hollow in which a jar was found standing.

In two places cupmarks were found united by a passage tunnelled through the rock between them—viz. at I 12 A and I 6, N. end.

Sometimes cupmarks have been found surrounding the mouths of cisterns. The most remarkable specimen of this will be found described in Chapter X, in connexion with the High Place, the cistern in question having been used as a receptacle for the bodies of sacrifices. Another example, which appears at the S. end of I 21, may here be referred to. The shaft of the cistern lies in the unexcavated side of the pit, and in consequence the western extension of the system, if any, was not exposed. In the part which was revealed by excavation there are fifteen cup hollows, all of them oval, measuring about 1' x 10", and about 6" deep; with two exceptions, one of which is square, an unusual shape, and the other circular, 8" in diameter and 1' deep.

That the juxtaposition of these cupmarks with the cistern mouth is not accidental is indicated by the fact that similar combinations are found elsewhere. There is one example (illustrated below) in the hills to the south of Abu Shusheh, and several examples have already been described by me from Tell es-Safi (see

EP, p. 193). It may be suggested that they were meant for watering cattle—the water being drawn and dashed over the surface of the rock, where it would gather in the cups in little pools,* though the cups hardly seem large enough for the purpose. That they are meant for oblations to the spirit of the water may possibly be a theory preferred by some, though I should be sorry to claim it as my own.

In order to display all the rock-markings on one sheet, I have drawn the cistern I 21 in Map I; but it is probable that it is to be referred to the First Semitic Period. In any case the cistern was used in later periods also, a shaft being built up through the accumulating debris. The cupmarks, of course, were covered and forgotten after the first period. The cistern therefore reappears on the successive plans.^f

Another example of the connexion of cupmarks and cisterns—in this case, however, less certainly intentional—will be seen at the south end of trench 4: an enlarged plan is given in fig. 53. The cistern in this case is quite small, and perhaps unfinished: depth of shaft 6', total depth 11'; the plan is rectangular, 9' 6" east to west and 7' 8" north to south. Close to it is a group of five small cups measuring from 1' to 2' in diameter: one of them is of the characteristic oval form. To the west is a scarp in the rock, 1' deep: above it is a double cup; in its edge is a recess in which a jar was lying (see the enlarged sketch above the plan and separated from it by a row of dotted lines). The half of a large basin, 6' 4" in diameter, appears below this—the other half was not cleared out. To the south is another scarp, of the same depth: below it are three small oval cups and one large basin 5' 9" in diameter; and another yet larger—the largest found on the mound—12' 7" in diameter. There are two cupmarks and a curious straight groove in the floor of this basin.

As in the other case, the cistern has been adapted to serve the needs of the overlying stratum.

A curious development of cupmarks or vats in the rock was found at I 29 A. Here there was a short scarp in the rock, 1' 8" deep, from which, at one end, a vat hollowed in the rock projected, 3' in diameter. What purpose this may have served did not appear. There was a remarkable cave close by (29 I), and a

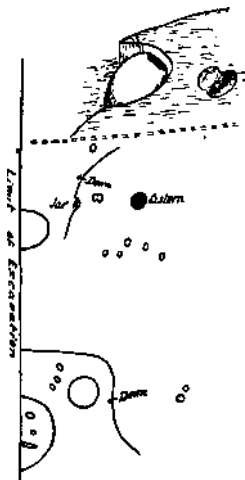


Fig. 53.—ROCK-CUTTINGS IN
TRENCH 4

* I once saw a boy in Jerusalem watering a sheep by pouring water on a pavement from a coffee-pot, the sheep licking it up as it fell!

† The rock-cut shaft of this cistern is of the unusual length of 7' 1"; the total depth is 17' 7", and the diameter 16' 6".

number of cupmarks on the surface of the rock. The vat in question is shewn in fig. 54.



ROCK SCARP

Important and difficult questions are raised by the presence of cupmarks, grouped with evident purpose, in the floors of some of the caves. The most striking example of this is in the great labyrinth 28 I I: this has already been described. It is the only specimen in which the cups are arranged in regular order; save that the three cups in 30 I I I are in a straight line. A single cup, possibly an olive-piess, appears in 17 I; and in addition to those first mentioned we have already seen groups of cups in 3 I, 3 I I I, 15 I V, 17 I I I, 27 I, 29 I, 30 I I, and 30 I I I.

In the plan of the surroundings of Gezer the principal groups of cupmarks are shewn—it would be quite impossible and unnecessary to mark all. In the land called *Wdret et-Tayasheh*, where there are a number of smooth, flat, table-like outcrops of rock with cupmarks cut upon them, one of the cups has a deep groove running out of it.

In the same land is the mouth of a cistern of the ordinary type; in the rock immediately above are a number of oval cupmarks. These, so far as they are exposed, are twelve in number, in a more or less straight row. Probably there are others concealed by the soil. See fig. 55.

The other groups marked on the map need not detain us long. They are exactly of the same nature as have so often been described before—groups of oval or circular depressions arranged without any definite order. The group between tombs 89 and 90 in *Wdret Danuish esh-Sharkiyeh* is cut in a smooth surface of rock that forms the roof above a very large natural cave. The single cups in *Shab VaA'ub*, near tomb 55, are large vats, probably for treading grapes. The group of cupmarks in the rock outcrop of *Wdret 'Aysa* is worthy of notice inasmuch as one has a ring round one of the cups (like the rings so often found round cups in European bronze-age monuments). This is rare in Palestine.

Some groups of cups are unquestionably connected with winepresses and threshing-floors, and will be noticed in their proper place in Chapter V I. Of others the purpose is elusive. But (so far as Palestine is concerned) I must say that the more I study the cup-groups and examine different specimens, the less am I inclined to see a religious or symbolic purpose in them.

There remains to say a few words about some miscellaneous rock-cuttings in the hillsides which cannot be classified under any of the preceding sections.

In the field called *Waret Darwish el-Gharbiyek* will be noticed three "pits in the rock." These were found when searching for tombs. They are very difficult to explain. The most northerly of them is especially

remarkable : it is about 8' 2½" deep. It seems to be square. It was not wholly cleared out, other and more important investigations demanding prior attention : in the surface of the bottom, so far as it was exposed, were two cupmarks. The second pit is probably an unfinished cistern. The third is a large circular hollow, 16' 5" in diameter. There is nothing to shew for what it was made.

The long rock-scarps that abound here and there are in all pro-

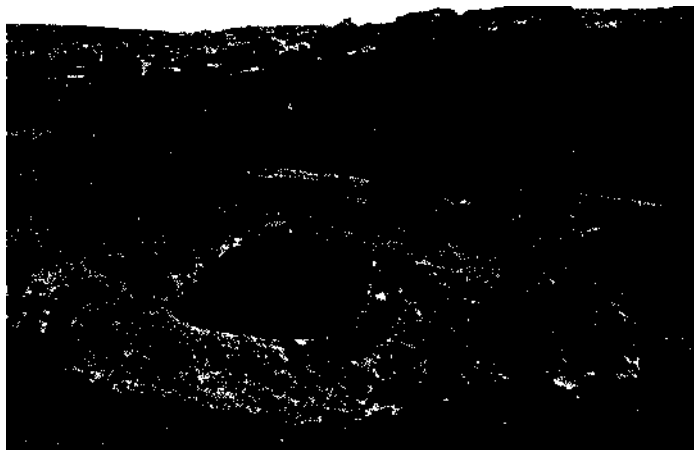


FIG. 55.—CUPMARKS SURROUNDING A CISTERN MOUTH, WA'RET KT-TAYASHEH

bability simply quarries, though some may have been made for receiving the doors of tombs that had never been excavated. They are especially frequent in the field called *Waret Darwlsh esh-Sharkiyeh*.

The cisterns, of which a few were found in the hillsides, seem on the whole to be smaller in size than those within the city, but otherwise do not differ materially from them.

The "steps in the rock" south-east of tomb 143 in *Waret 'Othman* are probably nothing more important than a bit of quarrying.

In *JSP*, p. 198, I have described a mysterious group of marks at

Tell es-Safi to which from their shape I gave the name of **V-marks**. Two such marks exist on the hillside of Gezer. One is in connexion with the winepress / in *Waret Darwish esh-Sharkiyeh*, described in Chapter VI; the other is solitary, on an outcrop of rock in *Ard 'Ain el-Butmeh*. It is a large block, 4' 5" high x 8' 6½" x 2' 5": the mark is U rather than V-shaped; it measures 1' 9½" x 1' 5½". The channel is 3½" broad.

In the hillside on the north and east are a few small **tanks**: they are rectangular in shape and carefully cemented. It is not easy to see for what these would be made: they would not hold much water, and it would soon evaporate in the hot Palestine sun. Measurements of one or two of them are given later in this chapter in the section on Waterworks.

Limekilns—cylindrical pits cut in the rock, about 10' deep—are found here and there. Some of these must be old, as they are filled with earth and seem to have been quite forgotten till they were reopened. That they were as old as the occupation of the city can however scarcely be asserted.

Of the **wine and olive presses** that abound everywhere we shall speak in a later chapter.

§ 10.—STRATIFICATION OF THE DEBRIS: THE PLAN OF THE CITY AT DIFFERENT PERIODS

Having now described the caves hollowed in the rocky core of the hill, and the various cuttings displayed by the surface of the rock, we must next proceed to a description of the buildings that went to make up the city. In this description, after some necessary preliminary generalities, we shall take first the ordinary dwelling-houses; then any other buildings which call for special notice—excluding of course those with a religious purpose, whose proper place is Chapter X; then we proceed to a description of the ramparts by which at successive periods the city was defended, and finally to an account of the various engineering works by which water was procured and stored within the city.

The stratification of Eastern and especially of Palestinian cities is a phenomenon which recent excavations have made so familiar that it is unnecessary to describe it here at length. Let it suffice to say that

houses have always been built over the ruins of their predecessors ; that these houses were built of mud-brick or of stones set in mud, from which the winter rains annually wash out a considerable quantity of clay ; that rubbish and organic matter were allowed to accumulate in the city streets;



FIG. 56.—SECTION SHEWING THE STRATIFICATION OF ACCUMULATED DEBRIS

and that thus the level of the city became raised at a rate variously estimated—at Gezer I reckon it to be about an inch in six years.

The debris proved on excavation to be of very different depths in different parts of the mound. At both ends of the hill, even within the city wall, rock crops out to the surface, shewing that at these parts there were always open spaces. A little west of this outcrop on the Eastern Hill

the soil deepens rapidly to 16'—17', containing from three to six strata of foundations. In the great pit around the alignment of the High Place, the soil was found to be from 5' to 23' deep, and to contain from three to seven strata. On the Western Hill the debris was much deeper than elsewhere, attaining a maximum depth of about 40', with eight strata of building.

The study of the strata at Gezer is in consequence peculiarly complex. In some parts of the hill certain of the epochs of the city's history are completely unrepresented, and we must suppose that during those epochs the regions in question were deserted areas; while on the other hand periods represented by single strata in some parts of the mound are found to involve two or three in others. Sometimes the side of a trench displays as in a geological section a complete history of the city in miniature; and I have thought it instructive to present the photograph fig. 56, which shews one of the best and clearest of all the sections that have been uncovered.* At the bottom is the rock-surface, in which will be seen the mouth of a cave (no. 27 I). This was used as a burial place; and when filled, its mouth was stopped with a great pile of small stones, upon which as a foundation the inner city wall was afterwards built. The original ground surface will be seen below this layer of stones, following the line of the rock. Above the stones is a white lime pavement; this, as well as the underlying pile of stones, is shewn in II 27 p, north end: about 1' above this is another bed, of broken potsherds and charcoal intermingled; over which are the walls of a large structure of brick which was built after the inner wall had fallen into decay. It will be seen in Map IIIa 27, 28. Above this brick structure, of which the walls are standing to a height of about 3', will be seen the flat table-stone of a winepress projecting into the side of the pit (IV 27 m), above which is the vegetable soil.

Reference words printed upon the photograph will enable this description to be followed more easily.

The task of making a series of plans which shall represent the arrangement of the houses and streets at different times is one difficult, if not impossible, to accomplish with accuracy. The problem is complicated by many elements, all of which add to the difficulty of its solution: it may not be amiss to state them here.

If it could be proved that a city was fully occupied during its whole history, and that the stratification of successive layers of building was due to a series of catastrophes by which the whole area of the town was

* I regret that an accidental streak of light has spoiled the appearance of this picture, but it does not destroy its value as an illustration.

wrecked several times, the case would be comparatively simple; and if we were acquainted with the nature and date of each of these catastrophes, we would then have no difficulty in assigning to their proper period the various remains of walls unearthed in excavation. And if architectural ornament of assignable age were used in the different periods of occupation, the question would evidently be simpler still.

There may be cities whose examination is thus reduced to the simplest terms in this way; but Gezer is certainly not one of them. The following are the principal elements which enter into and confuse the problem •—

(1) There is no possibility of distinguishing date from an inspection of the buildings themselves. From first to last all are of the same rude construction and plan, or rather want of plan. I might almost add, to the present day: for the modern village of Abu Shusheh, were it ruined, would present precisely the same appearance as the ancient city of Gezer.

(2) The great area included within the walls was not all occupied at once. There were many open spaces here and there at all times. In consequence, the number of strata ranges from two to eight. I have found that the successive strata of the city can fairly be plotted in six maps, with three intermediate maps for the Western Hill, where there are extra strata. It might be supposed that the antiquities found associated with the ruins would help to date them; but this is not always so. We must remember that the greater part of the walls that remain standing are the underground foundations, sunk into a stratum of earlier date than that to which the building actually belonged: so that the walls are, as a rule, associated with antiquities older than themselves—often considerably so. In the case of open spaces we must remember that they were not kept as municipal playgrounds; rather were they municipal rubbish heaps,* and indeed it is scarcely too much to say that a very large accumulation of potsherds and other worthless antiquities of a definite date in one spot is presumptive evidence that there was no house of that date erected in that spot. It follows, as a moment's thought will shew, that when these waste places were built over, there was an island of houses of one date surrounded by older buildings.

(3) There were no great universal catastrophes which destroyed the whole city at once. There are plenty of signs of large local fires, but no all-covering bed of ashes (like that most welcome layer at Tell el-Hesi). The captives and lootings of successive Pharaohs did a great deal of damage to the structures of the city, but in no case made "a clean sweep" of the whole. Many individual houses survived the storm and stress, and each one is a centre of difficulty and unsuspected inaccuracy to the would-be plotter of the city.

Herein lies the greatest difficulty: namely, that the rebuildings of the city took place gradually, not by a succession of entire reconstructions. A diagram will make

* Probably these open spaces were of use for collecting cattle in time of siege.

clear the confusion which this involves. Suppose a city to have consisted of five "quarters," A, B, C, D, and E; and suppose the rebuilding of these quarters to be indicated by dashes, thus A', B', etc. Then we may graphically represent the history of reconstruction in some such way as this:—

A	B	C	D	E	year	1	of the city
A'	B	C	D	E	"	50	" " "
A"	.		D	E'	"	150	" " "
	B'	C"	D	E'	"	200	" " "
A'''	B'	C"	D'	E"	"	250	" " "

which means that (by the data assumed) in the course of 250 years the city is completely rebuilt; during which one quarter has been rebuilt thrice, two twice, and two once; twice the city has been partially waste: there are thus five stages, so different from one another that to shew them properly a separate map is required for every one. None of the substitutes that might be suggested for this purpose are of any use in the case of a city like Gezer: tracing-paper with the changes printed upon it, to be placed over the map of the rock-surface, is cumbersome, and several thicknesses of it are too opaque to see through; and the use of superposed maps in different colours, with which I myself at first attempted to express the succession of strata, has only the effect of a polychromatic maze, whereby the eye is hopelessly confused.

Be it remembered, moreover, that the case as stated above is comparatively simple. In practice we have not to deal with five quarters, but with hundreds of individual houses; not with conveniently equal intervals of time, but with intervals of anything from, perhaps, a few months to any number of years.

In the maps will here and there be seen the letters X, Y, Z. These are meant to distinguish constructions of earlier or later date within the limits of the period covered by the map. The intermediate letter Y denotes the constructions that appear to belong to about the middle of the period; X indicates walls that appear older, but not old enough to be drawn on the previous map; Z marks walls that appear later, but not late enough to be drawn on the following. Building and rebuilding for some reason appear to have been more active at the western end of the mound than at the eastern: it has therefore been necessary to provide three intermediate maps for this part of the town.

Our troubles do not cease even there. We may assume that there was some sort of official or unofficial municipal council under the control of the *amilu*, or *hazanu*, or whatever name the chief functionary for the time called himself; but this council did not concern itself with the maintenance of highways. There seems to have been nothing to prevent a man building a house so as to obstruct and divert a line of traffic.* Indeed (as a moment's comparison of the maps will shew) the

* In modern Jerusalem, where building operations have been lately carried on to a surprising extent, paths that have been rights-of-way for generations are being closed one by one without any interference on the part of the community or of the Government.

non-permanence of lines of thoroughfare is one of the most striking facts that distinguishes the history of building in Gezer from that of any European city.

Among minor sources of confusion must be mentioned pits dug in the earth in ancient times, which were often responsible for lowering antiquities of one stratum into a context much too early. These pits were rarely distinguishable except when a lucky chance made them coincide with the vertical face of a trench, as in the photograph, fig. 57.



FIG. 57.—TRACE OF A PIT DUG IN THE DEBRIS IN ANCIENT TIMES

It is an instructive task to compare the various plans of the series together, and before going further, to endeavour to gather the general characteristics of city-planning at successive epochs of the history of the community. For though there is a remarkable uniformity—far more so perhaps than one would naturally expect—yet, as we shall see, each age has certain characteristics which distinguish it from the others.

We may pass over the cave-dwelling community, and omit from our consideration the fragments of pavements and walls which are indicated on Map I. These are the meagre remains of the first constructions on the mound ; but there is nothing to be made out from these incoherent fragments, many of which consist of four or five stones only. The three intermediate maps of the Western Hill may here also be neglected.

Map II belongs to what may be called the prehistoric period of the Semitic occupation—the period before the veil of illiteracy is raised, and reveals as the first act in the drama the terrors of Yapahi and his contemporaries. One building of great importance—no doubt a palace—at the south end of trenches 27-30, belongs certainly to this period. Otherwise the impression that an inspection of the plan gives is one of *emptiness*. Here and there are important houses, like that in the middle of trenches 3, 4, surrounded by open spaces that, in all probability, contained rude huts of temporary materials, like the reed villages which are characteristic of modern Egyptian scenery, or, it may be, a permanent settlement of tents, like the Nawar encampment opposite Saint-Etienne at Jerusalem or the Bedawin encampment at Wady Hanain near Ramleh. This eloquently speaks of the permanent settlement of a nomadic tribal or sub-tribal * community, under the leadership of a despotic Sheikh, dwelling in the palace just mentioned, and with more or less absolute control over the lives and time of his subjects. Such a constitution must indeed have existed at the time, as nothing but the strong will of a merciless despot can have supplied sufficient motive power for the excavation of the gigantic water-passage within the palace courtyard.

Towards the end of the period the temporary structures give place to stone buildings, as a comparison of Maps II and **IIa**, on the Western Hill, will shew. It is probably to this later part of the First Semitic Period that the crowded structures in trenches 20, 21 are to be assigned.

The Second Semitic Period, Map **III**, is characterized by *few* buildings, with comparatively large rooms. Though the trenches on the Western Hill look empty, they were not so in reality : the houses in **IIa** give place directly to those in **IIIa**, so that there were no intermediate structures erected at the beginning of the period. On the whole the impression one

* I use this expression as a sort of equivalent of the Arabic *hamuli*, or congeries of related families, groups of which make a tribe.

receives from the plan is that of a small and luxurious community; and with this agrees the observation that the richest tomb deposits found have been from this period, as well as the richest pottery from the houses. It was the time when the Aegean trade had introduced new art ideas, which rapidly found well-intentioned imitators among the craftsmen of the city.

In the Third Semitic Period, Map IV, there are obvious signs of a much increased population with more developed organization. Land for building is even stolen from the sacred High Place: the city is too congested within its old wall, and it becomes necessary to build another wall outside it. Various buildings of importance are erected, distinguished from the rest by their thick walls. The chief moves from the old palace site to another, at the north of 15 and 16. A tendency to bizarre plans is indicated by certain structures—notably the peculiar erection south of the middle of trench 27—with long narrow rooms.* These changes can best be accounted for by the entrance into the ancient population of another element, with different ideas: which accords with the statement of the Book of Judges (i. 29), that after the Israelite immigration certain Ephraimites settled in the city, although it was not brought completely under the control of the tribe.

The Fourth Semitic Period (Map V) displays the same general characteristics. The same liking for long narrow rooms will be noted, if anything further developed. One most important difference between this and all the other periods must be noted. There is not—so far, at least, as the excavation has been carried—any outstanding building that can be indicated as certainly a chiefs residence. This accords with the historical fact of the city having been brought within the control of a Central Government.

It will be noticed, on both this and the preceding plans, that the inner city wall, which, as we have said, went out of use at the beginning of the Third Semitic Period, still exists as the apparent limit of building. This is due to natural causes. No doubt the buildings of the later periods originally transgressed this limit; but the winter rain washes off the earth from the edge of the plateau, and exposes a few stones, which are promptly annexed for building purposes by the fellahin of any one of the half-dozen

* This shape is evidently dictated by the difficulty of finding lintels of wood or of stone long enough to roof a *broad* room.

villages within a few miles of the site. The result is that buildings round the edge of the city in time disappear completely. This is especially obvious in the sixth map, representing the last period: the empty line is visible almost all round.

What is left of this period speaks clearly of a dense and comfortable population. Built reservoirs, well-paved rooms, complex house-plans with pillars, all point in this direction. The absence of architectural ornament is easily explained by the same cause as that just mentioned—destructive fellahin. That there were actually ornamental constructions is shewn by an Ionic volute and some moulded stones cast in among the rubbish filling the great reservoir in trench 16.

Into this population burst the destroying vengeance of Simon Maccabaeus, who ransacked the city, deported its inhabitants, and garrisoned it with "men who would keep the law." It is not unlikely that this garrison was insufficiently provided with women having the same qualification—and surely no others would be admitted—to keep the population up to its former level: at any rate this event was the death-blow of the city. A few years later it falls back into Syrian hands so easily that the event is recorded, as it were, only in a footnote; and though the remarkable bath-house shews that the decimated remnants tried to make themselves comfortable within the wide walls that once sheltered so much larger a population, they probably felt themselves unable to defend so great a length of rampart, and abandoned the ancient city in despair, settling on the neighbouring village sites now known as Abu Shusheh and Khurbet Yerdeh. Thus only can we account for the complete disappearance in a very short time of so large a population as is postulated by Map VI.

It is very rarely indeed that a wall is found which can demonstrably be assigned to two different sets of successive buildings, of which it is a common member. An example, however, is the long wall V 4 AB, which has been taken over from the previous stratum; through which it runs to the rock. A wall of the first palace, in II 28, has been adapted to the construction of the second, in III 28. It will also be seen that the older city wall, after being superseded by the later rampart, was used to form one side of quite a series of chambers, built up against it.

Of street-paving there is scarcely a trace, one or two small fragments of foot-worn pavements, here and there, being the only indication that such was ever in use. These consist of rounded stones about 8" in diameter,

and must have been much more uncomfortable to walk upon than the smooth-trodden surface of the earth.

§ 11.—THE GEZERITE HOUSE

We must now proceed to describe and illustrate the normal Gezerite dwelling-house. We divide the subject into the following headings : plan ; construction (masonry and brickwork); floors ; doorways and windows; roofs and the means of supporting them; architectural ornament; and miscellaneous details. Though *cisterns* are an essential part of many of the houses, it will be more convenient to describe these together in a later part of this chapter.

Plan.—The absence of roofs, and still more the absence of doorways—the houses being as a rule ruined to below the thresholds—makes it often very difficult to discover the plan on which any given building was laid out. Indeed sometimes it is by no means easy to determine whether any given point was inside a building or in the street outside. Often, too, what may be called "fictitious rooms" are produced by the interweaving of foundations of successive periods. Thus in the diagram, if the dotted square represent an old foundation, and the square in firm lines a building erected later, evidently when both are ruined to the same level there will be three fictitious chambers, A, B, C, which never had any real existence. On account of the uniformly rude character of the masonry, with random bonding at angles, these fictitious chambers are not always so easy to detect as might be supposed.

In these difficulties it is satisfactory to note that there is one source of illumination from which much help can be obtained in solving the problems connected with the plans of the ancient houses. I refer to the dwellings of the modern fellahin, which seem to reproduce, with tolerable exactness, the main peculiarities of their ancient predecessors. As a preliminary to the study of the Gezerite House, I propose therefore to make some remarks on these dwellings.

The village streets are crooked and narrow. In many it is almost possible to touch both sides of the street at once by stretching the arms out horizontally. They are so artlessly laid out that even the tiny village of Abu Shusheh, which can

hardly contain more than six hundred souls,* is a most confusing labyrinth to the stranger.

The streets run, not between houses, but between the blank walls of courtyards : these walls, like all the constructions in the village, are built of more or less unhewn stone set in mud; very little lime is used in the buildings. The courtyard walls are 8'-10' in height. They are pierced only by the doors giving admission to the courtyards behind. These doorways are, as a rule, roughly arched ; the threshold is generally lofty, perhaps i' high. The door is secured to a vertical wooden beam that turns in a cup-shaped stone socket.

The courtyard varies greatly in both shape and size. And here it is well to remark that such rude buildings as these are never built to any actual measurement, and there is no special reason for considering that those who erected their ancient predecessors were any more particular. It follows that attempts to deduce the length of the cubit from the measurements of lengths of such walls must have results so uncertain as to be valueless.†

In the courtyard are (i) the baking oven, a small dome-shaped hut with the biick bread-pit in the centre, (2) one or two dog-kennels and chicken-coops, and (3) a raised platform of clay, with a lattice surrounding it of the same material, in which branches and reeds are in summer interwoven to make a booth for shelter from the heat of the summer sun.

At the back or sides of the courtyard is the house proper, almost invariably one-storeyed, consisting of one or more rooms, in which a part is set aside for the animals, and another with raised floor, for the family; covered with a flat roof of mud beaten down and kneaded, carefully smoothed with flat stones, and supported on wooden beams. On the rare occasions (one or two in each village at most) on which an upper storey is found, this is approached by a wooden external staircase. The roof is of mud, and each winter fresh layers are put on to prevent leakage during the rain. Sometimes the roofs become in time as much as 3' thick or more. If, as is probable, this be an ancient custom, it would help us to understand how great piles of earth accumulated on the ancient city sites.

If now we apply this modern analogy to the plans of houses which remain in tolerable completeness, we shall have little difficulty in getting

* During the campaign a robbery from the camp property was compensated for by a tax of one beshlik (about *Gd.*) on every adult male in the village community. The number of beshliks collected was 113. Allowing for five to each family, which is a fair average, this gives 565 as the total number of persons in the village. It agrees closely with an estimate made by the administrator of the Bergheim estate from other data.

† Nor have I much faith in the deduction of cubital lengths from measurements of rock-tombs. Even when a common divisor can be found to tables of measurements, a margin of inaccuracy often as great as an inch or two has to be allowed; and often no common divisor is forthcoming at all. Builders built, and tomb-cutters cut, until they had made a chamber large enough to suit the purpose they had in view; but I do not think that the system of measurements they used was as a rule any more scientific than that of the fellah who informed me that the length of a certain rock-cut tomb was "two walking-sticks and a hand-breadth!"

an idea of the disposition of the normal Gezerite house. It must not be forgotten, however, that each man built his own house according to his taste, fancy, and requirements, so that a diversity of detail must be expected throughout the city. The threshold of the entrance doorway was no doubt (as is always the case in modern houses) raised about 1' above the level of the roadway. This accounts for the total disappearance of any indication of the doorway in the masonry when the walls are ruined to the level of the ground. The practice of depositing lamp and bowl groups under the threshold, which will be more fully described in Chapter X, sometimes comes to our aid and indicates where the door should be placed in a reconstruction; but this practice was unfortunately not always followed, and in the absence of these useful indications we are left entirely in the dark as to the proper place for the entrance.

In Plate xlix, figs. 1-7, are collected the plans of representative specimens of houses selected from all the different periods of the city's history. The existing fragments of walls are shewn in firm lines, conjectural restorations are hatched.

Fig. 1 (II 3, 4) is a small and compact house on the Eastern Hill, with five chambers and an elaborate grain-store of small bins on the east side. What seems to be the courtyard is on the north side: the long passage that appears to have given access to it is curious.

Another house in this plan worthy of attention is the large but fragmentary building in II 14, evidently the dwelling of some wealthy notable: it is remarkable for the number of circular cornbins it contains. The buildings in trenches 20, 21 are much confused, and there are probably a good many "fictitious chambers" among them. Even here, however, a little attention shews that the normal plan—a courtyard with smaller chambers grouped around or behind—is followed in the majority. Another good but incompletely excavated example appears in II 1. The great palace, which will presently be specially described, at the south end of the western trenches is in essence merely a development of the same normal plan.

In Map I *la* the building to the south is probably also a palace, and calls for special notice hereafter. At the north end of trench 28 is a small house of the normal pattern, differing however in having the subsidiary chambers on the side of the court to the left of the entrance, not, as seems more usual, in the back.

In Map III note especially a large and important house at the south end of 20, 21. In this case the entrance to the courtyard appears to be through a small guard-room at the eastern side. There are rooms on two sides of the courtyard—the chambers to the south appear to belong to another house. The pile of skulls marked A found in this courtyard is grimly suggestive of some Gezerite Bluebeard. Toward the back of the court is a circular cornpit: the chamber immediately north of it was a granary. This house had a special cistern at its

eastern end—the same cistern as that already mentioned around which on the rock-surface arc cut a number of cupmarks.

The later part of the Second Semitic Period, as illustrated in **IIIa**, is distinguished by the remarkable brick construction on the Western Hill, shewn in Plate xlix, fig. 2, and illustrated in the photograph fig. 58. The walls were very thick, and the rooms much better laid out than usual. It was not possible to excavate it completely. At A, B, there are hollows in the walls, possibly the remains of secret store cupboards. The first of these is oval, 4' 9" x 3' 10", and at



Fig. 58.—LARGE BRICK BUILDING IN **IIIa**

present 2' 3" deep: the other is 2' 3" square, and only 6" deep. In the corner C there was a lamp and bowl deposit. Outside the brick (as will be seen in the photograph) there was a stone revetment wall. At D there was a circular shaft of stone, like a cistern shaft, but not leading to any excavation. It was 4' 4" in diameter. At E there was an oven. The bricks are sun-dried, about 1' 4" as a rule long, in courses 5" high. It is possible that the structure in **IIIa 30** belongs really to the period following; the long narrow chambers are more suggestive of that period. A good example of the courtyard house will be seen at the south end of **IIIa 28**. In **IIIa 30** is part of a house presenting some perplexing features. The chief detail is a wide courtyard with a stone pavement. In this pavement are two

pits A, B, respectively 2' 11" and 3' 6" in diameter. Remains of an older pavement run under it. West of the western wall of this courtyard are two small columns, CC. The bifid wall at D is curious. In the photograph accompanying (fig. 59) corresponding index letters are inserted. See the plan, Plate xlix, fig. 3.

The Third Semitic Period (Map IV) presents more constructions than its predecessors; and several good specimens of houses may be selected from it. A fine example, with a few later walls interfering with one corner, appears at the north end of IV 28. At the south end of the same trench are other houses—all of the same

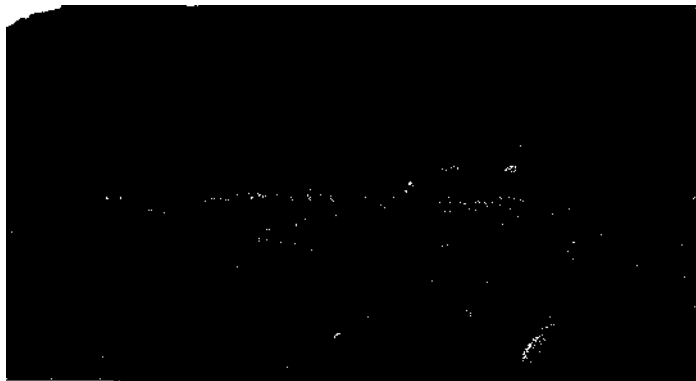


FIG. 59.—FLOOR OF A BUILDING IN IIIa 30

type, but much ruined. The series of chambers in IV 13 is not a little remarkable: the predilection for long narrow rooms, already noticed as being characteristic of this period, is here well illustrated; but it is curious to find so many chambers together not broken by a courtyard. Another good specimen of the courtyard house will be found at the south end of IV 21.

In the Fourth Semitic Period (Map V) again, numerous good examples, in a fair state of preservation, meet the eye. An important house occurs at the south end of V 2, 3, but owing to the loss of the north wall its limits are uncertain. Other houses will be noticed at the north end of 2, 3, and 4: the first of these, which is drawn to an enlarged scale Pl. xlix, fig. 4, is remarkable for the number



FIG. 60. -LARGE HOUSE IN V 27, 28

of ovens it contains. It is unnecessary to do more than point out others, in trenches 15 and 18, which all illustrate the one principle of planning followed regularly throughout. In a double house at the south end of V 21, there are two sets of chambers arranged each round its own courtyard, divided by a party wall. There is an interesting dwelling-place in V 27, 28, of which an enlarged plan is given Pl. xlix, fig. 5. The latter is evidently the residence of an important personage. It has three large corn-bins, a vat built into the west wall of the courtyard, and three square pillars, conspicuous in the annexed photograph, fig. 60. Being carefully squared, these can hardly be for any religious purpose: they probably supported a penthouse of some sort. They are 3' 6" high.

In Va there are few constructions. In the middle of trench 20 is an elaborate structure which, exceptionally, does not appear to be associated with a courtyard: on the contrary the no less elaborate but much ruined—almost incoherent—building south of this has evidently an important and ornate courtyard with chambers on at least two sides.

The Hellenistic Period seems to shew houses in which the importance of the courtyard is rather less as compared with the rooms. Though they obviously exist

—and in trench 19, west of the Maccabaeae Castle, there is a remarkably large open space—yet as a whole they are not conspicuously larger than the rooms of the houses to which they belong. In some houses—notably the large one on the East Hill, VI 2, 3, which has been chosen for illustration, Pl. xlix, fig. 6—there appears no courtyard at all. The elaborate structure in VI 30, south end, may possibly be rather earlier in date than the majority of the buildings with which it is associated.

One of the most complete residential buildings found in the city was the house which forms almost the only building of the Hellenistic Period remaining in the northern halves of trenches 10-12. This ruin made a small mound on the surface of the hill, which will be found indicated in Pl. viii as *Rujm 'Abd Allah* or "'Abd Allah's Cairn"—after a certain 'Abd Allah who, a generation ago, died here from the bite of a snake. This, being an unusually complete example of an ancient Palestinian house, deserves careful study. The plan is subjoined (fig. 61). The main entrance is at A. This gives admission to a space which from its breadth was probably an open courtyard, on the left-hand side of which is a doorway admitting to a building that evidently was independent of the main dwelling. This doorway is shewn in the photographic view, fig. 62, which gives a good idea of the masonry. This doorway opens into a plain chamber, with doors to the right and left. That to the right (west) admits to a room in the floor of which is a cylindrical pit cemented, 3' 7" in diameter and 6' 11" deep. This probably was for storage of grain. That to the left admits to a stepped reservoir of a type that will be more fully described later in the present chapter. In the example under discussion (a photograph of which is shewn in fig. 65) the water was collected from the roof by a conduit the lower end of which remains (marked H both in the plan fig. 61 and the photograph fig. 63). At the point where the existing fragment remains, the water fell into the small square cemented receptacle K, through a narrow hole in its corner (indicated in the plan). Here the washings from the roof

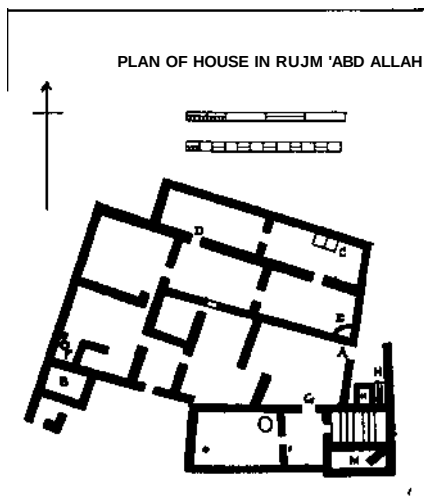


Fig. 61

were collected and prevented from falling into the cistern. The water, purified from its sediment, was allowed to run into the cistern through the hole I... The small opening into the vat K could (if the cistern were too full) be closed with a stone or pad, in which case the water would continue to run along the conduit H, along a canal through the wall of the cistern, and finally escape into the additional reservoir M. The cistern itself measures 13' 2" long, 8' 9" broad, and is 7' 3½" deep below the bottom of the topmost step. It is built of square blocks and cemented. Six steps lead down to the bottom, with a rise ranging from 9"



FIG. 62.—Doorw, IN RUJM 'ABD ALLAH

to 12" (except the lowest step, which is 2' high) and a head of 1' 3" to 2' 7", leaving 3' 3" clear of steps at the lower end. The steps are arranged in threes, one broad and two narrow.

Returning to the entrance courtyard, we enter the main building through an opening between the ends of two overlapping walls. This opening admits to a second court, from which doorways admit to the house rooms, twelve in number. These communicate by doorways, all of which are preserved except that of 13, where the walls are ruined. As usual the masonry consists of rough field stones set in mud. This unsightly masonry was no doubt covered with plaster smoothed and painted—and a small fragment of plaster, about the size of the palm of a man's

hand, was found loose in one of the chambers. This was adorned with green and red stripes, which gives a hint as to the style of mural decoration.

At C were two masonry steps, perhaps the bottom of a staircase leading to the roof or to an upper storey. If the latter, this is the only indication of a second storey found in any house in Gezer.

In the western jamb of the doorway D a hole was drilled in the face of a stone. This may have been for a bolt: otherwise there is no indication to shew how the doorways were closed. The structure E was a row of stones on edge, making a



FIG. 63.—CISTERN OF HOUSE IN RUJM 'ABD ALLAH

circular quadrant that filled the angle in which it was erected: it was possibly a hearth. V was a brick oven of common type.

Examples are occasionally found of alterations of plan or reconstructions. Thus in the curious structure VI 30 D (drawn to an enlarged scale in Plate xlix, fig. 7) there has evidently been more than one alteration, as is shewn by the walls butting against one another. A doorway (a) has evidently had an inner chamber built against it, with a doorway (6), which in its turn has been blocked.

Foundations.—As a rule the foundations of houses do not go deep ;

but sometimes, especially in the case of large walls, they are carried down even to the rock. This is the case of IIIa 30 AA.

No special treatment of the foundations, such as the beds of sand described from Tell el-rlesy (MMC, pp. 71-73) or the remarkable wooden footings from Tell Mutasellim (VC, p. 38), was discovered at Gezer; unless we may count a series of larger stones found under the foundation of the chamber IV 8 B—one under the south wall and two under the west wall.

On the eastern slope of the hill, near 'Ain Yerdeh, are certain rock-cuttings, which were long ago seen by Professor Clermont-Ganneau and by him identified as the foundations of extra-mural houses. I am not sure that it was the exact cuttings which the Professor saw that I have identified; though I think I have examined all the evidences of rock-cutting to be seen above ground on the hill. Perhaps some of those which I prefer to regard as simple quarries were among the number. But there are three in the region referred to, which I have marked *foundations* on the map, and which I have little doubt are actually the foundations of such buildings. It may be perhaps more correct to regard them as the foundations of watch-towers, erected in the vineyards (which the numerous presses in this region shew were planted here). Such watch-towers (the "lodge in the garden of cucumbers" of Isaiah i 8) are often very elaborate structures in modern Palestine, consisting of several rooms. There are some remarkable specimens in the hills around 'Ain Karim, near Jerusalem.

Of these rock-cuttings, the first (proceeding northwards) is in a long narrow outcrop of rock about 3' breadth running E. and W. Near its western end two square sinkings are made in it, separated by a bridge $7\frac{1}{2}$ " across. There is a square hollow in one angle (see the cut, fig. 64). This seems to me the threshold of a doorway giving admission to a room on the north side that was apparently about 11' 6" long east to west: the other dimensions cannot be discovered, as the rock sinks below the surface and was in consequence not trimmed.

The second cutting was more elaborate; but the plan of the building cannot be made out with certainty as naturally the rock is cut only where in the original outcrop there were projecting bosses which it was desirable to clear away. There are traceable parts of four rooms, one of these of very small size, and a doorsill and socket similar to that above described and illustrated.

Farther to the north, and just at the point where the hill rises from the valley, there was a lodge of yet more pretentiousness. All that remains of it are a rock-cut flight of steps and a now almost totally destroyed pavement of mosaic. The steps were four in number, the longest being $9\frac{1}{6}$ " in length with a tread 1' 4" broad.

They lead up to an artificially smoothed surface of rock, no doubt the foundation of a room or building: the length of this surface, east to west, is 30' 10"; the breadth cannot be determined with accuracy as there is no edge of uncut rock at either side; it is not less than 14' 5".

There is a bit of mosaic pavement to the north of the flight of steps and at the level of the lowest step. It is so much cut up and destroyed that no exact dimensions of the room can be given; but it was of small size, between 9' and 12' square.



FIG. 64. —ROCK-CUT FOUNDATIONS

Masonry.—The walls consist of rough stones of a great variety of sizes, from small pebbles to large boulders which a strong man can scarcely lift. About 1' 8" is perhaps the commonest dimension. Mortar and cement are never used—this rule is invariable from first to last—except in the lining of cisterns: the stones of house walls are always set in mud. Very few of the stones shew evidence of any but the very roughest hammer-dressing. Well-dressed stones, even at the corners and doorposts, are very rare.* The stones are fitted together without much art, the masonry being a rough rubble construction; and the joints, which are very wide and irregular, are packed with smaller stones and pebbles. If anything, the average size of the stone appears to be rather less in the lower strata; and here also some of the best-built walls are to be found.

Some of the walls in VI 29, north end, were remarkable for the large stones used in their construction—in all probability taken from the ruined temple in the neighbourhood. The following are measurements of the seven largest of these stones: 2' 8" x 1' 3" x 1' 10½", 3' 6¾" x 1' 3" x 1' 10½", 4' 9" x 1' 6⅛" x 1' 2", 4' 0" x 1' 6⅞" x 2' 0", 3' 1" x 1' 5" x 1' 6⅞", 2' 7,4" x 1' 4" x 1' 4", 3' 6" x 0' 11" x 0' 10¼".

It is very rare to find ornamental stone-dressing—indeed almost the only places where it appeared were in (1) the Solomonic towers of the outer city wall, (2) the late constructions of the Maccabaeon Palace, and (3) a reservoir of the same period on the Eastern Hill; in all of which drafted stones were found. The wall V 29 A is therefore specially noteworthy, for having drafted stones in its course. As it runs under

* Stone doorposts, wherever they occur, are indicated in the plans by the letter s. The walls are ruined to the average height of about 3'. The wall V 17 B, however, runs up through the upper strata almost to the surface of the earth.

the village cemetery it was impossible to find to what building it belonged ; probably a building of importance.

Though no doubt the lazy and pernicious custom of taking stones from earlier buildings, which is one of the most potent influences in destroying ancient remains, was freely practised by the Gezerites, building stones were quarried as well from the rock outcrops in the hills around. A number of these quarries, denoted by the initial Q, are indicated on the plan of the surroundings of Gezer; but it has not been thought necessary to indicate all. There is a fine quarry at the mouth of the Wady el-Jaijah, and the two great caves, Mugharet el-Jaijah and Shakif ez-Zutt, have



FIG. 6—WALL CONSISTING OF A ROW OF LARGE STONES WITH SMALLER STONES BETWEEN THEM

been used for quarries ; but usually the quarrying may be described as mere " nibbling " on the surface—one stone being cut here, one there, wherever the natural form of the outcrop seemed to offer a convenient shape.

VI 29 A is a wall which illustrates a curious and unusual type of construction—a row of small standing stones with masonry between them. These stones may originally have stood free, like the row of pillars supported in a dwarf wall a little to the north of them, and afterwards were joined by masonry ; or the construction may be merely a builder's freak. Fig. 65 shews a photograph of this. To make them clearer, a mark has been placed on each of the stones. Va 29 A is a row of

three long stones lying end to end, measuring respectively 2', 4', and 5' 4½", so that the whole row measures 11' 4½".

Analogous, but even rarer, is a horizontal stone extending through the whole width of a thick wall: one such case is at VI 27 A, where a large stone stretches right through the wall, otherwise built of comparatively small stones; the wall is 6' 10" thick.

The cement used in the lining of cisterns is made of burnt lime: in some of the later reservoirs, *e.g.* in the remarkable system of baths near the Maccabaeian Castle, a hard cement is made of sea-shells. A large pile of shells was found in a corner of the courtyard of the Maccabaeian Castle, probably brought up from the seashore in order to make cement.

Masons' marks were not found, except in the Maccabaeian buildings to be described later; unless indeed the mark cut on a building stone found near the mouth of the great water-passageway, here figured (fig. 66), be of this nature. The inscribed surface measures 7" broad and 1' high.

Brick began to be used very early. Thus, at the south end of II 14 is a simple wall of very rough masonry, of large stones roughly put together. Its foundation was 2' 8" above the rock. Underneath, and therefore older than, this very ancient structure, was a quantity of shapeless brick debris, which could not be planned. It is not improbable that the superstructure of most of the walls was of brick, in a stone base. In one instance the brick was below and a course of stones above: I cannot account for this anomaly except by supposing that for ornamental purposes there were courses of stones at intervals in the brick building. Brick so far as it survives is denoted on the maps by the letter *k*.

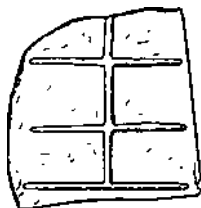


FIG. 66.—MARK CUT ON A BUILDING STONE

Near the south end of IIa 29, just south of the larger granary, there had evidently been a large brick construction, for a number of fragments of sun-dried bricks were found here. The broad surface of these bricks was slightly recessed behind a projecting margin. There were in almost every case two strokes impressed on one side. The average size seemed to be 10" x 1' 1" x 4". One of the bricks bore the impression of the paw of a dog. This example measured 1' 9" x 10½" x 4". This, and another, shewing two strokes—a very common mark, probably intended to key the mud used for mortar—are shewn in fig. 67. A square is drawn enclosing the dog's paw-mark. Another brick (fig. 68), similarly marked by the hoof of a calf, was found in the Maccabaeian Castle. One of the largest bricks found was projecting from a wall in V 4, N. end. It was 2' 5" high, 6" thick; it projected 1' 5", and of course had an additional breadth embedded in the wall.

Another instance of brick construction, from V 2, is shewn in the photographic view fig. 69. A man is standing facing the spectator in the left hand of the picture: to his left is a wall of the kind described, two courses of brick running above as many courses of stones; the individual bricks can easily be detected in the photograph. But the number of cases in which brick was thus found *in situ* was comparatively small. A certain number of houses were found filled with brick earth—evidently the walls had been built in the method described and the superstructures had collapsed

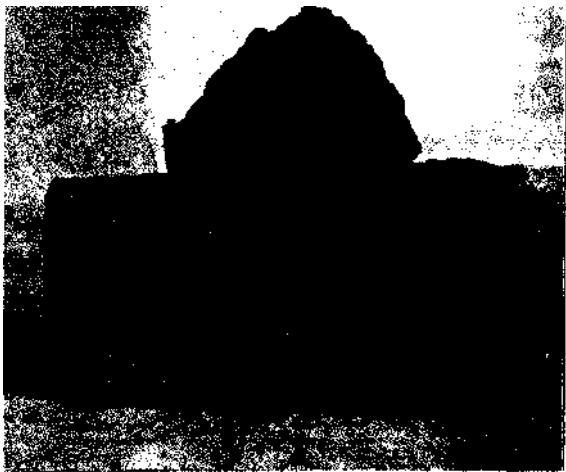


FIG. 69. —SPECIMENS OF BRICKS

completely. This was especially the case in the later structures, of the Fourth Semitic and the Hellenistic Periods.

At two places in V 2, near the south end, were found large solid masses of brickwork, irregular in outline. They were much broken, and there was no fair face to the surface. Each was about 5' 11" high, and their cross-dimensions measured respectively 8' x 3' 6" and 9' 3" x 7'. In the top of one of these was sunk a circular vat about 2' across.

The bricks are rarely kiln-burnt, most of them being merely sun-baked, and having now no more cohesion than the earth in which they

are embedded. The colours of these bricks are red, dark brown, light brown, yellow, and dirty white : bricks of different hues are mixed together in the same construction without any order or arrangement, though one rude oblong structure of two rooms just under the surface at the south side of the Eastern Hill (VI 2 kk, south end) was remarkable for having the courses alternately red and white. The red courses were 4" high, the white rather more—about 5". The lengths of the bricks ranged between



FIG. 68.—SPECIMENS OF BRICKS

1' and 1' 5½". In some buildings brick was used in part of the structure—possibly indicative of a reconstruction while the building was in use. Thus in a curious house at the north end of V 3 two adjacent walls of one of the chambers are of brick, the rest being of stone.

Mural Decoration.—In the latest period, and probably also in the earlier, the walls of the house rooms were covered with stucco. A fragment found in the large house above described, north of the baths, was made of a very gritty plaster, with many grains of flinty sand in it. The

outer surface was smoothed carefully, apparently with the edge of a batten of wood, and then covered with a thick dark cream paste. Upon this was painted a band of dark green, about $\frac{1}{2}$ " in breadth : on one side of this band the surface of the stucco had been washed over with dark brick-red, on the other side with a green rather lighter than the band. This gives some idea of the colour scheme adopted in decorating the insides of superior houses.



FIG. 69.—SPECIMEN OF BRICK CONSTRUCTION

Floors.—The floors of the houses were usually the bare surface of earth over which they were erected; and in the great majority of cases no definite indications of them were to be seen when they were cut through in the course of excavation. Sometimes, however, they consisted of beaten mud mixed with lime-cream, and in others a regular pavement of cobble-stones or else of small stones and lime clippings was found. I had a demonstration of the way in which such floors were made, in the course of erecting my own hut by the fellahin under my direction. The floor was made of

a mixture of clay and powdered limestone, passed through a sieve, and mixed with water; it was then smoothed off by rubbing down with a flat stone. Such floors were always easily recognizable.

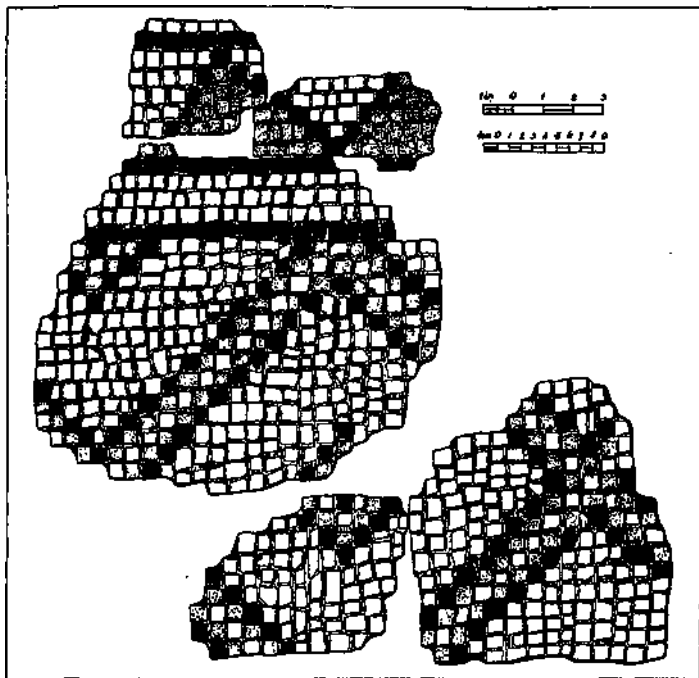


FIG. 70.—FRAGMENT OF MOSAIC PAVEMENT

In the house already shewn in the photograph, fig. 69 (it is in the middle of V 2, at the east side of the trench), there was a floor of beaten mud, small stones, and lime, in the centre of which a vat was formed in the ground 3' 6" across: the five-foot rod in the photograph is just behind the depression. Pavements, whether of plaster or of stone, are denoted in the map by the letter p. **IIIa 30 B** is a pavement 5' 1" square, of four large flat stones.

Another example of a vat sunk in a plastered pavement will be seen at **IIa 29 A.**

In this case the vat is 1' 4" wide and 10" deep. Another, rather larger, occurs at VI 29 B: this measures 3' 11" broad and 2' 10" deep. In the plastered floor of the peculiar building in the middle of IV 27 there was sunk a rectangular vat of thick pottery with flat bottom and rounded corners. It measured 1' 9" x 1' 6½", and was 5" deep. Underneath the pavement was a great mass of cow-bones.

At IIIa 30 AA there are two circular pits in the pavement, the northern one 3' 6" across, the southern 2' 11".



Fig. 71.—Cur FOR RECEIVING THE HORN OF A DOOR

Pavements are not always truly horizontal. The fragment VI 28 A slopes upwards toward the west at an angle of about 30°.

Mosaic.—The use of mosaic for the decoration of floors was not introduced into Palestine till the Roman period. No examples therefore exist in the hill itself. It was, however, used in the houses of the Roman settlements near by. White tesserae—generally about $\frac{3}{8}$ " cube—are often turned up by the plough in the surrounding fields; larger blocks, about 1½"

cube, are also found occasionally. Mosaic of white tesserae is to be found in two of the rock-cut winepresses on the hillside that will be described in Chapter VI. The mosaic in the bath near 'Ain Yerdeh is described in connexion with that interesting structure, later in the present chapter.

Of the domestic uses of mosaic decoration only two examples survive in the neighbourhood of Gezer. One is in the floor of a house in the middle of the village of Abu Shusheh, and is the only indication remaining above ground, known to me, of the existence of a village on that site in Roman times. It consists of white tesserae with blue lozenges, containing at their centres blue V-marks: the tesserae inside the Vs are red. The other example (a very fragmentary specimen, having been broken up by fellahin in the hope of finding, a tomb underneath) is at the east end of the hill, in what seems to have been a small Roman house. The pattern of the fragments is here represented (fig. 70): the colours are dirty yellowish white, indigo, and light brownish red. A fifteenth-century Arab coin and a few fragments of Arab wart: were found in the chamber.



Doors and Doorways.—

Doorways were absent in the majority of cases. The threshold, as in the houses of the fellahin, was raised some inches above the surface of the ground, and usually the walls were ruined to below this level. A *fortiori* the evidences of the nature and number of windows were yet more scanty; but that they differed from doorways only in size and position in the wall can scarcely be doubted.

As a rule the jamb of the doorway was simply an opening with vertical sides left in the masonry. There was nothing to shew how the door-frame was secured; no doubt, however, it was by pegs driven into the interstices between the stones. The doors themselves must have rested on projecting horns turning in stone cups, of which large numbers were found—few, however, *in situ*. Fig. 71 represents such a cup.

FIG 72-SOCKET FOR DOOR-HORN

At I 8 A is a built step with the hole for the door-horn at the end. In VI 30 was found a specimen (fig. 72) in which the hole was (unusually) bored *through* the stone. It measured about $8\frac{5}{8}$ " each way, was $2\frac{1}{2}$ ' thick, and had a hole 3 $\frac{3}{4}$ " diameter through it. The sides of this hole shew evident marks of friction.

Two curious stones will be seen at V I 30 C, not easy to explain. They are not placed anywhere where it is natural to expect a door, else might they be considered as sockets for the staples of a more elaborate type than usual. They are 3' *oh*" apart. Each stone measures 1' $8\frac{1}{2}$ " x



FIG-73.. STONES AT VI 30 C

1' $4\frac{1}{2}$ " x 8" high. They stand against a wall; and in the side of the stone towards the wall is cut a horseshoe-shaped curve, $6\frac{1}{2}$ " long and $8\frac{1}{2}$ " across, with a raised collar surrounding it $2\frac{3}{8}$ " broad and 1" high. The photograph fig. 73, shews their disposition and appearance: a mark is put upon them. Fig. 74 is a diagrammatic representation of one of them.

To secure the door when closed a bolt was used, and no doubt it is to receive such a bolt that holes are sometimes found drilled in the ends of walls.

Doorposts of stone are indicated by the letter *s* when it occurs in the course of a wall. The letter *s* when not connected with a wall denotes a loose stone which is not certainly a pillar-base.

Iron **keys** appear in the Hellenistic Period. These are evidently intended to fit into a lock like the well-known Arab type: tumblers of a certain number and order of arrangement fall through the frame into holes in the tail of the bolt, when the latter is shot; these can be lifted by rods projecting from the key, arranged to correspond with them. FIG. 74—DETAIL OF STONES

In the Maccabaeen keys the stem of the key is at right angles to the bar bearing the projections, in the modern they are in the same straight line, but otherwise the two are identical.



An example which has two tumblers will be figured in Vol. II. It comes from near the baths north of the Maccabaeen Castle. A different type of key is shewn in fig. 75.

A stone with two holes one above the other is the standing slab marked IV I s. This stone is pentagonal in shape, 2' 10" high, 2' 1" broad, and 10" thick: there are two bolt-holes in an almost vertical line in the middle, probably for a door-fastening.

Doorways were no doubt covered by lintels of stone or wood; but the latter would have long since decayed, and the former would naturally be removed when the buildings to which they belonged became ruined, as the long stone was too valuable to leave derelict. Only a single instance of a lintel stone remaining was found. This was in the stratum overlying the temple on the Eastern Hill; and in all probability the stone originally formed one of the alignment of massebdth belonging to this structure. The exact place of the lintel is marked VI 17 B, and it is indicated with an arrow in the annexed photograph, fig. 76. The stone is 5' 11" long,



FIG. 75—IRON KEY 1' 3" high, 1' 6" thick; the clear space beneath it is 3' 6" broad. It is supported on the east side by two stones, on the west by a single stone 2' 6" high: the opening under the lintel is thus very low, and can hardly be a true doorway. There are numerous large stones in the walls of the building to which this lintel belongs, all probably taken from the temple underneath. Three

small rudely built magazines will be seen in a line from north to south, west of the wall containing the lintel. This is shewn in fig. 76.

As a rule the doorway is of the simple kind above described ; but cases exist where it is lined with standing stones. This is usually in the later strata : a fine example from the south end of IIIa 28 will be seen in fig. 77. This consists of two stones about 5' 1" high: one is cut as though an attempt had been made to divide it into two. The width of the doorway ranges as a rule from 1' 7½' to



FIG. 76.-LINTEL STONE AT VI 17 B

3' 3". An exceptionally wide doorway, with stone doorpost, was found in the Maccabaeon Castle : it measured 3' 9".

In most of the excavations in Palestine broken fragments (and a few whole specimens) of a certain type of stone object have been found in the Hellenistic strata. These are rectangular discs of the rough micaceous Hauran stone of which corn-grinders are usually made. A specimen is figured in *EP*, Pl. 73, fig. 2 : no whole specimen was found in Gezer. The disc is usually about 15" long by 10"-12" broad, and about 4" thick. A narrow slit, with the long sides bevelled on one face of the stone, is cut through the stone, along its central major axis, stopping about 2½" from the edge of the stone at each end. There is a marginal frame round the bevelled parts, in which a shallow square sinking continues the line of the

perforation. It is possible that these objects are window-frames, but till one happens to be found *IN situ* this can only be recorded as a guess.

Roofs.—The roofing of the houses was probably, like other details, comparable with that of the modern huts, except in one particular: while the majority of the village houses are covered with flat mud roofs supported on wooden beams, a few here and there may have stone domed roofs.



Fig. 77.—STONE-LINED DOORWAY IN IIIa 28

There is, however, no evidence of the use of the arch in Gezer at any time previous to the Hellenistic Period.*

That the roofs were covered with mud may be inferred from the discovery of limestone rollers, similar to those with which the roofs of modern houses are flattened and smoothed. These rollers were confined to the Hellenistic stratum. One fine example, from east of the High Place

* The rock-cut arch in the great water-passage can hardly be taken into consideration in this connexion.

alignment (fig. 78), measured 1' 7½" long by 9" broad at the ends: in the middle the diameter is a little more, the roller being slightly barrel-shaped. In the earlier period the roofs were no doubt smoothed off with small flat rubbing stones. The roofs of the huts of the excavating party were smoothed with such stones, taken from the excavations. The framework bearing the mud-covering must have been supported on wooden rafters lying across the chamber, and resting their ends on the tops of opposite walls. One such roof remained, or rather enough of it remained to give an idea of its construction. The house to which it belonged had been burnt, and the charred rafters were still embedded in the earth when the



FIG. 78.—STONE ROOF ROLLER

latter was removed. They were oval in section, 6" in horizontal diameter, 4½" in vertical, and laid 2' 7" apart centre to centre.

Frequently it happened that a chamber was too wide to be spanned by a single length of roofing-timber. In that case two lengths had to be used, with their ends meeting in the middle and supported on a plate resting on columns. It is probable that these columns were of wood, but a flat stone was placed under their feet to support them and to prevent the weight of the roof above from pressing them into the soft earth floor. Such stones occur frequently, singly or in rows, in the centre of chambers. The commonest number for such rows of pillar-bases is *three*, and in fig. 79 a row of this number of stones is represented: its place in the plans is IV 21 A. It is worth noticing in passing that to slip the pillars from the footstones would not be an impossible task for a strong man, and to do so would obviously bring the roof of the house down. Evidently

this is what Samson is supposed to have done by the author of the Book of Judges. There is nothing in the narrative to justify the popular idea, countenanced by many pictures, either that the pillars were of stone or that Samson *broke* them.*

The most elaborate example of a colonnade was that marked V 28 A. This, however, is not meant for the support of a roof. There must have been here a



FIG. 79.—PART OF A HOUSE SHEWING THE ROW OF STONES IN THE FLOOR

verandah running round two sides of the structure to which it belonged, supported on four pillars on each side. Pillar-bases, when not denoted by special letters (capitals) for particular reference, are indicated in the map by the letter *b*. Sometimes large single loose stones are found lying about which are not certainly pillar-bases. These, as already mentioned, are denoted by the letter *s*. A remarkable series of such stones will be seen in VI 5 marked by the letter *s*. Possibly this series is earlier, and should be on Map V: there was nothing to indicate its age or purpose. II 3 B is a heap of stones. II 21 C is a flat stone 2' 4" across.

* See Judges xvi 26-30 and Moore's *Commentary*, pp. 360-363.

There is another remarkable series at the north end of VI 4, which may possibly be the remains of a short street of columns or covered market. The buildings are so ruined that the fragments remaining are quite incoherent. It reminds one of the curious building in Tell el-Ilesy (*MMC*, p 91).

Beside the pillar-bases, there are sometimes to be found single blocks of stone, as VI 18 E, which have no such obvious constructional purpose. They have probably no special significance, perhaps stones provided for a building found to be superfluous and so left derelict.

Only twice were pillars found with drum standing on drum: one with two circular drums at IV 18 b; the other, two pillars with square drums at Va 30 A.

As a rule pillar-bases such as we have been describing arc simply flat blocks with no attempt at making them

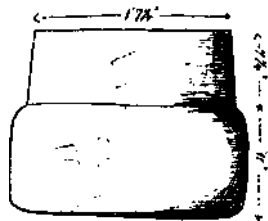


FIG. 80.—BASE OF A COLUMN

architecturally ornamental: we should therefore specially notice the few cases where some more ambitious effort seems to be made. Such is the easternmost stone of the series in the middle of VI 4 A, which is the frustum of a cone on a square base. A similar stone is fig. 80, which represents the column-base III 18 A: the dimensions are noted on the drawing. The other stone, to the east of this, is a plain block. The rarity of architectural ornament at all periods makes this rather early example noteworthy. Commoner are round stones, resembling column-drum: such is the base (marked *b*) in the middle of V 3. The pillar-base IV 30 B is a frustum of a cone, 1' 8" in diameter at top, 1' high, on a round base 1' high and 2' 6" in diameter. To the east is a similar pillar-base, indicated in the map by the ordinary symbol *b*. A similar but rather larger pillar-base, the lower member of which was square, 11" high, the conical part 7½" high and 1' 7½" broad at the top, will be found at III 18 A. The circular structures in this neighbourhood were ruined early, and there was a thick layer of accumulation, empty of wall, between this and the next stratum above. The pillar-base III 30 A is simply a cylinder, 1' 2" high and 1' 4" in diameter. The two pillar-bases II 17 CC are nicely rounded stones, 2' in diameter and 61" high.

The reference letter V 20 C is placed between two dots which represent column-stones of a more important kind than those we have been considering. They are shown in the photographic view, fig. 81. They are squared stones, roughly hammer-dressed, 3' 8" high and 1' 6" in both cross-dimensions. They appear to be standing in the middle of a passage, the walls of which are built of larger blocks than usual, especially on the south side. There is another stone, similar to these but longer (5' 9"), built into the east end of the wall to the north: it will be seen behind the head of a man that stands between the pillars, in the background about the middle of the picture. V 20 D marks a similar column, rather shorter (2' 10"), at a little distance, which may belong to the same series. These seem to belong to an attempt at

a colonnaded entrance to the house the centre of whose courtyard contains the reference letter V 21 B. It is analogous in some degree to the curious row of three pillars in the courtyard of a large house in the Western Hill, already described above. That these stones were in any way connected with religion I do not believe: such *squared* pillars can hardly have any but a constructional purpose, although (like the pillar with double axes in the palace at Cnossos) it is not impossible that religious emblems might be carved on them. None such, however, appear in the pillars under discussion, which simply form part of a colonnade. At VI 29 C is a curious colonnade, the two westernmost pillars of which are strongly built, of square stones (fig. 82),* the others smaller and flimsier. The latter stand on a dwarf wall, and



FIG. 81. COLONNADÉ

may represent a series of window-like openings (fig. 83). Pillar-bases such as we have been describing are generally found singly or in rows in the middles of chambers; but this is not always the case. They are sometimes found at the ends of walls: an example will be seen at the north end of V 20, marked by the usual symbol *b*. In this case we must suppose the pillar to be a support for two lintels, spanning the entrances to the two chambers separated by the wall. Sometimes the base is found standing on the wall: an example occurs in V 4, also denoted by *d*, a short distance south of the large thick wall in the middle of the trench. This is probably the base of a mullion dividing a small double window.

Stairs.—Very rarely was anything in the nature of a staircase found,

* These pillars consisted, when found, of two stones each. The upper stone of the easternmost pillar was thrown down by an accident before the photograph was taken.

and in no instance was there sufficient to indicate that the building to which it belonged had an upper storey. As a rule there was but one step, or two, which may have simply reached up to a doorway raised above the level of the ground, like an ordinary outer door of a house, or to a platform of beaten mud erected against one side of the chamber. In I la 29 B is



FIG. 82.—WEST END OF COLONNADE IN VI 29 C

a single step, of brick. This is under the level of the foundation to which it is adjacent, so cannot be a true step: it may be a footing for a wooden post, erected for some reason against the wall. In a corner at IV 29 C are two steps of masonry: possibly there was here a doorway, but unfortunately the buildings at this point are so ruined that their exact plan cannot be certainly recovered.

There was one example of steps at the entrance door of a house,

leading into a doorway from a colonnaded porch. It is marked VI 27 B, and appears in fig. 84. At VI 14 A are three stones like a step in the level of the foundation of the long wall to which they are adjacent.

Hearths.—Enclosures of stones on end are sometimes found in the middle or the corners of dwelling-houses. These are perhaps *hearths*. One such was in II 20 A, where there were four, stones on end. Another is at II 20 D. The circle of stones on edge V 9 A may be another.



FIG. 83.—EAST END OF COLONNADB IN VI 29 C

Miscellaneous Details.—Before leaving the subject of the ordinary dwelling-houses we may notice a few special details that could not be considered in the foregoing paragraphs.

The wall marked "*sloping wall*" in II 29 is a sloping glacis, like the Troglodyte rampart. Near it is a circular structure 4' 6" in diameter, probably a granary, lined with cement and floored with a pavement of stones.

In VI 29 D there occurs a small platform of standing stones on edge in the

corner of a square room. This platform measured 3' by 1' 4". It is probably a hearth.

There were some curious details in the large, irregular, and much-ruined house in the middle of IV 4 that call for notice: they are not easy to explain. They are indicated by reference letters in the plan.

A was a fragment of lime pavement, quite soft and ill-cemented together, measuring 5' 9" by 2' 8". It was strewn over with a thick layer of sea-gravel, consisting for the greater part of broken cockle-shells crushed and ground smooth by the action of the waves. On the gravel a bronze knife was found lying. B was a small trough covered with a similar soft cement, and bounded by a wall 1' high. In the centre was one of the vertical drains of jars that are described elsewhere. This



FIG. 84.—STEPS AT THE ENTRANCE OF A HOUSE

trough was partly underneath the thick wall east of it, which thus appears to be a later structure. C was the fragment of a plastered floor, 3' 7" north to south, 4' 6" east to west. Underneath was a layer of loose uncemented rubble with a jar standing upright in the middle. D was a circular structure in diameter 4' 9" externally, 2' 10" internally. It was plastered on its inner surface with a cement made of broken fragments of shell.

The circular structures so often to be seen at all periods were probably beehive-shaped granaries. Some of them (as V 13 A) were plastered on the inside face.

The excessive rarity of architectural ornaments of any kind invests even a poor little fragment like fig. 85 with a certain amount of interest. It was found in the disturbed strata at the north end of trench I—possibly it belonged to the building which covered the large well close by. Some moulded fragments were found in

the large central reservoir and will be noticed in connexion with it (Plate liii). In a house of the Maccabaeon Period was found a fragment with a *cyma reversa* moulding.

Because they resemble corbels more than anything else I describe at this point the three enigmatical objects represented in fig. 86; but I do not feel certain that this is their actual purpose. They were found

among the debris of the Maccabaeon city, overlying the smaller high place on the Western Mill (trench 29). They are made of soft limestone, a fact which is rather against their being corbels, as they could not stand much shearing strain. Two of them are L-shaped: of which one measures 7" x 10 $\frac{1}{8}$ " x 6 $\frac{3}{4}$ ", the other 8" x 9 $\frac{3}{4}$ " x 6 $\frac{3}{4}$ "; the third dimension being the

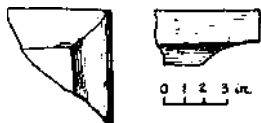


FIG. 85.—FRAGMENT OF MOULDING

breadth at right angles to the plane of the picture in each case. In the middle of the back of the upright limb of the second of these (which is at the left-hand side in the photograph), close to the top, is the first of the two marks in fig. 87; the second is at the side of the bottom of the horizontal limb, near the edge.* The third of these supposed corbels is T-shaped, the arms of the T being broken off. The vertical bar is of an oval section. It measures 9" high, 6" broad (in the plane of the photograph, along the cross-bar), and 5" at right angles to the plane of the photograph.

§ 12.—GRANARIES AND OTHER SPECIAL STRUCTURES

(1) Causeways.—A characteristic of the lowest stratum, especially on the Eastern Hill, is a number of broad stone caviseways, meant to ease



FIG. 86.—CORBELS (?)

* The words "upright," "horizontal," refer to the position of the object in the photograph.

the inconvenient irregularity of the rock-surface on which the city was built. These are from 1' to 3' in height, and of a width determined by the extent of the irregularity which they are meant to

FIG. 87.—MARKS ON THE "CORBELS"

tion by its superior masonry and evident importance. A pit was accordingly dug east of this trench in order to determine the nature of the building to which this wall belonged. It consisted of a four-sided enclosure, not rectangular, though probably intended to be so, with rounded corners.

be observed. The width of the enclosure — exclusive of the thickness of the walls — averaged about 45'. The western half of the enclosure was divided by cross-walls into four irregular chambers, the disposition of which can best be understood from the plan (fig. 88). The eastern half was free from buildings except for a circle of small stones about 1' 6" high, set on end on a platform of beaten mud raised about a foot from the rock. It is marked D in Map II, east of trench I. The stones were cemented together with mud. Smoke-blackening and heat-splintering especially on the end stone of

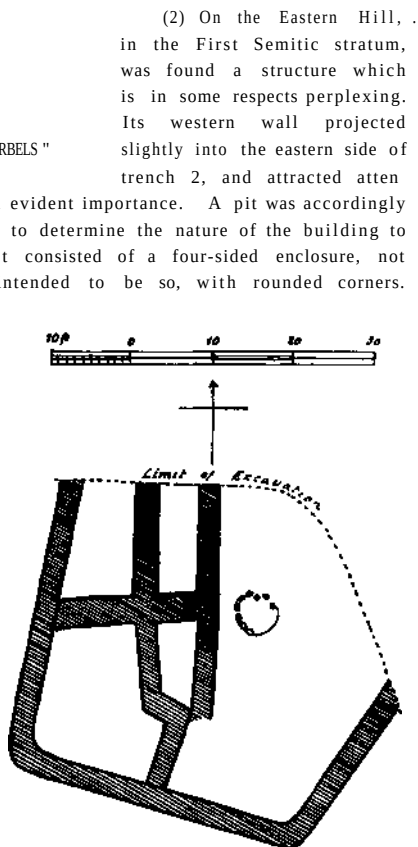


FIG. 88.—STRUCTURE ON THE EASTERN HILL

the curve at the eastern side shewed that this had been used as a hearth. The structure was left open to shew to visitors, but was soon afterwards destroyed by some mischievous boys : I took advantage of **this** to dig under the mud platform, but found nothing within it. Fig. 89 **well** shews the appearance of the structure.

When I first reported this discovery (QS, 1902, p. 321) I treated it as a place of worship. It may be so; but the subsequent discovery of the real temple of the city, as well as the total absence of objects of cult within its precincts, make me inclined to modify this view. I am not sure that it

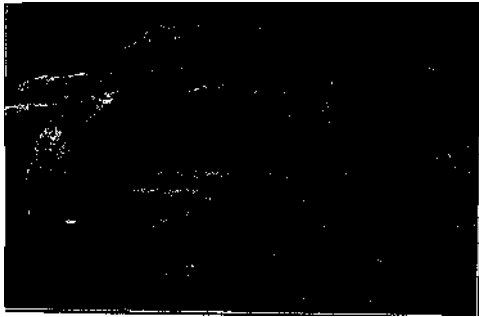


FIG. 89.—CIRCLE OF STONES IN THE BUILDING ON THE EASTERN HILL

is not best to regard it simply as a house, rather superior to the majority, with an open court in front containing the family hearth. Here and there, as has just been mentioned, small curved structures are found that probably are likewise to be explained as hearths. One such is built *on* the end of the short wall V 3 A, which must therefore have been a low dwarf wall and not a partition.

(3) **Granaries** formed an important class of buildings at all periods. Some of these seem to have been private stores, attached to individual houses; **but that** there were public granaries as well is indicated by the size of some of the stores, and the quantity of grain found in them. Some of these magazines seem to have perished by fire, and the charred grain,

retaining perfectly its original shape, is easily recognizable.* We are not here concerned with the varieties of the cereals represented, which is a subject for a later chapter, but only with the structural receptacles in which they were stored.

It is probable that most of the circular structures, which will be seen dotted over all the plans, are grain-stores. Grain was actually found in some

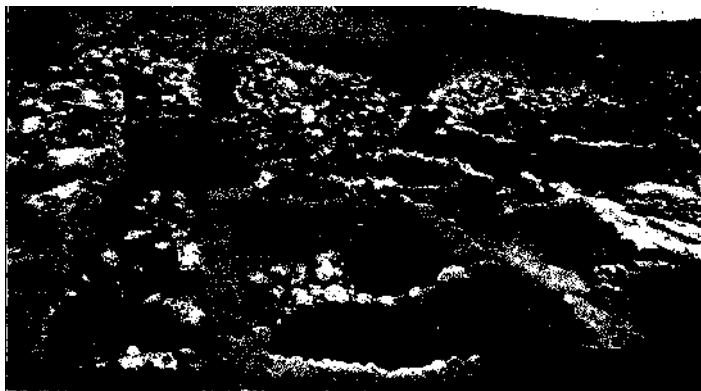


FIG. 90. -GRANARV AT NORTH END OF II 4

of them (notably in those at the north end of II 4 represented in fig. 90), and presumably it was for this purpose that most of them were built. They vary greatly in diameter, some being only about 2 8" across, as in a small example at the south end of V 4. Probably they were built (by means

* I believe, however, that it is not necessary to assume conflagrations in every case to account for the quantity of burnt grain found in the course of excavation; but that the grain if kept covered for an over-long period will in itself generate heat enough to cause incineration. I have been informed that some time ago one of the sheikhs of the village of Beit Jibrin lost his year's stock of wheat by incautiously leaving it covered up in this way.

of oversailing courses) to a dome or beehive-shape with a hole in the apex.

Deep pits, lined with cement, probably for grain, occur here and there. One such is at IV 8 A : it is 4' 9" across and 6' 9" deep. Another use for round structures of this nature is that of ashpits.*

Besides built circular structures, round pits dug in the subjacent earth, not lined with masonry, were occasionally found : they were sometimes filled with a slightly different-coloured earth, which betrayed their presence ; or if they happened to come at the side of a pit the outline of their vertical section was clearly visible in the vertical face of the pit. VI 30 B is a circular pit of this nature, 4' across. A, A, close by, are built circular structures, of a little more than half that diameter.

The notable granary in the middle of II 3 has already been mentioned in the account of the house of which it forms a part. The kinds of grain found in the various receptacles are indicated on the plan, PI. xlix, fig. 1. In IIa 29 there is a large granary (possibly part of the adjacent palace), the walls of which were 2' 6" in thickness: this was full of wheat; a round-ended annexe on the S.E. side contained *kursenni*. The pavement was of beaten mud ; and underneath it, just north of the partition by which the eastern portion of the granary is divided into two, were two drain-pipes, wider at one end than at the other, so as to fit into one another. At the end is a funnel-shaped fragment, turning obliquely downwards. The diagram added to the plan, PI. xlix, fig. 8, will shew the arrangement. These pipes are made of very coarse drab ware, with many grits, ½" thick. The drain is too fragmentary to permit us to be sure whether it was connected with the granary or—which is more likely—with an earlier building. It is laid on a layer of potsherds.

At the south end of IV 4, again, was an interesting granary whose plan is shewn in PI. xlix, fig. 9. The old city wall is adapted as a south wall of the structure. One room was full of corn ; but it was also used to store bricks, and a pile of these was found against one side. These bricks were both baked and unbaked. As is shewn in the sketch added

* A number were found with many fragments of pottery, bronze objects, etc., evidently waste sherds that had been thrown away. The statuette of Hekab, described in a later chapter, was found in one such ashpit. III 30 A was a circular ashpit full of pottery and sherds. At II 20 E was a solid square block of masonry resting in the rock, with a vertical shaft through the middle full of potsherds.

to the figure, several of them had three strokes on the side (perhaps, like the holes in modern bricks, meant as a key for the mud cement). On one of them was marked a spiral. Another room was divided into five compartments by dwarf walls. The two southernmost of these compartments held wheat : the other three contained chopped straw. All had been burnt, and in the N.W. corner were the burnt remains of a skeleton, perhaps



FIG. 91.—GRANARY IN IV 18

the owner of the store who had perished in trying to save his property in a conflagration.

Another granary of great importance—probably a public store—will be seen in the middle of IV 18. It is a four-sided building divided longitudinally into two compartments, each of which is subdivided into bins by walls rather irregularly disposed. Wheat and barley were found in some of these. A photographic view of this structure is given in fig. 91.

(4) At various places in the mound—an example will be seen in the middle

of V 3, 4—are found large **thick walls**, much more massive than any house wall, and approximating almost to the cross-dimensions of a city wall. These no doubt were the boundary walls of important public buildings. There is little that can be said about any of these walls; but a curious detail calls for notice. This is the occurrence of vertical hollow shafts, about 2' 3" in diameter, in their thickness. An example will be seen in the thick wall in the middle of Map V 3, on the boundary line between trench 2 and the adjacent trench to the left. It is difficult to assign a purpose for these shafts: they always seem intentionally made from the

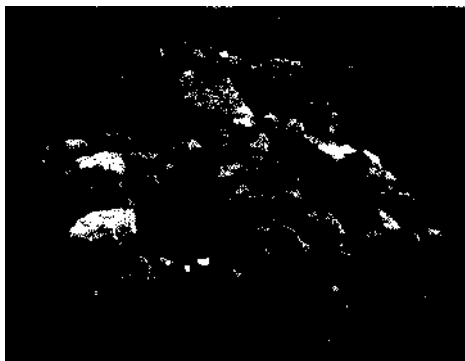


FIG. 92.— -SHAPED STRUCTURE

first, to judge from the appearance of the surrounding masonry; otherwise we might be tempted to take them to have been excavated in the foundation of the wall after it had been ruined, by persons living above its level, to make a store-pit, like the cavities in the top of the south gate of the second wall, to be described hereafter. They are not unknown even in the city walls. In III 21 A will be seen an example in the inner face of the second wall. This runs down through to the rock just like a well-shaft, and the rock-surface is slightly cut away at its bottom.

(5) Another structural detail not easy to explain is the occurrence of circular **platforms**, perhaps 9'-10' across at various places. Such platforms will be seen in V I 19, above the stones of the temple alignment. They



FIG. 93.—STONE SEAT (?)

in the corner of a room about a foot from the rock. I suggested in mentioning it in a report that it might have been a domestic altar; but the simpler explanation, that it is a rude **seat**, is probably better.

(8) On the plan of the ground known as *El-Kus'a*, there is marked a "Probable site of a **Church**" in Plate viii. This was a place from which the people of el-Kubab had removed a large number of cut stones. Although no trace even of the foundation of a church was left, the fragment of a stone cross of monumental size (fig. 94)—the fragment measured 2' 3" high and was 6" thick—gave a hint as to the nature of the building. Possibly this was the source of a marble Byzantine capital, now adapted as a well-head, lying loose in the precincts of the neighbouring *wely* of Sheikh Musa Tali'a. There has been a cross among the acanthus-leaves on the upper part of this capital, which has been imperfectly battered away (fig. 95).

§ 13.—THE PALACES

We must now proceed to a description of certain buildings found in the mound which by their size and character are marked out as being of special importance, and in all probability the

may possibly be the floors of circular grain-stores, of which the walls have entirely vanished. Another example appears marked **III 4 p** in the southern half of the trench.

(6) At the south end of V 19 will be seen a curious cp-shaped structure, of which fig. 92 is a representation. I can but guess that this is a pair of D-shaped store-chambers.

(7) In fig. 93 is shewn a small solid circle of stones, about 1' 3" in diameter: it was found

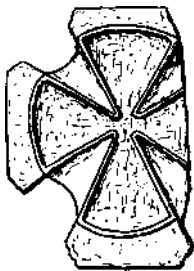


FIG. 94.—STONE CROSS FROM
EL-KUS'A, NEAR GEZER

residences or offices of the governors of successive periods. These buildings are (1) the First Semitic Palace at the south end of II 27, 28; (2) the Second Semitic Palace in IIa 27, 28; (3) the Third Semitic Castle in IV 15, 16; (4) the Fourth Semitic Judgment Hall in V 28, 29; and (5) the Castle of Simon Maccabaeus and the neighbouring buildings, which occupy the south side of the middle of Map V I. The last-mentioned is described in the following section.

(1) The First Semitic Palace is the largest complex of chambers found on the mound. There is little that can be said in description of it: the plan speaks for itself. It is erected just within the great brick gateway, and consists of the following members: (a) to the S.E. a number of small chambers, two of them with the bases of pillars supporting the roof. One of the smallest of these chambers was a granary, and contained a row of jars in which was burnt grain. () West of these chambers was a large courtyard of which hardly anything remained: its area could be deduced from the fragments of the boundary walls found here and there. In the centre of



FIG. 95.—MARBLE CAPITAL, AT Sheikh MUSA TALIA

this large courtyard opened the entrance to the great Water-passage, presently to be described, which no doubt was primarily intended for giving water to the royal establishment. To the north was a large hall with two aisles separated by a partition wall: the northern of these aisles had the roof supported on pillars resting on massive stone bases. This probably was some kind of public judgment hall. The foundations of this part of the structure will be seen in fig. 96.

No specially important objects were found in this palace; but a fine fragment of Cretan ware of the later Minoan type was found in its precincts—one of the few specimens of Cretan importation as distinguished from the later Mycenaean.

This palace was not the earliest construction on this part of the mound. Some very early walls underlay the pillared hall.

(2) The second palace, as I judge it to be, is built to the north of the first. It appears in Ha 27. 28. It is smaller and also much more mixed than the first. Part of it is built of brick. A small pillared hall and a large and important granary are the most noteworthy features.

(3) No building was found belonging to the later part of the Second



Semitic Period (Map III) which could be described as a palace; but there can be little doubt as to the nature and purpose of the important structure at the north end of trenches 14-16 in Map IV. This was the most important residence of its period found in the excavation, and it can hardly be other than the residence of the governor of the period.

It consists (fig. 97) of a number of small and irregular chambers, with very thick walls, built around a tower of the much older inner city wall, against whose surface the walls of the building butt without bonding.

As in several other instances, the old rampart has been adapted as the back wall of the structure. The entrance is from the south: the hall into which it opens communicates by doorways with other rooms. Certain chambers—that marked *a* and its neighbour—are now isolated, no doubt because the walls are ruined to below the level of the door-threshold: the same is true of the long narrow apartment 6, which was probably a store-room. The way in which the walls are carefully laid out at right angles, and their remarkable thickness, offer a striking contrast to the

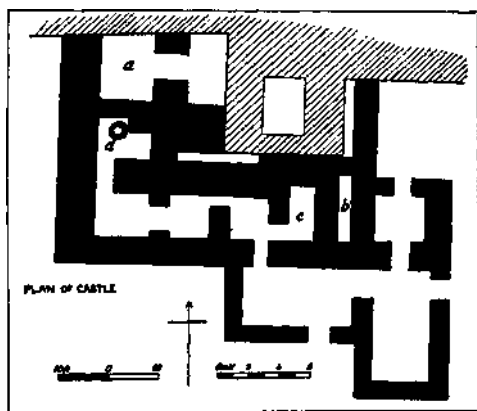


FIG. 97.—PLAN OF LARGE BUILDING IN IV 14-16

careless and flimsy construction of the ordinary houses in the city. The walls range in thickness from about 3' to 9'—the latter by far the greatest wall-thickness found at Gezer, with the exception of the city wall itself. The little circular structure *d*, probably a hearth, is the only architectural feature left.

East of this palace there was a large open courtyard, as will be seen in the general plan of the city. The rock-surface contained cisterns and rock-cut presses, but I suspect that these had already been overlaid with earth when the palace was built and that they therefore were of an earlier date.

This building remained open—probably as a ruin—during the whole

of the Fourth Semitic Period; as did the old towers commonly called "Goliath's Castle" at Jerusalem till its comparatively recent adaptation into the basement of the Ecole des Freres at Jerusalem. Not improbably it served the same ignoble purpose as the desecrated House of Baal at Samaria. This accounts (1) for the absence of later walls overlying the foundations, and (2) for the almost total absence of portable antiquities found in the ruins—with the noteworthy exception of a small store of objects found in chamber *a*. This consisted of two fine axeheads and a spearhead of bronze, a three-legged stone dish, an alabaster vase, some fragments of pottery, and a nondescript fragment of stone ornament (fig. 98). The last is a polished block of a green stone resembling serpentine, measuring $4\frac{1}{2}$ " x $2\frac{1}{2}$ " x $2\frac{1}{2}$ ". On one side is a sunk panel containing a number of incised chevrons: a line is drawn across the other side and round the fractured edge.

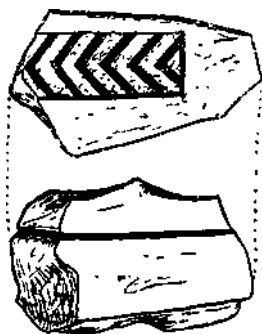


FIG. 98.—ORNAMENTAL FRAGMENT OF STONE

We cannot be for wrong in assigning this elaborate building, of which a general view will be seen in fig. 99, to the time of the Hebrew immigration. It is not impossible that it may actually be the residence of the shadowy Horam; but such a suggestion must be clearly understood to be nothing but a not inadmissible conjecture. Nothing was found to connect the castle definitely with Horam or with any one else.

(4) In the Fourth Semitic Period, no important building was found. This (as has already been said) fits in with the historical fact that Gezer was no longer under an independent Sheikh, but had been brought under the control of a Central Government. But some form of local judgment hall would be necessary, and possibly we may see such in the building whose thick walls break into the north ends of trenches 28 and 29 in Map V. By an unlucky chance the *wely* was built just in this corner, so that the rest of the site of the building was not available for excavation. As the two tablets bearing legal documents in cuneiform character were found in the angle made by these groups of walls, it is possible that they may have been thrown out from within it. This increases the

probability of the building having been a house for archives or judicial proceedings, and makes the presence of the wely the more regrettable.

§ 14.—THE MACCABAEAN CASTLE

In the course of running a trench along the outer face or the outer city wall, a place was found, in the middle of the south side, where there



FIG. 99. —VIEW OF THE BUILDING IN IV 14-16

was absolutely no trace of the rampart. By trenches dug at intervals at right angles to the line of the wall, it was proved that for a length of about 300' the outer wall did not exist. However, some remarkable constructions, in the gap between the two ends of the wall, attracted attention, and it was decided to uncover the whole area at this spot. On this account the southern sections of trenches 10 20, as indicated on Map VI, were opened. They were not deepened to the rock because this would have involved the destruction of the buildings which, as there is every reason to suppose, are of considerable historical interest.

The constructions uncovered in the area consist of:—

(1) A gatehouse with the remains of a causeway mounting the hill, and turning so as to enter the city along the face of the wall.

(2) A long double rampart, divided into compartments, and connected with chambers which evidently formed an important building.

(3) An elaborate bath establishment, which was later than the large building no. (2), as it passes over one of its corners.

The present section is concerned with the first two of these: the third will be described in the following section.

At an early stage of the investigation I formulated the following argument:—

(1) All these structures belong to the Hellenistic Period.

(2) As the gatehouse is evidently a public entrance to the city, it is not likely that the gate in the long double wall is also a public entrance. More probably this is a gate specially reserved for the occupant of the large building. As the gate gave ingress and egress to the city at all times without the necessity of passing through the city gate, this person must have been the military governor.

(3) The military governor in the Maccabaeon Period was John Hyrcanus, acting as deputy for his father Simon (see Chapter I). Simon "built for himself a dwelling-place" in the city, which he would hardly have done had this castle been already in existence and ready prepared for him.

(4) The condition of the city wall at this point recalls the incident of Simon's breaching with his battering-ram; and at this point the nature of the ground affords perhaps the most convenient place in the whole hill for the manipulation of such an engine.

From this the inference was drawn that it was not improbable that the building under investigation was the dwelling-place built by Simon.

Shortly after this conclusion was reached there was found lying loose in the debris a block of stone bearing a graffito in cursive Greek characters. The block is a fragment of a building stone of a kind very common in Palestine in structures of the Maccabaeon age: they were found in profusion in the Acropolis of Tell Zakariya, in the upper city of Tell Sandabannah, and in some of the caves of Beit Jibrin which may be supposed to have been excavated or repaired and adapted for use during this epoch. They are blocks of rather soft limestone, trimmed with a chisel to the shape of an ordinary brick, and measuring about 1' 9" x 7" x 6".

The fragment now described is a wedge-shaped splinter of such a block. Fortunately the end bearing the inscription is perfect, or nearly so: it measures 7½" x 6". Of the length of the stone a maximum of 5½" remains.

The surface bears an inscription in three lines and a diagram, the meaning of which is obscure. The inscription is very difficult to read. The Rev. Peres Germer-Durand and Lagrange have generously given me assistance in deciphering it. Their reading is as follows:—

ΠΑΜΠΡΑΣΙΜΩΝΟΣ
ΚΑΤΟΠΑΙΣΗΠ[ΥΡ?]
ΒΑΣΙΛΕΙΟΝ

In the first line a fracture makes it uncertain whether to read or I: on the whole the indications are more in favour of the former. There is another fracture farther on in the line which has carried away the second half of the M and the top of the w. The 1, it should be noticed, is attenuated to a mere dot, joined on to the M.

The second line is very difficult to read. The first word was read by me **ΚΑΤΕΠΑΓΙΙ**: Pere Germer-Durand preferred KATOIIAIIH, and the observation that the inscription is probably meant to read as a hexameter decides in favour of that reading. The letters following are rubbed, and next to impossible to make out; but is the most likely rendering.

The third line is perfectly clear and its reading certain. The whole seems therefore to read thus :—

Πάμπρα(ς) Σίμωνος κατοπάζη πύρ βασίλειον

"[Says] Pampras; may fire follow up Simon's palace!"

The photograph of the inscription (QS, 1905, p. 100) not being very clear, I have substituted here a drawing, made from the stone itself, with the camera lucida (fig. 100).

This inscription is therefore an imprecation, scratched on a building stone by one Pampras—the single C in line 1 is no doubt to be taken in a double sense, as the end of one word and the beginning of the next—and built into the structure for which the curse was intended. Examples of such imprecations are by no means uncommon. Pampras in all probability was one of the dispossessed Syrians, possibly condemned

to forced labour on the castle. The inscription has many points of interest. It is the first contemporary reference yet found to any of the Maccabaeans. And it is a corroboration of the arguments above set forth, by which an attempt was made to establish the identification of the building in which it was found. The formula is curious: probably, like the lovers who wrote that strange dialogue on the wall in the tomb of Apollophanes of Marissa, Pampras found Greek verse difficult of composition. It is curious, however, that the identical formula, translated into Arabic, occurs as an expletive in an Arab folk-tale in Mr. Hanauer's collection—*Ilhak bi-nar**

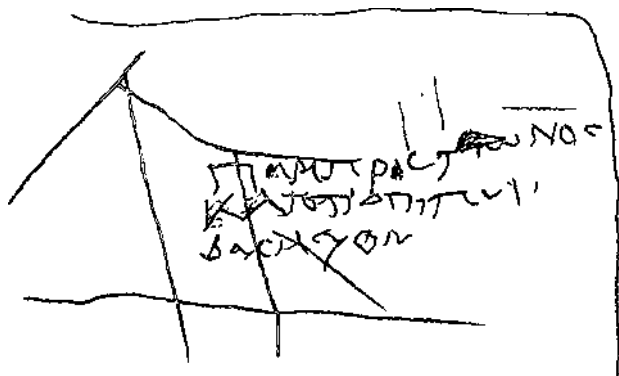


FIG. 100.—THE "PAMPRAS" INSCRIPTION

"follow up with fire." Possibly, therefore, the phrase was not unfamiliar on Semitic lips.

It may here be mentioned that two other inscribed fragments of stone were found in the castle; but they amounted to very little. One was a small wedge-shaped splinter of limestone $7\frac{1}{4}$ " X $2\frac{3}{4}$ " x $4\frac{1}{2}$ ", with the following letters upon it:—

... Α ...
... ΟΝ ...

in capitals which, though small (J" high), were of a formal and monumental type. The stone seemed to be a fragment of an inscribed lintel, the

* *Folklore of the Holy Land*, p. 21.

lettering on which was carved on a panel sunk slightly on its face. It is tempting to restore the first line *βασιλειον* and to see in a whole a dedicatory or explanatory inscription over the entrance to the castle; but such a restoration is mere guesswork. The other inscription is quite unintelligible: it is a row of Greek capitals, scratched on the edge of a building stone like that bearing the graffito of Pampras. Above is a series of lines of the same general character as those accompanying the Pampras

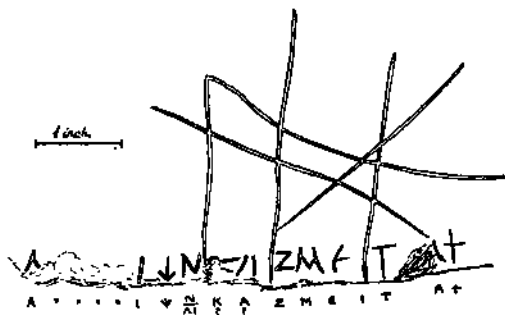


FIG. 101.—GRAFFITO

inscription (fig. 101). The inscribed edge is much chipped, and some letters are lost: what remains is

Α . . . ΙΥΝΚΑΖΜΕΙΤΑ +

which possibly is another magical inscription; the succession of letters appears to be quite meaningless.

We may now proceed to a description of the complex of buildings to the identification of which the imprecation of Pampras has afforded the clue—by a strange piece of irony, truly; for Pampras had in view a purpose directly contrary! We shall describe the buildings in the order enumerated above.

(1) The remains of the gatehouse consist of three courses of well-squared stones, extending for a length of 36' and returning at each end. Two towers, of shallow projection, occur in the course of this wall.

This fragment is marked A B C D E F G H in the accompanying plan, fig. 102, the towers being B C D E and F G H respectively. Their projection ranges from 1' to 3' 4", as they are not set out truly square. The courses of facing-stones are each about 1' 6" high.

In front of this wall is a rough pavement of cobble-stones ($J^1 J^2$), many of which shew marks of polishing by foot-wear. This pavement rises gently from east to west. It begins abruptly near the eastern end of the wall A H, and is interrupted at the western end. There seems

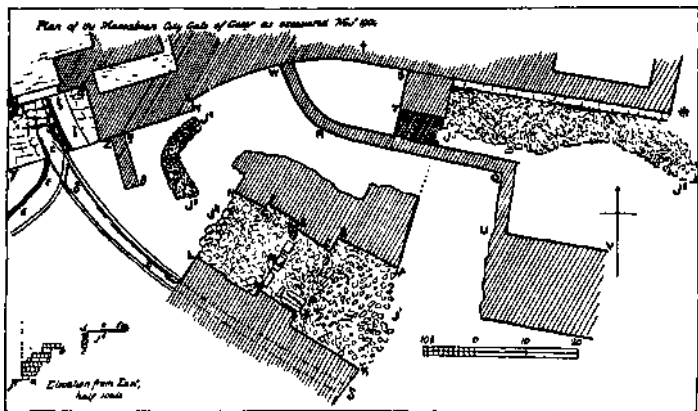


FIG. 102.—PLAN OF THE MACCABEAN CITY GATE

to have been some kind of arcading crossing the pavement between the points D M: at least there is here a threshold of cut stones, resembling the facing-stones of the wall A H, and having in the middle what looks like the much-weathered base of a column N.

On the south side of the pavement is the foundation of a wall that evidently was in all respects the counterpart of the wall A H. This is marked L M P K in the plan. The south face of this wall had not been exposed when the plan (originally prepared to illustrate the current report in the *Quarterly Statement*) was drawn: it was found later to be a plain straight line not broken by towers or otherwise.

Thus we have a passage, 36' long and 14'-15' broad, flanked by stone walls of well-dressed masonry, with two towers projecting inwards.

The recesses in the walls (D E F G and the corresponding recess on the opposite side) may have been meant to receive the *valvae* of a door, closing against the column that stood on the base N. There was no sign of hanging to be seen in the surviving fragments of the structure : this, however, was so ruined that the absence of such indications is not conclusive.

Two stones side by side, 3' 4" long, with a space 3" wide between them, are let into the pavement at P. It is not impossible that these have something to do with a door-fastening.

A little farther to the west is another fragment of paving (J³ J⁴) that seems to shew how the passage continues. It curves abruptly and mounts at a rather steep gradient. After this there is a long gap, till we pick it up again at J⁵ J⁶. The course of the pavement in this gap was marked by a white line (afterwards effaced by a shower of rain) running along the surface of the castle wall behind. This shewed exactly how the pavement had run.* It had thus started between A K, run up under the gatehouse A H K L, proceeded onward by the abrupt bend between Y H, and then at the back of the gatehouse between H W, along the face of the curved wall S W X (mounting at a gradient of about 1 in 6'4). At J⁵ it was just under the present surface of the ground. J⁶ was the last place where it was found, but there can be no doubt that it bent round the end of the castle wall and so entered the city to the east of that building. The difference in level between the uppermost and the lowermost section is 18' 3".

(2) Filling the gap in the city wall, but recessed behind it a short distance, is a series of long narrow chambers with very thick walls. To most of these there is no door remaining: the chambers that are on each side of the entrance gate, however, are provided with entrances, as the plan shews. These chambers were probably cellars under the main floor: they are at a level distinctly lower than that of the threshold of the gate. They may be simply the hollow spaces existing in what may be treated as *one* thick double wall, filling and strengthening the breach in the city rampart.

* And incidentally shews that the pavement and the castle wall were contemporary—a fact also proved by the total absence of any antiquities earlier than the Maccabaeon Period in and around their foundations.

This construction strikingly recalls, in the character of its plan and masonry, the "barrack" of long rooms that was found just inside the gatehouse at Tell Sandahannah.

Under the threshold at the east end is a small drain meant to carry off rainwater from the court inside the gate. This drain stops internally a foot or two after passing under the threshold. As the opening would be large enough for a small boy to squeeze through, who could then open

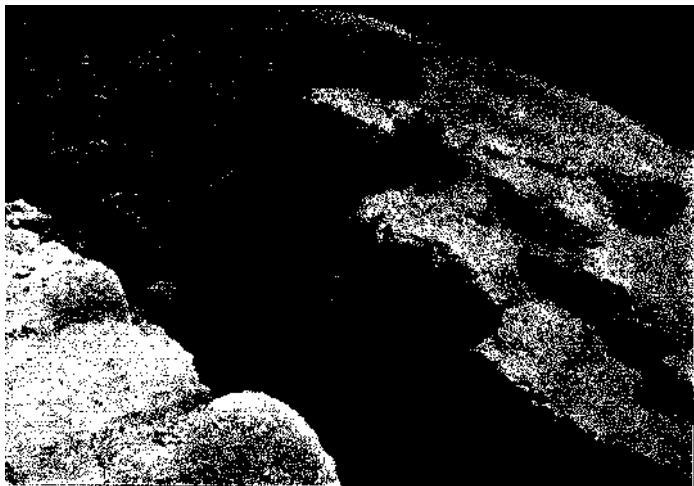


FIG. 103. MASONRY OF THE EASTURN TOWER CHAMBER

the gates for enemies outside, the drain has been blocked immediately inside the door by a large stone which effectually prevents any one coming through ; while it is no obstacle for water to run away, as it does not fit closely.

Proceeding to details, beginning with the western end, the rampart in trenches 18 and 19 is in a very ruinous condition. Being near the surf ice, and very convenient to the modern village, it has evidently been despoiled of its stones, and it is impossible to be certain of the original disposition of its chambers. There is *now* the appearance of an entrance

of the "hit-and-miss" kind in the middle of trench 19; but I think this is an accident, due to the destruction of walls. Till the middle of trench 17 we cannot feel any certainty of the plan. There is then a series of five chambers, of varying length though uniform in width. These display no features that need detain us. We then reach the "cellar" to which allusion has just been made. The only detail which calls for notice is a row of three small shafts, entering the outer wall horizontally at the level of the

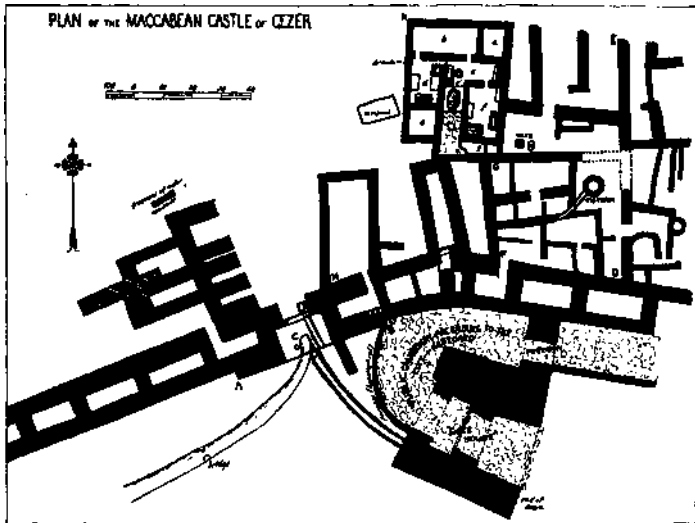


FIG. 104.—PLAN OF THE MACCABEAN CASTLE

floor. They are like nothing so much as miniature *kok* graves. They are 1' 10" in height, about 1' in breadth, and about 2 4" in length. I am unable to suggest any purpose for these hollows, unless they are intended for the secret concealment of some object [? an afterwards rifled foundation deposit]. Nothing but one or two potsherds was found in them. There are similar shafts in the corresponding chamber to the east of the gate, which are shewn in fig. 103.

We then come to the gate which was the entrance to the castle. This is approached by a short pavement C, sloping upwards toward the threshold. There cannot have been any connexion between this pavement and the public causeway running under the Gatehouse, as the levels are different. They were probably shut off from one another by a partition wall, a possible course for which is indicated in the plan. The causeway disappears outside the limits of the gateway tower, but there are not wanting indications that

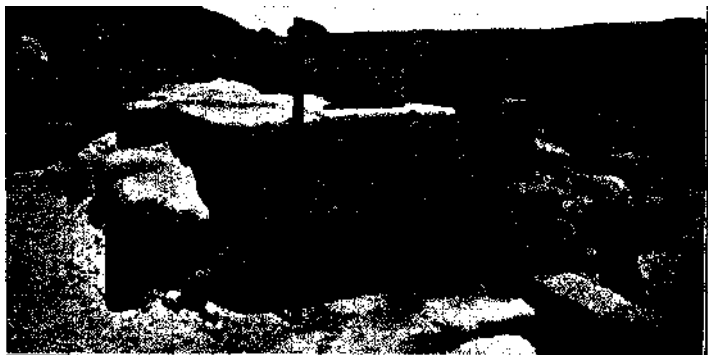


FIG. 105.—EASTERN JAMB OF THE GATE OF THE MACCAUAEAN CASTLE

originally it ran downwards towards the west, whereas the public causeway ran down towards the *east*. Two little breaks in the cement lining of the drain, which possibly are the piers of a small footbridge, may be indicated as suggesting this. They appear in the larger plan of the castle, fig. 104.

The gate itself is 9' 2" in the clear. The hinge and bolt-holes of double doors remain, just inside the threshold. The threshold stone has a similar hole in its outer upright face, shewing that it was taken from some earlier

doorway. The well-dressed blocks of which it is built are shewn in the view of the eastern jamb, fig. 105.

The rooms in the rampart to the east of the gate are similar to those to the west. The second of these chambers is curious. It has been blocked up by two brick partitions, the easternmost of which is just against an opening into a long room of the castle.* This opening is spanned by a stone lintel. Beneath this, and between it and the end of the brick



FIG. 106.—FURNACE IN THE MACCABAEAN CASTLE

partition, there was a large deposit of ashes, shewing that there had here been a large furnace. Probably the lintel, which was broken, had been cracked by the heat (fig. 106). The rest of the rampart is identical in type to the portion already described.

* This opening shews that the long chamber is contemporary with the double rampart. In the same way the crooked chamber marked H must be contemporary with the chamber into which it opens. Bond and all other masonry details shew that the whole system is one, and of one date.

(3) The rampart forms the south wall of a complex structure which was evidently an important building, and, as has already been mentioned, was probably the residence of the governor during the Maccabaeon Period. Unfortunately nothing was found in any of the chambers which would throw light on their purpose or give information as to their occupant. The only objects found, beside the ordinary potsherds of the period, were a few scraps of Greek bowls, some Rhodian jar-handles, and a few bronze



FIG. 107. — DOORWAY OF Supposed POTTER'S OVEN IN OR NEAR THE Maccabaeon CASTLE

and iron arrowheads of commonplace late types. Unexpected in such surroundings were one or two animal figures, and (more curious) a small fragment of a statuette of the Cyprian Astarte: these probably belonged to earlier or later occupations, and by accident became mixed with the castle debris. In fact, the castle was perhaps less prolific in small antiquities than any other part of the mound.

The most curious find was undoubtedly a great pile of cockle-shells in a corner of one of the rooms in the western side of the gate. These

perhaps had been brought up to make into cement, such as was used for the bath-house to be described in the following section.

It is not improbable that the stall-like spaces to the west of the entrance are porters' lodges or guard-rooms.

The general character of the western part of the castle is that of the normal house—a series of chambers surrounding a courtyard (or, in this case, two courtyards). To the north of the western courtyard was a remarkable circular structure with a doorway to the east: this was bee-



FIG. 108.—STRUCTURE OF STONES WEST OF THE Maccabaeae CASTLE

hive in shape and almost complete. There were marks of fire in the interior, and it is not improbable that it was a potter's oven (fig. 107). Rather farther west were two well-built parallel walls, enclosing an oval space between them. One of the building stones was a vat, turned on its edge. Perhaps this space was a small threshing-floor (fig. 108).

The most remarkable characteristic of the eastern part of the castle is the pair of long narrow chambers running more or less parallel to each other from north to south, which are a conspicuous feature of the plan.

The northern boundary of the courtyard between these two sections of the castle was destroyed, so that nothing can be said about its original area; but probably we will not be far wrong in supposing that a wall or walls ran along the line of the word "MACCABAEAN" in Plan VI, and thus joined the two parts of the castle and separated it from the other buildings in the neighbourhood. The small drain under the gate shews that this courtyard was open to the sky.

The masonry of the castle is of two different kinds. At the gateway the stones are more carefully squared and fitted than anywhere else in the mound, the only masonry that may be compared to it being that of the sepulchral monument over tomb no. 139. The stones of the gateway are dressed smooth; but in the flanking towers bosses make their appearance. A few of these have in the marginal drop a mason's mark Li, which has also been observed in the deep well on the Eastern Hill (see pp. 280, 281).

The rest of the building is composed of rough walls resembling in general character those of the rest of the city, though perhaps of larger stones than usual. That some of the superstructure was built of squared blocks of soft limestone is probable: fragments of such were found in the ruins, on two of which the graffiti above described were scratched.

(4) We must now describe the remarkable sewer that runs under the gate (fig. 109). In doing so we shall follow it from below upwards. Originally it ran eastward, under the south pier of the gatehouse; but this branch was stopped by a slab laid across it just outside the castle gate, and the westward branch opened instead. This change was possibly made to avoid the inconvenience of filth being discharged just outside the public entrance to the city. At the lower end of the eastern branch the drain is 1' 10" wide and 2' 7" deep; at the upper end, where it is stopped, it is 2' 2" wide and 1' 9" deep. The drain is constructed of stones, of the same general character as those composing the gatehouse, set on edge: the floor is also paved with stones. The western branch of the sewer is wider and deeper, but of inferior construction. It is 4' 6" deep and 4' across, at the point where it comes under the gate: it is built of small stones lined with cement.

An opening so large could be used by invaders as a convenient way to enter the city, were it not that these were prepared for. At 60' from

the threshold of the gate (A, fig. 109) the drain widens and turns westward. It is possible for a not very tall man to walk in it almost upright to this point: after this, however, it becomes narrow and low, there being a step upwards at B, and it is necessary to advance on hands and knees. At 13' from this point a block of stone set in the middle bars all farther progress (C : a sketch at *a* fig. 109). The unwary leader of an invading party would be trapped at this point: owing to the narrowness of the passage it would scarcely be possible for him to pass back word to his followers to return, and probably he would be crushed between them and

FIG. 109.—COURSE OF THE DRAIN UNDER THE CASTLE

the stone. A little to the north, from D, the drain was no longer traceable; but a fragment evidently belonging to it was found in the northern part of trench 15, north-east of the great reservoir.

§ 15.—THE SYRIAN BATU

Over the extreme north-east corner of the castle described in the last section was one of the most interesting buildings found in the excavation.

It is an elaborate bath establishment. In describing it I refer to fig. 110, on which the dimensions are indicated,* so that it is unnecessary

* There is an error in this figure which should be corrected: the chamber *b* is about 3' narrower than chamber *a*; there is a "break" in the outer wall at the partition. This is shewn correctly in the plan, Plate vi.

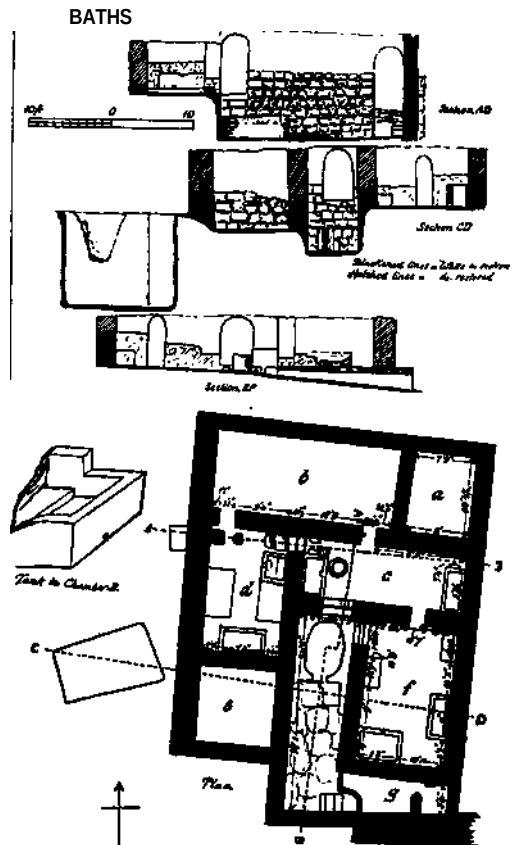


FIG. 110.—PLAN OF THE SYRIAN BATH-HOUSE

two tanks or baths. These are rectangular and built of stone lined with cement containing many pebbles. The edges of the baths are chamfered,

to overload the description with figures. With the exception of *e*, all the chambers are paved and lined with cement : as a rule the angles are rounded. The walls are built of blocks of limestone, cut to the shape of bricks, and laid in "English bond." Voussoir stones found fallen into some of the chambers shewed that they had been roofed with a barrel vault. The lintel of the doorway between *c* and *f* was found in the floor. It was cut to the shape of a semi-circular arch.

Of the chambers, *a*, *b*, and *e* are empty. Each of the others, *c*, *d*, and *f*, contains

to prevent bathers hurting themselves on sharp corners. At the bottom is a small round escape-hole, which, when a plug was removed, allowed the waste water to run over the floor. The floors are so laid that waste water is directed, as a stream from all the tanks, to a drain that opens under the doorway at the west end of *c*. These details are shewn in the two views, figs. 111, 112. The first shews chambers *c* and *f*, and the partition between them, taken from the west: the second, taken from the



FIG. 111.—VIEW OF THE SYRIAN BATH

north, shews chamber *f* with the sunk passage beside it, *d* to the right, and *c* in the foreground.

The tanks in *c* and *f*, and the southern tank in *d*, are of this kind. The western tank in *c* has a small pilaster of 6" projection and 6" width in one side. Beside this tank is a circular vat about 2' 6" in diameter. This has no outlet, and is cut out of a block of stone (not built up and cemented like the large tanks). It is not fixed to the floor, but is movable. It may have been meant to hold cold water, whereby a bather

who had taken a hot bath in the adjacent tank might afterwards refresh himself. This tank and vat appear in figs. 112, 113.

The eastern tank in *d* is peculiar. It is evidently a *seat*, in which a bather might sit in order that water should be thrown over him by an attendant. A sketch is added to the plan, fig. no.

In addition to the tanks there are in chamber *f* two benches, no doubt for the garments of bathers. These, like the tanks, are built up



FIG. 112.—VIEW OF THE SYRIAN BATH

of stone, and covered with cement. There were similar benches in *d*, but they have disappeared, and their place is indicated only by the breaks in the cement floor.

The drain runs just under the floor of chamber *d*, at its northern end. It is partly covered with stones embedded in cement, and partly open, to allow water from the tank in *d* to find its way into it (see the section EF, and fig. 113, which shews its opening). This drain stops short just outside the wall of *d*, which is the outer wall of the bath system,

and does not appear to have gone farther. It certainly has no connexion with the sewers running under the castle gate. There is a deep cement-lined cess-pit to the west, into which the drain probably discharged originally.

Between chambers *d* and *f* there is a passage sunk at a lower level, which displays several details of interest. In clearing it out stones were found to have fallen into it *in long rows*. These were probably the flattened out debris of vaulting.



FIG. 113.—VIEW OF THE SYRIAN BATH, SHEWING DRAIN

There are two doors leading into the vanished room above this passage. That from *c* has a small opening under the threshold, perhaps to admit hot air (the *raison d'être* of the vat for cold water will then become clearer). From *f* there are three steps leading down. At the northern end of the passage there is an oval enclosure, which must have been a heating furnace, as ashes were found filling it. South of the furnace the passage continues, till it passes the angle of chamber *f*. It is paved with broad flat flagstones.

After passing f it returns eastward, and rises by three steps to a retired corner that probably was a *latrina**

This building must have been erected during the short interval between the destruction of the castle and the final desertion of the city. For this reason, as the city was then in Syrian hands (as we have already seen in Chapter I), I have called this most remarkable structure "The Syrian Bath."

§ 16.—A ROMAN BATH

My attention was drawn to a spot on the south side of the road from Abu Shusheh to 'Ain Yerdeh, about midway between the latter point and 'Ain et-Tannur, by seeing some of the fellarjin of el-Kubab excavating there for building stones. With the help of the Imperial Commissioner this vandalistic work was stopped, and I myself directed excavations to be made in order to determine what manner of building had formerly existed here. That it was of some importance was suggested by traces of mosaic, revealed by the illicit excavations referred to.

After a week's work the building lay revealed as a fine Roman bath establishment. It had been much injured by the quarrying operations, both recent and previous ; but enough remained to shew the arrangement of the greater part of the plan. This is drawn on Plate 1.

The irregularity of the building is probably due to its following the lines of streets. The public drain at the N.W. corner evidently follows such a thoroughfare, and shews that the bath lay in the middle of a settlement of Roman date which still awaits excavation. The overall dimensions of the buildings are 68' 6" x 59'.

The shape of the outline can be understood best by a reference to the plan. The *hatched* parts of the wall represent those of which stones still remain : the parts in outline are inferred, the fellahm having removed every stone. It is probable that the main entrance to the establishment was somewhere in the destroyed part of the S.E. wall of the *atrium*.. No trace of an external door was found elsewhere in the ruins. The outer

* As it may not be quite clear that the plan represents *two* storeys in the passage, it will not be amiss to repeat the explanation in another way. The attendant who kindled the furnace reached it by going through the doorway from c or /, walking through the passage on a floor now fallen, till he reached the *latrina*; then, turning, he descended the steps, and went back underneath the floor he had walked along just before.

walls are built of well-squared masonry : a good specimen stone measures 1' 11" x 1' 2¼" high by 1' thick. The stones are roughly chisel-dressed; the strokes random in some, diagonal in others.

The *atrium* is a chamber whose dimensions and shape on the S.W. side it is impossible to state with certainty. The walls being destroyed at the critical point, nothing remains to shew how the northern wall was accommodated to the oblique irregularity in the outline of the building ; nor can we say to what a single block of masonry that remains in the S.W. quarter of the area of the atrium belonged. It is possible that there may have been a passage leading to the *frigidarium*, or possibly offices for servants, at this ruined part of the building.

The mosaic pavement is much less complete than is represented on the plan—indeed so fragmentary is it that it required a considerable amount of measurement and comparison before it was possible to determine with certainty the original design. I have, however, drawn it as though continuous, in order to make the full effect intelligible. The arrangement of colours, yellowish white, black, and red, is shewn in the detail added to the plate.

A door in the N.E. wall, of which one jamb remains, leads into a chamber 10' long by 6' 9¼" broad, paved with tesserae of white mosaic. An apse in its S.E. wall added 4' to its length. This apse was also paved with white mosaic; but separating it from the main body of the chamber was a ridge raised above the level of the mosaic floor and not shewing any traces of such a pavement. This ridge was probably a step, or the base of a bench. Of this chamber the walls were all ruined beneath the level of the mosaic pavement towards S. and E., and the outline of this part of the chamber can be inferred only from the cessation of the mosaic all round. In all probability this chamber was the *apodyterium*, in which the bathers undressed.

A rectangular chamber 11' 0³/₈" X 9' 5" lay N.W. of the *apodyterium*: it, likewise, had a white mosaic pavement. A doorway led to it from the *apodyterium*: the threshold was perforated by a hole, probably to allow water to pass through from the one chamber to the other. The N.E. wall of this chamber was destroyed, its line (as in the former case) being indicated by the cessation of the mosaic. A ridge was noticed in the mosaic floor parallel to the S.W. wall and about 1' from it. It is possible that this marked the line of a seat that had been added after

the mosaic had been laid. The proximity of this chamber to the *hypocaust*, and analogy with the plans of other baths, mark it out as the *tepidarium*.

The *caldarium* of the bath had completely disappeared: the *hypocaust*, however, remained, in fairly good order, though a large number of the arches were broken down. It is paved and built with tiles measuring $10\frac{1}{2}$ " square by $\frac{1}{2}$ " thick. These tiles form arches, the construction of which can be seen in the sections on the plan, and in the photographic



FIG. 114.—HYPOCAUST AND TEPIDARIUM OF THE ROMAN BATH

view fig. 114. The area of the hypocaust is divided into two by a row of piers larger than the rest, *faced* with tiles of a similar kind to those used in the construction: these are evidently intended to carry a continuation of the wall between the apodyterium and the tepidarium. To the S.E. of this wall there is a row of tiles set on edge running round some of the piers of the three outer rows: this detail can be recognized on the plan. The part of hypocaust floor intercepted between the tiles that thus run along the *outermost* row of piers and the wall is *plastered*: this is-

the only part not paved with tiles. The hypocaust ends to the S.E. in a large semicircular structure whose purpose as a furnace was attested to by ashes found within it. A low passage leading from this, covered with stones, conducted hot air to the hypocaust.

Close to the furnace were the meagre remains of a plastered cistern (marked PISCINA on the plan). Above the floor of this cistern was found the stone vat, fig. 115. It measures $1' 3\frac{7}{8} \times 1' 3'' \times 10''$ high. A hole drains out through one of the corners, as is shewn in the photograph.

Outside the bath, $4' 5''$ S.E. from the wall beside the furnace, was found the plastered floor of a cistern $5' 3'' \times 7' 3''$. This was not only outside, but at a higher level than the various pavements of the bath-house, on which grounds I do not think it likely that there was any connexion between them.

Returning to the hypocaust, we find to the N.W. of it a space $24' 10\frac{3}{4}'' \times 15' 1\frac{1}{8}''$, subdivided by smaller walls into a number of compartments which, there can be little doubt, were *latrinae*. Underneath the level of these cross walls were found the remains of a drain, evidently running to join the main *cloaca* presently to be described.



FIG. 115.—STONT: VAT FOUND IN ROMAN BATH

The S.W. corner is occupied by the *frigidarium*. Unfortunately this part of the bath was a good deal ruined, but enough remained to make its main outlines traceable.

The northern end was occupied by a bath, paved with white mosaic and lined with cement. It was of irregular shape: its maximum dimensions were $7' 3'' \times 8'$. A depth of $2' 5\frac{1}{2}''$ remained. A narrow seat ran partly round two sides, as shewn in the plan. A hole in the mosaic on the S.W. side of the bath opened into a drain that ran through a platform of solid masonry. Two low walls projected in a N.E. direction from this platform, running under the foundation of the atrium. I am unable to assign a purpose to these walls: they do not seem to belong to any earlier structure.

To the S.W. of the bath is a shallow semicircular basin lined with

stone. This basin also empties into the drain running from the bath. The breadth of its straight side is 3' 6". This, and the bath just described, are shewn in fig. 116.

The drain runs through a gap left for it in the wall, and empties into a finely built *cloaca*, evidently a public work, which, so far as the extent of the excavation permitted an opinion to be formed, follows the



FIG. 116.—FRIGIDARIUM OF ROMAN BATH

course of a street running outside the bath. This explains its serpentine windings, and incidentally the peculiar shape of the bath establishment itself. The drain is built of well-squared blocks: a good specimen is 1' 8½" in length and 1' 6½" high. Where complete it was roofed with cover slabs, one of which is half of a millstone.

A diagonal block of masonry fills up the re-entrant angle of the bath beside the drain.

There was no trace of any architectural ornament found among the

ruins: if any such had existed it must long ago have been removed. One stone was found (Plate 1, fig. 1) with a cornice moulding upon it, so roughly cut, however, that it could not possibly have been placed in any conspicuous position.

In the hypocaust were found a considerable number of tubes of compact Roman pottery: a typical specimen is shewn in Plate I, fig. 2. Though some of them seemed as though they had been laid with intention under the arches of the hypocaust, I cannot see what function they served. They look more like the openings made in the roofs of modern bath establishments for admitting light and air, almost identical tubes being embedded in the structure for the purpose; but in that case it is difficult to explain how they fell into their present position through the floor of the caldarium.

Plate 1, fig. 3, represents another type of tube, of which only two or three broken specimens were found. They are evidently the connecting members of a drain of pipes, the "pinch" in the middle being a stop to prevent the adjoining pipes slipping too far. None of these pipes were found *in situ*. They may have belonged to hot-air pipes running through the upper parts of the walls from the hypocaust.

The dimensions of the ordinary hypocaust tiles have been given above. None of them, it should be noticed, bore a stamp of any kind. A few tiles of special shape, intended for special positions, were found. Such are the corner-facing tiles (fig. 4), similar tiles with perforations (fig. 5), and shaped paving tiles (fig. 6).

A considerable number of fragments of marble slabs (polished, but all without mark or ornament upon them except one, which had a small fragment of a cyma moulding remaining) indicated that the walls had been lined with this material. The fragments were of varying shapes and sizes: the average thickness was about $1\frac{1}{4}$ ".

There were also some fragments of roofing tiles (fig. 7).

Among the smaller objects found in the baths must be mentioned a bronze arrowhead (fig. 8), probably an accidental intrusion, washed by rain into the area of the building after the latter had been ruined. This object is 2" long, and is remarkable for the comparatively massive stop-ridge displayed on its tang. A few fragments of iron nails and knives do not call for illustration.

There was also a bronze signet ring (fig. 9), 1" in maximum breadth.

This is evidently Arab, and, like the arrowhead, is an intrusion. There was also a plain ring, with square section, of lead, of about the same size, and a fragmentary bronze spatula. Two of the common conical diorite spindlewhorls or buttons were also found; a small disc of pottery—evidently the stopper of a bottle—and a lump of greenish coloured slag. A disc of bronze, $2\frac{1}{2}$ " in diameter, is represented in fig. 10.

A very large number of fragments of glass vessels were found over



FIG. 117.—GENERAL View of ROMAN HATH

the whole area of the building. Fig. 11 represents the only vessel found that was even approximately perfect. Among the many sherds and splinters the only ones that call for notice are a number of bases (like modern wine-glass bases) of the type of fig. 12; a fragment of a small bottle with longitudinal flutings (fig. 13); some fragments of stoppers or covers—perfectly flat sheets of glass with the edges turned over (as fig. 14); and a neck of a vessel to the lip of which was affixed a circular

disc of glass (fig. 15). There were also some fragments of glass bracelets, of the fluted kind common in late tombs. These glass vessels no doubt were for the greater part receptacles for ointments and cosmetics used by the bathers.

The pottery remains were comparatively meagre. A Byzantine lamp of the "candlestick" type (hereafter described), with a plain dot at the base, was probably, like the arrowhead above described, an intrusion. Mention



FIG. 118.....THE CITY WALLS

should be made of the small Roman jug (fig. 16), and the sherd from the bottom of a vessel with projecting button base (fig. 17), and the fragment with ornamented fluting (fig. 18) in red ware.

The bone pin (fig. 19), which is 2 8" long, is, with one important exception, **the** only other object from this building requiring notice. This exception is a collection of coins recovered from the ruins. These were scattered singly through the whole area of the building, but there was quite a hoard in the drain from the frigidarium, that had evidently been

accidentally lost and never recovered. They were mostly *oboli*, probably paid for admission to the bath. Attempts were made to clean them, but they were so hopelessly corroded that it was impossible to determine their date.

Fig. 117 gives a good general view of this important structure.

§ 17.—THE CITY WALLS

The foundations of three successive walls remain, running round the city. They are built one outside the other, and lie in approximately parallel lines along their whole course. The photograph, fig. 118, well shews their mutual relation.

We shall for the moment distinguish these walls as the outer, central, and inner walls. It will presently be shewn that the central wall is the oldest, the outer the latest, and we shall accordingly describe them in this order. On the plans of the city, the course of these walls, so far as determined by excavation, and completed by inference, is laid down,*

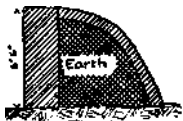


FIG. 119.—SECTION OF THE
CENTRAL CITY WALL

(1) The central city wall is a rude earth bank, lined inside and outside with a stone facing. The dimensions are by no means uniform throughout its length. At the place where the most perfect section was uncovered (at the north end of trench 3) the inner face was found to consist of a stone wall, 2' 2" thick and 6' 6" high; against this earth is piled up, and covering the earth is a sloping face of stones, about 8" thick. The top of the stone slope is flush with the top of the vertical wall, and the breadth of the base of the earth mound and the sloping stone face together is 6' 6". The slope of the outer face is not uniform: at the top it is nearly flat, but the lower half makes an angle of about 70° with the horizon. The section of this wall is given in fig. 119. The wall is built of small stones, the dimensions not being generally more than 10" or 1'

* The city wall in use at any given period of time is blackened in in the map belonging to that period. On the map representing the period when one wall gives place to the next, the older or superseded structure is hatched in to enable the student to grasp their mutual position.

any way, not dressed except by spalling with a hammer, and set in hard compact mud. The photograph, fig. 120, well shews its appearance.

It is noteworthy that at II 2 A a standing stone was found, which interrupted the course of this wall. It was erected on the rock. The smaller stones underpinning this monolith prove that it was erected when there was little or no depth of earth covering the rock-surface on which it stands. Had it been sunk through debris, these would have been



FIG. 120.—VIEW OF THE CITY WALLS, SHEWING THE EARTH RAMPART

unnecessary ; and the uncovered end of the stone would have been so insignificant in size that it would not have been worth the labour of erection. This proves that the stone was set up at a remote time, as the debris that overlies its foundation is itself of great age.

Now it is probable that the earth rampart is older than the stone, and that the stone was erected at a point where the rampart happened to be ruined. For if the stone already existed the rampart would probably have been deflected to avoid it. Therefore, if (as is most likely) the stone

is to be regarded as a monument of the earliest Semites, the rampart is to be assigned to the Troglodytes. It can never have been very effective as a defence for warfare, and possibly was not required as such : it may merely have been intended to serve (perhaps with the addition on its top of brushwood *chevaux de frise*) in excluding wild animals from the enclosure.

(2) The inner wall is a fine structure. It is about 13' in thickness, and has towers, generally about 41' long, 24' thick, at approximately regular intervals of about 90'. A good specimen of one of these towers, at the



FIG. 121.—TOWER OF INNER CITY WALL

north end of trench 28, is shewn in fig. 121. As these towers were not all excavated, it cannot be said whether they were solid or contained chambers : in one of the towers exposed to the north of trench 19 (north of the temple) an oblong chamber was discovered. This chamber was full of loose stones, the removal of which furnished occupation for two gangs of men for two days : below the floor of the chamber was found the entrance of cave 19 I, already described. This wall is not founded directly on the rock, but at about 1' above it.

The masonry of the wall is illustrated in the accompanying photograph, fig. 122. It will be seen to consist of rather large irregular hammer-dressed

stones measuring 1' 8"-2' each way, coursed but not very regularly so, set in mud instead of mortar, and with the joints, which are very wide, filled with smaller stones or mere pebbles. There is another variety of masonry used in places in this wall, in which the stones are of considerable length in proportion to the height of the courses. Thus a specimen stone in these parts of the wall is about 4' long by 1' 6" high. The N.W. corner tower (which owing to the cemetery overlying it was unfortunately impossible

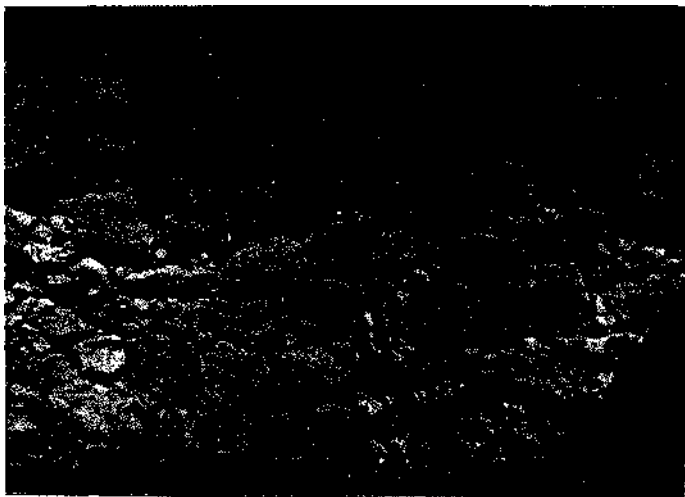


FIG. 122.—MASONRY OF INNER CITY WALL

to excavate fully) shewed the largest stones used in any building on the mound. See fig. 123.

Two gates were found in this wall in the course of the excavation. The first, which we shall call the northern gate, is at the north end of trench 2. The second, the southern gate, is at the south end of trench 28.

The northern gate is of the crooked type familiar to dwellers in modern Oriental towns: the Jaffa and Damascus gates of Jerusalem are good examples.

It consists of a tower containing gateways in adjacent sides, one on the outer face of the wall, the other projecting inward, so that a person entering the city follows a passage that turns through a right angle inside the tower. The Gezer example of this type of gateway is peculiar. It is of such great size, that it is not clear how it can have been closed against intruders: apparently a movable barrier was erected in both this and the southern gateways, for in the northern gateway the passage is too wide to receive a door of reasonable proportions, and in the southern gateway there is no sign of door hangings or fastenings to be seen in the jambs.

In Plate li will be found a plan of this gateway, which will be clearer than any description; and it can be more easily understood by a reference to the photograph,



FIG. 123.—NORTH-WEST CORNER TOWER, INNER CITY WALL

fig. 124. The passage-way is nearly 40' wide, and the tower containing it is almost 150' long. The Damascus gate at Jerusalem measures only about half these figures: the passage there is about 20' wide, the tower a little under 90' long. Whether the doorway at Gezer was crowned with a tower must, in view of these dimensions, be regarded as doubtful: if it were so, the second wall must have been an immense engineering work.

The southern gate, of which a plan and sections will be found on fig. 125, and a photographic view fig. 126, consists essentially of a narrow straight passage between two brick towers.

The bricks are nearly all sun-baked, and with one or two exceptions are very friable. They are mostly of a buff colour, though some of them are white or red.

The dimensions of the individual bricks vary: a typical size is about 15" x 11 ½" x 4". They are laid with no scientific attempt to break joints, in consequence of which vertical fissures cut the brickwork into several irregular sections.

The passage between the towers is 42' 3½" long and 9" broad. The pavement, which consists of roughly laid stones (not flagstones), polished in places by the wear of feet, rises gradually from inside to outside, and terminates inside in a step, 2' high and 5' 6½" broad.

The towers themselves are simply square solid blocks of brickwork (or possibly



FIG. 124. -NORTHERN GATE, INNER CITY WALL : VIEW

but less probably of rude rubble masonry with a more or less thick facing of brickwork), respectively 28' 5½" and 27' 7½" long. There are remains of a coating of lime covering the bricks. The projection from the wall of the western tower is 7' 10", that of the eastern tower 10' 2" : the difference is due to the gate not being at right angles to the wall. The towers stand at present to a height of 14'.

On each side of the passage-way the wall of the tower is masked for a height of about 6' by a row of three massive slabs of stone, with a few courses of rough masonry resting upon them and between each pair. They are merely set against

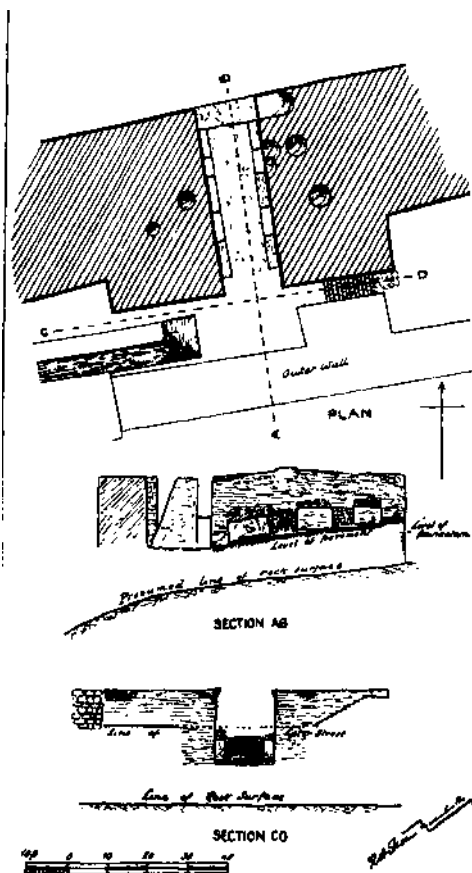


FIG. 125.—SOUTHERN GATE, INNER CITY WALL PLAN AND ELEVATIONS

seem that originally there was a projecting pier of brickwork of these stones, in which rather harder bricks were used than

the face of the brick tower, which runs behind them. The two outermost slabs shew signs of having been submitted to a powerful fire, being splintered and otherwise marked. Perhaps whatever wooden barrier closed this gateway—was near to these particular slabs, and was burnt in some hostile attack. (Of the nature of this hypothetical barrier, as already remarked, there is no definite evidence; but it is not impossible that it consisted of baulks of timber slipped between these stones, after the fashion of a portcullis). The slabs of stone are set at a distance of about $6' 5\frac{1}{2}"$ between each pair; their lengths are as follows:—

West side (from outside inwards) $8'9\frac{1}{2}"$, $8'2\frac{1}{2}"$, $7'2\frac{1}{4}"$.

East side (from outside inwards) $8'5\frac{5}{8}"$, $8'8\frac{3}{8}"$, $6'6\frac{3}{8}"$.

The stones are $1' 10\frac{1}{4}"$ to $1'$ thick. It would erected above each in the rest of the

structure. These piers have all been completely chipped away except the top of the middle pier on each side. This gives the effect of a slight corbelling in the brickwork, which at first I took for the remains of a false arch spanning the passage. In point of fact there is no evidence of the nature of the roofing of the gate.

In the tops of the towers is a series of circular pits, which are indicated on the plan. They range from about 4' to 3' 6" in diameter, and in depth from under 1' to about 5'. These pits may be most simply explained as belonging to a later stratum of building, whose houses were erected on the top of the wall. This is



FIG. 126.—SOUTHERN GATE, INNER CITY WALL : VIEW

indeed necessarily the case, for we certainly do not see before us the whole height of the gateway towers. The pits were probably excavated in the brickwork which formed the floor of the superposed houses to make receptacles for grain. Later one of the holes was closed again by being covered with the flat stone of an olive-press. I feel that we may rest assured that it is unnecessary to cast about for an explanation that treats these holes as an intrinsic part of the design of the gateway.

In some later period, probably about the time when the inner wall gave place to the outer, this gateway was blocked up with a wall 15' thick, built of rather loose masonry with a slight batter on the northern face.

(3) The outer wall has been traced along its outside face for nearly its whole length. In both character and regularity, its masonry is much inferior to that of the wall which has just been occupying our attention: there is little doubt that it was built in haste, probably at some time of stress. It is of an average thickness of 14', and, though greatly ruined, stands in some places to a height of 11' 10". Unlike the inner wall, it is founded upon or close to the rock, and trenches must have been excavated to receive its foundations. At some parts, and probably all round, the rock is scarped under the outer face of the wall. In one pit dug on the south side, for the purpose of quite a different investigation, evidence suggestive of the existence of a counter-scarp was found; but this question could not be followed up for lack of time. The scarp follows the line of foundation of the added bastion at the N.E. corner, so probably belongs to the latest period of the fortification.

The total length of the wall is estimated at nearly 4,600', which is rather more than one-third of the length of the modern wall of Jerusalem. Towers occur at intervals in its course, both on the inner and outer face. These towers have not the regularity, either in interspacing or in dimensions, that distinguishes those of the inner wall. Some are little more than slight set-offs, about 1' in projection, while others are bold projections, about 8' wide. So far as the inner face of the wall has been exposed, it does not appear that the towers on that side correspond to those on the outside exactly. As time failed to allow of the complete opening out of the wall (which, in view of the great extent of the mound and the valuable work to be done elsewhere upon it, would in any case have been hardly worth the expenditure of time involved), it is impossible to shew the course of the towers on the inner face otherwise than conjecturally. At the north end of trench I, where the wall remains in a good state of preservation, it stands to a height of 5' 4" inside and 11' outside, as the rock makes a considerable fall underneath the foundation.

At the eastern end of the mound the outer and inner walls are combined into one; that is to say, the builders of the outer wall adapted the work of their predecessors without addition. At this part of the hill the rock is very near the surface—indeed there is an extensive outcrop of uncovered rock, and therefore the full height of the wall must always have been exposed, as is the case at the north-east corner of the wall of modern Jerusalem. This has made the east end of the wall a

convenient quarry for the inhabitants of the more modern villages round the ancient site. In consequence, for nearly its whole length, all but one course of the eastern end of the wall has disappeared, owing to gradual spoliation during the two thousand years that have elapsed since the abandonment of the city. Indeed even that one course has gone for a good many yards. The same is true at the north-west corner.

Thus, the masonry of this wall displays three easily distinguishable

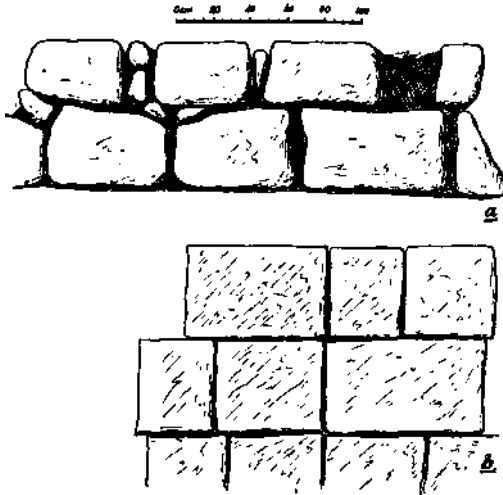


FIG. 127.—CONTRASTING TYPES OF MASONRY, OUTER CITY WALL

types, which no doubt belong to as many different periods. The wall itself, between the towers that interrupt it at irregular intervals, is built of large stones, for the greater part roughly hammer-dressed only, without any attempt being made to bring them to a rectangular shape. A few only display marks of chisel-dressing on the face. These stones are coursed roughly, with wide joints between them: the average dimensions of the faces of the stones are about 2' long and 1' 6" high. The joints are generally about 2" wide, and are filled with smaller stones wedged

between the larger blocks. Throughout, mud is, as usual, employed instead of mortar.

In fig. 127*a* a typical specimen of the masonry is represented.

With three exceptions, the towers display very different and much superior masonry. The stones, especially at the corners, are well-squared blocks, in courses about 1' 9½" high. The faces of the stones are smoothed by diagonal strokes of a chisel having a blade about 1" across. A section across these strokes would be shaped like a row of saw-teeth. These strokes are not rigidly parallel, and are not to be confused for a moment with the diagonal dressing of the Crusaders' masons. Some of the stones used are of considerable size: thus there is one at the south side of the third tower from the east, on the north side, which measures 4 x 1' 4³/₈" x 1' 6⁷/₈". Along the faces of the towers these square stones are not as a rule found; but the hammer-dressed stones, that take their place, are formed and set with much greater art than is the case in the walls between the towers. Two or three of the stones in the topmost surviving course of the N.E. tower have a slight marginal draft.

It is to be particularly noticed that these towers are not bonded to the walls, or else they are bonded to a section about 3' to 6' long, which itself joins the main length of the wall with a straight joint. The latter is the more frequent case, and when it is found, the square stones that characterize the towers are to be found also in the portion of wall bonded with them. This can only mean that the towers, as a whole, are an addition to the original scheme, and that at the places selected for erecting towers the original wall was cut out and the tower inserted. In one place I cut a section through the wall in order to determine whether the straight joint ran through the whole thickness of the wall, and this was found to be the case. The three exceptional towers (which are built of the inferior masonry characterizing the wall itself) are the fourth and eighth on the north side (counting from east to west), and the third on the south side, in the same direction.

A yet later construction is indicated by an addition that has been made to certain of the towers (the first, third, and fifteenth on the north side, the first, seventh, and thirteenth on the south side, counting from the east). This consists of a rounded casing, with sloping sides, carried round the face of the tower, and butting against the wall on each side.

As a typical instance of this addition we may take the thirteenth tower of the south side : a description of this specific instance will suffice for an account of all. It is illustrated in fig. 128. Originally the wall seems to have run straight on, with no tower. In the second period—the date of which will presently be considered—a section seems to have been bodily cut out, and a tower inserted. This tower is four-sided, and has well-squared corner-stones which certainly were never intended to be concealed. This

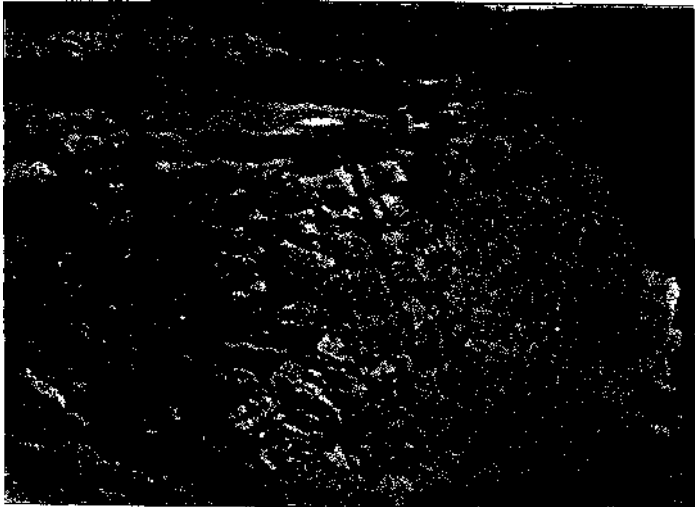


FIG. 128.—TOWER WITH BASTION

is shewn in fig. 129, where the corner of the bastion has been removed to shew the tower behind it.

Probably experience taught the defenders that the straight joint, between the junction of the tower and the wall, was a source of weakness; and they accordingly attempted to mask the joint by this covering. Its masonry is of workmanship very inferior to that of the wall. It is built of rough stones, shewing no signs of any tooling except occasional hammer-dressing, of average dimensions 1' 6" to 2 in every direction, and put

together without much attention being paid to proper coursing. The whole seems a rough and hasty piece of work.

At the N.E. tower the bastion is strengthened by a yet further outer shell of masonry, which covers the whole surface of a great rock platform, surrounded by a scarp having a maximum height of 13' and extending 23' out beyond the face of the original tower.

On the plan of the wall at the northern side, a section will be seen

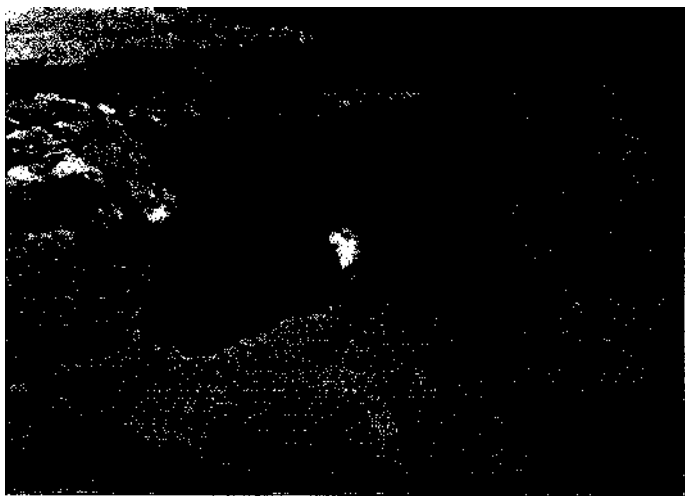


FIG. 129.—TOWER WITH BASTION REMOVED

to be marked "REBUILT." This section is conspicuously different in its masonry from the rest of the wall, and approximates rather to the style of the square towers. A specimen of it is drawn in fig. 127b. The courses are 1' 9 $\frac{3}{4}$ " high, the stones well squared and tooled, without drafts, by the use of a $\frac{5}{8}$ " chisel held diagonally so as to make a "saw-tooth" cutting. I have little doubt that the rebuilding of this part of the wall entered into the scheme of repairs executed at the same time as the insertion of

the towers, and probably was made necessary by the same circumstances, whatever these may have been.

It may be asked if we are to infer that the original wall had no towers. This is in itself very improbable; and the three towers of the masonry of the wall and bonded with it, are evidence that this was not the case. The masonry of these towers is in all respects similar to that of the original wall itself, and we may infer that these are survivals of the original towers, which were not demolished when all the others were rebuilt.

With reference to the plans, it must be remarked that only in a few places was the space between the walls excavated. This space was, as already mentioned, artificially filled with limestone debris, and contained next to no antiquities; and as the excavation of each pit cost on the average £20, it was not thought profitable to devote too much attention to so unproductive a region, when so much of the hill itself would better repay investigation. Thus I cannot claim that the internal projection of the towers is correctly represented, or even that internal towers do exist, except in places where the line of the wall is blacked in. Indeed it is probable that the outer and inner towers do not always correspond. It will also be noticed that in two places—at the north end of trench 20 and the south end of trench 29—there are two little buttresses in the internal face of the towers. These (which measure 8' in breadth and 11' 4" in projection) seem to be original features of the wall. It is possible that a row of such buttresses, alternating with larger towers, may be a characteristic of the wall as a whole: nothing but complete excavation could determine this point.

The following detailed description of the north side of the city wall will best shew to the reader the patchwork nature of its masonry. Beginning at the north-east corner, and working westward, we have, first, a square tower, solid, with no sign of having had an internal chamber, composed of successive courses or platforms of stones set in mud. These stones display little or no signs of dressing except at the two outer corners, where there are some well-squared stones. The corner-stone of the present top course, at the N.E. angle, is 2' 8¹/₈" long by 1' 6¹/₈" broad by 1' 10¹/₂" high: on both exposed faces there is a draft all round 6" broad; this has been cut by rather irregular strokes of a chisel held edgewise. The central boss is very slight. The corresponding stone at the other end is not drafted, but smoothed to an even face by strokes of a chisel ³/₄" across. It is 3' 6¹/₄" long, 1' 3³/₄" broad, and 1' 6¹/₈" high. The masonry is fairly well coursed, the interstices being filled with smaller stones.

The bastion wall with which this tower is surrounded is a much rougher piece of work. None of the stones, with a few doubtful exceptions, shew signs of anything but simple hammer-dressing. They are all rough boulders measuring from 1' 6" to 2' in every direction, built without regard to careful coursing, and packed with smaller stones.

Before passing on it should be noticed that stones of a triangular shape, similar in dressing to the corner-stones of the square tower, have been cut and fitted to

the end of the east wall at the point where it butts against the tower. This was no doubt done when the tower was inserted.

The curtain wall between the corner-tower and the next projection is composed of large rough stones averaging about 2' in length. For the greater part they are merely hammer-dressed, though a few are trimmed on the face with chisels: none are squared carefully, like the stones used in the towers, except for 3' adjacent to tower ii; in this part there are well-squared stones, set with wide joints between them. The tower is bonded to this section, but it does not bond with the rest of the wall. The stones of this section are smoothed with irregular diagonal strokes of a chisel, and set in courses 1' 6" high. Evidently in this case the tower and part of the adjacent portion of the wall are insertions.

Tower ii was originally a small projection of only 1' 10½", built of well-squared stones with diagonal chisel-dressing. A sloping buttress was built against its outer face at the time when the rounded bastions were added to certain of the towers. This was necessary, as the face of the tower slopes outward considerably, and evidently a settlement of the foundations had taken place which led the inhabitants to apprehend a fall of the whole tower. The masonry of this sloping buttress is of the same character as that of the bastion added to the tower, though on the whole it is built of rather smaller stones.

The curtain wall between towers ii and iii is composed of fairly well-coursed masonry, the courses about 1' 8" high. The stones are hammer-dressed, but no attempt is made at squaring them evenly. There are a few faces trimmed with chisels. The joints are wide—about 2"—but sparsely filled with smaller stones.

Tower iii consists, like tower i, of a square shell with a round bastion outside it; but the bastion is single, not in several independent shells as in that surrounding the corner-tower. The inner face of this tower corresponds in type with the masonry of the other square towers for the two upper courses at present existing: the lower courses, which were probably underground, are of very rough rubble. The corner-stone at the S.W. angle, in the present top course, is 3' 8⁷/₈" long, 1' 5" broad, and 1' 10½" high. It has been smoothed with a ¾" chisel.

The curtain wall between towers iii and iv is similar to the preceding length, but the joints are a little closer.

The fourth tower projects 1' 10¾". It has squared corner-stones similar to those in the other towers: the courses are 1' 9" high.

At the beginning of the curtain wall between towers iv and v there are one or two squared stones displaying very short marks almost resembling pocking—made by a chisel like that used in the tower. These are to be found for 5'. At the end of this length the wall is much ruined, and it is impossible to say definitely that there is no bond at this point, but the probability is that there is none. The rest of this stretch of wall resembles the previous section in its masonry.

Tower v, which projects 6', displays no dressed stones like the others, with one or two exceptions, and the masonry in all respects resembles that of the adjacent lengths of wall. This tower is probably part of the original structure.

The next curtain wall resembles the previous sections and has no dressed stones in any part

Tower vi is certainly an insertion. The projection is 1' 6¼", but pressure from inside, or a settlement of the foundations, has forced the tower and walls outward. There are squared stones with diagonal dressing running through the wall, and owing to the ruined state of the wall itself it can be clearly seen that there was no bond between this masonry and that of the tower. On the west side the tower bonds with the well-cut portion of masonry at the adjacent end of the next stretch.

The curtain wall between towers vi and vii displays well-squared stones for 3' 9", after which is a joint without bond: the remainder of the masonry resembles that in the other lengths of wall.

Tower vii projects 2' ¾". It forms part of an insertion in the wall, reaching from 3' 0¼" east of the tower to about the same distance west of it. At these two points straight joints run through the walls, faced, on the tower side, by well-squared stones. It happens, however, that the facing-stones of this tower are not so well cut as those of previous towers.

In the next curtain wall, 1' 6" from the straight joint above referred to, occurs one much-weathered stone that appears to have been drafted. This is the only drafted stone noticed in the whole wall, except those in the corner tower already described. On the whole the masonry of this length of the wall is better than the average: though the stones do not display any clear signs of chisel-dressing, they are better squared and closer together.

The eighth tower, and the inset following it, shew square stones.

The following curtain is of very rough rubble construction. There is on the inner face one of the narrow buttresses above alluded to.

Tower x is certainly inserted. At 21' beyond it is a ruined fragment resembling part of a bastion: possibly the rest of it has all been removed for building material.

The remainder of the masonry of the wall is on the whole the same as that described in the foregoing paragraphs; the towers being of much better masonry than the stretches between them, and not bonded to them. The most striking exception is the stretch marked "REBUILT" on the plan, which is in all respects similar to the adjacent towers, and is bonded to them.

It will be seen from this description that the towers are of both large and small projection, but there is no regular scheme of alternation. All the towers that have received the added bastion are among the larger, with the exception of the second on the northern side.

No complete city gate remained in this wall, unless there be one at the west end, where the modern farmhouse and its appended mulberry plantation prevented excavation. At the east end, where the rock crops out above the surface of the earth, and where in consequence every stone of the wall founded upon it has been taken away, there very probably was a gate. It would be natural if this were so, as in that direction the main road to Jerusalem is approached, and also the principal spring is to be found. There was another gate in the south side, of which the western jamb remains. The long gap filled by the Maccabaeon Castle and its attendant rampart begins here, and the eastern jamb has disappeared with the rest of this portion

of the wall. The surviving jamb is shewn in fig. 130. Of the gap in question and the gates that occur in its course we have already sufficiently spoken.

The walls have now been described as far as the excavation permits, and it remains to consider the chronology of the various buildings and rebuildings that they display. The *relative* chronology is obvious. There can be no doubt that the rude earth rampart is the oldest of any of the walls. Such fragments of pottery as happen to be mingled with the earth of which it is formed are of the most primitive types. It is founded on the rock. It must have been covered almost completely when the other two walls were built: the inner wall crosses it at the



FIG. 130.—SURVIVING JAMB of SOUTH-WEST GATE, OUTER CITY WALL

north-east gate, and it is not conceivable that this comparatively useless defence would have been built when either of the two great walls was in existence. It is always *at a distance* from the inner wall, so cannot be taken as the base of a glacis built against its lower part and thus contemporary with it (like the construction of the city walls at Megiddo, Taanach, and Jericho). Nor does a careful examination of the section of the side of the trench give any ground for supposing that it was a retaining wall for an earth mound heaped against the city wall.

At the north end of trench I there is a tower projecting inwards from the face of the outer wall, partly founded on the outer face of the inner wall, which here comes very close to the exterior rampart. This at any rate proves that the

towers of the outer wall are later than the inner wall. But that the whole of the outer wall is older than the inner is more clearly demonstrated by the fact that it blocks the gates of the inner wall.

With regard to the rebuildings within the outer wall, it is obvious the added square towers must be earlier than the rounded sloping coverings that in some cases mask them.

Thus we require to assign dates to the following successive structures :—

- I. The earth rampart.
- II. The inner wall.
- III. The outer wall in its original form.
- IV. The square-tower additions to the outer wall.
- V. The round-tower additions to the outer wall.

The first of these has already been sufficiently considered, and we may proceed at once to the question of the second.

A minor limit for the date of the inner wall is afforded by the excavation just east of the south gate. Here, over the ruined top of the wall, run the foundations of three successive strata of house-walls. The lowermost of these is founded directly on the wall, and inside the chambers of these houses were found a number of Egyptian objects, scarabs, beads, and amulets, in sufficient numbers to allow us to accept their unanimous testimony to the date of the structures in which they were found. This date is that of Amenhotep III, that is, about the fifteenth century B.C. Of less value as a date-indicator in itself, but of some importance in considering the question, was a scarab of Khyan (assigned conjecturally to 2200 B.c. or later), found on the top of the wall at the north of trench 2.

Thus the great inner wall was already superseded by the outer in the middle of the second millennium BC. It must therefore belong entirely to the earlier Semitic inhabitants of the city; and as they would probably set about the erection of their defences at the first occupation of the city, we must suppose the wall to have been originally built about 2500 B.C. As the outer wall lasted a thousand years in use, with only occasional repair or alteration, it is not excessive to assume another thousand years as the lifetime of the inner wall, which we have already seen to have been a superior structure.

As the city can at no time be supposed to have been without a wall, the destruction of the inner wall must have been immediately succeeded by the erection of the outer. Most likely the materials of the inner wall were to a large extent utilized over again for erecting the outer. It is probable that the growth of the city itself, both vertically and horizontally, was the prime cause in the supersession of a defence that might have been expected to last much longer. By successive rebuildings the level of the city must have risen so that the housetops were dangerously exposed above the summit of the wall, while the thresholds of the city gates must have become inconveniently low. It was probably felt also that it would be advantageous to build the wall a few feet farther out from its original site, thus gaining for the city a certain additional space all round. We have already seen that the date of this important change is to be assigned to some time in the fifteenth

century B.c. To fill the trench intercepted between the walls, and to bring the space thus gained up to the level of the city at the time of the rebuilding, a quantity of limestone chippings and other rubbish was thrown into it. Wherever this was excavated no antiquities of any kind were found.* This pile of cast rubbish is well shewn in the photograph, fig. 131. At the north-east gate of the inner wall, the cast limestone covers the northern jamb. It was noticed that here a thin film of earth separated the cast stuff from contact with the wall, as though the wall had been built in a trench sunk through the limestone, and therefore later than the



FIG. 131.—SECTION SHEWING CAST LIMESTONE BETWEEN THE TWO PRINCIPAL CITY WALLS

accumulation. But this is certainly to be accounted for otherwise: the thin film of clay is a deposit of percolation along the face of the wall.

Hitherto our task has not been difficult, as indications of chronology have not been wanting among the structures, and objects, found associated with the various walls with which we have been dealing. The case is, however, different when we consider the repairs that have been effected in the outer wall. There are no signs whereby without assistance from external sources we can assign dates to the towers added at a later time.

* Except a stray scarab, at the north end of trench 19.

Two preliminary questions have to be raised. The first is whether the square towers and round casings are the remains of two rebuildings or one. The presence of well-squared stones in the outer corner of the square tower leaves scarcely any room for doubt—as we have already said—that the round casings are a long-subsequent addition. The second question is whether the towers not bonded to the wall were built first and the curtain walls afterwards erected in order to join them, or whether (as we have hitherto assumed) the towers were inserted into prepared spaces in a Wall previously existing. This would be a question next to impossible to answer were it not for the existence of two towers, belonging intrinsically to the masonry of the wall on the north side; and, on the other hand, distinct evidence of a rebuilt patch in the wall itself, in the superior style of masonry used in the towers. These shew that the towers were a later addition to the structure of the wall, as we have already said to be the most probable hypothesis.

As there is little evidence of date to be found in the types of masonry in pre-exilic Palestine, we are led to an examination of the literary history of the city, in order to find whether any historical events likely to lead to these extensive repairs can be found recorded. It is a coincidence not a little remarkable that there are two, and only two, occasions recorded in which the city or its fortifications were rebuilt or repaired; and it is tempting to connect these two circumstances with the two successive repairs that have left traces in the existing remains. It is necessary, however, to be cautious in such identifications, for the history of Gezer, as it has come to us in written documents, is very fragmentary, and it may be that there were other repairs of which no record survives; while on the other hand all traces of the restorations of which we have historical evidence may at a later period have been swept away.

With this word of caution, we may refer to the two recorded restorations. They are of course the rebuilding of the city by Solomon after its destruction by the Egyptian king, and the fortification by Bacchides during the Judæo-Syrian Wars. It must be admitted that there is no definite statement in the meagre notice in I Kings ix 16 of the Solomonic repair—our only source of information on this event—that the walls of the city needed repairing: this may, however, be regarded as a probability. Pharaoh could not have even partially burnt the city without entering it, and he could hardly have entered a city so strongly fortified without breaching the walls at some place.

If we are correct in seeking for traces of the Solomonic repair in this wall, we may as a working hypothesis assign the rebuilding of the square towers, and of the stretch of wall marked on the plan "REBUILT," to this period. We may infer that in the capture of the city the walls were besieged, and greatly damaged at various points, but finally breached at the place indicated. It is by no means an unlikely place for such an operation, as the hill-slope at this place is much more gentle than elsewhere along the northern side: it is among the most easily attacked portions of the wall. In this connexion it is interesting to remark that Dr. Schumacher, on his visit to Gezer, was struck by the resemblance of the masonry of these square towers to that of structures which he had been led to assign to the time of Solomon in his excavations at Megiddo; and the observation

was amply confirmed by a photograph of the Megiddo buildings which I was afterwards permitted to see.

The assigning of the round towers to Bacchides is an identification that may be regarded as less doubtful. They form exactly such a fortification as might have been hastily put up under the circumstances. Bacchides was just a year in the city, and the strengthening of these six towers would be a good year's work. It may have been his original plan to strengthen them all, but his evacuation of the city led to the enterprise being abandoned.

Before leaving the city wall it may be worth noticing that, when deposits of antiquities were found outside, the later objects were as a rule at the bottom. This is to be accounted for by the successive stages of ruin through which the wall passed. The upper courses fell or were removed first, thereby giving an opportunity for rain to wash down the objects from the topmost strata. The courses next below followed, and so the objects from the second strata were superposed to those which had overlaid them. The process was of course continued till the debris inside the wall and that outside had both reached the same level, and the wall had been ruined flush with them.

§ 18.—WATERWORKS

The Water-passage.—In trench 29, and in the middle of the court of the First Semitic Palace, there was found a rock-cutting of the highest interest and importance.

At the south end of this trench, as the maps will shew, no walls (except a few insignificant fragments of foundations standing on the rock) were found of an earlier date than the Third Semitic Period. Instead of the normal maze of foundations there were about ten feet of solid alluvial silt, which contained nothing but a few stray scarabs, fragments of pottery, and such objects. All of these belonged to the culture-period named. It appeared as though there had been a waste space at this point, to which water and mud were allowed to drain: indeed several drains were found converging towards this spot, and the strata that represented ancient ground-surfaces all dipped in this direction.

After this uninteresting bed of soil had been cut through, and the surface of the rock was reached, the edge of a keyhole-shaped pool made its appearance, descending vertically in the rock, with well-scarped sides.

Soon steps were found at its northern end; and it appeared as though I had another pool resembling the great excavation in the Central Valley, described hereafter, but rather smaller.

A couple of days' work shewed evidence of an extension eastward, and, shortly after this was found, a hole was uncovered in that side of the pit, through which it was possible to creep. It was found to lead into a long passage sloping downward through the rock. Being evidently a



FIG. 132.—ENTRANCE TO WATER-PASSAGE

work of considerable importance, it was resolved to clear it completely, although when I contemplated it first I feared it would take the whole of the rest of the permit to do so.

The various theories that were formed about it during the process of excavation—that it was a sewer, an ancient exit from the city, the descent of some underground sanctuary or catacomb—had all to be finally abandoned when, after more than a month's hard work, it was found to give access to a powerful spring of water, rising in a natural cave sunk in the heart of the



FIG. 133.— THE WATER-PASSAGE, LOOKING DOWN

cylindrical niche, 2' 8" deep and 5' across: it bears a curious resemblance to the *mihrab* of a mosque. It will be seen between the two cranes in fig. 132. A rebating of the east and west edges of the pit, as though to receive the foundations of walls, seems to indicate that a building of some sort was erected over the hollow: of this, however, not a trace remains. It may be taken for granted that some protection would be built to prevent persons from falling into the pit. There are no coherent foundations of buildings connected with this rock-cutting in any way: a few small and unintelligible fragments of walls are all that surround the mouth.

The floor of the pit was entirely occupied by a flight of steps, cut in the rock, starting from the northern edge. They run southward for the length of the narrow part of the pit, and then turn eastward. All the southward-running steps, with the

rock. It was practically entirely filled with earth and stones, all of which had to be carried to the surface.

With this preliminary account of the discovery and the nature of the tunnel, we may now proceed to a detailed description. Reference should be made to Plate lii, where will be found a plan and sections, and to the accompanying photographs.

Entrance is gained, as above mentioned, by a keyhole-shaped sinking in the rock (fig. 132), 34' 6" in length along its western side, which is a straight perpendicular scarp, 7' 5" broad at the northern end, and 14' 6" at the southern. In the middle of the edge of this side is a semi-

exception of the first two, have been broken and quarried away, evidently with intention : a probable reason for this will be noted in the sequel.

The pit reaches its maximum depth on the lowest step under the eastern edge, just at the entrance to the tunnel. The depth is 26' 6".

The entrance to the tunnel is by an imposing archway, 23' high and 12' 10" broad. These dimensions are maintained through about two-thirds of its length. It descends in the rock, at an angle of 38 or 39° to the vertical: in the floor is cut a flight of steps occupying the whole width of the tunnel, and continuous with those in the entrance shaft.

The roof of the tunnel is cut to a barrel vault, and the sides are made well plumb. Fig. 133, looking downward, gives a good idea of the scale of the work, the excellence of the finish, and the texture of the rock. The tool-marks of the quarrymen are well preserved in the upper part of the tunnel, especially about the roof. They resemble those in the cave 16 III, and equally demonstrate that the cave was excavated by means of flint tools.

The general appearance of the staircase, viewed from below, is shewn in fig. 134. I found this a very difficult subject for the camera: the lower part of the cave required at all times to be illuminated by a magnesium flash, while some daylight (though not too much to cause halation) was necessary for the upper part, as the magnesium light would not carry sufficiently far. The photograph here given is the best I could obtain after several trials : I would have attempted to improve upon it, but unfortunately a few days



FIG. 134.—THE WATER-PASSAGE, LOOKING UPWARD

after I had secured it the sides of the trench above collapsed in a great storm, burying the tunnel in the ruins. To clear it out again would have involved a serious expenditure of money that would not be justified.

The staircase throughout is much worn and broken. Indeed, toward the end of the period during which it was in use, it was evidently considered dangerous, and rows of small hollows were cut at intervals on each side to serve as hand-grips. These are shewn in the sections on Plate lii.

They are not the only hollows in the walls; there are also a number of niches formed in the rock. These are of various sizes, from tiny pigeonholes to large shelf or cupboard-like recesses. Most of them are too high up to reach to from the staircase. On the other hand, one of them is sunk about 1' below the level of the steps on the south side, near the top. I found this hollow very useful in wet weather: by erecting a temporary dam just below it rainwater was diverted into it, and prevented from wetting the steps and making them slippery.

It is conceivable that this was its original purpose. A short distance farther in is an irregular hollow in the rock, running up the whole height of the tunnel. This is a natural fissure. It is not impossible that some of these niches were made for the deposition of ex-voto gifts to the spirit of the spring below. If a less imaginative explanation be required, they might have been made by workmen for putlog holes, or for holding their tools when not in use. Certain of these recesses—especially those of irregular outline about the middle of the tunnel—are

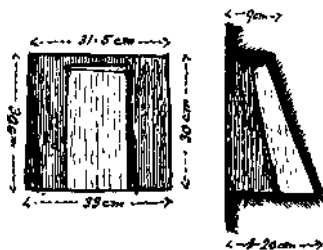


FIG. 135.—BAETYLI (?) IN THE WATER-PASSAGE

natural, being caused by the fracture of a thin layer of rock behind which was hidden a great boulder of flint. There are two or three strata of such flint boulders in the course of the tunnel. There is one jecess on the left-hand side (descending) just before reaching the arch, an elevation and section of which are shewn in the annexed cut (fig. 135). The square block left in the middle may be an indication that it is left unfinished, whatever its original purpose may have been; but it is also possible that (as was suggested to me by Pere Vincent) the block had a baetylic significance.

The passage is divided into three approximately equal parts by (1) a well-cut archway in the upper part of the tunnel, 47' 5" from the entrance, ending abruptly on each side about 5' from the level of the adjacent step—this archway has a reveal of 6"-8" on the outer side, but dies into the wall of the tunnel on the inner; (2) the entrance into a bed of much harder limestone, fissured by wide strata that dip at an angle of about 9°, but evidently so difficult to work that it gave considerable trouble to the quarrymen. From this point onwards the dimensions of the tunnel are reduced, and the workmanship and finish very inferior. There are no niches in this lower bed.

The staircase terminates at a pool of unknown depth—a long crowbar failed to reach the bottom—now full of soft watery mud. Water stands wherever this mud is dug away, and the level of the water remains constant no matter how much be taken away. The first day on which the water was found it was uncertain whether it was a spring or merely an accumulation of rainwater. Buckets were provided, and at least two hundred gallons of water drawn off and poured away, without making the smallest impression on the level. This is 94' 6" vertically below the surface of the rock, or about 130' below the present surface of the ground.

I decided that to clear the spring—which would require the employment of divers—would be difficult and archaeologically unprofitable. The water was tasted by some of the workmen, who pronounced it salty—but it was so impregnated with mud that that is little wonder. Abandoning the spring, I had a causeway of flat stones laid across the mud, from the bottom step, and proceeded to an examination of the farther extension of the tunnel.

By an examination of the sections in Plate lii, it will be seen that the slope of the roof is continued for some distance beyond the end of the staircase—indeed until it comes so close to the surface of the watery mud filling the pool that it is necessary to stoop low in order to pass underneath. It then rises again, and the excavation ends in a long narrow cave, measuring 80' by 28'.

This chamber was full of earth, and I began to clear it out, but soon abandoned the undertaking for several reasons. First and foremost was the question of risk. The collapse of the trench just referred to had already been threatened, by an ugly crack, some time before the work was concluded: had it taken place during the excavation of the tunnel it could not fail to have caused several fatalities. On that account I was anxious to be finished with the excavation as soon as possible. This indeed was not the only danger: the roof of the cave itself was in a most unsound condition, cracked, flawed, and rotten, and I was in daily dread of an unlucky concussion bringing down great masses of it upon the workmen below. I therefore decided to be satisfied with cutting trenches along the sides, and through the middle, in order to see whether the cave was artificial or natural, and to find out whether there was a continuation—another entrance, an exit, or an opening into farther chambers.

The question of the artificial or natural origin of the cave was not very easy to decide, as little or none of its original surface remained *in situ*. It had evidently suffered severely from earthquakes, which had loosened lumps of earth from the roof and sides and piled them up all round. Some of these accidents had taken place at a time sufficiently remote for 3'-6' of earth to accumulate above the broken fragments—in the section of the cave the position of two such layers of fallen rock is shewn; while others, lying on the surface of the earth, shewed fractures so fresh that they might well have been broken off in the moderately severe earthquake that shook Palestine in March 1903. In the middle of the cave the accumulated earth—alluvial deposit left by the spring when the water happened to be high—reached a height of about 13' above the water-line. The watery mud was reached wherever a deep enough hole was dug.

The entrance to this cave had almost completely been closed by blocks fallen

from the roof, which it was necessary to quarry away before the cave could be examined.

I made many efforts, all in vain, to secure a flash-light photograph of the interior of this cave. The air was warm, and so heavily charged with moisture that the camera lenses became obscured with condensation instantaneously after being uncovered, so preventing a satisfactory image being printed on the plate.

The final conclusion that I came to was that the cave was entirely natural; and no trace of an opening was found in its wall leading to an extension of the system of any kind.

It has been mentioned that the silt-like earth that closed the entrance to the tunnel contained objects of the Third Semitic Period; that is, of the Mycenaean and sub-Mycenaean civilizations. Thus the tunnel was abandoned and filled up about that date—say 1450-1250 B.C. We can hardly allow less than about 500 years for the steps to have got into the dilapidated condition in which they were found, so it is fair to assign a date of about 2000 B.C., at the latest, to this excavation.

When we consider the probable condition of Palestine at that date, this wonderful work becomes yet more wonderful. There is every likelihood that the disorganized state of society so graphically mirrored in the Tell el-Amarna letters was not peculiar to the fifteenth century B.C. It would be difficult to imagine Yapahi or one of his kind finding leisure and tranquillity enough, in the midst of all his anxieties and his intrigues, to conceive and carry out a work of this magnitude. Who then before him could have done so? To this question there is no answer forthcoming; but it gives a higher idea of the state of Canaanite civilization than we would have gathered from the meagre remains of their houses and property, to learn that a Canaanite governor could plan, and Canaanite engineers execute, a work so grandiose.

But is it to be ascribed to the Canaanites? We would not be surprised to find a work of this nature in the metropolis of a settled civilization; but could it possibly find place without foreign aid or influence in a country town of Palestine? Possibly some Egyptian overlord designed the work, or else a Babylonian king. If so, however, we should have expected to find more definite traces of Egyptian or Babylonian house-building throughout the city—characteristic architectural ornaments, for example; and at least an Egyptian or Babylonian monarch might have been trusted to write his name up in various places in the tunnel and around it. No trace of an inscription of any sort was observed.

Beside this difficult historical problem, there are some practical questions that call for discussion. How was the spring first discovered? By what system of calculations did the engineers so design their work as to hit exactly on this subterranean cave? And why was the great labour undertaken of making a passage-way (rather than a vertical well-shaft)? There is now no external indication whatever of the cave and its water-source. Clearly to fix its position accurately a trickle of water must be postulated running out of a tunnel at least large enough for a boy to pass through. This may possibly have existed in 2000 B.C.; but there is now no evidence for anything of the kind, either inside the cave or in the surface of the country outside. Again, from every point of view, a vertical well-shaft would have been much more practical than the stepped passage. It would have been shorter in the proportion (approximately) of 3 to 5; it would have served a larger number of persons at once; it would not need to have been so carefully finished; and the task of carrying water to the top would have been far less toilsome. So far as I can see, the only reason for making the water-passage rather than a vertical shaft (assuming the position of the cave to have been fixed by the engineers) was the desire to bring the mouth of the passage into the courtyard of the important dwelling adjacent.

These difficulties may be most easily solved by supposing that the discovery of the spring was a happy accident, made in the course of quarrying the tunnel for some entirely different purpose—most probably to serve as an exit from the city in time of siege. In that case an explanation of its great size can easily be reached, as it would clearly be advantageous to have as much light as possible in the passage.* When the spring was found, it would at once be recognized as being almost, if not quite, as advantageous a possession in time of siege as an underground exit would be. Indeed it is quite possible that on some occasion it enabled the defenders to hold out for a long time, and that the exasperated conqueror, when he at last succeeded in forcing an entrance, destroyed the steps that led down to the passage. This is a not improbable explanation of the condition of the upper part of the staircase. The lower

* Pere Vincent, who disagrees from this argument and considers that the tunnel was excavated from the first simply and solely to obtain water, has referred me as a parallel to a similar tunnel discovered at Susa, and described in the report of the excavations there for 1907-8.

part having become worn and dangerous, the citizens may not have considered it worth while to repair the damage, and for the future decided to depend on cisterns. So the tunnel was abandoned, and gradually became silted up.

On p. 20 above a remarkable example of the persistence of a historical tradition among the modern inhabitants is quoted. It may be that a yet more remarkable recollection of an historic fact may centre round this water-passage. There is a constant tradition all over the Moslem world, and referred to in the tenth sura of the Koran, that the water of Noah's flood rose in a *tannur*, or baking-oven. This *tannur* is placed by various authorities in a wide variety of different places; and the modern inhabitants of Abu Shusheh are positive that to their district belongs the doubtful honour of having once contained this instrument of destruction. Indeed it is definitely situated at 'Ain et-Tannur, between Abu Shusheh and 'Ain Yerdeh. There is quite a cycle of legends referring to this Tannur and the water that rose out of it.* Now when we remember that the Hebrew word for watercourse or gutter, which occurs in the narrative of II Sam. v 8, is *sinndr* [סנדר], it is tempting to believe that these legends are founded on a subconscious folk-recollection of this great engineering work. The fact that there once existed here a hole in which water rose, and the fact that it was called *Sinndr*, are both dimly remembered, and both perverted: the unknown word *sinndr* has been turned into an Arabic word of a known meaning, whose significance has coloured the associated legends; and these legends, like all popular traditions respecting water-bursts, have become associated with the story of the universal deluge.f

As might perhaps be expected, not much was found in the water-passage, and what there was had obviously silted in by accident and had no radical connexion with the excavation. The chief objects are collected together in Plate xix, figs. 10-24. Fig. 10 is the neck of a large jar covered with a creamy white wash, adorned with painted decoration in sepia (hatched in the figure) and yellow (dotted). Fig. 11 is part of the edge of a bowl in white stone. Fig. 12 is a fragment of First Semitic pottery decoration, consisting of a broad black band with a narrow white stripe, and then red stripes beyond. Fig. 13 is a bronze arrowhead with a thick rib, resembling the hoard from tomb no. 30. Fig. 14 is a fragment of an animal figure in saffron-yellow ware, ornamented with thick stripes. Fig. 15, perhaps the most important *trouvaille*, is a small conical vessel in polished green serpentine: no doubt of Egyptian provenance. Fig. 16 is one of the not very common moulds for casting "Astarte" plaques: it was interesting to notice that impressions from this very mould were found in the excavation. Fig. 17 is an "Astarte" plaque of a type not elsewhere found in the works, with the hands crossed between the breasts. The face is broken away. Fig. 18 is the bone haft of a bronze tool; fig. 19, the rounded bottom of a jar with a circular hole cut in it; fig. 20, a small hemispherical pottery

* On which see AR P.

† This elegant identification is due to Pere Vincent.

cup; fig. 21, a pendant of green enamel porcelain; fig. 22, an ivory button with deep grooves upon it; fig. 23, a fragment of Aegean ware, with the usual brown lines on a yellow slip; and fig. 24 is a curious object not very easy to explain, apparently a fragment of a tubular lamp (of the kind explained in the section on pottery) larger and deeper than usual. It is in light brown ware, burnished with red-painted lines.

Besides these objects we may mention: the horn of a cow, sawn clean off; the disc-base of a vessel in porous white ware, with a smooth white wash on the surface; a spherical sling-stone, $2\frac{1}{2}$ " diameter; a charred fig; a ledge-handle in drab ware; a large oval black stone, worn smooth by rubbing; tine of an antler; a large *buccinum* or similar shell; a large number of rude flint knives and chips; the leg of a stone three-legged dish of the ordinary kind; a fragment of an Egyptian glass vessel; a cubical block of limestone, about $34" \times 2\frac{1}{2}" \times 2"$, of irregular shape, with a depression on one side; the head of a cow in pottery with white lines on a grey slip; also a fragment of similar ware; a flint scraper; a bronze pin with no special characteristics; a block of clunch; a circular disc, 3" diameter, $1\frac{1}{4}"$ thick, with a small depression on each side; a one-handed jug, with a rather dumpy pointed base in which is a hole; a specimen of a variety of "ladder-pattern" ware, rather rare at Gezer, in which the "ladder" is white on a dark grey slip.

Most of these objects were found in the entrance shaft and at the upper part of the staircase: from the lower part of the staircase and the cave at the bottom there came nothing but potsherds with no special character, and a few animal bones and flints.

Especially interesting was a cake of clay on which a straw basket had at some time been laid. The clay had preserved the impression, and shreds of the outer surface, of the straw. The basket seems to have been made of a single rope of straw, about a quarter inch in diameter, twisted round into a spiral. The end of the rope is plaited in and through the adjacent whorls of the spiral—it can be traced to the fifth whorl. One or two ill-defined grooves radiating outwards from the centre suggest that the whorls of the spiral were kept in position by being passed through loops of a string. The base of the basket was slightly convex externally: the radius of its bottom was about $2\frac{1}{2}"$, but the centre of the spiral was not precisely in the middle of the base. The sides then turn up sharply, but here we reach the edge of the clod, and can glean no further information. See fig. 136.

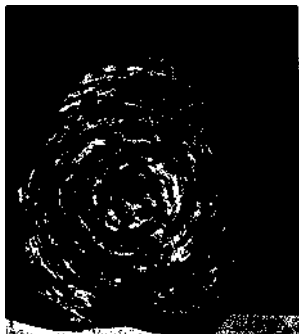


FIG. 136.—EARTHCLAY WITH IMPRESSION OF A BASKET

The Central Reservoir.—Another of the grandiose waterworks of the city was the great reservoir just north of the Maccabean Castle.

The clearance of this pit was a matter of considerable labour, as, like the deep Maccabaeen well on the Eastern Hill (described below), it had been filled with larger stones cast into it.

It was quarried in the rock: the 15' 9" of earth by which it was covered contained no walls and scarcely any antiquities — a "sign that it had remained open till the latest period, and had been hidden by the rain washing earth over it, and by the gradual accumulation of vegetable soil. The length and breadth of the opening, on the surface of the rock, were 57' and 46' respectively ; the pit descends with these cross-dimensions to a

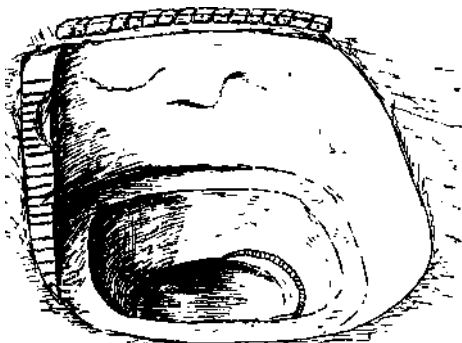


FIG. 137.—THE CENTRAL RESERVOIR

depth of 29' 6". In the floor at this depth a second pool was deepened, measuring 27' x 24' 6" at the top, but narrowing towards the bottom, which proved to reach a farther depth of 29' 6".

This double pool is wholly quarried in the soft, porous, chalky limestone which forms the core of the hill. The sides are irregular, and have many hollows and projecting bosses: they are covered with two coats of cement, each about $\frac{3}{8}$ " thick, the outer coats being smooth and comparatively fine, the inner coat gritty and rough. Careful search was made for inscriptions or graffiti, but none were found. Access to the bottom was gained by flights of steps: the flight in the upper pool is partly rock-cut, partly (in the upper steps) of masonry, much broken ;

that in the lower pool is altogether rock-cut. The drawing (fig. 137) gives a good idea of the general appearance of the whole.

A rough calculation shews that the pool, when full, contained rather over 600,000 gallons. That it was excavated as a public work is evident. How it was filled with water is a problem on which the excavation has thrown no light.

The lower stage had been allowed to get completely full of silt before the abandonment of the city; and after the mound had been turned to a pasture land the upper stage had been filled in with the large stones already referred to. Among these stones were found some with coarse mouldings, etc. (see Plate liii), and also a fragment of the volute of an Ionic capital. No buildings were discovered with which such remains could be associated, unless it be the ornamental city gateway near the Maccabaeon Castle. All the datable objects found among this debris, with one exception, were certainly of the Hellenistic Period: the exception was a jar-handle with the royal stamp of "Memshath." The other objects were potsherds and a few more or less sound vessels, handles of Rhodian wine-amphorae, a few small Ptolemaic coins, beads, fragments of iron picks, and a curious little clay tablet $2\frac{3}{4}$ " long, bearing impressed upon it a representation of a wild beast devouring a man (fig. 138).



Several fragments of pottery shewed glazes (like the glaze on Samian ware): these were principally red, FIG. 138.—CLAY TABLET FROM THE CENTRAL RESERVOIR
the fragments being those of bowls. A few fragments displayed a brown glaze.

A few flint knives and flakes of commonplace types, very rudely formed, and a good many fragments of iron nails, much corroded, were also discovered scattered through the silt and stones, but there was very little that could be called characteristic. Bronze was but poorly represented, one or two earrings being the only objects worth mentioning, and lead by one or two shapeless lumps.

There were also slips of bone of the common types (*EP*, Plate 76, 11), cut from the shank-bones of animals: probably used for rough prickers in sewing skins.

In pottery there was a predominance of fragments of the characteristic elongated ointment vessels (*EP*, Plate 60, 6). Some fragments of Rhodian handles were found. One bearing half of 3. circular stamp was found: the stamp bore the usual rose and the letters . . .] M A [. . . the rest was illegible or broken off. Another, also imperfect, had a similar circular stamp, with the inscription EM IN; and a third, likewise with an imperfect circular stamp, was inscribed APXEMBPOTOY . . .

A fragment of a hippopotamus's tooth also calls for mention.

My first idea was that this great excavation belonged to the latest period of occupation: the total absence of any earlier objects in the silt seemed to favour this hypothesis. But the observation that it is apparently surrounded by a wall resting on the rock, going back to the earliest times, rather inclines me to consider that it

really is one of the oldest works in the mound ; possibly enlarged and cemented and certainly cleaned out in later times. On the east side there was a large area in which there were no walls at all. This was probably a place where silt was dumped when the pool was cleared out.

Cisterns.—In every ancient city it was of the first importance to store water sufficient to satisfy the city's needs in case of a siege. Accordingly we find the rock honeycombed with cisterns, one appropriated to each group of houses. There are a very much larger number of these, in all, than were in use at any one time : at any moment in the city's history the cisterns of older strata had become choked and forgotten, while those of later periods had of course not yet been dug. In the maps of the city I have done my best to assign the various cisterns to their proper epochs, basing the deductions on the height to which the opening was carried up through the ddbris, and the character of the pottery and other objects found inside the cistern itself. Cisterns are indicated in the maps generally by the letter c, except where a special mark is used to indicate any to which particular attention is called.

The general type of the cistern is unchanged throughout the centuries. A bottle-shaped excavation, generally circular, sometimes square in plan, is sunk in the rock to a depth of about 16'-23'. The diameter of the floor maybe 11'—26'. The sides are sometimes more or less vertical, approaching together rapidly near the roof; or else they taper in the fashion of a cone, from the floor upward. The only entrance is a hole, always circular, more or less in the middle of the roof, about 3' in diameter and 4' 6" more or less in depth. This mouth is carried up by masonry through the ddbris underlying the date-level of the cistern. The walls are covered with cement or coarse plaster, usually much decayed: sometimes this covering is quite absent, and it is often difficult to understand how the cistern continued to hold water at all.

In the floor, immediately under the entrance, is sunk a hollow, hemispherical or conical—sometimes not much larger than a cupmark, but occasionally of considerable size and depth—say about 4' 6" across and 2 deep. I thought at first that this was for allowing the bucket or pitcher to descend to the bottom, when the water happened to be low; but my men assured me that in modern cisterns similar hollows are made with the purpose of receiving impurities that might happen to fall into the water. They called it a *musfei*, that is a filter.

As the Gezerites allowed their valuable spring, and the tunnel which with immense labour their ancestors had hewn to reach it, to become choked with silt and pass out of recollection, it will not be a matter of surprise that they displayed the same carelessness in regard to their ordinary cisterns. As a rule, each cistern served one period only, and instead of searching for and clearing out old water-stores, which would have involved little labour, every generation requiring cisterns incurred the enormous labour of cutting new ones. Occasionally, however, there are exceptions to this rule. The large cistern at the north end of trench 27. for example, was used in several periods, and its masonry shaft shewed distinct traces of having been lengthened as each successive stratum was added to the accumulation on the hill-top. As an indication of its long period of usefulness, specimens of potsherds of all periods from Mycenaean to Maccabaeon were found within it.

We have now described the normal type of cistern. A few special peculiarities displayed by individual cases may here be referred to.

Some of the cisterns had evidently been adapted from previously existing caves, and shewed at the entrance the steps, more or less broken, whereby the cave had been entered. An example of this is II 18 A, in which traces of the steps remain at the entrance of the cave. This cave has undergone complete modification in the process of being converted to a cistern, the plan being made round, and the chamber deepened. The original appearance of the dwelling-cave is in consequence quite lost, nothing remaining to tell of it but the fragments of steps. The diameter of the existing chamber is 16' 2".

Another interesting example of the appropriation of an ancient dwelling-cave as a cistern is presented by the large cave 21 I, the plan of which will be found on Plate xiii, fig. 2. The staircase hewn in the rock at the northern end* shews that it was originally one of the Pre-Semitic dwellings. The entrance was originally wider, a large part of the northern side having been built up with rude masonry.

The original floor remains for a breadth of 7', after which the cistern-cutters have deepened the excavation by a drop of 5' 4". There is a recess on the east side which has also been deepened. The total depth at present beneath the surface of the rock is 20' 8": the maximum diameter north to south is 38' 9". The whole wall has been covered with hard cement.

The cave seems first to have been used as a cistern in the Second Semitic Period and a hole was cut in the roof with a circular shaft rising from it, to about a yard above the rock. At this level a water conduit leads away from the mouth, running 13' in a N.W. direction, and then turning sharply round and running 4' to the N.E.

* By an unlucky oversight the drawing has been inverted on the plate, the south being turned up and the north down.

It will be seen at III 21 *d*. This conduit 'is formed of stones set on end, about 8" high : the diameter of the conduit is 10" internally and 20" externally. Its ultimate destination does not appear, as it stops suddenly and no farther continuation of it was to be found. Afterwards the shaft seems to have been carried up past this conduit for another 5' in order to bring this cistern into use by the Fourth Semitic people. There is no perceptible change in the masonry.

So large and well-cemented a cistern would not easily pass out from memory—it is too valuable a property. It was otherwise with a smaller First Semitic cistern which will be seen at the north end of II 21. This was so completely forgotten that another cistern was cut beside it in the Fourth Semitic Period, shewn in V 21, north end. Those who laboriously cut out the later excavation were in blissful ignorance that they came almost within a yard of another, rather more capacious * than that which they made for themselves. This excavation of the two cisterns was instructive : it was carried on simultaneously, and the contrast between the early pottery found in the first and the later ware found in the second was very striking. A good deal of painted ware and some Egyptian objects were found in the Fourth Semitic cistern. There was also a stone measuring 2' x 1' 6" x 6", with a circular depression 1' 1½" across and 4" deep in the upper surface.

Another example of the transformation of a cave is shewn by that at the south end of trench 21, which appears as a dwelling in Map I and as a cistern in II. A vertical section (north to south) will be found in Plate xiii, fig. 5. At the entrance the tell-tale steps remain. Their continuation downwards has been quarried away, but traces shewing the level of the old floor, 6' 3" below the entrance, remain all round: from this it has been deepened a farther 4' 10" with sides gradually converging *downwards*—a peculiarity which distinguishes this cistern from all others found at Gezer. In the floor will be seen the usual filtering hollow.

Inside this cave were found fragments of three skulls, a large number of bones, especially of the camel, fragments of Second Semitic pottery, including small bowls of the common type with wavy sides and one-handled jugs with pointed base. There were also a curious cup of very light porous friable brick, roughly modelled, measuring 9" x 8" x 4", with a depression 2" deep in one of the broad sides, and a number of flints and of prickers made of birds' leg-bones sharpened.

A case of exceptional length of the rock-cut part of a cistern-shaft, on the Western Hill, has already been referred to, in connexion with its bearing on the age of an adjacent cave.

At the south end of V 2 will be seen a cistern peculiar for having its orifice at the side, not in the middle.

The shape of the orifice is uniformly circular ; but in one case (VI 18 A) it is cut at the end of an oblong sinking in the rock. This cistern is one of a small minority that are rectangular or square on plan : the sides measure 13' and the depth 21'. The oblong sinking is 5' 10" long, 2' 8" broad and 1' 6" deep: it runs north and south.

Other cisterns of exceptional plan are occasionally found. Thus in the Fourth

* Depth 20, diameter at base 17' 8½".

well-sinkers as a convenient tool for scraping the soil in the cave in search of treasure.

The skull mentioned above was not, like the other bones, in the floor, but deposited in a fissure between two strata close under the roof of the chamber.

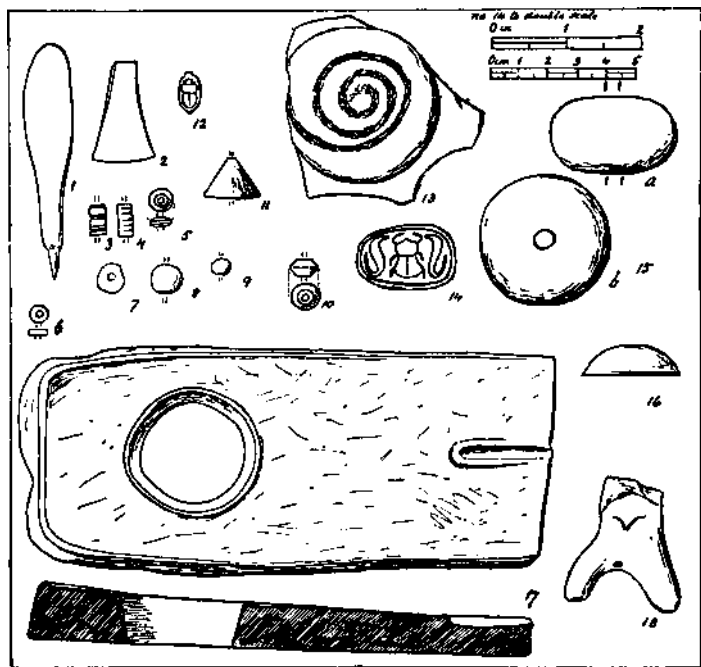


FIG. 42.—OBJECTS FROM CHAMBER (4), CAVE 28 II

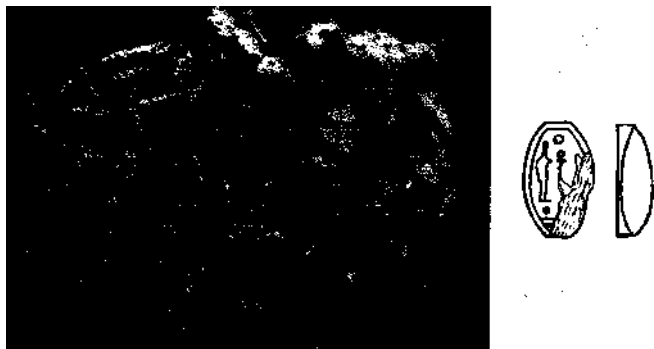
There was nothing in the part of the chamber that lay under the fallen roof. The cistern in this portion of the cave, however, contained a fine bronze pot that apparently had been accidentally dropped in (fig. 43), and a fragment of a green enamelled scarab (fig. 44).

Neither did the small passage extending southward from this portion of the U-shaped chamber yield much of special interest, nor yet the small rooms to which

it leads. In the passage was a large jar resembling Pl. xxxvii, fig. I, but broken, containing a few bones; a jug and some saucers of the commonest type (similar to Pl. xxxviii, fig. 3, and Pl. xxxvii, fig. 4), and a lamp of the ordinary pattern. There was also a fragment of the rim of a very large bowl, which when complete must have been about 1' 8" across.

On the other hand (7), and the room (8) opening out of it, were by far the richest in deposits of any portions of the cave. The happy accident of the fall of rock had sealed the precious contents of these rooms from depredation. The contents of these chambers alone rendered the discovery of the cave one of the most remarkable archaeological "finds" made in Palestine.

In (7) was little but pottery, but of this there was a considerable quantity,



Figs. 43, 44. -BRONZE TOT AND SCARAB FROM THE CISTERN IN CHAMBER (5), CAVE 28 II

forming a valuable series of contemporary types. Some of the jars contained infant bones. The human bones were in fair preservation, and the pottery was grouped about them. Besides the pottery there were a few inlaid strips of ivory shewn in Pl. xxxiv, and a scarab and gold-mounted bead (Pl. xxxvi, figs. 15, 16). In this chamber there was also a horn adze (Pl. xxxiv, fig. 31).

Chamber (8) contained another fine series of pottery and alabaster vessels, collected in groups containing from two to about a dozen fragments and pieces: it is noteworthy that with the unbroken specimens numerous fragmentary vessels and potsherds were found associated. Unfortunately the bones were few, scattered, and perfectly rotten, and the manner of interment could not, therefore, be exactly determined: it is probable that each group of pottery was the collection deposited with a burial. Underneath the pottery lay concealed a considerable number of

scarabs, some of them mounted in gold (see Pl. xxxv): the bronze gilt pin (Pl. xxxv, fig. 27) was found in this chamber also.

At the mouth of the narrow passage south of chamber (8) was a collection of one-handled jugs, near which was a bowl, inverted. There were also some beads and a few scarabs, as well as two bronze spearheads (Pl. xxxiv, figs. 32, 33). The passage itself, and the cell to which it led, were empty.

The passage leading to (9) was also empty, and (9) itself contained nothing but a few fragments of a tibia, shewing that one interment had taken place here. There were a few primitive fragments of pottery (shewn on Pl. xxxvi, fig. 3).

The broken chamber (10) contained a considerable number of primitive fragments of pottery in drab ware, some of them covered with white wash and red drip-lines. Ledge-handles were attached to some of the fragments. There were also fragments of stone rings, anodonta shells, and needles made of the leg-bones of cranes. A small stone corn-rubber must also be mentioned, and a bronze punch.

Covering the entrance shaft to chamber (8), above and around the great stone by which it was stopped, was a pile of potsherds. These had been broken on the spot, as was shewn by the fact that many could be pieced together. The majority of the pieces were coarse drab saucers of very common types. It is possible that this heap of pottery has no connexion with the cave or its contents, but is merely the debris of an ashpit—several similar ashpits were found not far away; but it is also possible that we have here a trace of a very early custom which even yet survives in some places—that of breaking vessels at a shrine or at an interment. Some fragments of cow-bones found mingled with the potsherds seem rather to favour the former alternative. The fact that the fragments can be pieced together does not necessarily weigh against it: a dish might have been broken in two, accidentally; the two fragments would then be naturally thrown into the rubbish heap, and would probably become still further fractured by the fall.

The human remains which were found buried in the cave were all badly decayed, and little could be made of them. They belonged to the early Semitic type described in the previous chapter. There were some curious examples of the deposits of bones in jugs, as under:

In a jug (Pl. xxxviii, fig. 1) from chamber (7): the fast thoracic vertebra of an infant, the last right great-toe joint of an adult, the semilunar bone of the right hand of an adult, the first upper molar of a child of six, the cuboid of the right foot of an adult, the metacarpal of a fourth finger, portion of a rib, the first phalanx of a foetal great toe, the lumbar rib of an adult, and the cartilage of the epiphysis of the lower end of the femur of a child of one year.

In a large jar resembling the great jar from (8) (Pl. xxxvii, fig. 1), found in the tunnel extending southward from (6), was a small clavicle and some vertebrae.

The *stone and metal* objects found in the cave are as follows. In *stone*, a few flint knives, all flaked and of poor quality: representative specimens are shewn in Pl. xxxii, figs. 15, 21, 24, and in Pl. xxxvi, fig. 17. These flints were found in the cistern in (6), and in chambers (2) and (8). In the northern branch of the U-shaped

chamber was found the small chipped flint PI. xxxvi, fig. 20. A flint scraper came from chamber (10).

A few rudely worked nodules of limestone were also discovered in the same part of the cave: such are the fragments of soft limestone with a hollow sunk in each face (PI. xxxvi, fig. 19), a similar piece of stone with a hollow in one face (not illustrated), and a perforated pebble (fig. 18).

Two slightly hollow circular stone dishes supported on three feet were discovered, one in chamber (2) (PI. xxxii, fig. 6), the other in (10). Of these the first was of considerable size, being $12\frac{1}{2}$ " in diameter. The other was *flat* on the upper surface, and was of value as it determined once for all the purpose of these footed trays; for with it was a hemispherical pebble, evidently the associated grinder, for trituration of grain.

The only *metal* objects that were not personal ornaments are the two spearheads from (8), the punch from (10), and the bronze pot found in the cistern in (7).

The spearheads are shewn in PI. xxxiv, figs. 32, 33. They are of a type common at all periods of the city's history—triangular blades with rather rounded tips and flat tapering tangs. The lengths of these spearheads are respectively $5\frac{3}{4}$ " and $7\frac{3}{4}$ ".

The punch is also of a common type (though its association with cave-dwellers' pottery is a little unexpected, and no doubt to be explained as an intrusion). It is $7\frac{1}{8}$ " long.

The pot, on the other hand, is unique. It has been illustrated above, fig. 43. It has a round bottom, a rather cylindrical body, and rounded mouth, strengthened by a slightly thickened rim, pinched at one side into a slight spout. One loop remains to shew that it was originally provided with a handle, like the handle of a bucket (possibly a thong of leather): this, with the corresponding loop, has disappeared. This interesting vessel is $6\frac{1}{2}$ " deep; its diameter through the spout is 9", and the diameter at right angles to this 7".

The principal objects in *ivory* are collected together on PI. xxxiv, which speaks for itself and calls for little description. There are thirty ivory inlays, used probably for decorating sword-hilts and similar objects. These objects are common at all periods and shew little variation from age to age. Punched circles (as in figs. 1, 22, 23) are on the whole the commonest decoration, though diagonal lines parallel (figs. 3, 15) or in zigzags (29) are found almost as frequently. On the other hand, transverse lines parallel to the long sides of the slip (as in 18-21) are rare, and it is still rarer to find them filled in with black enamel, as they are in the present examples. Dots (as in 10, 11) or oval indentations (24, 27) are also uncommon.

The peculiarly shaped slips nos. 2, 24-27, must be members of a pattern formed by a group of specially prepared inlays. No. 5 is unusually broad, no. 25 unusually narrow. These inlays were all found scattered through the earth on the floor of (8), except nos. 1-3 and 28-30, which came from (7).

There is another bone inlay of peculiar shape, shewn on PI. xxxvi, fig. 5. It was found broken in two in (7).

From the same place came the interesting horn adze shewn on PI. xxxiv, fig. 31. It is the base of a large stag's horn, with bevelled edge, and with a rectangular hole cut through it for the handle. A small circular hole cutting the axis of the first at right angles is provided, to hold a rivet whereby the head was prevented from slipping and flying off the handle. This object when found was much decayed and soon after removal fell to pieces. With considerable difficulty I cemented the fragments together in order to make the drawing from them, but the particles had no cohesion, and it was impossible to make the repair permanent. When fresh and strong, however, this tool was well adapted for breaking the soft rock in which the cave was excavated, and I am inclined to believe that we actually have in this adze one of the implements wherewith the cave was originally hollowed.

Two ostrich eggs, broken into many fragments, may be recorded here. They also come from chamber (7).

The objects in *alabaster* collected together on PI. xlii must next be noticed, as well as the black slate vessel, fig. 2 on the same plate, and the alabaster pot PI. xxxix, fig. 15. These all have a flat circular top and round mouth (in fig. 6 the top is broken off) underneath which is a hollow neck. The body is triangular in vertical section (as in figs. 3, 8); elliptical (fig. 9 an especially fine specimen—the small pot PI. xxxix, fig. 16, is somewhat similar); globular with round base (fig. 1) or with flat base (fig. 5); or else inverted conical with flat base (figs. 4, 6, 7).

The black slate vessel is remarkable. It has a turned foot, slightly hollow under the base, which is too narrow to allow the vessel to stand upright. The top is unfortunately broken off.

The most striking object in *gold* is the armlet, PI. xxxi, fig. 1. This is a long strip of flexible gold leaf: the broader end is unfortunately torn away, and has a ragged end, which is slightly under 1" in breadth. From this it tapers along its whole length of 10½". The narrow end is rounded. The armlet is ornamented with a row of repousse dots along each edge and round the surviving end. It evidently was secured by a hook now lost, fastened to the broader end by four rivets (the holes for which remain), and catching in the loop with spiral coils which is still secured to the narrow end. This is not fastened with rivets, but by some welding or soldering process: I was afraid to examine it too closely for fear of detaching it from its place.

The gold flower, such as fig. 19 on the same plate, is another characteristic type. Three of these were found in the cave—one at the outer entrance to chamber (1), the other two with the armlet in group A. They are discs, roughly cut into a cog-wheel shape, with a repousse boss in the middle perforated by a pinhole. They are no doubt intended to represent flowers, and probably were meant for sewing on to garments. A gold flower, of the same general type, but much more realistic and with three thread-holes, was found in slightly later debris elsewhere in the mound.

On the same plate are three gold beads (figs. 20, 21, 23), which also seem to be reminiscent of a vegetable original—in their shape and the ornamental reeding of their surface they resemble unopened buds. These likewise came from group A.

Fig. 22 in the same plate is a plain gold disc, circular, with a segment roughly cut out of it. Possibly it was broken away from some larger ornament.

The bead, fig. 29, is composed of two thin concave plates welded together two minute perforations being left on opposite sides of the edge. The finger-ring, fig. 28, is a plain loop of wire which (as was almost always the case in metal finger-rings formed of a looped wire), was thickest in the middle and tapered to a point at the two ends.

The objects on Pl. xxxv came from chamber (8). The pin, fig. 27, is not of gold, but of bronze, gilt. The point seems to be hollow. The handle is ornamented with a continuous beading. At the junction of the handle and point is a flat guard, to which a moveable ring is suspended. The point tapers regularly from this guard to the tip: at its base is a delicately incised lotus flower ornament. The total length of this object is $5\frac{1}{2}$ ".

Fig. 33 of the same plate represents a finger-ring about f" in diameter. It essentially resembles the other ring in being made of a wire thickest in the middle and tapering to a point at each end. It differs, however, in the points being prolonged and twisted spirally round each other. The joint is partly concealed by three minute annulets, also of gold, but of a deeper colour, threaded upon the wire.

The *silver* objects are of less varied interest. Beside the scarab mounts, some still retaining their hold on the scarab, others (Pl. xxxvi, figs. 7-9) broken away, there is nothing but the looped hairpin, the pendant crescents, and the earrings, all from group A, and all represented in Pl. xxxi, figs. 12, 13, 14, 16, 25.

Neither do the *bronze* ornaments appear to be of much account. Two fragments are shewn of hairpins, similar to that of silver—one from group A (Pl. xxxi, fig. 17), the other from (7) (Pl. xxxvi, fig. 12). A small double-headed wire, bent into a loop (Pl. xxxvi, fig. 13), came also from (7). A considerable number of featureless fragments of stems of bronze pins were found in various parts of the cave: there were also a few scarab mounts, as Pl. xxxvi, fig. 6.

The *beads* are of a large variety of materials and types. Agate, jasper, crystal, and carnelian are the ornamental stones used: one peculiar bead, shaped like a sea-shell (Pl. xxxi, fig. 11), was of malachite. Paste, covered with enamel of different colours, was also used, the colours being green, blue, yellow, and dark brown.

The shapes of the beads are double conical, cylindrical, oval with flattened facets, spherical, and discoidal: typical specimens of each variety and material will be found in the accompanying Plates, xxxi, xxxv, xxxvi. One of the most interesting was a cylindrical bead, with elliptical transverse section, of green enamelled paste ornamented with brown dots. It had a gold cap at each end (Pl. xxxvi, fig. 15). This, and one scarab (fig. 12), were the only objects other than pottery, bone, and alabaster found in (7). From (5) there was one amethyst bead (Pl. xxxvi, fig. 10).

Two blue cylindrical paste beads (Pl. xxxvi, fig. 14) came from (8), close to the small southward passage. The group of carnelian beads (Pl. xxxv, fig. 32) were from the same place. The rudest bead was the rough perforated pebble (Pl. xxxvi, fig. 18). This was from chamber (7).

Group A yielded three cylinders. One of these (Pl. xxxi, fig. 2) was of green enamelled paste with gold mount, still retaining its silver setting. A second was of the same material and colour, ornamented with delicate crossing diagonal lines (Pl. xxxi, fig. 24). These were evidently merely ornamental. The third, being a seal-cylinder, was more interesting. It was of a brown-coloured stone, and bore four vertical rectangular compartments, three of them containing palm-branches, the other a peculiar device of zigzag lines and crescents which I am unable to explain (see Pl. xxxi, fig. 15).

I now come to the *scarabs*, of which there was a fine collection. The majority were from chamber (8): one was from (7), and a few were from group A in chamber (2). We shall begin with the most important group, which is shewn on Pl. xxxv.

1-7. Plain uninscribed scarabs in amethyst, most of them poor flawed stones. The purple colour varies considerably in intensity. All are mounted in a gold band surrounding the sides and edge of the base, except in the case of no. 6, which is unmounted. This gold band is plain, except in no. 1, which has a line of delicate beading on the vertical and horizontal faces of the gold band; and no. 5, which has a slight projecting horizontal rim all round the base. Attached to the gold mount there is in the perfect specimens a small circlet of gold, which was evidently intended to prevent the ring from fraying away the thin mount by friction. The ring itself is a loop of gold, silver, or bronze, rather more than two-thirds of a circle with flattened perforated ends: through these was a fine gold wire, on which the scarab is threaded. This wire is coiled round the ends of the ring. The wire is generally of gold, but in some, such as no. 3, it is of bronze. The gold band of no. 7, which has lost its circlets, is unusually deep for the size of the scarab. This set of amethyst scarabs varies in length (exclusive of the mounts) from $\frac{1}{2}$ " to $\frac{7}{8}$ ".

8. Carnelian scarab, uninscribed, with gold mount and ring. The legs of the scarabaeus are roughly indicated on the left side, but not on the right. The length is $\frac{1}{2}$ ".

9. Fine green serpentine scarab in a massive gold mount. Length $\frac{7}{8}$ ".

10-12. Three plain scarabs of dark greenish basalt. One of these (no. 12) has a white vein on the right-hand side. The heads and thoraces of the scarabaei are indicated, but the sides and elytra are plain as in all the previous examples. When found, no. 10 had a flimsy gold-leaf mount which snapped and fell off when touched; no. 11 retains its mount, but has lost the ring; no. 12 was found unmounted. Length between $\frac{3}{4}$ " and $\frac{1}{8}$ ".

13. Steatite scarab in gold mount: the head and legs of the insect are indicated but not the elytra. The base seems to have borne a device which is, however, almost totally effaced. Length $\frac{1}{2}$ ".

14. Steatite scarab unmounted: a dab of brown enamel on the elytra. The legs are summarily outlined and left flat, not cut away as in nos. 20 and 23. The base bears a kneeling figure holding a lotus blossom with a long zigzag stalk: below is *nb* ("lord").

15. Steatite scarab mounted in a corroded silver ring. The elytra of the

beetle are not indicated, but the engraving of the legs is a little less elementary than in the preceding example. The device consists of groups of S and C curves forming eight spirals with a figure-of-eight knot in the centre. Length £".

16. Small steatite scarab in gold mount, well formed: the legs of the beetle cut in relief as in nos. 20 and 23. On the base four repetitions of the sign *n(u)b* ("gold"), arranged symmetrically with respect to *nfr* ("good") in the centre. Length $\frac{1}{2}$ ".

17. Unmounted steatite scarab in detail resembling no. 14, though without the brown mark on the back. On the base, fourteen spirals in three rows, formed by S curves. Length £".

18. Unmounted steatite scarab resembling the previous specimen. On the base is the combination of the characters *mht* and *rs*, which typifies the union of Upper and Lower Egypt: this symbol is very roughly drawn. Below is a papyrus sceptre between two crowns of Lower Egypt. Length $\frac{7}{8}$ ".

19. Unmounted steatite scarab resembling the preceding. On the base, inside a beaded border, is a ring of spirals formed of S curves, hooked to a circle at the top, and containing the characters *sn-nfr* ("good circuit"). Length $\frac{7}{8}$ ".

20. Well-cut scarab of steatite resembling the preceding with a symmetrical knot on the base. Length about $\frac{13}{16}$ ".

21. Minute steatite scarab in gold mount, set in a silver ring: well and carefully cut. On the back the now greyish white enamel is scraped off along the division of the elytra. On the back is *nfr* ("good"), flanked on each side with '*nh* ("life"); above is '*mn* ("established power"); below are the letters *t*, *mn*, and *n(u)b* inverted. Length $\frac{1}{2}$ ".

22. A small steatite scarab, plainly executed: the perforation contains the corroded stump of a bronze wire. The device is three S curves with *nfr* ("good") twice repeated. Length $\frac{1}{2}$ ".

23. A large and well-executed scarab of steatite. The anatomical details of the scarabaeus are well indicated. The inscription on the base is in three columns—The two side columns are symmetrical and contain symbolic figures—at the top the divine eyes, then the crown and the flower of Lower Egypt, the bee indicating the king of Lower Egypt, and the character *lit* ("front"). The central column bears the papyrus sceptre *w'd*, and the letter *k'-li-nfri*, perhaps meant for the throne name of Senwosret III, H-k, '-r'. Compare the very similar scarab, also assigned to Senwosret III, 'in Ward's *Sacred Beetle*, Pl. ix, fig. 403. Length $\frac{1}{4}$ ".

24. Steatite scarab, well executed, in gold mount set in a silver ring. The thick greyish white enamel has been scraped off the middle of the back of the beetle, shewing the brown-coloured stone below—exactly as in no. 21 above. The device is a group of four lotus blossoms with their stalks connected by a figure-of-eight knot similar to that shewn in no. 15. Above is *n(u)b* ("gold"); below, a flying scarabaeus. The cutting of this specimen is very fine. Length $\frac{7}{8}$ ".

25. Polished blue limestone scarab, well cut, unmounted. The device consists of a geometrical ornament above, with an inscription in three columns below. The two outer columns read *sn-nfr*, as in no. 19: the middle is *nfr-hpr*. The length is $\frac{5}{8}$ ".

26. Well-cut steatite scarab: the device is a rather poorly designed pattern of S and C curves, with two circles filling it at each end. Length $\frac{5}{8}$ ".

27 (Pl. xxxv, fig. 28). Steatite scarab, the enamel originally of a yellow colour, which survives in the incisions. The head, thorax, and legs of the beetle are indicated, but not the elytra. The device is a twist of two cords running vertically down the middle, with on each side *nfr* and *w'd* alternating symmetrically: between them *t*. Length $\frac{5}{8}$ ". This is a typical Hyksos scarab: compare Pl. xix, fig. 2, of Newberry's *Scarabs*.

28 (fig. 29). Steatite scarab rudely executed, and inscribed *n(u)b-mn-r*. Length $\frac{1}{2}$ ".

29 (fig. 30). Steatite scarab which has been covered with a black colour that remains in the incisions: it is similar to no. 28 in character. It bears *nfr*, with a uracus and the divine eye. Length 1".

30 (fig. 31). Uninscribed crystal scarab in gold mount. Length $\frac{5}{8}$ ".

31 (Pl. xxxvi, fig. 16). A fine deep-coloured amethyst scarab, uninscribed, in gold mount. Length $\frac{7}{8}$ ".

32 (Pl. xxxi, fig. 27). This is a scarab of grey paste, with traces of yellow inlay in the incisions. It was found at the end of the passage running south from (2), close to the entrance numbered A* in the plan. The device consists of an animal walking to the right: above is *nb*, and in front of it an indistinguishable character. Length $\frac{3}{4}$ ".

33 (Pl. xxxi, fig. 3). This and the remaining scarabs of the series came from group A. It is a plain amethyst scarab, similar to the others of the same material in gold mount and silver ring. Length 1".

34 (Pl. xxxi, fig. 18). A very fine plain scarab of clear crystal, in gold mount, silver ring. Length 1".

35 (Pl. xxxi, fig. 30). Steatite scarab which has been covered with a black-coloured enamel: this clogs and rather obscures the device. It consists of a line of writing between two bands of spirals, ending above with lotus flowers. At the top seems to be *h-r'-?-ti* (?), below which is *w'd*, *'nh*, and *nfr*, then *stn biti*, and below that again *Apr*, flanked by *'nh*.

36 (Pl. xxxi, fig. 4). Steatite scarab bearing the inscription *r-hpr-n-nb* (?).

37-40 (Pl. xxxi, figs. 5-8). Four small plain scarabs, two of amethyst, one of basalt, and one of paste enamelled blue.

The large collection of *pottery* and fragments recovered from the cave was of peculiar value. It afforded ample material for the study of the different types of ware and vessels employed at the time when the cave was in use: for that reason I have deemed it desirable to prepare coloured plates of almost the entire series of the vessels from the cave, in order so far as possible to make them available for study.

The pottery falls distinctly into two series—one, as I understand it, a legacy surviving from the period when the cave was used as a habitation; the other, which forms by far the larger proportion of the collection, being the deposits left when it was adapted for burial.

Of the first series, but one whole vessel was left—the fine jar with ledge-handles (Pl. xxxii, fig. 1). This is a typical specimen of early ware, made of rough coarse

gritty pottery of a light reddish drab colour: it has a flat base, gently swelling body, and cylindrical neck. The mouth is strengthened by a slight thickening. There are two plain ledge-handles. The height of this is $9\frac{5}{8}$ ". The sides are painted with rough vertical lines in dark Indian red, applied directly to the surface of the pottery.

Also early, though perhaps not of equally high antiquity, are the remarkable series of waterpots recovered from the cistern in chamber (2). They are illustrated on PI. xxxiii. This is a perplexing group of pots. The ware, especially of figs. 1 and 4 on the plate, shews the rough grittiness that characterizes the most ancient vessels; but in form they are certainly more comparable with vessels of the second period (represented by the interments)—if, indeed, nos. 2 and 3 could be considered so old. The large pot, fig. 1, with its blunt base and almost Greek-like handles, curving upwards, is unique in shape among Gezerite waterpots. It is $1' 5\frac{1}{2}$ " high. To find so large a vessel in a cistern is extremely rare. As a rule large vessels were not dipped into the water, owing to the difficulty of drawing out their heavy weight when filled: the smaller jugs, such as those with which it is associated, are however frequently found.

A good many fragments, displaying ledge-handles, were found in the earth filling chamber (1), and others, which are drawn on PI. xxxvi, fig. 3, were discovered in the small chamber (9). The cistern in the passage south from (2) also contained a considerable quantity of primitive potsherds, none of them, however, displaying any very characteristic features. The most interesting are shewn on PI. xxxii.

From these scanty relics we turn to the remains of the interment period, which, as already hinted, were of great value and richness.

In describing these, we shall first concern ourselves with the ware, then with the shapes of the vessels. Last, we shall give an account of the grouping of individual vessels within the cave.

The ware in the majority of vessels is coarse and gritty. Nearly all the commoner and ruder vessels shew small pebbles or stone powder in their texture. In some extreme cases the grit seriously interferes with the cohesion of the ware, which snaps under a moderate cross-strain like a biscuit. It is possible to arrange the pieces in a continuous gradation, those shewing many grits at one end of the line, those with perfectly homogeneous clay at the other. At one end of the line would be such vessels as the bowl PI. xli, fig. 4, the jugs PI. xxxix, fig. 13, PI. xl, figs. 7, 10, and some half-dozen others, which are very gritty—in the last-specified each pebble is the centre of a star of flaws that radiate in all directions through the vessel. The broken fragments found outside, above the entrance shaft to chamber 8, would also for the greater part be placed here. In the middle of the line would stand the majority of the pieces, few of which are wholly devoid of grit. The other end would contain two classes of vessels: those made of a clay which, though lacking pebbles, is coarse grained (the bowl PI. xxxviii, fig. 18, is a good example), and those carefully made of a very fine, hard, homogeneous clay, evidently selected with deliberation for the purpose of making ware of superior quality. The bowl PI. xxxviii, fig. 14, is an exceptionally fine example.

Some idea of the proportion of gritty to homogeneous ware will be obtained

from the following table, drawn from an examination of eighty-eight vessels from the cave :—

Very gritty.	11
Fairly numerous grits	5
Gritty.	4
Fairly fine, but gritty.	11
Very few grits	22
Coarse homogeneous	14
Fine homogeneous	21
Total	88

It is to be remarked further that, generally speaking, certain classes of clay appear to be reserved for certain types of vessel. This is specially to be noticed in the case of the fourth type of jugs (see below), of which out of nine specimens all but one are of fine homogeneous clay, the exception being also of homogeneous clay, but rather coarser than the rest. The lamps, too, are almost exclusively of homogeneous or very slightly gritty clay. On the other hand, of the wide-spreading Bowls six were found of which three (one half) were to be classed as "very gritty."

The colour ranges from a very dark drab (almost black) through a regular spectrum of shades of red and yellow to a light cream. A few vessels are of a dark olive-green shade. As is often the case, the centres of fractured edges are generally found to be of a colour different from that of the surfaces—black between two red surfaces is about the commonest.

There is a good deal of difference in the baking of the vessels. Most of them are very hard-baked; but some (such as PL xxxix, fig. 11) are so soft that any attempt to write upon them with a pencil cuts an indentation in the surface. As might be expected, the softer-baked vessels show a tendency to disintegration.

Slip is exceptional. The jug PL xl, fig. 6, has a light red slip covering the yellowish brown pottery: the slip, however, has nearly all perished owing to the decomposition of the surface of the pottery. The bowl PL xxxix, fig. 6, has a red slip on its upper surface; and the two fragmentary jugs PL xl, figs. 16, 18, have a slip of dark Indian red colour highly burnished. The painted jug PL xl, fig. 12, has a brownish red slip, as has the bowl PL xxxvii, fig. 4.

One vessel (PL xxxvii, fig. 3) has been submitted to so severe a fire that it is burnt black throughout.

All the vessels, without exception, have been made on the wheel—the handles being modelled separately and stuck on in place afterwards. In the more carefully made vessels (such as PL xxxviii, fig. 14) the circular lines surrounding the vessels, resulting from the process of manufacture, have been smoothed off. Combed ornamentation is not very common: there is a band of it surrounding the body of the large jar PL xxxvii, fig. 1, at the level of the upper attachment of the handles; and in the jug PL xxxix, fig. 10, a comb has been lightly pressed against the vessel and

moved upwards as the wheel rotated, so that the indentations travel spirally up to about the middle of the vessel. The bowls PI. xxxviii, figs. 5, 15, have been distorted by careless firing.

Burnishing is rare. It is found only on the three ornamental jugs PI. xl, figs. 15, 16, 18, and the jug PI. xxxix, fig. 19, which is burnished horizontally on the shoulders, vertically on the sides. A few vessels bear lines of depression as though they had been treated with a burnishing tool which for some reason failed to burnish: such are the jugs PI. xl, fig. 11, and PI. xli, fig. 9.

Painted ware in this later period is strangely absent. Only two specimens were found: the bowl PI. xxxviii, fig. 18, in which the margin is picked out with a line of dark Indian red, and the jug PI. xl, fig. 12, which has a group of red, white, and black lines upon it.

We may now proceed to a description of the types of vessels discovered in the cave, taking first jars and jugs, then bowls, and finally lamps.

(1) The vessel first calling for notice is the large jar PI. xxxvii, fig. 1: this was the only specimen found entire in (8), though there were considerable fragments of two others and sherds of several more in the same chamber. In the passage running south from the broken chamber east of (5), (7), another specimen was found. It stands 1' 10" high, and has a round, slightly moulded mouth, two handles, and a conical body, ending in a blunt point. The ware is coarse drab, but not very gritty.

(2) Of jugs by far the commonest type is that we shall denote here as type I, specimens of which will be found on almost all the accompanying plates of pottery: PI. xl, fig. 1, may be taken as a good example. These jugs have an oval body with pointed base and pinched-in neck, expanding almost immediately into a mouth, the lip of which is lengthened into a spout. There is one handle which springs from the shoulder and from the side of the mouth, either immediately or, in the great majority, a little below the lip. In PI. xl, fig. 3, the lip is strengthened by a slight internal thickening. The butt end of PI. xxxix, fig. 19, is unusually blunt, but does not attain to the roundness that characterizes similar one-handled jugs of a later date. The largest specimen of this type of jug found in the cave (PI. xl, fig. 1) measures 10¾" in length; the smallest 7".

A variety of the type is shewn in PI. xl, fig. 2, which has a more or less cylindrical neck, and a circular (not spouted) mouth, with the lip flattened outward all round. The base of this vessel is not pointed, the extreme tip being flattened.

(3) The second type of jugs is represented, in this collection, by three specimens only—two large (PI. xxxviii, fig. 1; PI. xli, fig. 10) and one small (PI. xxxvii, fig. 3). Unlike type 1, which of course cannot stand without support, these jugs have a round base which, in the first-named, is a projecting ring, in the other two a flat disc. The body expands into an inverted conical or globular form, and then contracts to a neck: the mouth is spouted in the second and third above-mentioned, and presumably was also spouted in the first, the lip of which is broken.

(4) Four specimens—all but one imperfect—survive of type III of the jugs. This very graceful class of vessel (for the perfect specimen see PI. xxxviii, fig. 17—the

others are shewn on PI. xl, figs. 16-18) has a conical body rounding into flat shoulders from which springs a very narrow neck, expanding at the top into a mouth with round thick lip. There is one handle, which is not (like the handles of type I) cylindrical, but broad and flat with a slight wave down the middle, or else a deep groove which gives the handle the appearance of two cylindrical handles side by side. In the present series the latter variety is illustrated by one specimen only, PI. xl, fig. 17. The base terminates in a cylindrical projection (PI. xxxviii, fig. 17), or a button (PI. xl, fig. 18). It is possible that the broken fragment PI. xxxix, fig. 20 was part of a jug in which this projecting base was greatly exaggerated.

(5) The fourth type of jugs, of which nine specimens were forthcoming, may be regarded as a variety of the third. The neck, handles, and shoulders are identical in appearance; but the body, instead of tapering rapidly into a complete cone, contracts very gently and is the frustum of a cone—indeed, in some specimens it is practically a cylinder. The base is never absolutely flat, but always very slightly convex. The double handle is here the rule rather than the exception (see for example PI. xli, fig. 8). It is found in six of the nine specimens, the waved handle in two. The largest perfect example of this type found is $5\frac{1}{4}$ " high, the smallest $4\frac{1}{2}$ ". It has already been mentioned that this type of jug is invariably modelled in very fine clay.

(6) There remain a few jugs which cannot be classed with these, but are individual specimens of types not otherwise exemplified in the cemetery. Of these the most interesting is the little vessel PI. xl, fig. 12. It is of conical shape with deep rounded base—not unlike a modern claret jug—and measures $5\frac{1}{4}$ " in height. The mouth expands, but is not spouted. Round the body are painted four lines in dark brick-red, with between them three lines in black, smeared over with white. This is a survival of a yet earlier technique of pottery painting which consists in filling up the field to be decorated entirely with lines, straight or zigzag, red, white, and black. The white is a coarse lime-cream. Fragments of similar technique belonging to the earlier period were found in the cistern in (5), and are shewn in PI. xxxii, figs. 8, 17, 18.

PI. xxxvii, fig. 2, is an elegant vessel with wide circular mouth, short neck, flat shoulders, and inverted conical body. A beading, composed of a separate piece of pottery fastened on, is added just at the intersection of the neck and shoulder. There never was a handle. The base is broken away. The whole vessel is covered with a creamy yellow slip.

PI. xxxix, fig. 1, is a standing cup on a hollow trumpet-shaped foot. A fragment only survives, and no part of the rim remains. It is impossible, therefore, to say how it was finished. The ware is fine and homogeneous, but disintegrates easily.

PI. xxxix, fig. 11, is a small vessel in fine reddish yellow ware that might be classed with type II, from which it differs in its minute size only. Its height is $2\frac{5}{8}$ ". The handle, restored in the drawing, has disappeared.

PI. xxxviii, fig. 16, is a curious vessel shaped (in its present form) like a modern oil-can. There was, however, a handle originally, which has been lost. Round the margin of the base on the under surface are exceedingly delicate lines caused by the slight pressure of a fine comb.

(7) Of bowls by far the commonest type is that of which a good specimen is shewn PI. xxxviii, fig. 6. From a round base—in the normal specimens invariably a projecting disc, slightly hollowed in the middle—rises an inverted conical body, the sides of which, at rather more than half the height of the vessel, contract slightly to the top, where they again expand into a horizontal lip. This graceful form of bowl lasted in use for a very long time.

There are several varieties produced by altering the relative proportions of the conical base, the contracting sides, and the horizontal lip. Thus, in the fine example PL xxxix, fig. 4, the lip is exaggerated at the expense of the other two members; and this is even more so in PI. xxxviii, fig. 14, in which the conical base has become flattened out, with a little circular hollow in the middle—a singular anticipation (not only in form but also in the fineness of the ware and carefulness of manufacture) of bowls executed under Greek influence in the Hellenistic age. On the other hand in PI. xxxix, fig. 16, it is the conical part which is exaggerated at the expense of the other members. In PI. xxxviii, fig. 18, the contracting part is "reduced to its lowest terms." In PI. xxxix, fig. 14, a variety is obtained by omitting the disc base altogether and substituting a rounded bottom for the conical lower part. One or two of the abnormal specimens above referred to (such as PI. xxxix, fig. 4, and PI. xxxviii, fig. 18) substitute a projecting ring for the hollow disc base. There is not much variation in height in these bowls, which averages about $2\frac{1}{8}$ " in diameter at the top the perfect specimens range from $5\frac{5}{8}$ " to $6\frac{13}{16}$ ".

(8) The second type of bowls consists of wide dishes on circular bases. The bases are slightly hollow discs (with one exception, which is a ring): the dishes themselves are broad and shallow. PI. xli, fig. 5, is a typical example.

(9) Two bowls remain not referable to either of the foregoing classes. One of them is PI. xxxviii, fig. 15, which has a flat base and slightly concave oblique sides: it is in very coarse drab pottery. The other is essentially similar, but the ware is much finer, and the sides are convex on the outer surface of the bowl. It is represented in PI. xxxix, fig. 12.

(10) Twelve lamps or fragments of lamps were found. All of these are referable to one type, a good specimen of which will be found in PI. xxxix, fig. 2. It is a shallow saucer, wheel-turned, with a slight spout pinched in the edge before firing—a contrast to the long narrow channel into which in later periods this spout developed. This spout almost invariably displays marks of smoke-blackening. A few of the lamps (such as PI. xxxix, fig. 3) are slightly deeper than others, but not sufficiently so to justify their inclusion in a separate class.

Of the broken fragments found above the stone cover of the entrance shaft the three shewn on PI. xxxvi, figs. 1, 2, 4, are the only specimens that require special attention. Of the others the majority were coarse drab saucers or bowls of type I: there was also a fragment of a jug of type I. These add nothing to our knowledge of the forms. The four-handled saucer, however (fig. 1), is unlike anything else found in the mound. The bowl fig. 2 is a specimen of type 11, with a conspicuous thickening inside the lip. The smaller bowl, fig. 4, is a variation of type I.

We must now note the manner in which the objects found were distributed into groups. These were as follows:—

(1) Above the stone filling the entrance shaft of (8), a large pile of potsherds, as already noticed.

(2) In the chamber (8) were six groups, as well as several single vessels: these groups were:—

(a) xl 1 * and the alabaster vase xlii 8, lying on their sides.

(ft) A small group consisting of the alabaster xlii 3, on its side, and xli 15 and xxxvii 3 standing upright. Underneath this group was found the gilt kohl-pin and many of the scarabs, including the important specimens nos. 14 and 23.

(7) Two alabaster pots xlii 4 and 6, lying prostrate.

() Two vessels, xl 8 and a broken jug of type I (not drawn), lying prostrate.

(e) A large and important group comprising the jar xxxvii 1 and bottoms of two similar to it, prostrate—one of the bottoms resting on the lamp xli 3. Underneath the bottom of the large jar, the upper part of another similar to it; and beside it the black slate vessel xlii 2. Around this group was placed, in order, the bowl xli 2, the jug xl 10 (partly covered by a potsherd), the jug xl 11, a lamp of the ordinary type, inverted, the bowl xli 5 (also inverted), the jug xl 7, and the bowl xli 4. There were also several characterless sherds.

() Close by this group was a small collection containing the alabaster vessel xlii 1, the handsome jug xxxvii 2 (inverted), and a jug of type IV (not drawn) on its side.

(3) At the entrance to the small southern passage were three jugs of type I, all lying on their sides—namely xl 3, 4, 5; one of type III, namely xl 16; and also the painted vessel xl 12. Close by was the bowl xli 6, inverted.

(4) In chamber (7) were seven groups and several single vessels. Owing to the fall of the rock a good deal of the earth had silted in, so that these were covered and not, as in chamber (8), lying exposed when the cemetery was first entered. The following are the groups:—

(a) Near the end of the partition between (5) and (7), the jug xxxix 17 and bowl xxxix 16.

(ft) Just south of (a), the bowls xxxix 6, 14, 18, and the jug xxxix 10.

(7) Close to the fallen rock-roof, the alabaster jug xxxix 15, and the pottery objects xxxix 5, 8, 11, 12, 19.

(8) South of (7), xxxix 1, 2, 4, 7, 9, 13.

(e) West of the last, a jug of type I, not drawn, the jug xxxviii 1, also xxxviii 17, 18, and a bowl of type I.

() In the centre of the chamber, two jugs of type I, also xxxviii 12, and a lamp.

(n) At the south side of the chamber, not far from the door to chamber (8), xli 8, 9, 10, II, 16, xl 14, and the alabaster vessel xlii 5.

I may also mention two lamps placed together in the crevice of the rock on the north side. The vessels on Plates xxxvii-xlii not enumerated in the above catalogue were found singly in various parts of the two chambers (7), (8), and were not associated with any special pottery groups.

Two of the chambers—(4) and (6)—had, as already mentioned, been adapted as

* These numbers denote the plate and the figure on the plate.

cisterns at a subsequent period, and their contents belong to an entirely later archaeological stratum.

The most interesting of the objects from (4) are shewn in fig. 42 above (p. 121). They consist of a tanged arrowhead, with ogee-shaped blade (no. 1), and a small axhead-like object (no. 2), both in bronze (the latter is an unusual type in Gezer): beads—no. 3 is in red enamelled paste, as is also no. 10, which, however, is more glazed; no. 4 is yellow enamelled, nos. 5 and 6 green, nos. 8 and 9 grey; no. 10 is a flat disc of bone: spindlewhorls—no. 11 of polished diorite, no. 16 of bone: a fine polished diorite macehead (no. 15): among a great mass of potsherds, of no special interest, three pieces to which attention may be called—the bottom of a bowl with a spiral burnished on it (no. 13), a peculiar handle (?) with a perforation through it (no. 17), and the lower part of a very rudely modelled figure in black ware (no. 18). There is also the bezel of a green enamelled paste seal-ring, bearing a scarabaeus—this indicates the period of Amenhotep IV, which would accord well with the other objects recovered from the cistern, so far as they indicate date at all; and a yellow-coloured scarab, shewing on its base *hpr* between two uraei.

From (6), the "cistern" period of which is considerably later, some specimens were found unlike anything else recovered from the rest of the mound. The most interesting are collected on Plate xliii.

Figs. 1 and 2 of this plate represent two pieces of coloured ware belonging to the Mycenaean technique that in the later Canaanite period spread over Southern Palestine under the influence of the civilization of the Aegean. Fig. 1 is of native manufacture. It was actually found in chamber 5, being probably brought in by one of the well-sinkers who worked in the adjacent room 6, and employed by him in scraping the earth in search of treasure. He may easily have found it, in the first instance, in digging the cistern shaft. The second fragment is an actual importation, and displays the characteristic Aegean glaze.

Figs. 3 and 4 are specimens of portions of waterpots found in the cistern. Fig. 3 is a fragment of a peculiar type with three looped feet, in shape resembling handles. This type of vessel had a limited range of use, being found only about the time of the latter part of the Hebrew monarchy.

Fig. 4 is a round-bottomed pottery bucket, with two corresponding holes under the rim for a strap or metal handle. Several other fragments of waterpots, of no special interest, were found in the well.

Fig. 5 is a fragment of a shallow rectangular stone tray of diorite, with a handle at the surviving end. The three aspects *a*, *b*, *c*, in the plate sufficiently illustrate it. Such a tray is unique so far as the excavations have gone: stone trays are common, but they are generally round.

Fig. 6 is a peculiar object of stone resembling a pedestal. It stands 1' 2½" high. The dotted line in the diagram represents the internal section. What purpose this object served it is impossible to say. I have thought that it might possibly be a spindle, for the rope of the well-bucket: the objection to this suggestion is the absence of rope-marks on the side of the object; such marks would certainly be worn upon the very soft stone. The better to illustrate it a photograph is here subjoined, fig. 45.

It now remains to endeavour to deduce the history of this interesting cave from the indications which its contents afford.

That originally it was the home of a cave-dwelling community there can be no doubt. They have left evidence of their presence all through the system, in rude rubbing stones, fragments of pottery, and other relics, especially in chambers (i), (3), and (10).

The first problem that suggests itself to the explorer of such a cave as this is the explanation of the narrow passages that connect the various members of the system; it would appear so much more convenient to make the chambers open off one another directly as in 15 II.

There are two possible solutions to this question. The first is, that the various systems were originally quite independent and were afterwards united by cutting a passage between them. The second is that the passages were made long and narrow intentionally, in order that they might be easily blocked: when an enemy made his appearance at one entry, the inhabitants escaped by the passage and hastily erected a pile of stones—which no doubt would be ready to hand—at the opposite end. There was of course little or no light in the passages, and the pursuer might well be nonplussed by such a simple device. Such a feature as the cistern in chamber (5) might also have been originally cut as a pitfall for unwar' intruders. It is certainly most inconveniently placed as a receptacle for water: it would not gather much, and what water might fall into it would not easily be drawn out. Perhaps there is some truth in both suggested explanations: the different systems may have been connected in the manner suggested above, and the passages were perhaps made narrow on purpose for facility of blockade.

In the cave under discussion, the loose and friable nature of the limestone prevents our obtaining any definite information from a study of the toolmarks, which in a homogeneous rock would be perfectly sharp and would probably settle several questions. The direction of the chisel-marks would shew the direction in which the quarryers worked, and would indicate, for example, whether the tunnel was excavated from both ends at once, like the Siloam aqueduct at Jerusalem. In the present cave we are left to *a priori* probability as our only guide in deciding the reason for its peculiar plan.

The impression that a study of the cave leaves is, that the various members were excavated independently and afterwards united. We thus begin the history of the cave with three separate communities: the *first* group inhabiting chambers (1) (2), (3); the *second*, chamber (4); and the *third*, chambers (5)-(10).

To judge by the size of the chamber-groups, the last-named was evidently



FIG. 45. — STONE OBJECT FROM CHAMBER (6), CAVE 28 II

the most important. There was an unusual number of chambers, and they were unusually large. Probably there was but one entrance, that into the ruined part of (5): the roof-entrance of (8) was most likely made originally merely for convenience in quarrying, and when the chamber was completed was stopped up. In (5) was a pool for water, fed by the rain which fell through specially made holes in the roof—this pool was afterwards deepened into a cistern. In the great cave 16 111 in the middle of the hill was a similar pool: it does not appear whether there were similar holes in the roof, as the latter is here destroyed.

Why the family of the (5) group joined their residence to that of the (1) group we can but conjecture. Possibly one remarkable peculiarity of the (1) group of chambers, which we will presently discuss, made it a desirable possession, and in consequence the (5) people captured the dwelling of the (1) people and joined it to their own. Possibly, on the other hand, the families became united by inter-marriages. In any case, it is in the highest degree probable that the tunnel was the work of the (5) people. It leaves the (5) group naturally, but breaks into the (1) group of chambers by a most awkward and inconvenient hole. Moreover the tunnel diminishes in cross-dimensions as it advances from (5) to (1). It is evidently natural that such a tunnel should diminish from the outer end inwards, and unnatural that it should expand, owing to the difficulty of passing material through the narrow entrance.

What then are we to say of the linking of (1) and (4)? Here again *a priori* probability is our only guide. In this case it seems to me most likely that the tunnel was cut from both ends. For if it had been cut from the (3) end alone, we should have to imagine that all the material removed from the inner half of the tunnel was passed through the excessively narrow doorway between (3) and (4); whereas if it were cut from the other end the sudden drop downwards in the middle of the tunnel would not be so easily accounted for: it is more likely that a tunnel should begin low and step upwards than that it should begin high and step downwards. If, however, we suppose two sets of workmen starting, the one from chamber (3) and making their way to just beyond the narrow doorway, the other from (4) and advancing to meet them, the change of direction and level would be easily accounted for by a miscalculation such as we would naturally expect under such circumstances. It may be argued that such a miscalculation is a sufficient explanation of the downward stepping of the tunnel quite independently of the direction in which the quarryers worked; but obviously if the tunnel had been cut from one end only, the downward stepping to correct a miscalculation would have been at its extremity. The purpose of the narrow doorway is easily guessed. It could be stopped up by a moderately sized stone, and pursuers would be absolutely prevented from following any one who might take refuge in the chamber beyond.

Whether the different groups of chambers, as we see them now, are exactly as their dwellers first quarried them, is a question that except in one detail cannot be definitely answered. It is most likely that from time to time chambers were added as they were required. That some plans were abandoned before they were completely carried out is indicated by the unfinished cistern shaft in the passage

south from (5). The one thing that can be definitely said is that the steps found in the cistern shaft at (2) must originally have led to a small chamber at a lower level, which was afterwards deepened. Probably it was noticed that water accumulated in this chamber in winter, making it useless for any purpose but that of a water-store, and this led to the idea of turning it formally into a cistern.

We must now consider a difficult question, the solution of which cannot be reached as yet with any certainty. I refer to the purpose and period of the system of cupmarks in chamber (1).

All the available evidence points to this peculiar feature being the work of the Troglodytes. Cupmarks are found in a good many parts of the mound, and whenever they have any connexion with other remains that can be more definitely dated, these remains are assignable to the cave-dwellers. In this cave the presence of pottery of the earliest type in the earth covering the cupmarks, and entire absence of any later objects in connexion with them, corroborated the conclusion to be drawn from a study of the subject in other parts of the mound.

If then we assume that these cups are the work of the cave-men, the more difficult question remains, for what purpose did the cave-men make them?

It has been suggested that they were meant for jars, containing stores of oil or grain, to stand in. In favour of this it might be urged that fragments of just such jars were found in the chamber; and that there is a causeway running to the centre of the middle ring from chamber (2), between the open ends of the rings of cups, so that the jars in the middle of the room could be got at without disturbing the rest. It is, however, open to question whether the rude occupants would take such trouble to make a series of mere sockets with such an obviously purposeful distribution; or indeed whether they would make such sockets at all for jars that could quite as well stand without them.

Various recondite explanations of cupmarks have been given from time to time, which appear to me tenable only in exceptional cases. Such an exceptional case is undoubtedly that now before us, and it is here much less open to objection than in many other places to suppose the cups to have some connexion with sacrifice and offering. Indeed, it seems an admissible conjecture that the whole floor of this chamber is a gigantic table of offerings. If this were so we could easily understand that the (5) people might envy the (1) people the possession of so lucky and desirable an annexe to their dwelling, and would wish to unite themselves with them, whether in a peaceable or hostile manner. Much less likely are the suggestions that there is anything of priapic symbolism in these cups, or that they form the apparatus for some game—a sort of public billiard-table.

The next stage of the cave's history is associated with the beginning of the Semitic occupation. The caves were abandoned for houses; but no doubt some of them were used as cellars, store-chambers, or refuges from the heat of the sun. The northern system certainly was so used by the inhabitants of the houses built on it: whether the southern half was also used for the same purpose there does not appear evidence to shew. But the waterpots in the cistern in chamber (2), which are on the whole rather earlier in type than the burial vases in (5) and (6),

indicate a short period when people descended for water to chamber (2) before the time when they used (5) and (7) for burial.

When (2) was adapted as a cellar, the two entrances above the cistern were closed—no doubt because they were dangerously near that pitfall, and practically useless on account of its position with regard to it. They were not so completely sealed up but that water trickled between the stones. Silt quickly made its way through and covered the steps under the entrance A⁴ in a thick layer, which the presence of group A of the antiquities proves to have already begun to accumulate; and the water-receiver built outside entrance A² shews that the latter was the channel whereby the cistern was filled.

On the whole it is most likely that in this period waterpots were carried to and from the cistern down the broad and high passage running south of (2) to the entrance A⁴. There is no evidence that chamber (1) was used for any purpose, except the accident of a gold rosette having been dropped just outside the entrance A¹.

It is a little doubtful when the great stone was placed across the passage south of (2) in order to cut off all communication with the southern group. It may be that it was at this stage of the history, and that it was intended to prevent underground communication between two adjacent houses. It may also have been in connexion with the succeeding stages.

This third period was characterized by the adaptation of the southern half as a burial place. It is most important to notice that there are no interments whatever in the northern system, and no evidence that there ever were any.

If the people who used the northern half of the cave as a cistern and cellar had not already closed the access to the southern system, they would certainly have done so when that probably derelict part of the cave had begun to be used for burials. Fear of the ghosts of the deceased would no doubt lead them to stop up as firmly as possible every means whereby they might find their way out of the *Sheol* where they were confined. In fact it is very likely that the northern system was altogether closed not long after, as even the big stone stopping the entrance to the long passage might not be thought a sufficient obstacle against the spirits. So little frequented was this part of the cave after the southern part was turned into a cemetery, that some one thought it a safe place for the concealment of treasure. This is the explanation of group A, the solitary deposit found in the northern member of the system. There was no interment with these objects; the silt on a sloping staircase was not, indeed, at all a likely place to deposit a dead body: but if the cave were unfrequented it was just the place which a person wishing to hide precious objects would choose for such a purpose. The loose silt could be easily excavated with the hand, and the hole filled in again after the objects had been placed there. It is legitimate to guess that in his or her haste the person who carried these objects down to the cave dropped a scarab at the very place where we might expect such a misfortune to happen—beside the stone which barred the way to the world of spirits beyond, which our fugitive would probably pass in a hurry. A scarab found here was the only precious object from the northern system, except group A and the gold rosette from outside chamber (1). At first I was inclined to think that this part of the cave had been

looted, but the total absence of any bones or other indications of burial has led me to change my view, and I now think that there probably never was anything in the northern part of the cave more than what was found there. Probably not long after these treasures were deposited—perhaps as a further precaution against ghosts—the second great stone was put in its place in entrance A⁴, by some one who did not know that he was scaling up a precious hoard.

The next event in the history of the cave is the fall of the roof in chamber (5), which took place somewhere about 1450 B.C. The date is fixed by the landslide it caused, which produced a "fault" in the accumulated debris, easily visible in the vertical section of the mound. This fault extends up to the level associated with scarabs and other objects bearing the name of Amenhotep III, and thus indicates when the subsidences took place. The later debris is in no way affected by it.

At about the same period chamber (4) was discovered by well-sinkers. That they deepened it is proved by the fact that the tunnel, which we have shewn to have been partly cut from (4), and therefore was presumably at an accessible height above the original floor, is now quite inaccessible from the bottom of the chamber. In deepening it steps were cut, for convenience, running from the old entrance: perhaps the three broken steps at the top are original, the unbroken steps below having been added. A shaft for drawing water was also cut in the middle of the ceiling. The antiquities found in this cistern are referable to the period of the Tell el-Amarna correspondence.

Lastly we have to notice the unfortunate discovery of chamber (6) by well-sinkers somewhere about 700 B.C. There can be little doubt that they obtained a harvest of precious objects from the northern half of the U-shaped chamber, and not improbably from (5) also.

Of the chronology of the early events of the history of the cave, the scarabs found in (8) give us valuable information. Plate xxxv, no. 23, for instance, is typically twelfth dynasty, and probably bears the name of Senwosret III; nos. 14 and 28 on the same plate are as typically Hyksos. The remainder all range themselves more or less definitely into one or other of these two groups. As the collection must necessarily belong to the latest date indicated, it follows that, as a whole, the interments are to be assigned to the Hyksos period—that is to say, somewhere from 1600 to 1800 B.C.

28 III. A Troglodyte cave, as shewn by the steps at the entrance to the south. It had two chambers: the inner chamber had been sunk about 4' 3½" below the rest to serve as a cistern, a silt hole cut in the bottom and a dipping hole in the top. A bronze knife was found, and several water-jars. These of course belong to the cistern period.

29 I. A long low excavation, 46' in length, 21' 4" in maximum breadth. The outline of the walls is irregular. The floor mounts upwards toward the inside of the cave so that at the inner end it is impossible to stand upright. The long axis lies east and west, the entrance being towards the east. The floor bears a few cupmarks. At the inner end there is on the right-hand side a fruitpress, 5' 11" in diameter, sunk below the level of the highest point of the floor. On the left-

hand side the cave is prolonged through a narrow opening, through which one must creep with difficulty, into a small beehive cell 3' 11" to 5' 9" in diameter and 4' 3½" high. This seems also to have been used as a fruitpress as there is a small cup in the floor. The only contents of the tomb were potsherds of both the Troglydite and First Semitic Periods, and flint chips. There were also a few fragments of human and other bones. See the plan, Plate xiv, fig. 10.

Just under the entrance are two holes in the floor. That to the right was covered with a large slab carefully wedged round with smaller stones: there was a small cupmark in the upper surface of this stone. The other hole was found to be full of earth. On being raided the slab was found to cover a small beehive-shaped cell, measuring 8' 10½" x 6' 5" x 3' 7". A very narrow passage, almost impossible to pass through, opens into this cell from the other hole in the floor. From it a small doorway gives access to a row of three smaller cells: in the floor of the two inner ones a vat is sunk. The first of these three chambers is 5' 9" x 6' 10½" x 3' 7". The second is 5' 3" in diameter, 3' 11½" high. The vat in the floor is sunk in a small recess, 3' 3" across, between it and the entrance chamber to the cistern: a small hole is broken in the partition wall just above this vat. The last chamber is 4' 7" in diameter and only 3' 1½" high: almost the whole floor is taken up with a pit 2' 11½" in diameter and 10" deep. What the purpose of these cells may be it is difficult to say. They were completely empty, notwithstanding the care with which they had been sealed up. It is of course possible to suppose that any treasures they may have contained had been stolen through the narrow passage, which was not closed, except by the silt that had washed in afterwards. This was the only case found at Gezer of caves arranged in two storeys one over the other: the case of 16 III and 17 II is apparent rather than real, as these are quite independent of one another; there are one or two differences of level in the large cave 28 II, but no case of one chamber actually beneath the floor of another.

29 II, the great water-passage, is described later in this chapter in connexion with the other waterworks of the city.

30 I. An oval excavation, 38' 6" long and 9' 6" in maximum height. The usual Troglydite staircase was at the eastern end. This had been blocked up and a shaft for water cut through the roof: the walls were cemented carefully and still held water. Some flint knives and potsherds of the Second Semitic Period—the period of the re-adaptation—were found in it.

This cave contained a considerable number of flints and some late waterpots, all belonging to the time when it was used for a cistern. None of these objects call for special illustration or enumeration: we may perhaps mention the segment of a shallow saucer in black ware, with flat base and vertical sides through which small holes are perforated at intervals—there appear to have been about six such holes round the vessel. The most interesting find in the cave is the small bronze figure here represented (fig. 46). The hands are raised, the arms being covered from elbows onwards. There is a triple girdle round the waist. A horizontal tenon in front of the feet shews that it was attached to some larger object. It may have

been part of a group representing a worshipper in front of his deity. The height of the figure is $2\frac{1}{2}$ ".

30 II. An undisturbed Troglodyte dwelling, which contained many very early sherds of pottery and flint knives, but unfortunately no whole vessels or bones. An awkward and ill-made staircase at the east end gave admission to the main chamber. This was $30' 6\frac{1}{2}"$ long, of rather irregular shape: the maximum height of the roof was $7' 2\frac{1}{2}"$. Just inside the entrance, on the left-hand side, is a raised platform, in front of which are two pits, one $1' 6"$ deep, the other $6'$ deep. An opening on the north side gives access to a smaller chamber, with a short tunnel projecting from it: this is not unlike a grave in appearance, but is rather too short— $5' 4"$. It is $2' 3"$ high, of which $1' 2"$ are below the level of the floor of the chamber. A plan of this cave will be found in Pl. xiii, fig. 11, and the pottery on Pl. xlv. Fig. 1 is of gritty reddish brown ware: there is a white lime-cream over the surface. Fig. 2 is of yellowish brown ware and decorated with red lines. Fig. 3 is yellowish brown, as also is fig. 4. The painted sherds (figs. 6, 7) are coloured black on a brown ground. Besides these objects and the uncharacteristic potsherds there were a loop-handle nearly $7"$ long and $1\frac{1}{7}"$ across, and a buffalo's horn.

30 IIA. Merely a natural shelter in the rock, $10'$ long (cast and west), $8' 6\frac{1}{2}"$ broad, $2' 8"$ high. It contained some early pottery shewn on Pl. xxiii. Fig. 18 is of yellow ware with a red margin; fig. 20 is a pin-head (?) of black clay with two projections, as shewn, on each side. Fig. 21 is of drab ware, also with a red margin. Besides these there was found a sherd of a stone bowl with  ornament on its edge. The entrance is at the north side, but there is a fissure in the roof over the south side as well.

30 III. A chamber roughly circular, ending northwards in an apse with a slight step upwards. The staircase entered from the south side. To the west is a small extra chamber, raised above the level of the floor.

There are three cupmarks in the floor of the principal chamber, one of them in the apse, two outside. The maximum height of the cave is $10'$, its maximum internal dimensions $13' 11"$ north to south by $15' 9"$ east to west. The only objects found in this cave which call for notice are shewn in Pl. xxix, figs. 3-7. Fig. 3 is a ledge-handle of unusual shape with nicks on the edge. Fig. 4 is a fragment of limestone with a groove round it. Fig. 5 is a sherd of drab ware with ornamental rope-moulding on it. Fig. 6 is the interior surface of the sherd of a V-shaped bowl with an incised herringbone pattern upon it. Fig. 7 is the side of a burnished vessel. See plan (Pl. xiv, fig. 11).

30 IV. This cave is by far the most interesting of the whole series. It is



FIG. 46.—BRONZE FIGURE
FROM CAVE 30 I

hollowed in the rock under a depth of 36" of debris, containing eight strata. Of these, three are subsequent to the destruction of the inner city wall, about 1450 B.c.; three lie intermediate between that date and the erection of the same wall, about 2500 B.c.; and two are earlier than the wall referred to. Assuming a uniform rate of accumulation, this leads us back to somewhere between 3200 and 3500 B.C. as the minor limit of date for the cave. It lies in the south end of a small knoll in the rock which rises fairly steeply to a height of about 3' above the rock-surface surrounding it. Just south of the entrance to the cave there is an appearance as though rude steps had been cut to make the ascent of the knoll easier; but I am inclined to think these natural.

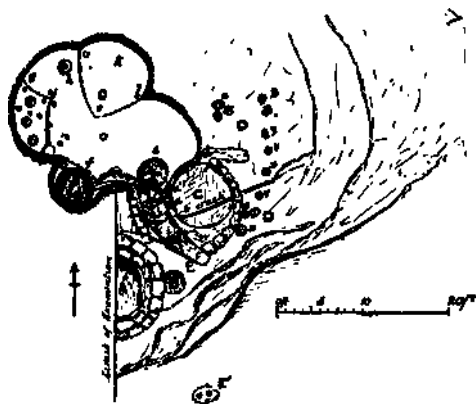


FIG. 47.—PLAN OF CAVE 30 IV

The following cuttings surround the mouth of the cave. They are indicated by reference letters on the plan, fig. 47. (A) A hollow only, half excavated, scarped in the rock to a depth of 1' 6", and 7' in diameter. At the south side the rock fails, and its place is supplied by a row of three stones set on edge completing the circle. A wall is built over this hollow, set back a little behind to edge all round, to a maximum height of 3' above the rock. (B) A hollow, 2' depth and 3' 3" across, with vertical sides and rounded base. This lies partly under the wall that surrounds A, indicating that the latter was built subsequently. (C) A hollow, circular, 6' in diameter, and of a maximum depth of 1' below the original level of the rock. At *na* the rock fails, and its place is supplied by masonry. At *b* it rises to its maximum height above the bottom of the hollow, so that the space *ab* appears (accidentally) to be a channel. A curved wall *cc* partly surrounds the hollow but does not follow its contour exactly. Owing to the irregularity of the rock contour there is an appearance (also accidental) at *d* of another channel leading

out of or into this hollow. A crack runs across the hollow from west to east. It reappears outside the hollow to the east, disappearing on the edge of the rocky knoll, and it is probably a natural flaw, perhaps caused by an earthquake. This hollow is no doubt a fruitpress. (D) A group of cupmarks, thirteen in number. Those marked *x* are shallow circular basins, with breadth greater than the depth: those marked *y* are also circular but with depth greater than the breadth. The others are oval depressions. Beside these there are two conspicuous cups, both similar to those marked *y*, on a small knob of rock south of the knoll: they are marked *E*¹. The largest of these cups is the southernmost of those marked *D*, which is 2' broad and 9" deep. The diameter of the others ranges from 1' to 1' 6". The deepest is the one marked *y* next to the southernmost, immediately under the wall surrounding the fruitpress *C*. This is 1' 2" deep.

The entrance to the cave is marked *EE*. It is a long narrow opening in the rock. Round the northern end rude masonry is built, as the surface of the rock is not of the required height. The floor of the entrance slopes downward, and access to the cave is gained by very rude steps—little better than footholds—cut in the rock.

The cave itself is oval, with a series of irregular apses round the sides. Photographic views from the doorway and from the inner end are given in Plate *xliv*. On entering, the most conspicuous features are two deep hollows, one on each side of the entrance staircase: the first of these, marked *e* on the plan, is 3' across and 1' 10" deep. This is just under the entrance, and in fact is partly cut out of the staircase. The second, marked *f*, occupies an apse to the left of the staircase. These hollows are evidently meant to intercept rainwater, and prevent it flooding the cave: the second of the two, *f*, is connected with the staircase by a channel cut on the top of a projecting shelf of rock. It is 3' 11" across and 3' deep. The apse *g* at the inner end of the cave has part of its floor raised 10" above the floor of the cave; and this raised step bears three shallow cups measuring 10"—1' 1" across, with five smaller hollows disposed as shewn in the diagram. There are also seven other cups in this part of the cave, one of them, *h*, a double cup (*i.e.* with a secondary cup sunk in the floor of the first) of maximum diameter 1' 9". The floor of the apse, *k*, is sunk 10" below the level of the floor of the cave. It contains three cups. There is in addition one cup in almost the exact middle of the cave area. The total length of the cave is 16' 7": the height is with fair uniformity 5' 5". There is a hole, apparently for tethering cattle, cut through the projecting angle *l*.

We now come to the feature that gives this cave its unique interest. To a height of about 4' above the floor the walls are rough. Above this, however, there is a frieze of smoother rock, and all round the cave this frieze is occupied with rude scribbings: a few similar scribbings are also to be seen on the roof. These scribbings are represented in reduced facsimile on Plates *xlvi*-*xlvi*iii.* They are of three kinds:—

* The following has been the method by which the drawings have been prepared. Rubbings were taken with a soft pencil and inked in on the spot. They were then transferred to a sheet of drawing-paper with the aid of a camera lucida, and carried back to the cave and again inked in on the spot.

(1) Arrangements of lines, grouped apparently at random, though in some they cross vertically and horizontally as in a draughtboard. (2) Arrangements of circular dots, nearly all reducible to one scheme—a square of four, or a row of three dots, with a circle of dots surrounding them, which there seems reason to regard as a degenerated spiral. (3) Drawings of animals. Most of the latter are childish attempts—a rectangle with four strokes below and one above, to denote respectively body, head, and legs; but some shew much more advanced skill, as a glance at the plates will shew. Casts have been deposited in the museum of the Fund.

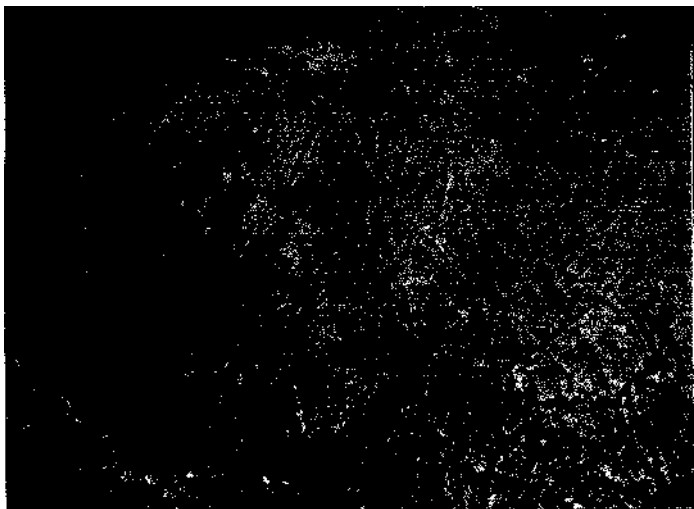


FIG. 48.—GRAFFITO NO. 4, CAVE 30 IV

The following is a detailed descriptive list of the graffiti, with particulars regarding their position inside the cave. The latter is marked on the plan of the cave in Plate xlviii.

1. A random arrangement of lines with no apparent meaning, just under the roof and over the outer edge of the recess containing the pit f.
2. A similar group of random lines beneath the right-hand end of no. 1.
3. Figure of a bird (?) on the outer side of the roof of the apse containing the pit f.
4. The roof of this apse at its right-hand side is covered for a space of 1' 8" x 1' 4"

with a network of random lines, like no. 8, only yet more confused and irregular. After several attempts to secure a drawing of it—which is very difficult, as it is on a horizontal surface face downward—I decided that it was not worth the great expenditure of time it would involve, especially as the most careful scrutiny on several occasions under different conditions of lighting failed to detect the slightest evidence of design in the strokes. I succeeded, however, in obtaining a good photograph which is here reproduced, fig. 48. They may have been made to deface a previous design, as will be seen to be the case in another part of the cave; but if so I could find no trace of the drawing destroyed.

5, 6. Two smaller groups of lines similar to 4, on the roof of the apse.

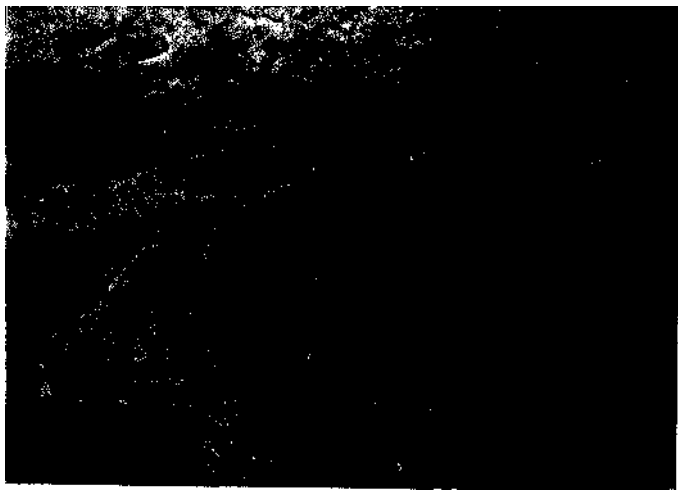


FIG. 49.—GRAFFITI NOS. 7-9, CAVE 30 IV

7. A group of dots on the face of the cusp separating the 'first apse from the second. The largest of these is 1" across by $\frac{3}{8}$ " deep. The design recurs elsewhere in the cave in smaller dots, as we shall see presently: perhaps it is some kind of *wasm* or tribe mark. They appear to be meant to be in a spiral.

8. On the side of the cusp in the second apse, immediately adjacent to 7, a random arrangement of lines, in which no design or order is to be detected. There are two fractures in the middle of this design.

9. At 4" from 8 there has been a similar but slightly smaller group of lines, which, however, has been entirely destroyed, evidently with intention. Nothing is

left but a small strip along each of the vertical cusps, the middle part being all hacked away. The original measured 5" x 6½". Graffiti 7-9 are shewn in fig. 49.

10. At 7" from this is a single stroke not quite straight nor quite vertical, but nearly so.

11. At 5" farther is another group of random lines in which no meaning can be detected. It is narrower and higher than the majority of these random groups.

12. Beside the upper part of the last: the first animal figure we encounter. It is perhaps the rudest and most childish of the whole series, as a glance at the illustration will shew.

13. Under the tail of the animal, and 5½" below it, is a hacked space 3" high by 5½" broad, apparently marking where a figure has been destroyed. There are the ends of three vertical lines shewing below the edge of the hacked space.

14. At 1' from no. 12 is a hole in the rock 5" x 5" x 3", probably marking the place where some design has been cut away.

15. At 4¾" from no. 14 is another hacked space 6" x 6½" x 2".

16. Obliquely below and to the right, and 11" from it, in another hacked space, 4" X 4" X 11"; from the left-hand side projects a line forking into three Y-like branches, thus possibly the tail of a bird. Nothing else of the design can be seen.

17. Immediately beside 16 is a deep hole of about the same cross-dimensions and 4" deep. Possibly here also a figure has been destroyed, but if so there are no traces of it.

18. Just above no. 17 is a group of random lines.

19. At 1' 4" from 18, but rather below its level, was a similar device, measuring 6½" x 5". The middle is hacked out. At the left-hand side of the injury are four oblique lines, sloping downwards from left above to right below: at the other side three similar lines crossed near their upper extremities by a shorter oblique line in the opposite direction.

20. Immediately above this is a device, of which the lower half has been hacked away by a hole 4" x 4" X 2".

21. At 6½" from this, a design has been hacked out, all that remains being a hole 5 ½" x 6" x 2½".

21 A. In the rest of this long apse there are no certain traces of graffiti. There are one or two places where it would seem as though designs had been cut out, but I cannot feel sure about any of them. We find nothing definite till we reach the cusp separating this from the next apse. On the farther side of the cusp is an interesting graffiti. I cannot but think that it is a representation of the common black millipede (*Julus*) which is so conspicuous a member of the smaller fauna of Palestine. See Plate xlvii, fig. 21.

22. Immediately next to 21A and almost on the edge of the cusp is a rude animal figure.

23. Just below 22, an arrangement of random lines.

24. Past the turn of the cusp is boldly engraved a representation of the print of a human foot. The heel is obscure, but can be traced: the ball of the foot and the toes are well marked. It is obvious that this is much more carefully engraved than the

rude scratches which are elsewhere to be found in the cave; and also that the separated toes, with square ends, are much in the Egyptian style of technique—such as is to be seen, for instance, in hundreds of representations of mummies on coffins. I must here record the ingenious theory propounded by Mr. K. T. Frost, formerly of the Egyptian Public Education Department, when he visited this cave under my guidance. It was to the effect that after the beginning of Egyptian settlement in Gezer, this even then ancient cave was adapted as the cellar of a house built above it: that the owner of the house, probably an Egyptian, descending into his cellar, was awed to find the mysterious graffiti on the wall, and in a panic proceeded to destroy them; but either because he wearied, or because he feared to proceed, he stopped when he had finished about half his task, and cut this symbol to avert whatever evil influences might be expected from the unhallowed pictures. This theory will account for the remarkable fact that the drawings are nearly all destroyed till we reach the footprint, after which they are intact; it would, however, be even more acceptable if a *hand* had been cut rather than a foot.

25. At 6" from the foot, and above its level, is another spiral of dots rather smaller than in the previous example. The spiral is in this case unmistakable. This occurrence long before any possibility of Mycenaean culture and influence of a motive so characteristic is of considerable interest. It is also noteworthy that in the Troglodyte Crematorium was found a tray of coarse pottery (fig. 50), with a spiral of knobs just similar to those marked on the walls

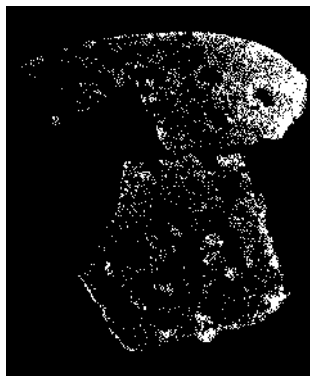


FIG. 50.- BOWL WITH KNOBS IN FORM OF A SPIRAL

of the cave on its upper surface. This may be merely an unimportant coincidence but it seems worth a passing reference.

26. At 3¼" from this spiral is another much less definitely formed.

27. At 3¼" farther on is a fine cow. This is the most artistic of all the graffiti, and shews that the Troglodytes were not incapable of a fair amount of skill, though they cannot possibly rival their Palaeolithic predecessors of the French Bone Caves. The snail-like knobbed horns are curious: did the Troglodytes protect themselves from their half-wild cattle by tying knobs on their horns?

28. Just below the last, and contrasting strangely with it, is a rude headless animal with long tail.

29. At 9½" from these two, and at the level of the space between them, is

a long horizontal stroke with vertical strokes depending from its right-hand end. This may be an unfinished figure of an animal.

30. Above and partly interfering with this figure, as the drawing shews, is another spiral of dots.

31, 32. At $2\frac{1}{2}$ " from no. 30 but at a higher level are two animal figures, one over the other. The upper one, which is actually on the roof of the cave, is reduced to an oval without limbs. The lower is only less summary.

33. Another spiral of dots is just under and to the right of the lower figure.

1.1. Just next to this is another very rude sketch of a horned animal. The hind-



FIG. 51.—GRAFFITI NOS. 38-41, CAVE 30 IV

legs have been broken, which is the only damage the graffiti on the right-hand side of the footprint have sustained.

35. Below and behind this animal is a small spiral of dots.

36. Above the last is another spiral of dots, rather larger.

37-39. Just next to the last are three animal figures, in a vertical row. The uppermost is on the under side of the roof. It has remarkably long horns. The second is quite among the best of the drawings in the cave. The third is larger. It is much interfered with by random scratchings, either with the intent to deface it, or else meant to represent long vegetation in which the animal is partly hidden.

40. There follows immediately one more—the last—spiral of dots, in this case degenerated into a triangle with three dots in a row in the middle.

41. Then follows a long narrow animal figure. Note how the under side of the body is made by a double line, one faint, the other strongly marked. Graffiti 38-41 are shewn in fig. 51.

42. 43. Then come two more animal figures, the hindquarters of the first being just under the snout of no. 41. The horns of the first are made very prominent to distinguish them from the almost random lines around them. It is evident that



FIG. 52.—GRAFFITI NOS. 42-45, CAVE 30 IV

the hinder animal is like one of those mentioned before, standing among long vegetation.

44. At f" farther on, past a crack in the rock, is a very interesting figure. It evidently represents a stag being killed with a bow and arrow, which are visible behind. Unfortunately the modesty of the huntsman has led him to suppress his own person! In front of the stag there is what may possibly be a grove of trees.

45. Just before reaching the cusp separating this apse from the next is a large group of random lines. No design is to be detected in these lines, which are apparently meant to deface a previously existing figure. Faint traces of one cow figure are to be seen underneath, and it is possible there may be others, but one

cannot feel any assurance. This much is, however, certain, that the defacement took place during the Troglodyte Period, and was not the work of our hypothetical Egyptian vandal.

46. Turning the cusp, we find just round its corner end under the roof nine short vertical strokes.

47. Immediately underneath this are some indefinite lines.

48-50. On a level with the last and 1" from them is a remarkable group representing a man (or two men?) doing something (ploughing? or driving? or hunting with a spear?) with two animals. Though rude, these animal figures are among the most ambitious of the series, as there seems to be an attempt made to represent the muscular structure of the animals. They are both confused with vertical slashes, as before suggestive of vegetation.

51. A figure of part of an animal in a smooth hollow place, apparently the matrix of a flint nodule, in the curve between the roof and the wall. Above the space between 49 and 52.

52. At $3\frac{3}{4}$ " from 49-50 is an interesting animal whose long horns proclaim it as a buffalo. I do not know what the triangular object underneath may be.

53. At 7" from the buffalo is a chequer of vertical and horizontal lines. A few random strokes fill the space between 52 and 53.

54. This curious little design follows the chequer at $3\frac{3}{4}$ " from it.

55. Above 52, 53, in a smooth hollow place between roof and wall (similar to that containing 51), a random arrangement of lines.

56. At 4" from 53, but at a higher level. Random lines.

57. Rude animal figure above 56 and almost beside 55.

58. Draughtboard pattern, just beside 56.

59. An animal figure immediately following 58.

60. Immediately after 59, a draughtboard.

61. At 8" from 59, a draughtboard.

62. A random group of lines, resembling no. 63, 4" from 61.

63. A random group of lines $2\frac{1}{2}$ " from 62.

64. On the roof above a point 1' 4" from 63.

65. Close to 64 on the roof.

66. Close to 65.

67. Above the pit on the right-hand side of the staircase, an arrangement of random lines like that photographed above the pit on the left side, not so extensive but quite as meaningless and complicated.

§ 9.—OTHER CUTTINGS IN THE ROCK: CUPMARKS, ETC.

Before we proceed to describe the buildings erected on the surface of the rock, a word or two should be said about the face of the rock itself, as obviously most of the features which it presents must antedate the erection of dwellings above it,

The surface of the rock is very irregular, covered with cracks, grooves, and depressions. Some of the deepest and most inconvenient of these have been bridged by **causeways** in very early times.

Three long parallel **fissures** in the rock, at the N. end of I 27, each about 3" wide and 1" deep, are probably natural; perhaps produced by earthquakes. They do not look as though cut, and have no assignable purpose.

Deep cylindrical vertical **shafts** cut in the rock can be explained in a variety of ways. Some (as I 29 nl), in which the breadth exceeds the depth, are probably rude fruitpresses, even though they may lack the cup in the bottom which, as we shall see in Chapter VI, is an ordinary feature of this type of cutting. The example referred to measures 6' 5" across and 4' 4" deep. Others, where the depth exceeds the breadth, are probably the beginnings of cisterns which, for some reason, were never finished. There is an example so marked in I 14. II 3 C is a pit in the rock, east of which is a small cupmark.

One of the most extraordinary characteristics of early man in Palestine is his fondness for making **cupmarks**. Every hill bears evidence of this singular custom, and to explain it adequately baffles all the ingenuity of the anthropologist. Hollows for votive offerings—recondite emblems of religion—star maps—mortars—waterpots—stands for waterpots—olive-presses—corn-grinders—fullers' vats—these and many more are the explanations that have been suggested, some or all of which may have their place in accounting for individual examples, but none of which completely covers the whole subject. The probability is that there is no one all-embracing explanation, but that different marks and groups of marks were made for different purposes and, there can be little doubt, at widely different times.

The surface of the rock at Gezer bears a perfect wilderness of cupmarks, single and in groups. Most of these are shewn in Map I, being indicated in general by the letter *a*; but I cannot claim that every single example has been recorded. Usually the cups are entirely artificial; but sometimes a natural hollow has been slightly "touched up" and adapted for whatever purpose it may have been required to serve. Thus I 2 A is a hollow, slightly enlarged artificially: it is 3' 6" deep. Again in trench 3 in the same map there is a scarp facing southward, north of which is a large cupmark 3' 3" across and 2' 6" deep: this was full of potsherds when found. North of it is a natural hollow, slightly tooled. South of the scarp is a small oval hollow, probably natural. There was a crooked wall south of this

hollow, which appears in Map I I. It ends at its western extremity in a large stone slab, standing upright: to the south of it are three single stones, probably the remains of a ruined wall. In I I 19, at the north end, was a very early pavement, underneath which was found a cupmark shewn in I 19. South of this is another cup, which, as often happens, is cut in the top of a small natural knob of rock. At I 19 A there is a shallow *natural* hole in the rock, the opening of which has been artificially rounded. Groups of cupmarks are very often cut on a natural surface of rock that rises above the surrounding area; but they are by no means confined to such natural tables.

It is not often that cupmarks are found definitely associated with building. One example will be seen at IV 18 A, which, however, may after all be accidental. It is a square tower-like structure of rude masonry about 4' 10" each way, founded on the rock, in the exact middle of which a cupmark of the ordinary kind was cut. It is difficult to assign a purpose to a building so narrow.

I 30 A, which seems to be closely associated with the cupmarks that surround the very remarkable cave 30 IV, is another example of the connexion of cupmarks and masonry. It is a circular structure 9' 10" in external diameter. Inside of it is a circular cutting in the rock; but as the rock fails on the south side its place is supplied by a row of four stones set on edge.

I 10 A is a natural hollow in the rock with three vats cut in the rock closely associated with it. It is difficult to explain the purpose of these vats. The southernmost is the smallest, 3' across, 1' 8" deep at the bottom of a scarp 2' 4" high; the next is 3' 7" across, 2' 6" deep; the next is 3' 10" across and no less than 6' 6" deep.

Cupmarks are sometimes double, *i.e.* a smaller cup in the floor of a larger. That immediately south of cave 14 I is an example of this.

At I 5 A is a circular basin 6" deep, with two cupmarks and a groove within it: above it to the N.E. are a large cup and five smaller, above which is a rock scarp. I 5 B is a cup hollow in which a jar was found standing.

In two places cupmarks were found united by a passage tunnelled through the rock between them—viz. at I 12 A and I 6, N. end.

Sometimes cupmarks have been found surrounding the mouths of cisterns. The most remarkable specimen of this will be found described in Chapter X, in connexion with the High Place, the cistern in question having been used as a receptacle for the bodies of sacrifices. Another example, which appears at the S. end of I 21, may here be referred to. The shaft of the cistern lies in the unexcavated side of the pit, and in consequence the western extension of the system, if any, was not exposed. In the part which was revealed by excavation there are fifteen cup hollows, all of them oval, measuring about 1' x 10", and about 6" deep; with two exceptions, one of which is square, an unusual shape, and the other circular, 8" in diameter and 1' deep.

That the juxtaposition of these cupmarks with the cistern mouth is not accidental is indicated by the fact that similar combinations are found elsewhere. There is one example (illustrated below) in the hills to the south of Abu Shusheh, and several examples have already been described by me from Tell es-Safi (see

EP, p. 193). It may be suggested that they were meant for watering cattle—the water being drawn and dashed over the surface of the rock, where it would gather in the cups in little pools,* though the cups hardly seem large enough for the purpose. That they are meant for oblations to the spirit of the water may possibly be a theory preferred by some, though I should be sorry to claim it as my own.

In order to display all the rock-markings on one sheet, I have drawn the cistern I 21 in Map I; but it is probable that it is to be referred to the First Semitic Period. In any case the cistern was used in later periods also, a shaft being built up through the accumulating debris. The cupmarks, of course, were covered and forgotten after the first period. The cistern therefore reappears on the successive plans.^f

Another example of the connexion of cupmarks and cisterns—in this case, however, less certainly intentional—will be seen at the south end of trench 4: an enlarged plan is given in fig. 53. The cistern in this case is quite small, and perhaps unfinished: depth of shaft 6', total depth 11'; the plan is rectangular, 9' 6" east to west and 7' 8" north to south. Close to it is a group of five small cups measuring from 1' to 2' in diameter: one of them is of the characteristic oval form. To the west is a scarp in the rock, 1' deep: above it is a double cup; in its edge is a recess in which a jar was lying (see the enlarged sketch above the plan and separated from it by a row of dotted lines). The half of a large basin, 6' 4" in diameter, appears below this—the other half was not cleared out. To the south is another scarp, of the same depth: below it are three small oval cups and one large basin 5' 9" in diameter; and another yet larger—the largest found on the mound—12' 7" in diameter. There are two cupmarks and a curious straight groove in the floor of this basin.

As in the other case, the cistern has been adapted to serve the needs of the overlying stratum.

A curious development of cupmarks or vats in the rock was found at I 29 A. Here there was a short scarp in the rock, 1' 8" deep, from which, at one end, a vat hollowed in the rock projected, 3' in diameter. What purpose this may have served did not appear. There was a remarkable cave close by (29 I), and a

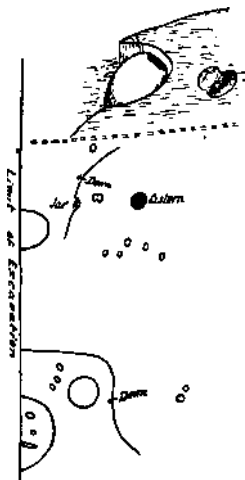


Fig. 53.—ROCK-CUTTINGS IN
TRENCH 4

* I once saw a boy in Jerusalem watering a sheep by pouring water on a pavement from a coffee-pot, the sheep licking it up as it fell!

† The rock-cut shaft of this cistern is of the unusual length of 7' 1"; the total depth is 17' 7", and the diameter 16' 6".

number of cupmarks on the surface of the rock. The vat in question is shewn in fig. 54.



ROCK SCARP

Important and difficult questions are raised by the presence of cupmarks, grouped with evident purpose, in the floors of some of the caves. The most striking example of this is in the great labyrinth 28 I I: this has already been described. It is the only specimen in which the cups are arranged in regular order; save that the three cups in 30 I I I are in a straight line. A single cup, possibly an olive-piess, appears in 17 I; and in addition to those first mentioned we have already seen groups of cups in 3 I, 3 I I I, 15 I V, 17 I I I, 27 I, 29 I, 30 I I, and 30 I I I.

In the plan of the surroundings of Gezer the principal groups of cupmarks are shewn—it would be quite impossible and unnecessary to mark all. In the land called *Wdret et-Tayasheh*, where there are a number of smooth, flat, table-like outcrops of rock with cupmarks cut upon them, one of the cups has a deep groove running out of it.

In the same land is the mouth of a cistern of the ordinary type; in the rock immediately above are a number of oval cupmarks. These, so far as they are exposed, are twelve in number, in a more or less straight row. Probably there are others concealed by the soil. See fig. 55.

The other groups marked on the map need not detain us long. They are exactly of the same nature as have so often been described before—groups of oval or circular depressions arranged without any definite order. The group between tombs 89 and 90 in *Wdret Danuish esh-Sharkiyeh* is cut in a smooth surface of rock that forms the roof above a very large natural cave. The single cups in *Shab VaA'ub*, near tomb 55, are large vats, probably for treading grapes. The group of cupmarks in the rock outcrop of *Wdret 'Aysa* is worthy of notice inasmuch as one has a ring round one of the cups (like the rings so often found round cups in European bronze-age monuments). This is rare in Palestine.

Some groups of cups are unquestionably connected with winepresses and threshing-floors, and will be noticed in their proper place in Chapter V I. Of others the purpose is elusive. But (so far as Palestine is concerned) I must say that the more I study the cup-groups and examine different specimens, the less am I inclined to see a religious or symbolic purpose in them.

There remains to say a few words about some miscellaneous rock-cuttings in the hillsides which cannot be classified under any of the preceding sections.

In the field called *Waret Darwish el-Gharbiyek* will be noticed three "pits in the rock." These were found when searching for tombs. They are very difficult to explain. The most northerly of them is especially

remarkable : it is about 8' 2½" deep. It seems to be square. It was not wholly cleared out, other and more important investigations demanding prior attention : in the surface of the bottom, so far as it was exposed, were two cupmarks. The second pit is probably an unfinished cistern. The third is a large circular hollow, 16' 5" in diameter. There is nothing to shew for what it was made.

The long rock-scarps that abound here and there are in all pro-

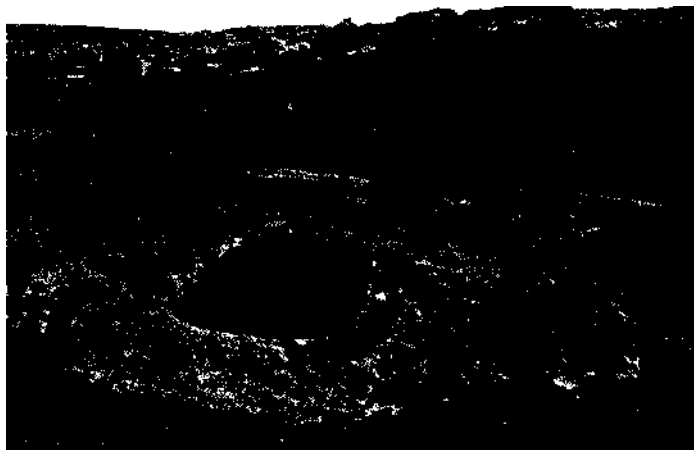


FIG. 55.—CUPMARKS SURROUNDING A CISTERN MOUTH, WA'RET KT-TAYASHEH

bability simply quarries, though some may have been made for receiving the doors of tombs that had never been excavated. They are especially frequent in the field called *Waret Darwlsh esh-Sharkiyeh*.

The cisterns, of which a few were found in the hillsides, seem on the whole to be smaller in size than those within the city, but otherwise do not differ materially from them.

The "steps in the rock" south-east of tomb 143 in *Waret 'Othman* are probably nothing more important than a bit of quarrying.

In *JSP*, p. 198, I have described a mysterious group of marks at

Tell es-Safi to which from their shape I gave the name of **V-marks**. Two such marks exist on the hillside of Gezer. One is in connexion with the winepress / in *Waret Darwish esh-Sharkiyeh*, described in Chapter VI; the other is solitary, on an outcrop of rock in *Ard 'Ain el-Butmeh*. It is a large block, 4' 5" high x 8' 6½" x 2' 5": the mark is U rather than V-shaped; it measures 1' 9½" x 1' 5½". The channel is 3½" broad.

In the hillside on the north and east are a few small **tanks**: they are rectangular in shape and carefully cemented. It is not easy to see for what these would be made: they would not hold much water, and it would soon evaporate in the hot Palestine sun. Measurements of one or two of them are given later in this chapter in the section on Waterworks.

Limekilns—cylindrical pits cut in the rock, about 10' deep—are found here and there. Some of these must be old, as they are filled with earth and seem to have been quite forgotten till they were reopened. That they were as old as the occupation of the city can however scarcely be asserted.

Of the **wine and olive presses** that abound everywhere we shall speak in a later chapter.

§ 10.—STRATIFICATION OF THE DEBRIS: THE PLAN OF THE CITY AT DIFFERENT PERIODS

Having now described the caves hollowed in the rocky core of the hill, and the various cuttings displayed by the surface of the rock, we must next proceed to a description of the buildings that went to make up the city. In this description, after some necessary preliminary generalities, we shall take first the ordinary dwelling-houses; then any other buildings which call for special notice—excluding of course those with a religious purpose, whose proper place is Chapter X; then we proceed to a description of the ramparts by which at successive periods the city was defended, and finally to an account of the various engineering works by which water was procured and stored within the city.

The stratification of Eastern and especially of Palestinian cities is a phenomenon which recent excavations have made so familiar that it is unnecessary to describe it here at length. Let it suffice to say that

houses have always been built over the ruins of their predecessors ; that these houses were built of mud-brick or of stones set in mud, from which the winter rains annually wash out a considerable quantity of clay ; that rubbish and organic matter were allowed to accumulate in the city streets;



FIG. 56.—SECTION SHEWING THE STRATIFICATION OF ACCUMULATED DEBRIS

and that thus the level of the city became raised at a rate variously estimated—at Gezer I reckon it to be about an inch in six years.

The debris proved on excavation to be of very different depths in different parts of the mound. At both ends of the hill, even within the city wall, rock crops out to the surface, shewing that at these parts there were always open spaces. A little west of this outcrop on the Eastern Hill

the soil deepens rapidly to 16'—17', containing from three to six strata of foundations. In the great pit around the alignment of the High Place, the soil was found to be from 5' to 23' deep, and to contain from three to seven strata. On the Western Hill the debris was much deeper than elsewhere, attaining a maximum depth of about 40', with eight strata of building.

The study of the strata at Gezer is in consequence peculiarly complex. In some parts of the hill certain of the epochs of the city's history are completely unrepresented, and we must suppose that during those epochs the regions in question were deserted areas; while on the other hand periods represented by single strata in some parts of the mound are found to involve two or three in others. Sometimes the side of a trench displays as in a geological section a complete history of the city in miniature; and I have thought it instructive to present the photograph fig. 56, which shews one of the best and clearest of all the sections that have been uncovered.* At the bottom is the rock-surface, in which will be seen the mouth of a cave (no. 27 I). This was used as a burial place; and when filled, its mouth was stopped with a great pile of small stones, upon which as a foundation the inner city wall was afterwards built. The original ground surface will be seen below this layer of stones, following the line of the rock. Above the stones is a white lime pavement; this, as well as the underlying pile of stones, is shewn in II 27 p, north end: about 1' above this is another bed, of broken potsherds and charcoal intermingled; over which are the walls of a large structure of brick which was built after the inner wall had fallen into decay. It will be seen in Map IIIa 27, 28. Above this brick structure, of which the walls are standing to a height of about 3', will be seen the flat table-stone of a winepress projecting into the side of the pit (IV 27 m), above which is the vegetable soil.

Reference words printed upon the photograph will enable this description to be followed more easily.

The task of making a series of plans which shall represent the arrangement of the houses and streets at different times is one difficult, if not impossible, to accomplish with accuracy. The problem is complicated by many elements, all of which add to the difficulty of its solution: it may not be amiss to state them here.

If it could be proved that a city was fully occupied during its whole history, and that the stratification of successive layers of building was due to a series of catastrophes by which the whole area of the town was

* I regret that an accidental streak of light has spoiled the appearance of this picture, but it does not destroy its value as an illustration.

wrecked several times, the case would be comparatively simple; and if we were acquainted with the nature and date of each of these catastrophes, we would then have no difficulty in assigning to their proper period the various remains of walls unearthed in excavation. And if architectural ornament of assignable age were used in the different periods of occupation, the question would evidently be simpler still.

There may be cities whose examination is thus reduced to the simplest terms in this way; but Gezer is certainly not one of them. The following are the principal elements which enter into and confuse the problem •—

(1) There is no possibility of distinguishing date from an inspection of the buildings themselves. From first to last all are of the same rude construction and plan, or rather want of plan. I might almost add, to the present day: for the modern village of Abu Shusheh, were it ruined, would present precisely the same appearance as the ancient city of Gezer.

(2) The great area included within the walls was not all occupied at once. There were many open spaces here and there at all times. In consequence, the number of strata ranges from two to eight. I have found that the successive strata of the city can fairly be plotted in six maps, with three intermediate maps for the Western Hill, where there are extra strata. It might be supposed that the antiquities found associated with the ruins would help to date them; but this is not always so. We must remember that the greater part of the walls that remain standing are the underground foundations, sunk into a stratum of earlier date than that to which the building actually belonged: so that the walls are, as a rule, associated with antiquities older than themselves—often considerably so. In the case of open spaces we must remember that they were not kept as municipal playgrounds; rather were they municipal rubbish heaps,* and indeed it is scarcely too much to say that a very large accumulation of potsherds and other worthless antiquities of a definite date in one spot is presumptive evidence that there was no house of that date erected in that spot. It follows, as a moment's thought will shew, that when these waste places were built over, there was an island of houses of one date surrounded by older buildings.

(3) There were no great universal catastrophes which destroyed the whole city at once. There are plenty of signs of large local fires, but no all-covering bed of ashes (like that most welcome layer at Tell el-Hesi). The captives and lootings of successive Pharaohs did a great deal of damage to the structures of the city, but in no case made "a clean sweep" of the whole. Many individual houses survived the storm and stress, and each one is a centre of difficulty and unsuspected inaccuracy to the would-be plotter of the city.

Herein lies the greatest difficulty: namely, that the rebuildings of the city took place gradually, not by a succession of entire reconstructions. A diagram will make

* Probably these open spaces were of use for collecting cattle in time of siege.

clear the confusion which this involves. Suppose a city to have consisted of five "quarters," A, B, C, D, and E; and suppose the rebuilding of these quarters to be indicated by dashes, thus A', B', etc. Then we may graphically represent the history of reconstruction in some such way as this:—

A	B	C	D	E	year	1	of the city
A'	B	C	D	E	"	50	" " "
A"	.		D	E'	"	150	" " "
	B'	C"	D	E'	"	200	" " "
A'''	B'	C"	D'	E"	"	250	" " "

which means that (by the data assumed) in the course of 250 years the city is completely rebuilt; during which one quarter has been rebuilt thrice, two twice, and two once; twice the city has been partially waste: there are thus five stages, so different from one another that to shew them properly a separate map is required for every one. None of the substitutes that might be suggested for this purpose are of any use in the case of a city like Gezer: tracing-paper with the changes printed upon it, to be placed over the map of the rock-surface, is cumbersome, and several thicknesses of it are too opaque to see through; and the use of superposed maps in different colours, with which I myself at first attempted to express the succession of strata, has only the effect of a polychromatic maze, whereby the eye is hopelessly confused.

Be it remembered, moreover, that the case as stated above is comparatively simple. In practice we have not to deal with five quarters, but with hundreds of individual houses; not with conveniently equal intervals of time, but with intervals of anything from, perhaps, a few months to any number of years.

In the maps will here and there be seen the letters X, Y, Z. These are meant to distinguish constructions of earlier or later date within the limits of the period covered by the map. The intermediate letter Y denotes the constructions that appear to belong to about the middle of the period; X indicates walls that appear older, but not old enough to be drawn on the previous map; Z marks walls that appear later, but not late enough to be drawn on the following. Building and rebuilding for some reason appear to have been more active at the western end of the mound than at the eastern: it has therefore been necessary to provide three intermediate maps for this part of the town.

Our troubles do not cease even there. We may assume that there was some sort of official or unofficial municipal council under the control of the *amilu*, or *hazanu*, or whatever name the chief functionary for the time called himself; but this council did not concern itself with the maintenance of highways. There seems to have been nothing to prevent a man building a house so as to obstruct and divert a line of traffic.* Indeed (as a moment's comparison of the maps will shew) the

* In modern Jerusalem, where building operations have been lately carried on to a surprising extent, paths that have been rights-of-way for generations are being closed one by one without any interference on the part of the community or of the Government.

non-permanence of lines of thoroughfare is one of the most striking facts that distinguishes the history of building in Gezer from that of any European city.

Among minor sources of confusion must be mentioned pits dug in the earth in ancient times, which were often responsible for lowering antiquities of one stratum into a context much too early. These pits were rarely distinguishable except when a lucky chance made them coincide with the vertical face of a trench, as in the photograph, fig. 57.



FIG. 57.—TRACE OF A PIT DUG IN THE DEBRIS IN ANCIENT TIMES

It is an instructive task to compare the various plans of the series together, and before going further, to endeavour to gather the general characteristics of city-planning at successive epochs of the history of the community. For though there is a remarkable uniformity—far more so perhaps than one would naturally expect—yet, as we shall see, each age has certain characteristics which distinguish it from the others.

We may pass over the cave-dwelling community, and omit from our consideration the fragments of pavements and walls which are indicated on Map I. These are the meagre remains of the first constructions on the mound; but there is nothing to be made out from these incoherent fragments, many of which consist of four or five stones only. The three intermediate maps of the Western Hill may here also be neglected.

Map II belongs to what may be called the prehistoric period of the Semitic occupation—the period before the veil of illiteracy is raised, and reveals as the first act in the drama the terrors of Yapahi and his contemporaries. One building of great importance—no doubt a palace—at the south end of trenches 27-30, belongs certainly to this period. Otherwise the impression that an inspection of the plan gives is one of *emptiness*. Here and there are important houses, like that in the middle of trenches 3, 4, surrounded by open spaces that, in all probability, contained rude huts of temporary materials, like the reed villages which are characteristic of modern Egyptian scenery, or, it may be, a permanent settlement of tents, like the Nawar encampment opposite Saint-Etienne at Jerusalem or the Bedawin encampment at Wady Hanain near Ramleh. This eloquently speaks of the permanent settlement of a nomadic tribal or sub-tribal * community, under the leadership of a despotic Sheikh, dwelling in the palace just mentioned, and with more or less absolute control over the lives and time of his subjects. Such a constitution must indeed have existed at the time, as nothing but the strong will of a merciless despot can have supplied sufficient motive power for the excavation of the gigantic water-passage within the palace courtyard.

Towards the end of the period the temporary structures give place to stone buildings, as a comparison of Maps II and **IIa**, on the Western Hill, will shew. It is probably to this later part of the First Semitic Period that the crowded structures in trenches 20, 21 are to be assigned.

The Second Semitic Period, Map **III**, is characterized by *few* buildings, with comparatively large rooms. Though the trenches on the Western Hill look empty, they were not so in reality: the houses in **IIa** give place directly to those in **IIIa**, so that there were no intermediate structures erected at the beginning of the period. On the whole the impression one

* I use this expression as a sort of equivalent of the Arabic *hamuli*, or congeries of related families, groups of which make a tribe.

receives from the plan is that of a small and luxurious community; and with this agrees the observation that the richest tomb deposits found have been from this period, as well as the richest pottery from the houses. It was the time when the Aegean trade had introduced new art ideas, which rapidly found well-intentioned imitators among the craftsmen of the city.

In the Third Semitic Period, Map IV, there are obvious signs of a much increased population with more developed organization. Land for building is even stolen from the sacred High Place: the city is too congested within its old wall, and it becomes necessary to build another wall outside it. Various buildings of importance are erected, distinguished from the rest by their thick walls. The chief moves from the old palace site to another, at the north of 15 and 16. A tendency to bizarre plans is indicated by certain structures—notably the peculiar erection south of the middle of trench 27—with long narrow rooms.* These changes can best be accounted for by the entrance into the ancient population of another element, with different ideas: which accords with the statement of the Book of Judges (i. 29), that after the Israelite immigration certain Ephraimites settled in the city, although it was not brought completely under the control of the tribe.

The Fourth Semitic Period (Map V) displays the same general characteristics. The same liking for long narrow rooms will be noted, if anything further developed. One most important difference between this and all the other periods must be noted. There is not—so far, at least, as the excavation has been carried—any outstanding building that can be indicated as certainly a chiefs residence. This accords with the historical fact of the city having been brought within the control of a Central Government.

It will be noticed, on both this and the preceding plans, that the inner city wall, which, as we have said, went out of use at the beginning of the Third Semitic Period, still exists as the apparent limit of building. This is due to natural causes. No doubt the buildings of the later periods originally transgressed this limit; but the winter rain washes off the earth from the edge of the plateau, and exposes a few stones, which are promptly annexed for building purposes by the fellahin of any one of the half-dozen

* This shape is evidently dictated by the difficulty of finding lintels of wood or of stone long enough to roof a *broad* room.

villages within a few miles of the site. The result is that buildings round the edge of the city in time disappear completely. This is especially obvious in the sixth map, representing the last period: the empty line is visible almost all round.

What is left of this period speaks clearly of a dense and comfortable population. Built reservoirs, well-paved rooms, complex house-plans with pillars, all point in this direction. The absence of architectural ornament is easily explained by the same cause as that just mentioned—destructive fellahin. That there were actually ornamental constructions is shewn by an Ionic volute and some moulded stones cast in among the rubbish filling the great reservoir in trench 16.

Into this population burst the destroying vengeance of Simon Maccabaeus, who ransacked the city, deported its inhabitants, and garrisoned it with "men who would keep the law." It is not unlikely that this garrison was insufficiently provided with women having the same qualification—and surely no others would be admitted—to keep the population up to its former level: at any rate this event was the death-blow of the city. A few years later it falls back into Syrian hands so easily that the event is recorded, as it were, only in a footnote; and though the remarkable bath-house shews that the decimated remnants tried to make themselves comfortable within the wide walls that once sheltered so much larger a population, they probably felt themselves unable to defend so great a length of rampart, and abandoned the ancient city in despair, settling on the neighbouring village sites now known as Abu Shusheh and Khurbet Yerdeh. Thus only can we account for the complete disappearance in a very short time of so large a population as is postulated by Map VI.

It is very rarely indeed that a wall is found which can demonstrably be assigned to two different sets of successive buildings, of which it is a common member. An example, however, is the long wall V 4 AB, which has been taken over from the previous stratum; through which it runs to the rock. A wall of the first palace, in II 28, has been adapted to the construction of the second, in III 28. It will also be seen that the older city wall, after being superseded by the later rampart, was used to form one side of quite a series of chambers, built up against it.

Of street-paving there is scarcely a trace, one or two small fragments of foot-worn pavements, here and there, being the only indication that such was ever in use. These consist of rounded stones about 8" in diameter,

and must have been much more uncomfortable to walk upon than the smooth-trodden surface of the earth.

§ 11.—THE GEZERITE HOUSE

We must now proceed to describe and illustrate the normal Gezerite dwelling-house. We divide the subject into the following headings : plan ; construction (masonry and brickwork); floors ; doorways and windows; roofs and the means of supporting them; architectural ornament; and miscellaneous details. Though *cisterns* are an essential part of many of the houses, it will be more convenient to describe these together in a later part of this chapter.

Plan.—The absence of roofs, and still more the absence of doorways—the houses being as a rule ruined to below the thresholds—makes it often very difficult to discover the plan on which any given building was laid out. Indeed sometimes it is by no means easy to determine whether any given point was inside a building or in the street outside. Often, too, what may be called "fictitious rooms" are produced by the interweaving of foundations of successive periods. Thus in the diagram, if the dotted square represent an old foundation, and the square in firm lines a building erected later, evidently when both are ruined to the same level there will be three fictitious chambers, A, B, C, which never had any real existence. On account of the uniformly rude character of the masonry, with random bonding at angles, these fictitious chambers are not always so easy to detect as might be supposed.

In these difficulties it is satisfactory to note that there is one source of illumination from which much help can be obtained in solving the problems connected with the plans of the ancient houses. I refer to the dwellings of the modern fellahin, which seem to reproduce, with tolerable exactness, the main peculiarities of their ancient predecessors. As a preliminary to the study of the Gezerite House, I propose therefore to make some remarks on these dwellings.

The village streets are crooked and narrow. In many it is almost possible to touch both sides of the street at once by stretching the arms out horizontally. They are so artlessly laid out that even the tiny village of Abu Shusheh, which can

hardly contain more than six hundred souls,* is a most confusing labyrinth to the stranger.

The streets run, not between houses, but between the blank walls of courtyards : these walls, like all the constructions in the village, are built of more or less unhewn stone set in mud; very little lime is used in the buildings. The courtyard walls are 8'-10' in height. They are pierced only by the doors giving admission to the courtyards behind. These doorways are, as a rule, roughly arched ; the threshold is generally lofty, perhaps i' high. The door is secured to a vertical wooden beam that turns in a cup-shaped stone socket.

The courtyard varies greatly in both shape and size. And here it is well to remark that such rude buildings as these are never built to any actual measurement, and there is no special reason for considering that those who erected their ancient predecessors were any more particular. It follows that attempts to deduce the length of the cubit from the measurements of lengths of such walls must have results so uncertain as to be valueless.†

In the courtyard are (i) the baking oven, a small dome-shaped hut with the biick bread-pit in the centre, (2) one or two dog-kennels and chicken-coops, and (3) a raised platform of clay, with a lattice surrounding it of the same material, in which branches and reeds are in summer interwoven to make a booth for shelter from the heat of the summer sun.

At the back or sides of the courtyard is the house proper, almost invariably one-storeyed, consisting of one or more rooms, in which a part is set aside for the animals, and another with raised floor, for the family; covered with a flat roof of mud beaten down and kneaded, carefully smoothed with flat stones, and supported on wooden beams. On the rare occasions (one or two in each village at most) on which an upper storey is found, this is approached by a wooden external staircase. The roof is of mud, and each winter fresh layers are put on to prevent leakage during the rain. Sometimes the roofs become in time as much as 3' thick or more. If, as is probable, this be an ancient custom, it would help us to understand how great piles of earth accumulated on the ancient city sites.

If now we apply this modern analogy to the plans of houses which remain in tolerable completeness, we shall have little difficulty in getting

* During the campaign a robbery from the camp property was compensated for by a tax of one beshlik (about *Gd.*) on every adult male in the village community. The number of beshliks collected was 113. Allowing for five to each family, which is a fair average, this gives 565 as the total number of persons in the village. It agrees closely with an estimate made by the administrator of the Bergheim estate from other data.

† Nor have I much faith in the deduction of cubital lengths from measurements of rock-tombs. Even when a common divisor can be found to tables of measurements, a margin of inaccuracy often as great as an inch or two has to be allowed; and often no common divisor is forthcoming at all. Builders built, and tomb-cutters cut, until they had made a chamber large enough to suit the purpose they had in view; but I do not think that the system of measurements they used was as a rule any more scientific than that of the fellah who informed me that the length of a certain rock-cut tomb was "two walking-sticks and a hand-breadth!"

an idea of the disposition of the normal Gezerite house. It must not be forgotten, however, that each man built his own house according to his taste, fancy, and requirements, so that a diversity of detail must be expected throughout the city. The threshold of the entrance doorway was no doubt (as is always the case in modern houses) raised about 1' above the level of the roadway. This accounts for the total disappearance of any indication of the doorway in the masonry when the walls are ruined to the level of the ground. The practice of depositing lamp and bowl groups under the threshold, which will be more fully described in Chapter X, sometimes comes to our aid and indicates where the door should be placed in a reconstruction; but this practice was unfortunately not always followed, and in the absence of these useful indications we are left entirely in the dark as to the proper place for the entrance.

In Plate xlix, figs. 1-7, are collected the plans of representative specimens of houses selected from all the different periods of the city's history. The existing fragments of walls are shewn in firm lines, conjectural restorations are hatched.

Fig. 1 (II 3, 4) is a small and compact house on the Eastern Hill, with five chambers and an elaborate grain-store of small bins on the east side. What seems to be the courtyard is on the north side: the long passage that appears to have given access to it is curious.

Another house in this plan worthy of attention is the large but fragmentary building in II 14, evidently the dwelling of some wealthy notable: it is remarkable for the number of circular cornbins it contains. The buildings in trenches 20, 21 are much confused, and there are probably a good many "fictitious chambers" among them. Even here, however, a little attention shews that the normal plan—a courtyard with smaller chambers grouped around or behind—is followed in the majority. Another good but incompletely excavated example appears in II 1. The great palace, which will presently be specially described, at the south end of the western trenches is in essence merely a development of the same normal plan.

In Map I *la* the building to the south is probably also a palace, and calls for special notice hereafter. At the north end of trench 28 is a small house of the normal pattern, differing however in having the subsidiary chambers on the side of the court to the left of the entrance, not, as seems more usual, in the back.

In Map III note especially a large and important house at the south end of 20, 21. In this case the entrance to the courtyard appears to be through a small guard-room at the eastern side. There are rooms on two sides of the courtyard—the chambers to the south appear to belong to another house. The pile of skulls marked A found in this courtyard is grimly suggestive of some Gezerite Bluebeard. Toward the back of the court is a circular cornpit: the chamber immediately north of it was a granary. This house had a special cistern at its

eastern end—the same cistern as that already mentioned around which on the rock-surface arc cut a number of cupmarks.

The later part of the Second Semitic Period, as illustrated in **IIIa**, is distinguished by the remarkable brick construction on the Western Hill, shewn in Plate xlix, fig. 2, and illustrated in the photograph fig. 58. The walls were very thick, and the rooms much better laid out than usual. It was not possible to excavate it completely. At A, B, there are hollows in the walls, possibly the remains of secret store cupboards. The first of these is oval, 4' 9" x 3' 10", and at



Fig. 58.—LARGE BRICK BUILDING IN **IIIa**

present 2' 3" deep: the other is 2' 3" square, and only 6" deep. In the corner C there was a lamp and bowl deposit. Outside the brick (as will be seen in the photograph) there was a stone revetment wall. At D there was a circular shaft of stone, like a cistern shaft, but not leading to any excavation. It was 4' 4" in diameter. At E there was an oven. The bricks are sun-dried, about 1' 4" as a rule long, in courses 5" high. It is possible that the structure in **IIIa 30** belongs really to the period following; the long narrow chambers are more suggestive of that period. A good example of the courtyard house will be seen at the south end of **IIIa 28**. In **IIIa 30** is part of a house presenting some perplexing features. The chief detail is a wide courtyard with a stone pavement. In this pavement are two

pits A, B, respectively 2' 11" and 3' 6" in diameter. Remains of an older pavement run under it. West of the western wall of this courtyard are two small columns, CC. The bifid wall at D is curious. In the photograph accompanying (fig. 59) corresponding index letters are inserted. See the plan, Plate xlix, fig. 3.

The Third Semitic Period (Map IV) presents more constructions than its predecessors; and several good specimens of houses may be selected from it. A fine example, with a few later walls interfering with one corner, appears at the north end of IV 28. At the south end of the same trench are other houses—all of the same

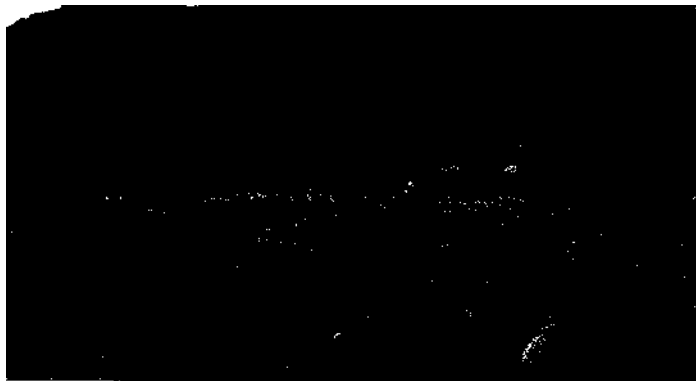


FIG. 59.—FLOOR OF A BUILDING IN IIIa 30

type, but much ruined. The series of chambers in IV 13 is not a little remarkable: the predilection for long narrow rooms, already noticed as being characteristic of this period, is here well illustrated; but it is curious to find so many chambers together not broken by a courtyard. Another good specimen of the courtyard house will be found at the south end of IV 21.

In the Fourth Semitic Period (Map V) again, numerous good examples, in a fair state of preservation, meet the eye. An important house occurs at the south end of V 2, 3, but owing to the loss of the north wall its limits are uncertain. Other houses will be noticed at the north end of 2, 3, and 4: the first of these, which is drawn to an enlarged scale Pl. xlix, fig. 4, is remarkable for the number

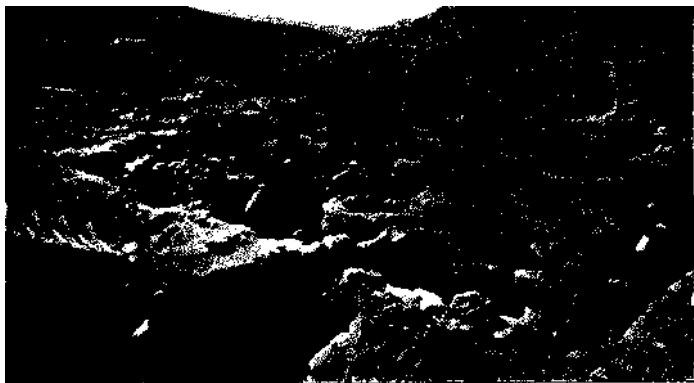


FIG. 60. -LARGE HOUSE IN V 27, 28

of ovens it contains. It is unnecessary to do more than point out others, in trenches 15 and 18, which all illustrate the one principle of planning followed regularly throughout. In a double house at the south end of V 21, there are two sets of chambers arranged each round its own courtyard, divided by a party wall. There is an interesting dwelling-place in V 27, 28, of which an enlarged plan is given Pl. xlix, fig. 5. The latter is evidently the residence of an important personage. It has three large corn-bins, a vat built into the west wall of the courtyard, and three square pillars, conspicuous in the annexed photograph, fig. 60. Being carefully squared, these can hardly be for any religious purpose: they probably supported a penthouse of some sort. They are 3' 6" high.

In Va there are few constructions. In the middle of trench 20 is an elaborate structure which, exceptionally, does not appear to be associated with a courtyard: on the contrary the no less elaborate but much ruined—almost incoherent—building south of this has evidently an important and ornate courtyard with chambers on at least two sides.

The Hellenistic Period seems to shew houses in which the importance of the courtyard is rather less as compared with the rooms. Though they obviously exist

—and in trench 19, west of the Maccabaeae Castle, there is a remarkably large open space—yet as a whole they are not conspicuously larger than the rooms of the houses to which they belong. In some houses—notably the large one on the East Hill, VI 2, 3, which has been chosen for illustration, Pl. xlix, fig. 6—there appears no courtyard at all. The elaborate structure in VI 30, south end, may possibly be rather earlier in date than the majority of the buildings with which it is associated.

One of the most complete residential buildings found in the city was the house which forms almost the only building of the Hellenistic Period remaining in the northern halves of trenches 10-12. This ruin made a small mound on the surface of the hill, which will be found indicated in Pl. viii as *Rujm 'Abd Allah* or "'Abd Allah's Cairn"—after a certain 'Abd Allah who, a generation ago, died here from the bite of a snake. This, being an unusually complete example of an ancient Palestinian house, deserves careful study. The plan is subjoined (fig. 61). The main entrance is at A. This gives admission to a space which from its breadth was probably an open courtyard, on the left-hand side of which is a doorway admitting to a building that evidently was independent of the main dwelling. This doorway is shewn in the photographic view, fig. 62, which gives a good idea of the masonry. This doorway opens into a plain chamber, with doors to the right and left. That to the right (west) admits to a room in the floor of which is a cylindrical pit cemented, 3' 7" in diameter and 6' 11" deep. This probably was for storage of grain. That to the left admits to a stepped reservoir of a type that will be more fully described later in the present chapter. In the example under discussion (a photograph of which is shewn in fig. 65) the water was collected from the roof by a conduit the lower end of which remains (marked H both in the plan fig. 61 and the photograph fig. 63). At the point where the existing fragment remains, the water fell into the small square cemented receptacle K, through a narrow hole in its corner (indicated in the plan). Here the washings from the roof

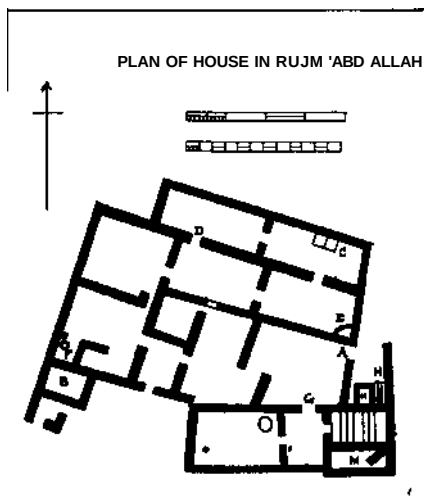


Fig. 61

were collected and prevented from falling into the cistern. The water, purified from its sediment, was allowed to run into the cistern through the hole I... The small opening into the vat K could (if the cistern were too full) be closed with a stone or pad, in which case the water would continue to run along the conduit H, along a canal through the wall of the cistern, and finally escape into the additional reservoir M. The cistern itself measures 13' 2" long, 8' 9" broad, and is 7' 3½" deep below the bottom of the topmost step. It is built of square blocks and cemented. Six steps lead down to the bottom, with a rise ranging from 9"



FIG. 62.—Doorw, IN RUJM 'ABD ALLAH

to 12" (except the lowest step, which is 2' high) and a head of 1' 3" to 2' 7", leaving 3' 3" clear of steps at the lower end. The steps are arranged in threes, one broad and two narrow.

Returning to the entrance courtyard, we enter the main building through an opening between the ends of two overlapping walls. This opening admits to a second court, from which doorways admit to the house rooms, twelve in number. These communicate by doorways, all of which are preserved except that of 13, where the walls are ruined. As usual the masonry consists of rough field stones set in mud. This unsightly masonry was no doubt covered with plaster smoothed and painted—and a small fragment of plaster, about the size of the palm of a man's

hand, was found loose in one of the chambers. This was adorned with green and red stripes, which gives a hint as to the style of mural decoration.

At C were two masonry steps, perhaps the bottom of a staircase leading to the roof or to an upper storey. If the latter, this is the only indication of a second storey found in any house in Gezer.

In the western jamb of the doorway D a hole was drilled in the face of a stone. This may have been for a bolt: otherwise there is no indication to shew how the doorways were closed. The structure E was a row of stones on edge, making a



FIG. 63.—CISTERN OF HOUSE IN RUJM 'ABD ALLAH

circular quadrant that filled the angle in which it was erected: it was possibly a hearth. V was a brick oven of common type.

Examples are occasionally found of alterations of plan or reconstructions. Thus in the curious structure VI 30 D (drawn to an enlarged scale in Plate xlix, fig. 7) there has evidently been more than one alteration, as is shewn by the walls butting against one another. A doorway (a) has evidently had an inner chamber built against it, with a doorway (6), which in its turn has been blocked.

Foundations.—As a rule the foundations of houses do not go deep ;

but sometimes, especially in the case of large walls, they are carried down even to the rock. This is the case of IIIa 30 AA.

No special treatment of the foundations, such as the beds of sand described from Tell el-rlesy (MMC, pp. 71-73) or the remarkable wooden footings from Tell Mutasellim (VC, p. 38), was discovered at Gezer; unless we may count a series of larger stones found under the foundation of the chamber IV 8 B—one under the south wall and two under the west wall.

On the eastern slope of the hill, near 'Ain Yerdeh, are certain rock-cuttings, which were long ago seen by Professor Clermont-Ganneau and by him identified as the foundations of extra-mural houses. I am not sure that it was the exact cuttings which the Professor saw that I have identified; though I think I have examined all the evidences of rock-cutting to be seen above ground on the hill. Perhaps some of those which I prefer to regard as simple quarries were among the number. But there are three in the region referred to, which I have marked *foundations* on the map, and which I have little doubt are actually the foundations of such buildings. It may be perhaps more correct to regard them as the foundations of watch-towers, erected in the vineyards (which the numerous presses in this region shew were planted here). Such watch-towers (the "lodge in the garden of cucumbers" of Isaiah i 8) are often very elaborate structures in modern Palestine, consisting of several rooms. There are some remarkable specimens in the hills around 'Ain Karim, near Jerusalem.

Of these rock-cuttings, the first (proceeding northwards) is in a long narrow outcrop of rock about 3' breadth running E. and W. Near its western end two square sinkings are made in it, separated by a bridge $7\frac{1}{2}$ " across. There is a square hollow in one angle (see the cut, fig. 64). This seems to me the threshold of a doorway giving admission to a room on the north side that was apparently about 11' 6" long east to west: the other dimensions cannot be discovered, as the rock sinks below the surface and was in consequence not trimmed.

The second cutting was more elaborate; but the plan of the building cannot be made out with certainty as naturally the rock is cut only where in the original outcrop there were projecting bosses which it was desirable to clear away. There are traceable parts of four rooms, one of these of very small size, and a doorsill and socket similar to that above described and illustrated.

Farther to the north, and just at the point where the hill rises from the valley, there was a lodge of yet more pretentiousness. All that remains of it are a rock-cut flight of steps and a now almost totally destroyed pavement of mosaic. The steps were four in number, the longest being $9\frac{1}{6}$ " in length with a tread 1' 4" broad.

They lead up to an artificially smoothed surface of rock, no doubt the foundation of a room or building: the length of this surface, east to west, is 30' 10"; the breadth cannot be determined with accuracy as there is no edge of uncut rock at either side; it is not less than 14' 5".

There is a bit of mosaic pavement to the north of the flight of steps and at the level of the lowest step. It is so much cut up and destroyed that no exact dimensions of the room can be given; but it was of small size, between 9' and 12' square.



FIG. 64. —ROCK-CUT FOUNDATIONS

Masonry.—The walls consist of rough stones of a great variety of sizes, from small pebbles to large boulders which a strong man can scarcely lift. About 1' 8" is perhaps the commonest dimension. Mortar and cement are never used—this rule is invariable from first to last—except in the lining of cisterns: the stones of house walls are always set in mud. Very few of the stones shew evidence of any but the very roughest hammer-dressing. Well-dressed stones, even at the corners and doorposts, are very rare.* The stones are fitted together without much art, the masonry being a rough rubble construction; and the joints, which are very wide and irregular, are packed with smaller stones and pebbles. If anything, the average size of the stone appears to be rather less in the lower strata; and here also some of the best-built walls are to be found.

Some of the walls in VI 29, north end, were remarkable for the large stones used in their construction—in all probability taken from the ruined temple in the neighbourhood. The following are measurements of the seven largest of these stones: 2' 8" x 1' 3" x 1' 10½", 3' 6¾" x 1' 3" x 1' 10½", 4' 9" x 1' 6⅛" x 1' 2", 4' 0" x 1' 6⅞" x 2' 0", 3' 1" x 1' 5" x 1' 6⅞", 2' 7,4" x 1' 4" x 1' 4", 3' 6" x 0' 11" x 0' 10¼".

It is very rare to find ornamental stone-dressing—indeed almost the only places where it appeared were in (1) the Solomonic towers of the outer city wall, (2) the late constructions of the Maccabaeon Palace, and (3) a reservoir of the same period on the Eastern Hill; in all of which drafted stones were found. The wall V 29 A is therefore specially noteworthy, for having drafted stones in its course. As it runs under

* Stone doorposts, wherever they occur, are indicated in the plans by the letter s. The walls are ruined to the average height of about 3'. The wall V 17 B, however, runs up through the upper strata almost to the surface of the earth.

the village cemetery it was impossible to find to what building it belonged ; probably a building of importance.

Though no doubt the lazy and pernicious custom of taking stones from earlier buildings, which is one of the most potent influences in destroying ancient remains, was freely practised by the Gezerites, building stones were quarried as well from the rock outcrops in the hills around. A number of these quarries, denoted by the initial Q, are indicated on the plan of the surroundings of Gezer; but it has not been thought necessary to indicate all. There is a fine quarry at the mouth of the Wady el-Jaijah, and the two great caves, Mugharet el-Jaijah and Shakif ez-Zutt, have



FIG. 6—WALL CONSISTING OF A ROW OF LARGE STONES WITH SMALLER STONES BETWEEN THEM

been used for quarries ; but usually the quarrying may be described as mere " nibbling " on the surface—one stone being cut here, one there, wherever the natural form of the outcrop seemed to offer a convenient shape.

VI 29 A is a wall which illustrates a curious and unusual type of construction—a row of small standing stones with masonry between them. These stones may originally have stood free, like the row of pillars supported in a dwarf wall a little to the north of them, and afterwards were joined by masonry ; or the construction may be merely a builder's freak. Fig. 65 shews a photograph of this. To make them clearer, a mark has been placed on each of the stones. Va 29 A is a row of

three long stones lying end to end, measuring respectively 2', 4', and 5' 4½", so that the whole row measures 11' 4½".

Analogous, but even rarer, is a horizontal stone extending through the whole width of a thick wall: one such case is at VI 27 A, where a large stone stretches right through the wall, otherwise built of comparatively small stones; the wall is 6' 10" thick.

The cement used in the lining of cisterns is made of burnt lime: in some of the later reservoirs, *e.g.* in the remarkable system of baths near the Maccabaeian Castle, a hard cement is made of sea-shells. A large pile of shells was found in a corner of the courtyard of the Maccabaeian Castle, probably brought up from the seashore in order to make cement.

Masons' marks were not found, except in the Maccabaeian buildings to be described later; unless indeed the mark cut on a building stone found near the mouth of the great water-passage, here figured (fig. 66), be of this nature. The inscribed surface measures 7" broad and 1' high.

Brick began to be used very early. Thus, at the south end of II 14 is a simple wall of very rough masonry, of large stones roughly put together. Its foundation was 2' 8" above the rock. Underneath, and therefore older than, this very ancient structure, was a quantity of shapeless brick debris, which could not be planned. It is not improbable that the superstructure of most of the walls was of brick, in a stone base. In one instance the brick was below and a course of stones above: I cannot account for this anomaly except by supposing that for ornamental purposes there were courses of stones at intervals in the brick building. Brick so far as it survives is denoted on the maps by the letter *k*.

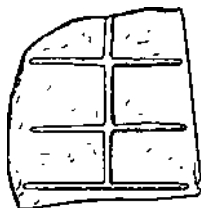


FIG. 66.—MARK CUT ON A BUILDING STONE

Near the south end of IIa 29, just south of the larger granary, there had evidently been a large brick construction, for a number of fragments of sun-dried bricks were found here. The broad surface of these bricks was slightly recessed behind a projecting margin. There were in almost every case two strokes impressed on one side. The average size seemed to be 10" x 1' 1" x 4". One of the bricks bore the impression of the paw of a dog. This example measured 1' 9" x 10½" x 4". This, and another, shewing two strokes—a very common mark, probably intended to key the mud used for mortar—are shewn in fig. 67. A square is drawn enclosing the dog's paw-mark. Another brick (fig. 68), similarly marked by the hoof of a calf, was found in the Maccabaeian Castle. One of the largest bricks found was projecting from a wall in V 4, N. end. It was 2' 5" high, 6" thick; it projected 1' 5", and of course had an additional breadth embedded in the wall.

Another instance of brick construction, from V 2, is shewn in the photographic view fig. 69. A man is standing facing the spectator in the left hand of the picture: to his left is a wall of the kind described, two courses of brick running above as many courses of stones; the individual bricks can easily be detected in the photograph. But the number of cases in which brick was thus found *in situ* was comparatively small. A certain number of houses were found filled with brick earth—evidently the walls had been built in the method described and the superstructures had collapsed

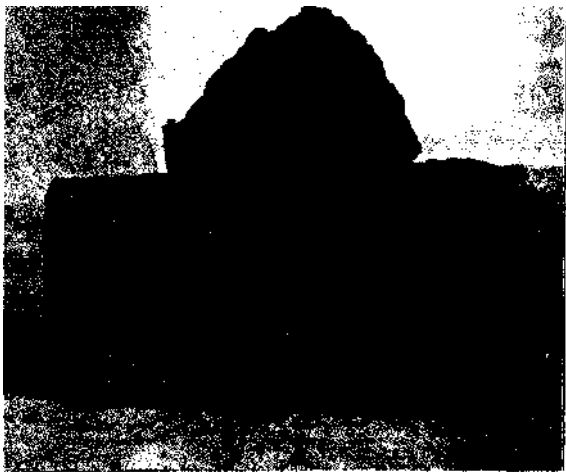


FIG. 69. —SPECIMENS OF BRICKS

completely. This was especially the case in the later structures, of the Fourth Semitic and the Hellenistic Periods.

At two places in V 2, near the south end, were found large solid masses of brickwork, irregular in outline. They were much broken, and there was no fair face to the surface. Each was about 5' 11" high, and their cross-dimensions measured respectively 8' x 3' 6" and 9' 3" x 7'. In the top of one of these was sunk a circular vat about 2' across.

The bricks are rarely kiln-burnt, most of them being merely sun-baked, and having now no more cohesion than the earth in which they

are embedded. The colours of these bricks are red, dark brown, light brown, yellow, and dirty white : bricks of different hues are mixed together in the same construction without any order or arrangement, though one rude oblong structure of two rooms just under the surface at the south side of the Eastern Hill (VI 2 kk, south end) was remarkable for having the courses alternately red and white. The red courses were 4" high, the white rather more—about 5". The lengths of the bricks ranged between



FIG. 68.—SPECIMENS OF BRICKS

1' and 1' 5½. In some buildings brick was used in part of the structure—possibly indicative of a reconstruction while the building was in use. Thus in a curious house at the north end of V 3 two adjacent walls of one of the chambers are of brick, the rest being of stone.

Mural Decoration.—In the latest period, and probably also in the earlier, the walls of the house rooms were covered with stucco. A fragment found in the large house above described, north of the baths, was made of a very gritty plaster, with many grains of flinty sand in it. The

outer surface was smoothed carefully, apparently with the edge of a batten of wood, and then covered with a thick dark cream paste. Upon this was painted a band of dark green, about $\frac{1}{2}$ " in breadth : on one side of this band the surface of the stucco had been washed over with dark brick-red, on the other side with a green rather lighter than the band. This gives some idea of the colour scheme adopted in decorating the insides of superior houses.



FIG. 69.—SPECIMEN OF BRICK CONSTRUCTION

Floors.—The floors of the houses were usually the bare surface of earth over which they were erected; and in the great majority of cases no definite indications of them were to be seen when they were cut through in the course of excavation. Sometimes, however, they consisted of beaten mud mixed with lime-cream, and in others a regular pavement of cobble-stones or else of small stones and lime clippings was found. I had a demonstration of the way in which such floors were made, in the course of erecting my own hut by the fellahin under my direction. The floor was made of

a mixture of clay and powdered limestone, passed through a sieve, and mixed with water; it was then smoothed off by rubbing down with a flat stone. Such floors were always easily recognizable.

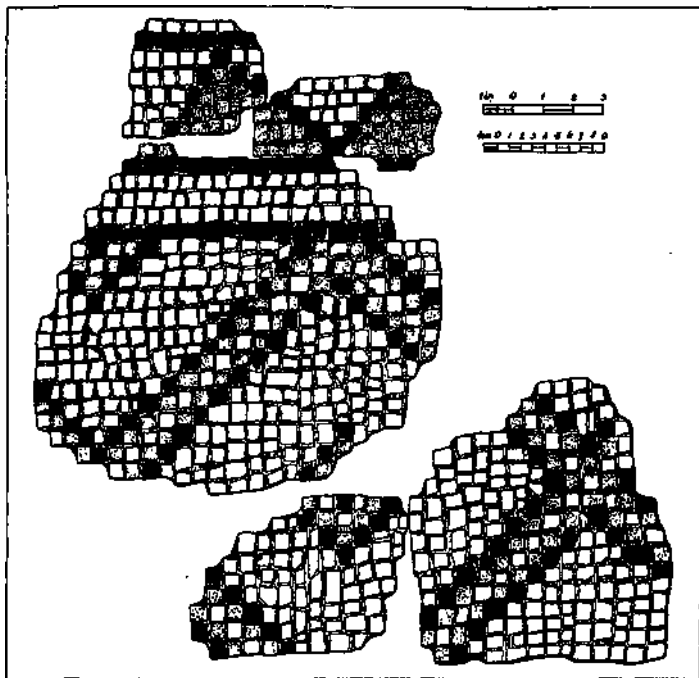


FIG. 70.—FRAGMENT OF MOSAIC PAVEMENT

In the house already shewn in the photograph, fig. 69 (it is in the middle of V 2, at the east side of the trench), there was a floor of beaten mud, small stones, and lime, in the centre of which a vat was formed in the ground 3' 6" across: the five-foot rod in the photograph is just behind the depression. Pavements, whether of plaster or of stone, are denoted in the map by the letter p. **IIIa 30 B** is a pavement 5' 1" square, of four large flat stones.

Another example of a vat sunk in a plastered pavement will be seen at **IIa 29 A.**

In this case the vat is 1' 4" wide and 10" deep. Another, rather larger, occurs at VI 29 B: this measures 3' 11" broad and 2' 10" deep. In the plastered floor of the peculiar building in the middle of IV 27 there was sunk a rectangular vat of thick pottery with flat bottom and rounded corners. It measured 1' 9" x 1' 6½", and was 5" deep. Underneath the pavement was a great mass of cow-bones.

At IIIa 30 AA there are two circular pits in the pavement, the northern one 3' 6" across, the southern 2' 11".



Fig. 71.—Cur FOR RECEIVING THE HORN OF A DOOR

Pavements are not always truly horizontal. The fragment VI 28 A slopes upwards toward the west at an angle of about 30°.

Mosaic.—The use of mosaic for the decoration of floors was not introduced into Palestine till the Roman period. No examples therefore exist in the hill itself. It was, however, used in the houses of the Roman settlements near by. White tesserae—generally about $\frac{3}{8}$ " cube—are often turned up by the plough in the surrounding fields; larger blocks, about 1½"

cube, are also found occasionally. Mosaic of white tesserae is to be found in two of the rock-cut winepresses on the hillside that will be described in Chapter VI. The mosaic in the bath near 'Ain Yerdeh is described in connexion with that interesting structure, later in the present chapter.

Of the domestic uses of mosaic decoration only two examples survive in the neighbourhood of Gezer. One is in the floor of a house in the middle of the village of Abu Shusheh, and is the only indication remaining above ground, known to me, of the existence of a village on that site in Roman times. It consists of white tesserae with blue lozenges, containing at their centres blue V-marks: the tesserae inside the Vs are red. The other example (a very fragmentary specimen, having been broken up by fellahin in the hope of finding, a tomb underneath) is at the east end of the hill, in what seems to have been a small Roman house. The pattern of the fragments is here represented (fig. 70): the colours are dirty yellowish white, indigo, and light brownish red. A fifteenth-century Arab coin and a few fragments of Arab wart: were found in the chamber.



Doors and Doorways.—

Doorways were absent in the majority of cases. The threshold, as in the houses of the fellahin, was raised some inches above the surface of the ground, and usually the walls were ruined to below this level. A *fortiori* the evidences of the nature and number of windows were yet more scanty; but that they differed from doorways only in size and position in the wall can scarcely be doubted.

As a rule the jamb of the doorway was simply an opening with vertical sides left in the masonry. There was nothing to shew how the door-frame was secured; no doubt, however, it was by pegs driven into the interstices between the stones. The doors themselves must have rested on projecting horns turning in stone cups, of which large numbers were found—few, however, *in situ*. Fig. 71 represents such a cup.

FIG 72-SOCKET FOR DOOR-HORN

At I 8 A is a built step with the hole for the door-horn at the end. In VI 30 was found a specimen (fig. 72) in which the hole was (unusually) bored *through* the stone. It measured about $8\frac{5}{8}$ " each way, was $2\frac{1}{2}$ ' thick, and had a hole 3 $\frac{3}{4}$ " diameter through it. The sides of this hole shew evident marks of friction.

Two curious stones will be seen at V I 30 C, not easy to explain. They are not placed anywhere where it is natural to expect a door, else might they be considered as sockets for the staples of a more elaborate type than usual. They are 3' *oh*" apart. Each stone measures 1' $8\frac{1}{2}$ " x



FIG-73.. STONES AT VI 30 C

1' $4\frac{1}{2}$ " x 8" high. They stand against a wall; and in the side of the stone towards the wall is cut a horseshoe-shaped curve, $6\frac{1}{2}$ " long and $8\frac{1}{2}$ " across, with a raised collar surrounding it $2\frac{3}{8}$ " broad and 1" high. The photograph fig. 73, shews their disposition and appearance: a mark is put upon them. Fig. 74 is a diagrammatic representation of one of them.

To secure the door when closed a bolt was used, and no doubt it is to receive such a bolt that holes are sometimes found drilled in the ends of walls.

Doorposts of stone are indicated by the letter *s* when it occurs in the course of a wall. The letter *s* when not connected with a wall denotes a loose stone which is not certainly a pillar-base.

Iron **keys** appear in the Hellenistic Period. These are evidently intended to fit into a lock like the well-known Arab type: tumblers of a certain number and order of arrangement fall through the frame into holes in the tail of the bolt, when the latter is shot; these can be lifted by rods projecting from the key, arranged to correspond with them. FIG. 74—DETAIL OF STONES

In the Maccabaeae keys the stem of the key is at right angles to the bar bearing the projections, in the modern they are in the same straight line, but otherwise the two are identical.



An example which has two tumblers will be figured in Vol. II. It comes from near the baths north of the Maccabaeae Castle. A different type of key is shewn in fig. 75.

A stone with two holes one above the other is the standing slab marked IV I s. This stone is pentagonal in shape, 2' 10" high, 2' 1" broad, and 10" thick: there are two bolt-holes in an almost vertical line in the middle, probably for a door-fastening.

Doorways were no doubt covered by lintels of stone or wood; but the latter would have long since decayed, and the former would naturally be removed when the buildings to which they belonged became ruined, as the long stone was too valuable to leave derelict. Only a single instance of a lintel stone remaining was found. This was in the stratum overlying the temple on the Eastern Hill; and in all probability the stone originally formed one of the alignment of massebdth belonging to this structure. The exact place of the lintel is marked VI 17 B, and it is indicated with an arrow in the annexed photograph, fig. 76. The stone is 5' 11" long,



FIG. 75—IRON KEY 1' 3" high, 1' 6" thick; the clear space beneath it is 3' 6" broad. It is supported on the east side by two stones, on the west by a single stone 2' 6" high: the opening under the lintel is thus very low, and can hardly be a true doorway. There are numerous large stones in the walls of the building to which this lintel belongs, all probably taken from the temple underneath. Three

small rudely built magazines will be seen in a line from north to south, west of the wall containing the lintel. This is shewn in fig. 76.

As a rule the doorway is of the simple kind above described ; but cases exist where it is lined with standing stones. This is usually in the later strata : a fine example from the south end of IIIa 28 will be seen in fig. 77. This consists of two stones about 5' 1" high: one is cut as though an attempt had been made to divide it into two. The width of the doorway ranges as a rule from 1' 7½' to



FIG. 76.-LINTEL STONE AT VI 17 B

3' 3". An exceptionally wide doorway, with stone doorpost, was found in the Maccabaeen Castle : it measured 3' 9".

In most of the excavations in Palestine broken fragments (and a few whole specimens) of a certain type of stone object have been found in the Hellenistic strata. These are rectangular discs of the rough micaceous Hauran stone of which corn-grinders are usually made. A specimen is figured in *EP*, Pl. 73, fig. 2 : no whole specimen was found in Gezer. The disc is usually about 15" long by 10"-12" broad, and about 4" thick. A narrow slit, with the long sides bevelled on one face of the stone, is cut through the stone, along its central major axis, stopping about 2½" from the edge of the stone at each end. There is a marginal frame round the bevelled parts, in which a shallow square sinking continues the line of the

perforation. It is possible that these objects are window-frames, but till one happens to be found *IN situ* this can only be recorded as a guess.

Roofs.—The roofing of the houses was probably, like other details, comparable with that of the modern huts, except in one particular: while the majority of the village houses are covered with flat mud roofs supported on wooden beams, a few here and there may have stone domed roofs.



Fig. 77.—STONE-LINED DOORWAY IN IIIa 28

There is, however, no evidence of the use of the arch in Gezer at any time previous to the Hellenistic Period.*

That the roofs were covered with mud may be inferred from the discovery of limestone rollers, similar to those with which the roofs of modern houses are flattened and smoothed. These rollers were confined to the Hellenistic stratum. One fine example, from east of the High Place

* The rock-cut arch in the great water-passage can hardly be taken into consideration in this connexion.

alignment (fig. 78), measured 1' 7½" long by 9" broad at the ends: in the middle the diameter is a little more, the roller being slightly barrel-shaped. In the earlier period the roofs were no doubt smoothed off with small flat rubbing stones. The roofs of the huts of the excavating party were smoothed with such stones, taken from the excavations. The framework bearing the mud-covering must have been supported on wooden rafters lying across the chamber, and resting their ends on the tops of opposite walls. One such roof remained, or rather enough of it remained to give an idea of its construction. The house to which it belonged had been burnt, and the charred rafters were still embedded in the earth when the



FIG. 78.—STONE ROOF ROLLER

latter was removed. They were oval in section, 6" in horizontal diameter, 4½" in vertical, and laid 2' 7" apart centre to centre.

Frequently it happened that a chamber was too wide to be spanned by a single length of roofing-timber. In that case two lengths had to be used, with their ends meeting in the middle and supported on a plate resting on columns. It is probable that these columns were of wood, but a flat stone was placed under their feet to support them and to prevent the weight of the roof above from pressing them into the soft earth floor. Such stones occur frequently, singly or in rows, in the centre of chambers. The commonest number for such rows of pillar-bases is *three*, and in fig. 79 a row of this number of stones is represented: its place in the plans is IV 21 A. It is worth noticing in passing that to slip the pillars from the footstones would not be an impossible task for a strong man, and to do so would obviously bring the roof of the house down. Evidently

this is what Samson is supposed to have done by the author of the Book of Judges. There is nothing in the narrative to justify the popular idea, countenanced by many pictures, either that the pillars were of stone or that Samson *broke* them.*

The most elaborate example of a colonnade was that marked V 28 A. This, however, is not meant for the support of a roof. There must have been here a



FIG. 79.—PART OF A HOUSE SHEWING THE ROW OF STONES IN THE FLOOR

verandah running round two sides of the structure to which it belonged, supported on four pillars on each side. Pillar-bases, when not denoted by special letters (capitals) for particular reference, are indicated in the map by the letter *b*. Sometimes large single loose stones are found lying about which are not certainly pillar-bases. These, as already mentioned, are denoted by the letter *s*. A remarkable series of such stones will be seen in VI 5 marked by the letter *s*. Possibly this series is earlier, and should be on Map V: there was nothing to indicate its age or purpose. II 3 B is a heap of stones. II 21 C is a flat stone 2' 4" across.

* See Judges xvi 26-30 and Moore's *Commentary*, pp. 360-363.

There is another remarkable series at the north end of VI 4, which may possibly be the remains of a short street of columns or covered market. The buildings are so ruined that the fragments remaining are quite incoherent. It reminds one of the curious building in Tell el-Ilesy (*MMC*, p 91).

Beside the pillar-bases, there are sometimes to be found single blocks of stone, as VI 18 E, which have no such obvious constructional purpose. They have probably no special significance, perhaps stones provided for a building found to be superfluous and so left derelict.

Only twice were pillars found with drum standing on drum: one with two circular drums at IV 18 b; the other, two pillars with square drums at Va 30 A.

As a rule pillar-bases such as we have been describing arc simply flat blocks with no attempt at making them

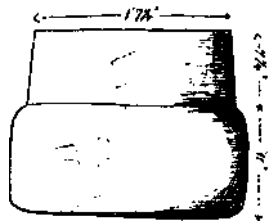


FIG. 80.—BASE OF A COLUMN

architecturally ornamental: we should therefore specially notice the few cases where some more ambitious effort seems to be made. Such is the easternmost stone of the series in the middle of VI 4 A, which is the frustum of a cone on a square base. A similar stone is fig. 80, which represents the column-base III 18 A: the dimensions are noted on the drawing. The other stone, to the east of this, is a plain block. The rarity of architectural ornament at all periods makes this rather early example noteworthy. Commoner are round stones, resembling column-drum: such is the base (marked *b*) in the middle of V 3. The pillar-base IV 30 B is a frustum of a cone, 1' 8" in diameter at top, 1' high, on a round base 1' high and 2' 6" in diameter. To the east is a similar pillar-base, indicated in the map by the ordinary symbol *b*. A similar but rather larger pillar-base, the lower member of which was square, 11" high, the conical part 7½" high and 1' 7½" broad at the top, will be found at III 18 A. The circular structures in this neighbourhood were ruined early, and there was a thick layer of accumulation, empty of wall, between this and the next stratum above. The pillar-base III 30 A is simply a cylinder, 1' 2" high and 1' 4" in diameter. The two pillar-bases II 17 CC are nicely rounded stones, 2' in diameter and 61" high.

The reference letter V 20 C is placed between two dots which represent column-stones of a more important kind than those we have been considering. They are shown in the photographic view, fig. 81. They are squared stones, roughly hammer-dressed, 3' 8" high and 1' 6" in both cross-dimensions. They appear to be standing in the middle of a passage, the walls of which are built of larger blocks than usual, especially on the south side. There is another stone, similar to these but longer (5' 9"), built into the east end of the wall to the north: it will be seen behind the head of a man that stands between the pillars, in the background about the middle of the picture. V 20 D marks a similar column, rather shorter (2' 10"), at a little distance, which may belong to the same series. These seem to belong to an attempt at

a colonnaded entrance to the house the centre of whose courtyard contains the reference letter V 21 B. It is analogous in some degree to the curious row of three pillars in the courtyard of a large house in the Western Hill, already described above. That these stones were in any way connected with religion I do not believe: such *squared* pillars can hardly have any but a constructional purpose, although (like the pillar with double axes in the palace at Cnossos) it is not impossible that religious emblems might be carved on them. None such, however, appear in the pillars under discussion, which simply form part of a colonnade. At VI 29 C is a curious colonnade, the two westernmost pillars of which are strongly built, of square stones (fig. 82),* the others smaller and flimsier. The latter stand on a dwarf wall, and



FIG. 81. COLONNADÉ.

may represent a series of window-like openings (fig. 83). Pillar-bases such as we have been describing are generally found singly or in rows in the middles of chambers; but this is not always the case. They are sometimes found at the ends of walls: an example will be seen at the north end of V 20, marked by the usual symbol *b*. In this case we must suppose the pillar to be a support for two lintels, spanning the entrances to the two chambers separated by the wall. Sometimes the base is found standing on the wall: an example occurs in V 4, also denoted by *d*, a short distance south of the large thick wall in the middle of the trench. This is probably the base of a mullion dividing a small double window.

Stairs.—Very rarely was anything in the nature of a staircase found,

* These pillars consisted, when found, of two stones each. The upper stone of the easternmost pillar was thrown down by an accident before the photograph was taken.

and in no instance was there sufficient to indicate that the building to which it belonged had an upper storey. As a rule there was but one step, or two, which may have simply reached up to a doorway raised above the level of the ground, like an ordinary outer door of a house, or to a platform of beaten mud erected against one side of the chamber. In I la 29 B is



FIG. 82.—WEST END OF COLONNADE IN VI 29 C

a single step, of brick. This is under the level of the foundation to which it is adjacent, so cannot be a true step: it may be a footing for a wooden post, erected for some reason against the wall. In a corner at IV 29 C are two steps of masonry: possibly there was here a doorway, but unfortunately the buildings at this point are so ruined that their exact plan cannot be certainly recovered.

There was one example of steps at the entrance door of a house,

leading into a doorway from a colonnaded porch. It is marked VI 27 B, and appears in fig. 84. At VI 14 A are three stones like a step in the level of the foundation of the long wall to which they are adjacent.

Hearths.—Enclosures of stones on end are sometimes found in the middle or the corners of dwelling-houses. These are perhaps *hearths*. One such was in II 20 A, where there were four, stones on end. Another is at II 20 D. The circle of stones on edge V 9 A may be another.



FIG. 83.—EAST END OF COLONNADB IN VI 29 C

Miscellaneous Details.—Before leaving the subject of the ordinary dwelling-houses we may notice a few special details that could not be considered in the foregoing paragraphs.

The wall marked "*sloping wall*" in II 29 is a sloping glacis, like the Troglodyte rampart. Near it is a circular structure 4' 6" in diameter, probably a granary, lined with cement and floored with a pavement of stones.

In VI 29 D there occurs a small platform of standing stones on edge in the

corner of a square room. This platform measured 3' by 1' 4". It is probably a hearth.

There were some curious details in the large, irregular, and much-ruined house in the middle of IV 4 that call for notice: they are not easy to explain. They are indicated by reference letters in the plan.

A was a fragment of lime pavement, quite soft and ill-cemented together, measuring 5' 9" by 2' 8". It was strewn over with a thick layer of sea-gravel, consisting for the greater part of broken cockle-shells crushed and ground smooth by the action of the waves. On the gravel a bronze knife was found lying. B was a small trough covered with a similar soft cement, and bounded by a wall 1' high. In the centre was one of the vertical drains of jars that are described elsewhere. This



FIG. 84.—STEPS AT THE ENTRANCE OF A HOUSE

trough was partly underneath the thick wall east of it, which thus appears to be a later structure. C was the fragment of a plastered floor, 3' 7" north to south, 4' 6" east to west. Underneath was a layer of loose uncemented rubble with a jar standing upright in the middle. D was a circular structure in diameter 4' 9" externally, 2' 10" internally. It was plastered on its inner surface with a cement made of broken fragments of shell.

The circular structures so often to be seen at all periods were probably beehive-shaped granaries. Some of them (as V 13 A) were plastered on the inside face.

The excessive rarity of architectural ornaments of any kind invests even a poor little fragment like fig. 85 with a certain amount of interest. It was found in the disturbed strata at the north end of trench I—possibly it belonged to the building which covered the large well close by. Some moulded fragments were found in

the large central reservoir and will be noticed in connexion with it (Plate liii). In a house of the Maccabaeen Period was found a fragment with a *cyma reversa* moulding.

Because they resemble corbels more than anything else I describe at this point the three enigmatical objects represented in fig. 86; but I do not feel certain that this is their actual purpose. They were found

among the debris of the Maccabaeen city, overlying the smaller high place on the Western Mill (trench 29). They are made of soft limestone, a fact which is rather against their being corbels, as they could not stand much shearing strain. Two of them are L-shaped: of which one measures 7" x 10 $\frac{1}{8}$ " x 6 $\frac{3}{4}$ ", the other 8" x 9 $\frac{3}{4}$ " x 6 $\frac{3}{4}$ "; the third dimension being the

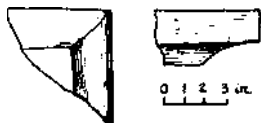


FIG. 85.—FRAGMENT OF MOULDING

breadth at right angles to the plane of the picture in each case. In the middle of the back of the upright limb of the second of these (which is at the left-hand side in the photograph), close to the top, is the first of the two marks in fig. 87; the second is at the side of the bottom of the horizontal limb, near the edge.* The third of these supposed corbels is T-shaped, the arms of the T being broken off. The vertical bar is of an oval section. It measures 9" high, 6" broad (in the plane of the photograph, along the cross-bar), and 5" at right angles to the plane of the photograph.

§ 12.—GRANARIES AND OTHER SPECIAL STRUCTURES

(1) Causeways.—A characteristic of the lowest stratum, especially on the Eastern Hill, is a number of broad stone caviseways, meant to ease



FIG. 86.—CORBELS (?)

* The words "upright," "horizontal," refer to the position of the object in the photograph.

the inconvenient irregularity of the rock-surface on which the city was built. These are from 1' to 3' in height, and of a width determined by the extent of the irregularity which they are meant to

FIG. 87.—MARKS ON THE "CORBELS"

tion by its superior masonry and evident importance. A pit was accordingly dug east of this trench in order to determine the nature of the building to which this wall belonged. It consisted of a four-sided enclosure, not rectangular, though probably intended to be so, with rounded corners.

be observed. The width of the enclosure — exclusive of the thickness of the walls — averaged about 45'. The western half of the enclosure was divided by cross-walls into four irregular chambers, the disposition of which can best be understood from the plan (fig. 88). The eastern half was free from buildings except for a circle of small stones about 1' 6" high, set on end on a platform of beaten mud raised about a foot from the rock. It is marked D in Map II, east of trench I. The stones were cemented together with mud. Smoke-blackening and heat-splintering especially on the end stone of

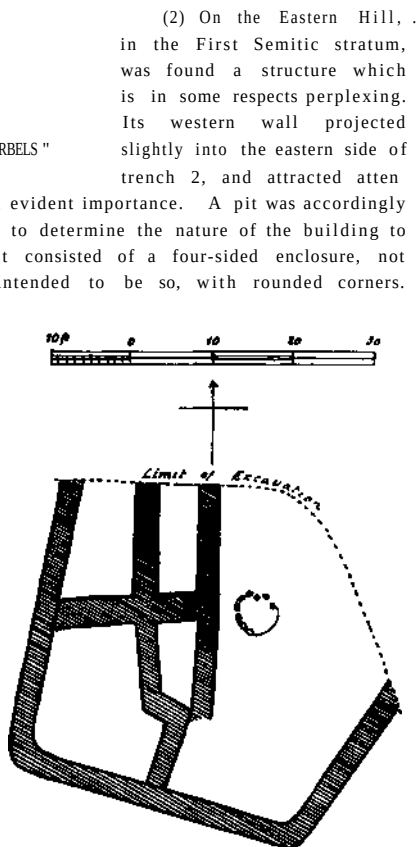


FIG. 88.—STRUCTURE ON THE EASTERN HILL

the curve at the eastern side shewed that this had been used as a hearth. The structure was left open to shew to visitors, but was soon afterwards destroyed by some mischievous boys : I took advantage of **this** to dig under the mud platform, but found nothing within it. Fig. 89 **well** shews the appearance of the structure.

When I first reported this discovery (QS, 1902, p. 321) I treated it as a place of worship. It may be so; but the subsequent discovery of the real temple of the city, as well as the total absence of objects of cult within its precincts, make me inclined to modify this view. I am not sure that it

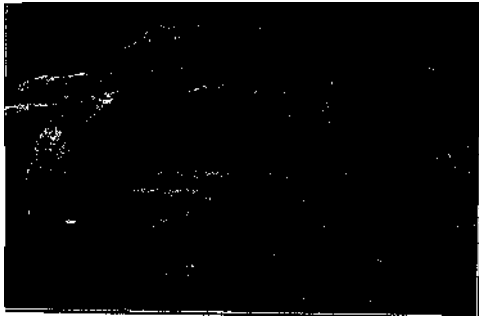


FIG. 89.—CIRCLE OF STONES IN THE BUILDING ON THE EASTERN HILL

is not best to regard it simply as a house, rather superior to the majority, with an open court in front containing the family hearth. Here and there, as has just been mentioned, small curved structures are found that probably are likewise to be explained as hearths. One such is built *on* the end of the short wall V 3 A, which must therefore have been a low dwarf wall and not a partition.

(3) **Granaries** formed an important class of buildings at all periods. Some of these seem to have been private stores, attached to individual houses; **but that** there were public granaries as well is indicated by the size of some of the stores, and the quantity of grain found in them. Some of these magazines seem to have perished by fire, and the charred grain,

retaining perfectly its original shape, is easily recognizable.* We are not here concerned with the varieties of the cereals represented, which is a subject for a later chapter, but only with the structural receptacles in which they were stored.

It is probable that most of the circular structures, which will be seen dotted over all the plans, are grain-stores. Grain was actually found in some

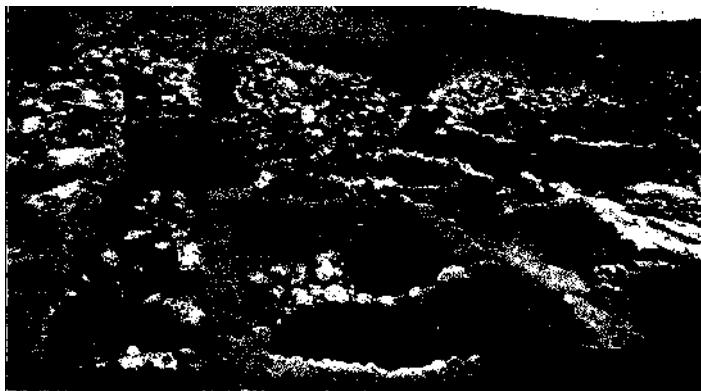


FIG. 90. -GRANARY AT NORTH END OF II 4

of them (notably in those at the north end of II 4 represented in fig. 90), and presumably it was for this purpose that most of them were built. They vary greatly in diameter, some being only about 2 8" across, as in a small example at the south end of V 4. Probably they were built (by means

* I believe, however, that it is not necessary to assume conflagrations in every case to account for the quantity of burnt grain found in the course of excavation; but that the grain if kept covered for an over-long period will in itself generate heat enough to cause incineration. I have been informed that some time ago one of the sheikhs of the village of Beit Jibrin lost his year's stock of wheat by incautiously leaving it covered up in this way.

of oversailing courses) to a dome or beehive-shape with a hole in the apex.

Deep pits, lined with cement, probably for grain, occur here and there. One such is at IV 8 A : it is 4' 9" across and 6' 9" deep. Another use for round structures of this nature is that of ashpits.*

Besides built circular structures, round pits dug in the subjacent earth, not lined with masonry, were occasionally found : they were sometimes filled with a slightly different-coloured earth, which betrayed their presence ; or if they happened to come at the side of a pit the outline of their vertical section was clearly visible in the vertical face of the pit. VI 30 B is a circular pit of this nature, 4' across. A, A, close by, are built circular structures, of a little more than half that diameter.

The notable granary in the middle of II 3 has already been mentioned in the account of the house of which it forms a part. The kinds of grain found in the various receptacles are indicated on the plan, PI. xlix, fig. 1. In IIa 29 there is a large granary (possibly part of the adjacent palace), the walls of which were 2' 6" in thickness: this was full of wheat; a round-ended annexe on the S.E. side contained *kursenni*. The pavement was of beaten mud ; and underneath it, just north of the partition by which the eastern portion of the granary is divided into two, were two drain-pipes, wider at one end than at the other, so as to fit into one another. At the end is a funnel-shaped fragment, turning obliquely downwards. The diagram added to the plan, PI. xlix, fig. 8, will shew the arrangement. These pipes are made of very coarse drab ware, with many grits, ½" thick. The drain is too fragmentary to permit us to be sure whether it was connected with the granary or—which is more likely—with an earlier building. It is laid on a layer of potsherds.

At the south end of IV 4, again, was an interesting granary whose plan is shewn in PI. xlix, fig. 9. The old city wall is adapted as a south wall of the structure. One room was full of corn ; but it was also used to store bricks, and a pile of these was found against one side. These bricks were both baked and unbaked. As is shewn in the sketch added

* A number were found with many fragments of pottery, bronze objects, etc., evidently waste sherds that had been thrown away. The statuette of Hekab, described in a later chapter, was found in one such ashpit. III 30 A was a circular ashpit full of pottery and sherds. At II 20 E was a solid square block of masonry resting in the rock, with a vertical shaft through the middle full of potsherds.

to the figure, several of them had three strokes on the side (perhaps, like the holes in modern bricks, meant as a key for the mud cement). On one of them was marked a spiral. Another room was divided into five compartments by dwarf walls. The two southernmost of these compartments held wheat : the other three contained chopped straw. All had been burnt, and in the N.W. corner were the burnt remains of a skeleton, perhaps



FIG. 91.—GRANARY IN IV 18

the owner of the store who had perished in trying to save his property in a conflagration.

Another granary of great importance—probably a public store—will be seen in the middle of IV 18. It is a four-sided building divided longitudinally into two compartments, each of which is subdivided into bins by walls rather irregularly disposed. Wheat and barley were found in some of these. A photographic view of this structure is given in fig. 91.

(4) At various places in the mound—an example will be seen in the middle

of V 3, 4—are found large **thick walls**, much more massive than any house wall, and approximating almost to the cross-dimensions of a city wall. These no doubt were the boundary walls of important public buildings. There is little that can be said about any of these walls; but a curious detail calls for notice. This is the occurrence of vertical hollow shafts, about 2' 3" in diameter, in their thickness. An example will be seen in the thick wall in the middle of Map V 3, on the boundary line between trench 2 and the adjacent trench to the left. It is difficult to assign a purpose for these shafts: they always seem intentionally made from the

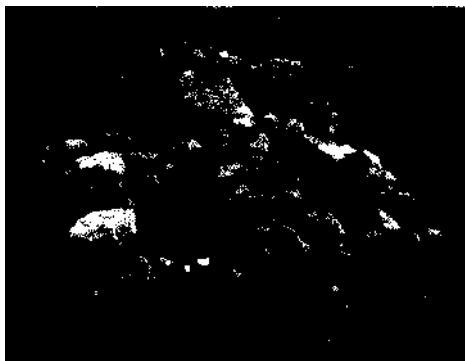


FIG. 92.— -SHAPED STRUCTURE

first, to judge from the appearance of the surrounding masonry; otherwise we might be tempted to take them to have been excavated in the foundation of the wall after it had been ruined, by persons living above its level, to make a store-pit, like the cavities in the top of the south gate of the second wall, to be described hereafter. They are not unknown even in the city walls. In III 21 A will be seen an example in the inner face of the second wall. This runs down through to the rock just like a well-shaft, and the rock-surface is slightly cut away at its bottom.

(5) Another structural detail not easy to explain is the occurrence of circular **platforms**, perhaps 9'-10' across at various places. Such platforms will be seen in V I 19, above the stones of the temple alignment. They



FIG. 93.—STONE SEAT (?)

may possibly be the floors of circular grain-stores, of which the walls have entirely vanished. Another example appears marked **III 4 p** in the southern half of the trench.

(6) At the south end of V 19 will be seen a curious cp-shaped structure, of which fig. 92 is a representation. I can but guess that this is a pair of D-shaped store-chambers.

(7) In fig. 93 is shewn a small solid circle of stones, about 1' 3" in diameter: it was found

in the corner of a room about a foot from the rock. I suggested in mentioning it in a report that it might have been a domestic altar; but the simpler explanation, that it is a rude **seat**, is probably better.

(8) On the plan of the ground known as *El-Kus'a*, there is marked a "Probable site of a **Church**" in Plate viii. This was a place from which the people of el-Kubab had removed a large number of cut stones. Although no trace even of the foundation of a church was left, the fragment of a stone cross of monumental size (fig. 94)—the fragment measured 2' 3" high and was 6" thick—gave a hint as to the nature of the building. Possibly this was the source of a marble Byzantine capital, now adapted as a well-head, lying loose in the precincts of the neighbouring *wely* of Sheikh Musa Tali'a. There has been a cross among the acanthus-leaves on the upper part of this capital, which has been imperfectly battered away (fig. 95).

§ 13.—THE PALACES

We must now proceed to a description of certain buildings found in the mound which by their size and character are marked out as being of special importance, and in all probability the

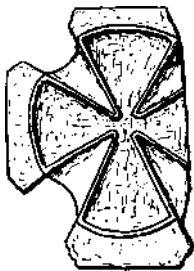


FIG. 94.—STONE CROSS FROM EL-KUS'A, NEAR GEZER

residences or offices of the governors of successive periods. These buildings are (1) the First Semitic Palace at the south end of II 27, 28; (2) the Second Semitic Palace in IIa 27, 28; (3) the Third Semitic Castle in IV 15, 16; (4) the Fourth Semitic Judgment Hall in V 28, 29; and (5) the Castle of Simon Maccabaeus and the neighbouring buildings, which occupy the south side of the middle of Map V I. The last-mentioned is described in the following section.

(1) The First Semitic Palace is the largest complex of chambers found on the mound. There is little that can be said in description of it: the plan speaks for itself. It is erected just within the great brick gateway, and consists of the following members: (a) to the S.E. a number of small chambers, two of them with the bases of pillars supporting the roof. One of the smallest of these chambers was a granary, and contained a row of jars in which was burnt grain. () West of these chambers was a large courtyard of which hardly anything remained: its area could be deduced from the fragments of the boundary walls found here and there. In the centre of



FIG. 95.—MARBLE CAPITAL, AT Sheikh MUSA TALIA

this large courtyard opened the entrance to the great Water-passage, presently to be described, which no doubt was primarily intended for giving water to the royal establishment. To the north was a large hall with two aisles separated by a partition wall: the northern of these aisles had the roof supported on pillars resting on massive stone bases. This probably was some kind of public judgment hall. The foundations of this part of the structure will be seen in fig. 96.

No specially important objects were found in this palace; but a fine fragment of Cretan ware of the later Minoan type was found in its precincts—one of the few specimens of Cretan importation as distinguished from the later Mycenaean.

This palace was not the earliest construction on this part of the mound. Some very early walls underlay the pillared hall.

(2) The second palace, as I judge it to be, is built to the north of the first. It appears in Ha 27. 28. It is smaller and also much more mixed than the first. Part of it is built of brick. A small pillared hall and a large and important granary are the most noteworthy features.

(3) No building was found belonging to the later part of the Second



Semitic Period (Map III) which could be described as a palace; but there can be little doubt as to the nature and purpose of the important structure at the north end of trenches 14-16 in Map IV. This was the most important residence of its period found in the excavation, and it can hardly be other than the residence of the governor of the period.

It consists (fig. 97) of a number of small and irregular chambers, with very thick walls, built around a tower of the much older inner city wall, against whose surface the walls of the building butt without bonding.

As in several other instances, the old rampart has been adapted as the back wall of the structure. The entrance is from the south: the hall into which it opens communicates by doorways with other rooms. Certain chambers—that marked *a* and its neighbour—are now isolated, no doubt because the walls are ruined to below the level of the door-threshold: the same is true of the long narrow apartment 6, which was probably a store-room. The way in which the walls are carefully laid out at right angles, and their remarkable thickness, offer a striking contrast to the

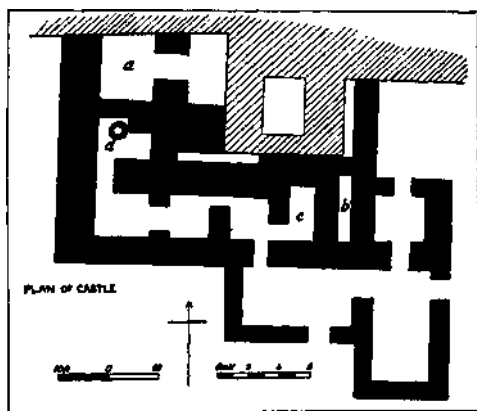


FIG. 97.—PLAN OF LARGE BUILDING IN IV 14-16

careless and flimsy construction of the ordinary houses in the city. The walls range in thickness from about 3' to 9'—the latter by far the greatest wall-thickness found at Gezer, with the exception of the city wall itself. The little circular structure *d*, probably a hearth, is the only architectural feature left.

East of this palace there was a large open courtyard, as will be seen in the general plan of the city. The rock-surface contained cisterns and rock-cut presses, but I suspect that these had already been overlaid with earth when the palace was built and that they therefore were of an earlier date.

This building remained open—probably as a ruin—during the whole

of the Fourth Semitic Period; as did the old towers commonly called "Goliath's Castle" at Jerusalem till its comparatively recent adaptation into the basement of the Ecole des Freres at Jerusalem. Not improbably it served the same ignoble purpose as the desecrated House of Baal at Samaria. This accounts (1) for the absence of later walls overlying the foundations, and (2) for the almost total absence of portable antiquities found in the ruins—with the noteworthy exception of a small store of objects found in chamber *a*. This consisted of two fine axeheads and a spearhead of bronze, a three-legged stone dish, an alabaster vase, some fragments of pottery, and a nondescript fragment of stone ornament (fig. 98). The last is a polished block of a green stone resembling serpentine, measuring $4\frac{1}{2}$ " x $2\frac{1}{2}$ " x $2\frac{1}{2}$ ".

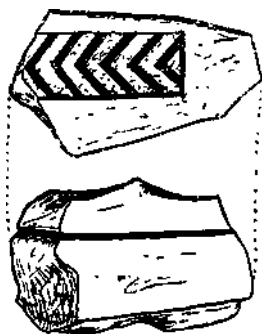


FIG. 98.—ORNAMENTAL FRAGMENT OF STONE

On one side is a sunk panel containing a number of incised chevrons : a line is drawn across the other side and round the fractured edge.

We cannot be for wrong in assigning this elaborate building, of which a general view will be seen in fig. 99, to the time of the Hebrew immigration. It is not impossible that it may actually be the residence of the shadowy Horam ; but such a suggestion must be clearly understood to be nothing but a not inadmissible conjecture. Nothing was found to connect the castle definitely with Horam or with any one else.

(4) In the Fourth Semitic Period, no important building was found. This (as has already been said) fits in with the historical fact that Gezer was no longer under an independent Sheikh, but had been brought under the control of a Central Government. But some form of local judgment hall would be necessary, and possibly we may see such in the building whose thick walls break into the north ends of trenches 28 and 29 in Map V. By an unlucky chance the *wely* was built just in this corner, so that the rest of the site of the building was not available for excavation. As the two tablets bearing legal documents in cuneiform character were found in the angle made by these groups of walls, it is possible that they may have been thrown out from within it. This increases the

probability of the building having been a house for archives or judicial proceedings, and makes the presence of the wely the more regrettable.

§ 14.—THE MACCABAEAN CASTLE

In the course of running a trench along the outer face or the outer city wall, a place was found, in the middle of the south side, where there



FIG. 99. —VIEW OF THE BUILDING IN IV 14-16

was absolutely no trace of the rampart. By trenches dug at intervals at right angles to the line of the wall, it was proved that for a length of about 300' the outer wall did not exist. However, some remarkable constructions, in the gap between the two ends of the wall, attracted attention, and it was decided to uncover the whole area at this spot. On this account the southern sections of trenches 10 20, as indicated on Map V I, were opened. They were not deepened to the rock because this would have involved the destruction of the buildings which, as there is every reason to suppose, are of considerable historical interest.

The constructions uncovered in the area consist of:—

(1) A gatehouse with the remains of a causeway mounting the hill, and turning so as to enter the city along the face of the wall.

(2) A long double rampart, divided into compartments, and connected with chambers which evidently formed an important building.

(3) An elaborate bath establishment, which was later than the large building no. (2), as it passes over one of its corners.

The present section is concerned with the first two of these: the third will be described in the following section.

At an early stage of the investigation I formulated the following argument:—

(1) All these structures belong to the Hellenistic Period.

(2) As the gatehouse is evidently a public entrance to the city, it is not likely that the gate in the long double wall is also a public entrance. More probably this is a gate specially reserved for the occupant of the large building. As the gate gave ingress and egress to the city at all times without the necessity of passing through the city gate, this person must have been the military governor.

(3) The military governor in the Maccabaeon Period was John Hyrcanus, acting as deputy for his father Simon (see Chapter I). Simon "built for himself a dwelling-place" in the city, which he would hardly have done had this castle been already in existence and ready prepared for him.

(4) The condition of the city wall at this point recalls the incident of Simon's breaching with his battering-ram; and at this point the nature of the ground affords perhaps the most convenient place in the whole hill for the manipulation of such an engine.

From this the inference was drawn that it was not improbable that the building under investigation was the dwelling-place built by Simon.

Shortly after this conclusion was reached there was found lying loose in the debris a block of stone bearing a graffito in cursive Greek characters. The block is a fragment of a building stone of a kind very common in Palestine in structures of the Maccabaeon age: they were found in profusion in the Acropolis of Tell Zakariya, in the upper city of Tell Sandabannah, and in some of the caves of Beit Jibrin which may be supposed to have been excavated or repaired and adapted for use during this epoch. They are blocks of rather soft limestone, trimmed with a chisel to the shape of an ordinary brick, and measuring about 1' 9" x 7" x 6".

The fragment now described is a wedge-shaped splinter of such a block. Fortunately the end bearing the inscription is perfect, or nearly so: it measures 7½" x 6". Of the length of the stone a maximum of 5½" remains.

The surface bears an inscription in three lines and a diagram, the meaning of which is obscure. The inscription is very difficult to read. The Rev. Peres Germer-Durand and Lagrange have generously given me assistance in deciphering it. Their reading is as follows:—

ΠΑΜΠΡΑΣΙΜΩΝΟΣ
ΚΑΤΟΠΑΙΣΗΠ[ΥΡ?]
ΒΑΣΙΛΕΙΟΝ

In the first line a fracture makes it uncertain whether to read or I: on the whole the indications are more in favour of the former. There is another fracture farther on in the line which has carried away the second half of the M and the top of the w. The 1, it should be noticed, is attenuated to a mere dot, joined on to the M.

The second line is very difficult to read. The first word was read by me **ΚΑΤΕΠΑΓΙΙ**: Pere Germer-Durand preferred KATOIIAIIH, and the observation that the inscription is probably meant to read as a hexameter decides in favour of that reading. The letters following are rubbed, and next to impossible to make out; but is the most likely rendering.

The third line is perfectly clear and its reading certain. The whole seems therefore to read thus :—

Πάμπρα(ς) Σίμωνος κατοπάζη πύρ βασίλειον

"[Says] Pampras; may fire follow up Simon's palace!"

The photograph of the inscription (QS, 1905, p. 100) not being very clear, I have substituted here a drawing, made from the stone itself, with the camera lucida (fig. 100).

This inscription is therefore an imprecation, scratched on a building stone by one Pampras—the single C in line 1 is no doubt to be taken in a double sense, as the end of one word and the beginning of the next—and built into the structure for which the curse was intended. Examples of such imprecations are by no means uncommon. Pampras in all probability was one of the dispossessed Syrians, possibly condemned

to forced labour on the castle. The inscription has many points of interest. It is the first contemporary reference yet found to any of the Maccabaeans. And it is a corroboration of the arguments above set forth, by which an attempt was made to establish the identification of the building in which it was found. The formula is curious: probably, like the lovers who wrote that strange dialogue on the wall in the tomb of Apollophanes of Marissa, Pampras found Greek verse difficult of composition. It is curious, however, that the identical formula, translated into Arabic, occurs as an expletive in an Arab folk-tale in Mr. Hanauer's collection—*Ilhak bi-nar**

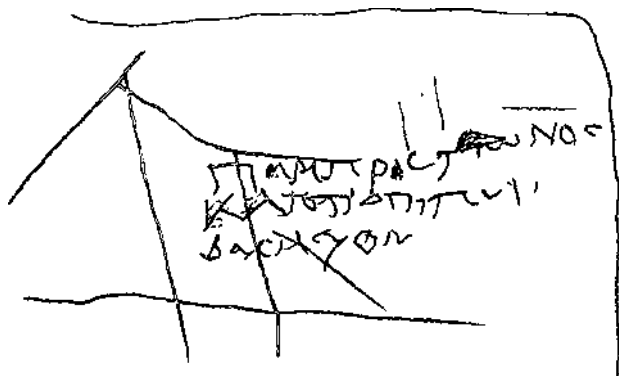


FIG. 100.—THE "PAMPRAS" INSCRIPTION

"follow up with fire." Possibly, therefore, the phrase was not unfamiliar on Semitic lips.

It may here be mentioned that two other inscribed fragments of stone were found in the castle; but they amounted to very little. One was a small wedge-shaped splinter of limestone $7\frac{1}{4}$ " X $2\frac{3}{4}$ " x $4\frac{1}{2}$ ", with the following letters upon it:—

... Α ...
... ΟΝ ...

in capitals which, though small (J" high), were of a formal and monumental type. The stone seemed to be a fragment of an inscribed lintel, the

* *Folklore of the Holy Land*, p. 21.

lettering on which was carved on a panel sunk slightly on its face. It is tempting to restore the first line *βασιλειον* and to see in a whole a dedicatory or explanatory inscription over the entrance to the castle; but such a restoration is mere guesswork. The other inscription is quite unintelligible: it is a row of Greek capitals, scratched on the edge of a building stone like that bearing the graffito of Pampras. Above is a series of lines of the same general character as those accompanying the Pampras

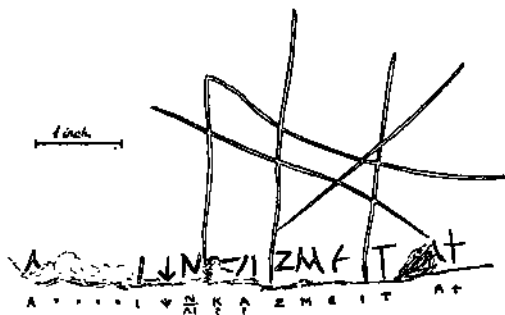


FIG. 101.—GRAFFITO

inscription (fig. 101). The inscribed edge is much chipped, and some letters are lost: what remains is

Α . . . ΙΥΝΚΑΖΜΕΙΤΑ +

which possibly is another magical inscription; the succession of letters appears to be quite meaningless.

We may now proceed to a description of the complex of buildings to the identification of which the imprecation of Pampras has afforded the clue—by a strange piece of irony, truly; for Pampras had in view a purpose directly contrary! We shall describe the buildings in the order enumerated above.

(1) The remains of the gatehouse consist of three courses of well-squared stones, extending for a length of 36' and returning at each end. Two towers, of shallow projection, occur in the course of this wall.

This fragment is marked A B C D E F G H in the accompanying plan, fig. 102, the towers being B C D E and F G H respectively. Their projection ranges from 1' to 3' 4", as they are not set out truly square. The courses of facing-stones are each about 1' 6" high.

In front of this wall is a rough pavement of cobble-stones ($J^1 J^2$), many of which shew marks of polishing by foot-wear. This pavement rises gently from east to west. It begins abruptly near the eastern end of the wall A H, and is interrupted at the western end. There seems

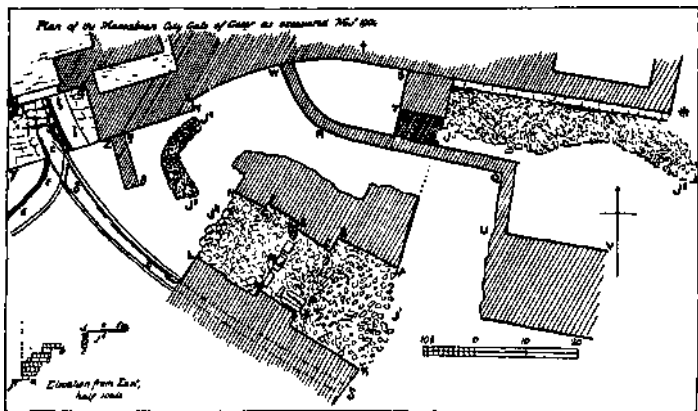


FIG. 102.—PLAN OF THE MACCABEAN CITY GATE

to have been some kind of arcading crossing the pavement between the points D M: at least there is here a threshold of cut stones, resembling the facing-stones of the wall A H, and having in the middle what looks like the much-weathered base of a column N.

On the south side of the pavement is the foundation of a wall that evidently was in all respects the counterpart of the wall A H. This is marked L M P K in the plan. The south face of this wall had not been exposed when the plan (originally prepared to illustrate the current report in the *Quarterly Statement*) was drawn: it was found later to be a plain straight line not broken by towers or otherwise.

Thus we have a passage, 36' long and 14'-15' broad, flanked by stone walls of well-dressed masonry, with two towers projecting inwards.

The recesses in the walls (D E F G and the corresponding recess on the opposite side) may have been meant to receive the *valvae* of a door, closing against the column that stood on the base N. There was no sign of hanging to be seen in the surviving fragments of the structure : this, however, was so ruined that the absence of such indications is not conclusive.

Two stones side by side, 3' 4" long, with a space 3" wide between them, are let into the pavement at P. It is not impossible that these have something to do with a door-fastening.

A little farther to the west is another fragment of paving (J³ J⁴) that seems to shew how the passage continues. It curves abruptly and mounts at a rather steep gradient. After this there is a long gap, till we pick it up again at J⁵ J⁶. The course of the pavement in this gap was marked by a white line (afterwards effaced by a shower of rain) running along the surface of the castle wall behind. This shewed exactly how the pavement had run.* It had thus started between A K, run up under the gatehouse A H K L, proceeded onward by the abrupt bend between Y H, and then at the back of the gatehouse between H W, along the face of the curved wall S W X (mounting at a gradient of about 1 in 6'4). At J⁵ it was just under the present surface of the ground. J⁶ was the last place where it was found, but there can be no doubt that it bent round the end of the castle wall and so entered the city to the east of that building. The difference in level between the uppermost and the lowermost section is 18' 3".

(2) Filling the gap in the city wall, but recessed behind it a short distance, is a series of long narrow chambers with very thick walls. To most of these there is no door remaining: the chambers that are on each side of the entrance gate, however, are provided with entrances, as the plan shews. These chambers were probably cellars under the main floor: they are at a level distinctly lower than that of the threshold of the gate. They may be simply the hollow spaces existing in what may be treated as *one* thick double wall, filling and strengthening the breach in the city rampart.

* And incidentally shews that the pavement and the castle wall were contemporary—a fact also proved by the total absence of any antiquities earlier than the Maccabaeon Period in and around their foundations.

This construction strikingly recalls, in the character of its plan and masonry, the "barrack" of long rooms that was found just inside the gatehouse at Tell Sandahannah.

Under the threshold at the east end is a small drain meant to carry off rainwater from the court inside the gate. This drain stops internally a foot or two after passing under the threshold. As the opening would be large enough for a small boy to squeeze through, who could then open

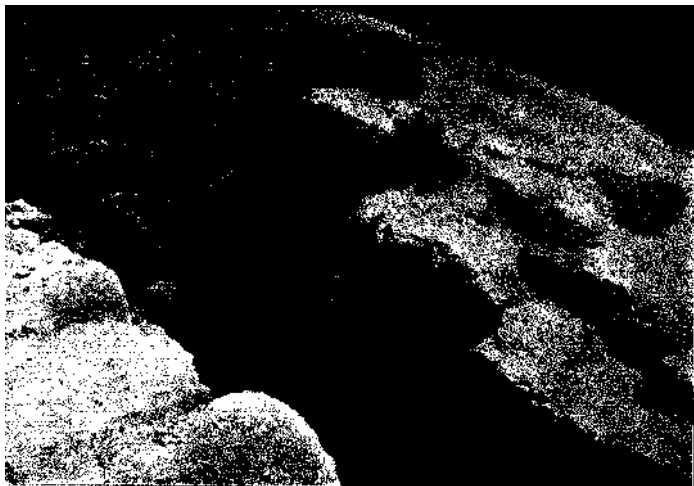


FIG. 103. MASONRY OF THE EASTURN TOWER CHAMBER

the gates for enemies outside, the drain has been blocked immediately inside the door by a large stone which effectually prevents any one coming through ; while it is no obstacle for water to run away, as it does not fit closely.

Proceeding to details, beginning with the western end, the rampart in trenches 18 and 19 is in a very ruinous condition. Being near the surf ice, and very convenient to the modern village, it has evidently been despoiled of its stones, and it is impossible to be certain of the original disposition of its chambers. There is *now* the appearance of an entrance

of the "hit-and-miss" kind in the middle of trench 19; but I think this is an accident, due to the destruction of walls. Till the middle of trench 17 we cannot feel any certainty of the plan. There is then a series of five chambers, of varying length though uniform in width. These display no features that need detain us. We then reach the "cellar" to which allusion has just been made. The only detail which calls for notice is a row of three small shafts, entering the outer wall horizontally at the level of the

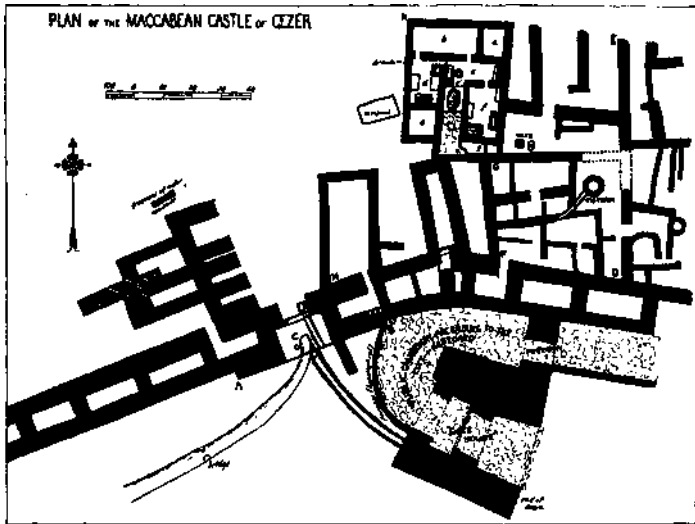


FIG. 104.—PLAN OF THE MACCABEAN CASTLE

floor. They are like nothing so much as miniature *kok* graves. They are 1' 10" in height, about 1' in breadth, and about 2 4" in length. I am unable to suggest any purpose for these hollows, unless they are intended for the secret concealment of some object [? an afterwards rifled foundation deposit]. Nothing but one or two potsherds was found in them. There are similar shafts in the corresponding chamber to the east of the gate, which are shewn in fig. 103.

We then come to the gate which was the entrance to the castle. This is approached by a short pavement C, sloping upwards toward the threshold. There cannot have been any connexion between this pavement and the public causeway running under the Gatehouse, as the levels are different. They were probably shut off from one another by a partition wall, a possible course for which is indicated in the plan. The causeway disappears outside the limits of the gateway tower, but there are not wanting indications that

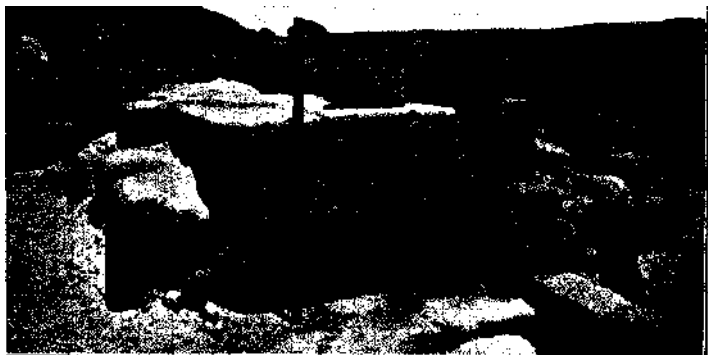


FIG. 105.—EASTERN JAMB OF THE GATE OF THE MACCAUEAN CASTLE

originally it ran downwards towards the west, whereas the public causeway ran down towards the *east*. Two little breaks in the cement lining of the drain, which possibly are the piers of a small footbridge, may be indicated as suggesting this. They appear in the larger plan of the castle, fig. 104.

The gate itself is 9' 2" in the clear. The hinge and bolt-holes of double doors remain, just inside the threshold. The threshold stone has a similar hole in its outer upright face, shewing that it was taken from some earlier

doorway. The well-dressed blocks of which it is built are shewn in the view of the eastern jamb, fig. 105.

The rooms in the rampart to the east of the gate are similar to those to the west. The second of these chambers is curious. It has been blocked up by two brick partitions, the easternmost of which is just against an opening into a long room of the castle.* This opening is spanned by a stone lintel. Beneath this, and between it and the end of the brick



FIG. 106.—FURNACE IN THE MACCABAEAN CASTLE

partition, there was a large deposit of ashes, shewing that there had here been a large furnace. Probably the lintel, which was broken, had been cracked by the heat (fig. 106). The rest of the rampart is identical in type to the portion already described.

* This opening shews that the long chamber is contemporary with the double rampart. In the same way the crooked chamber marked H must be contemporary with the chamber into which it opens. Bond and all other masonry details shew that the whole system is one, and of one date.

(3) The rampart forms the south wall of a complex structure which was evidently an important building, and, as has already been mentioned, was probably the residence of the governor during the Maccabaeon Period. Unfortunately nothing was found in any of the chambers which would throw light on their purpose or give information as to their occupant. The only objects found, beside the ordinary potsherds of the period, were a few scraps of Greek bowls, some Rhodian jar-handles, and a few bronze



FIG. 107. — DOORWAY OF Supposed POTTER'S OVEN IN OR NEAR THE Maccabaeon CASTLE

and iron arrowheads of commonplace late types. Unexpected in such surroundings were one or two animal figures, and (more curious) a small fragment of a statuette of the Cyprian Astarte : these probably belonged to earlier or later occupations, and by accident became mixed with the castle debris. In fact, the castle was perhaps less prolific in small antiquities than any other part of the mound.

The most curious find was undoubtedly a great pile of cockle-shells in a corner of one of the rooms in the western side of the gate. These

perhaps had been brought up to make into cement, such as was used for the bath-house to be described in the following section.

It is not improbable that the stall-like spaces to the west of the entrance are porters' lodges or guard-rooms.

The general character of the western part of the castle is that of the normal house—a series of chambers surrounding a courtyard (or, in this case, two courtyards). To the north of the western courtyard was a remarkable circular structure with a doorway to the east: this was bee-



FIG. 108.—STRUCTURE OF STONES WEST OF THE Maccabaeae CASTLE

hive in shape and almost complete. There were marks of fire in the interior, and it is not improbable that it was a potter's oven (fig. 107). Rather farther west were two well-built parallel walls, enclosing an oval space between them. One of the building stones was a vat, turned on its edge. Perhaps this space was a small threshing-floor (fig. 108).

The most remarkable characteristic of the eastern part of the castle is the pair of long narrow chambers running more or less parallel to each other from north to south, which are a conspicuous feature of the plan.

The northern boundary of the courtyard between these two sections of the castle was destroyed, so that nothing can be said about its original area; but probably we will not be far wrong in supposing that a wall or walls ran along the line of the word "MACCABAEAN" in Plan VI, and thus joined the two parts of the castle and separated it from the other buildings in the neighbourhood. The small drain under the gate shews that this courtyard was open to the sky.

The masonry of the castle is of two different kinds. At the gateway the stones are more carefully squared and fitted than anywhere else in the mound, the only masonry that may be compared to it being that of the sepulchral monument over tomb no. 139. The stones of the gateway are dressed smooth; but in the flanking towers bosses make their appearance. A few of these have in the marginal drop a mason's mark Li, which has also been observed in the deep well on the Eastern Hill (see pp. 280, 281).

The rest of the building is composed of rough walls resembling in general character those of the rest of the city, though perhaps of larger stones than usual. That some of the superstructure was built of squared blocks of soft limestone is probable: fragments of such were found in the ruins, on two of which the graffiti above described were scratched.

(4) We must now describe the remarkable sewer that runs under the gate (fig. 109). In doing so we shall follow it from below upwards. Originally it ran eastward, under the south pier of the gatehouse; but this branch was stopped by a slab laid across it just outside the castle gate, and the westward branch opened instead. This change was possibly made to avoid the inconvenience of filth being discharged just outside the public entrance to the city. At the lower end of the eastern branch the drain is 1' 10" wide and 2' 7" deep; at the upper end, where it is stopped, it is 2' 2" wide and 1' 9" deep. The drain is constructed of stones, of the same general character as those composing the gatehouse, set on edge: the floor is also paved with stones. The western branch of the sewer is wider and deeper, but of inferior construction. It is 4' 6" deep and 4' across, at the point where it comes under the gate: it is built of small stones lined with cement.

An opening so large could be used by invaders as a convenient way to enter the city, were it not that these were prepared for. At 60' from

the threshold of the gate (A, fig. 109) the drain widens and turns westward. It is possible for a not very tall man to walk in it almost upright to this point: after this, however, it becomes narrow and low, there being a step upwards at B, and it is necessary to advance on hands and knees. At 13' from this point a block of stone set in the middle bars all farther progress (C : a sketch at *a* fig. 109). The unwary leader of an invading party would be trapped at this point: owing to the narrowness of the passage it would scarcely be possible for him to pass back word to his followers to return, and probably he would be crushed between them and

FIG. 109.—COURSE OF THE DRAIN UNDER THE CASTLE

the stone. A little to the north, from D, the drain was no longer traceable; but a fragment evidently belonging to it was found in the northern part of trench 15, north-east of the great reservoir.

§ 15.—THE SYRIAN BATU

Over the extreme north-east corner of the castle described in the last section was one of the most interesting buildings found in the excavation.

It is an elaborate bath establishment. In describing it I refer to fig. 110, on which the dimensions are indicated,* so that it is unnecessary

* There is an error in this figure which should be corrected: the chamber *b* is about 3' narrower than chamber *a*; there is a "break" in the outer wall at the partition. This is shewn correctly in the plan, Plate vi.

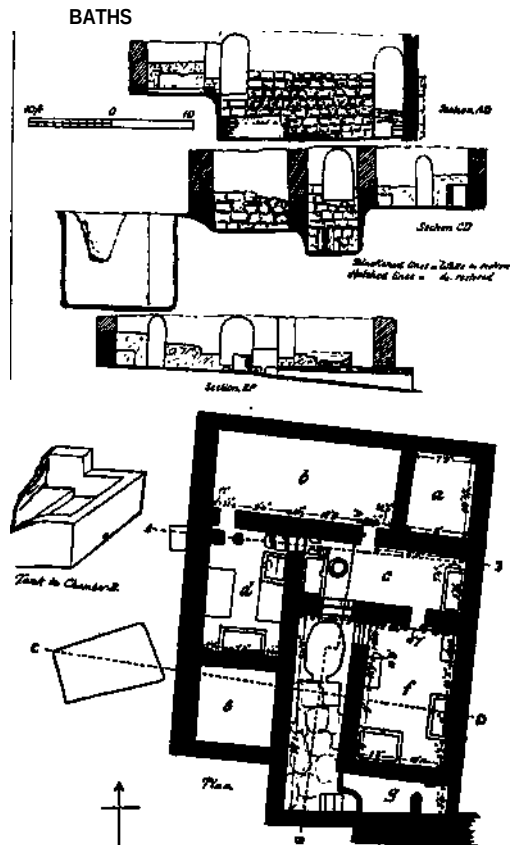


FIG. 110.—PLAN OF THE SYRIAN BATH-HOUSE

two tanks or baths. These are rectangular and built of stone lined with cement containing many pebbles. The edges of the baths are chamfered,

to overload the description with figures. With the exception of *e*, all the chambers are paved and lined with cement : as a rule the angles are rounded. The walls are built of blocks of limestone, cut to the shape of bricks, and laid in "English bond." Voussoir stones found fallen into some of the chambers shewed that they had been roofed with a barrel vault. The lintel of the doorway between *c* and *f* was found in the floor. It was cut to the shape of a semi-circular arch.

Of the chambers, *a*, *b*, and *e* are empty. Each of the others, *c*, *d*, and *f*, contains

to prevent bathers hurting themselves on sharp corners. At the bottom is a small round escape-hole, which, when a plug was removed, allowed the waste water to run over the floor. The floors are so laid that waste water is directed, as a stream from all the tanks, to a drain that opens under the doorway at the west end of *c*. These details are shewn in the two views, figs. 111, 112. The first shews chambers *c* and *f*, and the partition between them, taken from the west: the second, taken from the



FIG. 111.—VIEW OF THE SYRIAN BATH

north, shews chamber *f* with the sunk passage beside it, *d* to the right, and *c* in the foreground.

The tanks in *c* and *f*, and the southern tank in *d*, are of this kind. The western tank in *c* has a small pilaster of 6" projection and 6" width in one side. Beside this tank is a circular vat about 2' 6" in diameter. This has no outlet, and is cut out of a block of stone (not built up and cemented like the large tanks). It is not fixed to the floor, but is movable. It may have been meant to hold cold water, whereby a bather

who had taken a hot bath in the adjacent tank might afterwards refresh himself. This tank and vat appear in figs. 112, 113.

The eastern tank in *d* is peculiar. It is evidently a *seat*, in which a bather might sit in order that water should be thrown over him by an attendant. A sketch is added to the plan, fig. no.

In addition to the tanks there are in chamber *f* two benches, no doubt for the garments of bathers. These, like the tanks, are built up



FIG. 112.—VIEW OF THE SYRIAN BATH

of stone, and covered with cement. There were similar benches in *d*, but they have disappeared, and their place is indicated only by the breaks in the cement floor.

The drain runs just under the floor of chamber *d*, at its northern end. It is partly covered with stones embedded in cement, and partly open, to allow water from the tank in *d* to find its way into it (see the section EF, and fig. 113, which shews its opening). This drain stops short just outside the wall of *d*, which is the outer wall of the bath system,

and does not appear to have gone farther. It certainly has no connexion with the sewers running under the castle gate. There is a deep cement-lined cess-pit to the west, into which the drain probably discharged originally.

Between chambers *d* and *f* there is a passage sunk at a lower level, which displays several details of interest. In clearing it out stones were found to have fallen into it *in long rows*. These were probably the flattened out debris of vaulting.



FIG. 113.—VIEW OF THE SYRIAN BATH, SHEWING DRAIN

There are two doors leading into the vanished room above this passage. That from *c* has a small opening under the threshold, perhaps to admit hot air (the *raison d'être* of the vat for cold water will then become clearer). From *f* there are three steps leading down. At the northern end of the passage there is an oval enclosure, which must have been a heating furnace, as ashes were found filling it. South of the furnace the passage continues, till it passes the angle of chamber *f*. It is paved with broad flat flagstones.

After passing f it returns eastward, and rises by three steps to a retired corner that probably was a *latrina**

This building must have been erected during the short interval between the destruction of the castle and the final desertion of the city. For this reason, as the city was then in Syrian hands (as we have already seen in Chapter I), I have called this most remarkable structure "The Syrian Bath."

§ 16.—A ROMAN BATH

My attention was drawn to a spot on the south side of the road from Abu Shusheh to 'Ain Yerdeh, about midway between the latter point and 'Ain et-Tannur, by seeing some of the fellarjin of el-Kubab excavating there for building stones. With the help of the Imperial Commissioner this vandalistic work was stopped, and I myself directed excavations to be made in order to determine what manner of building had formerly existed here. That it was of some importance was suggested by traces of mosaic, revealed by the illicit excavations referred to.

After a week's work the building lay revealed as a fine Roman bath establishment. It had been much injured by the quarrying operations, both recent and previous ; but enough remained to shew the arrangement of the greater part of the plan. This is drawn on Plate 1.

The irregularity of the building is probably due to its following the lines of streets. The public drain at the N.W. corner evidently follows such a thoroughfare, and shews that the bath lay in the middle of a settlement of Roman date which still awaits excavation. The overall dimensions of the buildings are 68' 6" x 59'.

The shape of the outline can be understood best by a reference to the plan. The *hatched* parts of the wall represent those of which stones still remain : the parts in outline are inferred, the fellahm having removed every stone. It is probable that the main entrance to the establishment was somewhere in the destroyed part of the S.E. wall of the *atrium*.. No trace of an external door was found elsewhere in the ruins. The outer

* As it may not be quite clear that the plan represents *two* storeys in the passage, it will not be amiss to repeat the explanation in another way. The attendant who kindled the furnace reached it by going through the doorway from c or /, walking through the passage on a floor now fallen, till he reached the *latrina*; then, turning, he descended the steps, and went back underneath the floor he had walked along just before.

walls are built of well-squared masonry : a good specimen stone measures 1' 11" x 1' 2¼" high by 1' thick. The stones are roughly chisel-dressed; the strokes random in some, diagonal in others.

The *atrium* is a chamber whose dimensions and shape on the S.W. side it is impossible to state with certainty. The walls being destroyed at the critical point, nothing remains to shew how the northern wall was accommodated to the oblique irregularity in the outline of the building ; nor can we say to what a single block of masonry that remains in the S.W. quarter of the area of the atrium belonged. It is possible that there may have been a passage leading to the *frigidarium*, or possibly offices for servants, at this ruined part of the building.

The mosaic pavement is much less complete than is represented on the plan—indeed so fragmentary is it that it required a considerable amount of measurement and comparison before it was possible to determine with certainty the original design. I have, however, drawn it as though continuous, in order to make the full effect intelligible. The arrangement of colours, yellowish white, black, and red, is shewn in the detail added to the plate.

A door in the N.E. wall, of which one jamb remains, leads into a chamber 10' long by 6' 9¼" broad, paved with tesserae of white mosaic. An apse in its S.E. wall added 4' to its length. This apse was also paved with white mosaic; but separating it from the main body of the chamber was a ridge raised above the level of the mosaic floor and not shewing any traces of such a pavement. This ridge was probably a step, or the base of a bench. Of this chamber the walls were all ruined beneath the level of the mosaic pavement towards S. and E., and the outline of this part of the chamber can be inferred only from the cessation of the mosaic all round. In all probability this chamber was the *apodyterium*, in which the bathers undressed.

A rectangular chamber 11' 0³/₈" X 9' 5" lay N.W. of the *apodyterium*: it, likewise, had a white mosaic pavement. A doorway led to it from the *apodyterium*: the threshold was perforated by a hole, probably to allow water to pass through from the one chamber to the other. The N.E. wall of this chamber was destroyed, its line (as in the former case) being indicated by the cessation of the mosaic. A ridge was noticed in the mosaic floor parallel to the S.W. wall and about 1' from it. It is possible that this marked the line of a seat that had been added after

the mosaic had been laid. The proximity of this chamber to the *hypocaust*, and analogy with the plans of other baths, mark it out as the *tepidarium*.

The *caldarium* of the bath had completely disappeared: the *hypocaust*, however, remained, in fairly good order, though a large number of the arches were broken down. It is paved and built with tiles measuring $10\frac{1}{2}$ " square by $\frac{1}{2}$ " thick. These tiles form arches, the construction of which can be seen in the sections on the plan, and in the photographic



FIG. 114.—HYPOCAUST AND TEPIDARIUM OF THE ROMAN BATH

view fig. 114. The area of the hypocaust is divided into two by a row of piers larger than the rest, *faced* with tiles of a similar kind to those used in the construction: these are evidently intended to carry a continuation of the wall between the apodyterium and the tepidarium. To the S.E. of this wall there is a row of tiles set on edge running round some of the piers of the three outer rows: this detail can be recognized on the plan. The part of hypocaust floor intercepted between the tiles that thus run along the *outermost* row of piers and the wall is *plastered*: this is-

the only part not paved with tiles. The hypocaust ends to the S.E. in a large semicircular structure whose purpose as a furnace was attested to by ashes found within it. A low passage leading from this, covered with stones, conducted hot air to the hypocaust.

Close to the furnace were the meagre remains of a plastered cistern (marked PISCINA on the plan). Above the floor of this cistern was found the stone vat, fig. 115. It measures $1' 3\frac{7}{8} \times 1' 3'' \times 10''$ high. A hole drains out through one of the corners, as is shewn in the photograph.

Outside the bath, $4' 5''$ S.E. from the wall beside the furnace, was found the plastered floor of a cistern $5' 3'' \times 7' 3''$. This was not only outside, but at a higher level than the various pavements of the bath-house, on which grounds I do not think it likely that there was any connexion between them.

Returning to the hypocaust, we find to the N.W. of it a space $24' 10\frac{3}{4}'' \times 15' 1\frac{1}{8}''$, subdivided by smaller walls into a number of compartments which, there can be little doubt, were *latrinae*. Underneath the level of these cross walls were found the remains of a drain, evidently running to join the main *cloaca* presently to be described.



FIG. 115.—STONT: VAT FOUND IN ROMAN BATH

The S.W. corner is occupied by the *frigidarmm*. Unfortunately this part of the bath was a good deal ruined, but enough remained to make its main outlines traceable.

The northern end was occupied by a bath, paved with white mosaic and lined with cement. It was of irregular shape: its maximum dimensions were $7' 3'' \times 8'$. A depth of $2' 5\frac{1}{2}''$ remained. A narrow seat ran partly round two sides, as shewn in the plan. A hole in the mosaic on the S.W. side of the bath opened into a drain that ran through a platform of solid masonry. Two low walls projected in a N.E. direction from this platform, running under the foundation of the atrium. I am unable to assign a purpose to these walls: they do not seem to belong to any earlier structure.

To the S.W. of the bath is a shallow semicircular basin lined with

stone. This basin also empties into the drain running from the bath. The breadth of its straight side is 3' 6". This, and the bath just described, are shewn in fig. 116.

The drain runs through a gap left for it in the wall, and empties into a finely built *cloaca*, evidently a public work, which, so far as the extent of the excavation permitted an opinion to be formed, follows the



FIG. 116.—FRIGIDARIUM OF ROMAN BATH

course of a street running outside the bath. This explains its serpentine windings, and incidentally the peculiar shape of the bath establishment itself. The drain is built of well-squared blocks: a good specimen is 1' 8½" in length and 1' 6½" high. Where complete it was roofed with cover slabs, one of which is half of a millstone.

A diagonal block of masonry fills up the re-entrant angle of the bath beside the drain.

There was no trace of any architectural ornament found among the

ruins: if any such had existed it must long ago have been removed. One stone was found (Plate 1, fig. 1) with a cornice moulding upon it, so roughly cut, however, that it could not possibly have been placed in any conspicuous position.

In the hypocaust were found a considerable number of tubes of compact Roman pottery: a typical specimen is shewn in Plate I, fig. 2. Though some of them seemed as though they had been laid with intention under the arches of the hypocaust, I cannot see what function they served. They look more like the openings made in the roofs of modern bath establishments for admitting light and air, almost identical tubes being embedded in the structure for the purpose; but in that case it is difficult to explain how they fell into their present position through the floor of the caldarium.

Plate 1, fig. 3, represents another type of tube, of which only two or three broken specimens were found. They are evidently the connecting members of a drain of pipes, the "pinch" in the middle being a stop to prevent the adjoining pipes slipping too far. None of these pipes were found *in situ*. They may have belonged to hot-air pipes running through the upper parts of the walls from the hypocaust.

The dimensions of the ordinary hypocaust tiles have been given above. None of them, it should be noticed, bore a stamp of any kind. A few tiles of special shape, intended for special positions, were found. Such are the corner-facing tiles (fig. 4), similar tiles with perforations (fig. 5), and shaped paving tiles (fig. 6).

A considerable number of fragments of marble slabs (polished, but all without mark or ornament upon them except one, which had a small fragment of a cyma moulding remaining) indicated that the walls had been lined with this material. The fragments were of varying shapes and sizes: the average thickness was about $1\frac{1}{4}$ ".

There were also some fragments of roofing tiles (fig. 7).

Among the smaller objects found in the baths must be mentioned a bronze arrowhead (fig. 8), probably an accidental intrusion, washed by rain into the area of the building after the latter had been ruined. This object is 2" long, and is remarkable for the comparatively massive stop-ridge displayed on its tang. A few fragments of iron nails and knives do not call for illustration.

There was also a bronze signet ring (fig. 9), 1" in maximum breadth.

This is evidently Arab, and, like the arrowhead, is an intrusion. There was also a plain ring, with square section, of lead, of about the same size, and a fragmentary bronze spatula. Two of the common conical diorite spindlewhorls or buttons were also found; a small disc of pottery—evidently the stopper of a bottle—and a lump of greenish coloured slag. A disc of bronze, $2\frac{1}{2}$ " in diameter, is represented in fig. 10.

A very large number of fragments of glass vessels were found over



FIG. 117.—GENERAL View of ROMAN HATH

the whole area of the building. Fig. 11 represents the only vessel found that was even approximately perfect. Among the many sherds and splinters the only ones that call for notice are a number of bases (like modern wine-glass bases) of the type of fig. 12; a fragment of a small bottle with longitudinal flutings (fig. 13); some fragments of stoppers or covers—perfectly flat sheets of glass with the edges turned over (as fig. 14); and a neck of a vessel to the lip of which was affixed a circular

disc of glass (fig. 15). There were also some fragments of glass bracelets, of the fluted kind common in late tombs. These glass vessels no doubt were for the greater part receptacles for ointments and cosmetics used by the bathers.

The pottery remains were comparatively meagre. A Byzantine lamp of the "candlestick" type (hereafter described), with a plain dot at the base, was probably, like the arrowhead above described, an intrusion. Mention



FIG. 118.....THE CITY WALLS

should be made of the small Roman jug (fig. 16), and the sherd from the bottom of a vessel with projecting button base (fig. 17), and the fragment with ornamented fluting (fig. 18) in red ware.

The bone pin (fig. 19), which is 2 8" long, is, with one important exception, **the** only other object from this building requiring notice. This exception is a collection of coins recovered from the ruins. These were scattered singly through the whole area of the building, but there was quite a hoard in the drain from the frigidarium, that had evidently been

accidentally lost and never recovered. They were mostly *oboli*, probably paid for admission to the bath. Attempts were made to clean them, but they were so hopelessly corroded that it was impossible to determine their date.

Fig. 117 gives a good general view of this important structure.

§ 17.—THE CITY WALLS

The foundations of three successive walls remain, running round the city. They are built one outside the other, and lie in approximately parallel lines along their whole course. The photograph, fig. 118, well shews their mutual relation.

We shall for the moment distinguish these walls as the outer, central, and inner walls. It will presently be shewn that the central wall is the oldest, the outer the latest, and we shall accordingly describe them in this order. On the plans of the city, the course of these walls, so far as determined by excavation, and completed by inference, is laid down,*

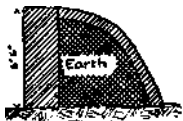


FIG. 119.—SECTION OF THE
CENTRAL CITY WALL

(1) The central city wall is a rude earth bank, lined inside and outside with a stone facing. The dimensions are by no means uniform throughout its length. At the place where the most perfect section was uncovered (at the north end of trench 3) the inner face was found to consist of a stone wall, 2' 2" thick and 6' 6" high; against this earth is piled up, and covering the earth is a sloping face of stones, about 8" thick. The top of the stone slope is flush with the top of the vertical wall, and the breadth of the base of the earth mound and the sloping stone face together is 6' 6". The slope of the outer face is not uniform: at the top it is nearly flat, but the lower half makes an angle of about 70° with the horizon. The section of this wall is given in fig. 119. The wall is built of small stones, the dimensions not being generally more than 10" or 1'

* The city wall in use at any given period of time is blackened in in the map belonging to that period. On the map representing the period when one wall gives place to the next, the older or superseded structure is hatched in to enable the student to grasp their mutual position.

any way, not dressed except by spalling with a hammer, and set in hard compact mud. The photograph, fig. 120, well shews its appearance.

It is noteworthy that at II 2 A a standing stone was found, which interrupted the course of this wall. It was erected on the rock. The smaller stones underpinning this monolith prove that it was erected when there was little or no depth of earth covering the rock-surface on which it stands. Had it been sunk through debris, these would have been



FIG. 120.—VIEW OF THE CITY WALLS, SHEWING THE EARTH RAMPART

unnecessary ; and the uncovered end of the stone would have been so insignificant in size that it would not have been worth the labour of erection. This proves that the stone was set up at a remote time, as the debris that overlies its foundation is itself of great age.

Now it is probable that the earth rampart is older than the stone, and that the stone was erected at a point where the rampart happened to be ruined. For if the stone already existed the rampart would probably have been deflected to avoid it. Therefore, if (as is most likely) the stone

is to be regarded as a monument of the earliest Semites, the rampart is to be assigned to the Troglodytes. It can never have been very effective as a defence for warfare, and possibly was not required as such : it may merely have been intended to serve (perhaps with the addition on its top of brushwood *chevaux de frise*) in excluding wild animals from the enclosure.

(2) The inner wall is a fine structure. It is about 13' in thickness, and has towers, generally about 41' long, 24' thick, at approximately regular intervals of about 90'. A good specimen of one of these towers, at the



FIG. 121.—TOWER OF INNER CITY WALL

north end of trench 28, is shewn in fig. 121. As these towers were not all excavated, it cannot be said whether they were solid or contained chambers : in one of the towers exposed to the north of trench 19 (north of the temple) an oblong chamber was discovered. This chamber was full of loose stones, the removal of which furnished occupation for two gangs of men for two days : below the floor of the chamber was found the entrance of cave 19 I, already described. This wall is not founded directly on the rock, but at about 1' above it.

The masonry of the wall is illustrated in the accompanying photograph, fig. 122. It will be seen to consist of rather large irregular hammer-dressed

stones measuring 1' 8"-2' each way, coursed but not very regularly so, set in mud instead of mortar, and with the joints, which are very wide, filled with smaller stones or mere pebbles. There is another variety of masonry used in places in this wall, in which the stones are of considerable length in proportion to the height of the courses. Thus a specimen stone in these parts of the wall is about 4' long by 1' 6" high. The N.W. corner tower (which owing to the cemetery overlying it was unfortunately impossible

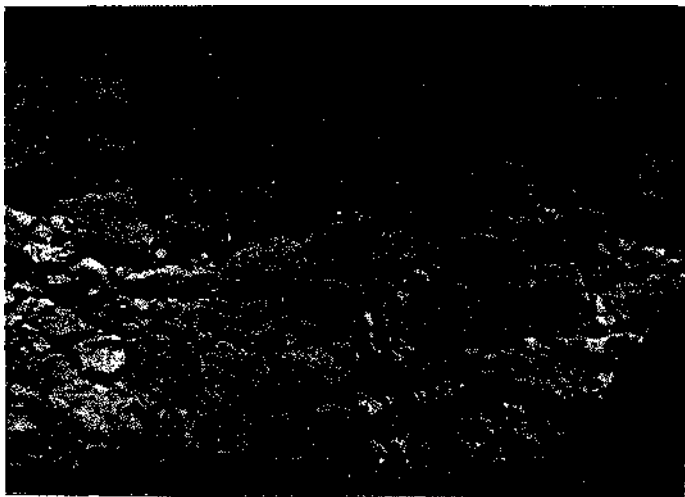


FIG. 122.—MASONRY OF INNER CITY WALL

to excavate fully) shewed the largest stones used in any building on the mound. See fig. 123.

Two gates were found in this wall in the course of the excavation. The first, which we shall call the northern gate, is at the north end of trench 2. The second, the southern gate, is at the south end of trench 28.

The northern gate is of the crooked type familiar to dwellers in modern Oriental towns: the Jaffa and Damascus gates of Jerusalem are good examples.

It consists of a tower containing gateways in adjacent sides, one on the outer face of the wall, the other projecting inward, so that a person entering the city follows a passage that turns through a right angle inside the tower. The Gezer example of this type of gateway is peculiar. It is of such great size, that it is not clear how it can have been closed against intruders: apparently a movable barrier was erected in both this and the southern gateways, for in the northern gateway the passage is too wide to receive a door of reasonable proportions, and in the southern gateway there is no sign of door hangings or fastenings to be seen in the jambs.

In Plate li will be found a plan of this gateway, which will be clearer than any description; and it can be more easily understood by a reference to the photograph,



FIG. 123.—NORTH-WEST CORNER TOWER, INNER CITY WALL

fig. 124. The passage-way is nearly 40' wide, and the tower containing it is almost 150' long. The Damascus gate at Jerusalem measures only about half these figures: the passage there is about 20' wide, the tower a little under 90' long. Whether the doorway at Gezer was crowned with a tower must, in view of these dimensions, be regarded as doubtful: if it were so, the second wall must have been an immense engineering work.

The southern gate, of which a plan and sections will be found on fig. 125, and a photographic view fig. 126, consists essentially of a narrow straight passage between two brick towers.

The bricks are nearly all sun-baked, and with one or two exceptions are very friable. They are mostly of a buff colour, though some of them are white or red.

The dimensions of the individual bricks vary: a typical size is about 15" x 11 ½" x 4". They are laid with no scientific attempt to break joints, in consequence of which vertical fissures cut the brickwork into several irregular sections.

The passage between the towers is 42' 3½" long and 9" broad. The pavement, which consists of roughly laid stones (not flagstones), polished in places by the wear of feet, rises gradually from inside to outside, and terminates inside in a step, 2' high and 5' 6½" broad.

The towers themselves are simply square solid blocks of brickwork (or possibly



FIG. 124. -NORTHERN GATE, INNER CITY WALL : VIEW

but less probably of rude rubble masonry with a more or less thick facing of brickwork), respectively 28' 5½" and 27' 7½" long. There are remains of a coating of lime covering the bricks. The projection from the wall of the western tower is 7' 10", that of the eastern tower 10' 2" : the difference is due to the gate not being at right angles to the wall. The towers stand at present to a height of 14'.

On each side of the passage-way the wall of the tower is masked for a height of about 6' by a row of three massive slabs of stone, with a few courses of rough masonry resting upon them and between each pair. They are merely set against

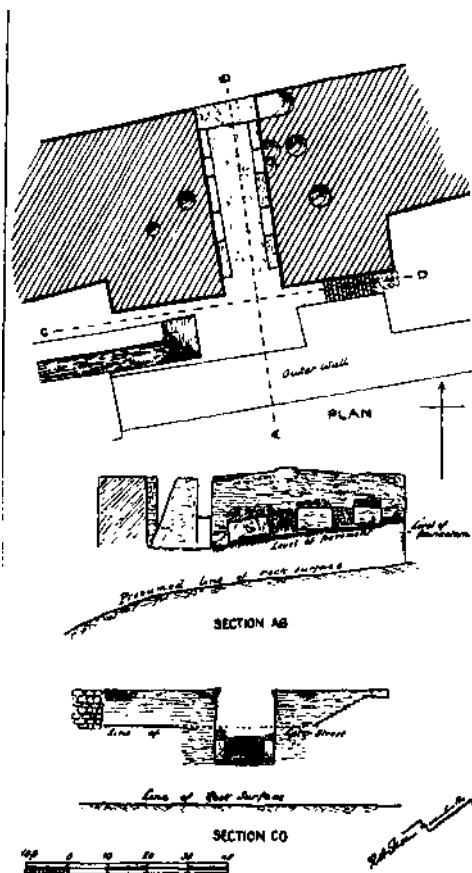


FIG. 125.—SOUTHERN GATE, INNER CITY WALL PLAN AND ELEVATIONS

seem that originally there was a projecting pier of brickwork of these stones, in which rather harder bricks were used than

the face of the brick tower, which runs behind them. The two outermost slabs shew signs of having been submitted to a powerful fire, being splintered and otherwise marked. Perhaps whatever wooden barrier closed this gateway—was near to these particular slabs, and was burnt in some hostile attack. (Of the nature of this hypothetical barrier, as already remarked, there is no definite evidence; but it is not impossible that it consisted of baulks of timber slipped between these stones, after the fashion of a portcullis). The slabs of stone are set at a distance of about $6' 5\frac{1}{2}"$ between each pair; their lengths are as follows:—

West side (from outside inwards) $8'9\frac{1}{2}"$, $8'2\frac{1}{2}"$, $7'2\frac{1}{4}"$.

East side (from outside inwards) $8'5\frac{5}{8}"$, $8'8\frac{3}{8}"$, $6'6\frac{3}{8}"$.

The stones are $1' 10\frac{1}{4}"$ to $1'$ thick. It would erected above each in the rest of the

structure. These piers have all been completely chipped away except the top of the middle pier on each side. This gives the effect of a slight corbelling in the brickwork, which at first I took for the remains of a false arch spanning the passage. In point of fact there is no evidence of the nature of the roofing of the gate.

In the tops of the towers is a series of circular pits, which are indicated on the plan. They range from about 4' to 3' 6" in diameter, and in depth from under 1' to about 5'. These pits may be most simply explained as belonging to a later stratum of building, whose houses were erected on the top of the wall. This is



FIG. 126.—SOUTHERN GATE, INNER CITY WALL : VIEW

indeed necessarily the case, for we certainly do not see before us the whole height of the gateway towers. The pits were probably excavated in the brickwork which formed the floor of the superposed houses to make receptacles for grain. Later one of the holes was closed again by being covered with the flat stone of an olive-press. I feel that we may rest assured that it is unnecessary to cast about for an explanation that treats these holes as an intrinsic part of the design of the gateway.

In some later period, probably about the time when the inner wall gave place to the outer, this gateway was blocked up with a wall 15' thick, built of rather loose masonry with a slight batter on the northern face.

(3) The outer wall has been traced along its outside face for nearly its whole length. In both character and regularity, its masonry is much inferior to that of the wall which has just been occupying our attention: there is little doubt that it was built in haste, probably at some time of stress. It is of an average thickness of 14', and, though greatly ruined, stands in some places to a height of 11' 10". Unlike the inner wall, it is founded upon or close to the rock, and trenches must have been excavated to receive its foundations. At some parts, and probably all round, the rock is scarped under the outer face of the wall. In one pit dug on the south side, for the purpose of quite a different investigation, evidence suggestive of the existence of a counter-scarp was found; but this question could not be followed up for lack of time. The scarp follows the line of foundation of the added bastion at the N.E. corner, so probably belongs to the latest period of the fortification.

The total length of the wall is estimated at nearly 4,600', which is rather more than one-third of the length of the modern wall of Jerusalem. Towers occur at intervals in its course, both on the inner and outer face. These towers have not the regularity, either in interspacing or in dimensions, that distinguishes those of the inner wall. Some are little more than slight set-offs, about 1' in projection, while others are bold projections, about 8' wide. So far as the inner face of the wall has been exposed, it does not appear that the towers on that side correspond to those on the outside exactly. As time failed to allow of the complete opening out of the wall (which, in view of the great extent of the mound and the valuable work to be done elsewhere upon it, would in any case have been hardly worth the expenditure of time involved), it is impossible to shew the course of the towers on the inner face otherwise than conjecturally. At the north end of trench I, where the wall remains in a good state of preservation, it stands to a height of 5' 4" inside and 11' outside, as the rock makes a considerable fall underneath the foundation.

At the eastern end of the mound the outer and inner walls are combined into one; that is to say, the builders of the outer wall adapted the work of their predecessors without addition. At this part of the hill the rock is very near the surface—indeed there is an extensive outcrop of uncovered rock, and therefore the full height of the wall must always have been exposed, as is the case at the north-east corner of the wall of modern Jerusalem. This has made the east end of the wall a

convenient quarry for the inhabitants of the more modern villages round the ancient site. In consequence, for nearly its whole length, all but one course of the eastern end of the wall has disappeared, owing to gradual spoliation during the two thousand years that have elapsed since the abandonment of the city. Indeed even that one course has gone for a good many yards. The same is true at the north-west corner.

Thus, the masonry of this wall displays three easily distinguishable

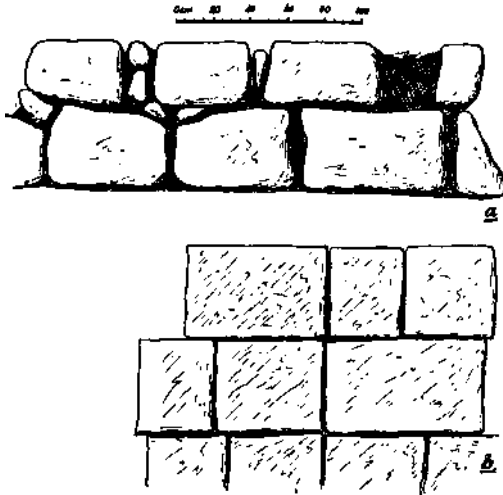


FIG. 127.—CONTRASTING TYPES OF MASONRY, OUTER CITY WALL

types, which no doubt belong to as many different periods. The wall itself, between the towers that interrupt it at irregular intervals, is built of large stones, for the greater part roughly hammer-dressed only, without any attempt being made to bring them to a rectangular shape. A few only display marks of chisel-dressing on the face. These stones are coursed roughly, with wide joints between them: the average dimensions of the faces of the stones are about 2' long and 1' 6" high. The joints are generally about 2" wide, and are filled with smaller stones wedged

between the larger blocks. Throughout, mud is, as usual, employed instead of mortar.

In fig. 127a a typical specimen of the masonry is represented.

With three exceptions, the towers display very different and much superior masonry. The stones, especially at the corners, are well-squared blocks, in courses about 1' 9½" high. The faces of the stones are smoothed by diagonal strokes of a chisel having a blade about 1" across. A section across these strokes would be shaped like a row of saw-teeth. These strokes are not rigidly parallel, and are not to be confused for a moment with the diagonal dressing of the Crusaders' masons. Some of the stones used are of considerable size: thus there is one at the south side of the third tower from the east, on the north side, which measures 4 x 1' 4³/₈" x 1' 6⁷/₈". Along the faces of the towers these square stones are not as a rule found; but the hammer-dressed stones, that take their place, are formed and set with much greater art than is the case in the walls between the towers. Two or three of the stones in the topmost surviving course of the N.E. tower have a slight marginal draft.

It is to be particularly noticed that these towers are not bonded to the walls, or else they are bonded to a section about 3' to 6' long, which itself joins the main length of the wall with a straight joint. The latter is the more frequent case, and when it is found, the square stones that characterize the towers are to be found also in the portion of wall bonded with them. This can only mean that the towers, as a whole, are an addition to the original scheme, and that at the places selected for erecting towers the original wall was cut out and the tower inserted. In one place I cut a section through the wall in order to determine whether the straight joint ran through the whole thickness of the wall, and this was found to be the case. The three exceptional towers (which are built of the inferior masonry characterizing the wall itself) are the fourth and eighth on the north side (counting from east to west), and the third on the south side, in the same direction.

A yet later construction is indicated by an addition that has been made to certain of the towers (the first, third, and fifteenth on the north side, the first, seventh, and thirteenth on the south side, counting from the east). This consists of a rounded casing, with sloping sides, carried round the face of the tower, and butting against the wall on each side.

As a typical instance of this addition we may take the thirteenth tower of the south side : a description of this specific instance will suffice for an account of all. It is illustrated in fig. 128. Originally the wall seems to have run straight on, with no tower. In the second period—the date of which will presently be considered—a section seems to have been bodily cut out, and a tower inserted. This tower is four-sided, and has well-squared corner-stones which certainly were never intended to be concealed. This

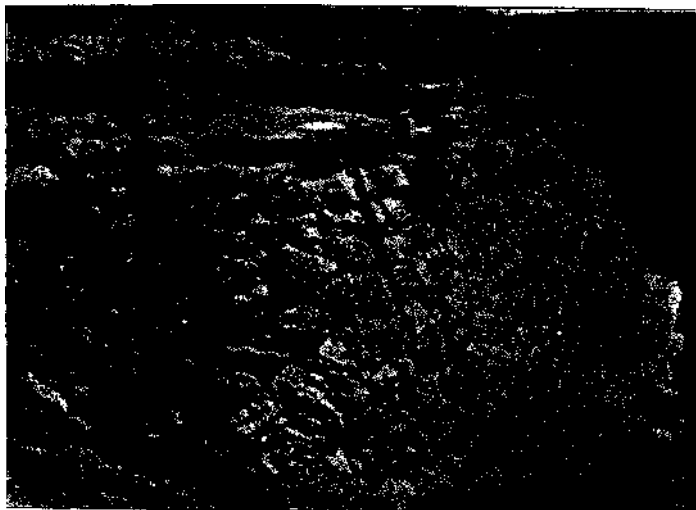


FIG. 128.—TOWER WITH BASTION

is shewn in fig. 129, where the corner of the bastion has been removed to shew the tower behind it.

Probably experience taught the defenders that the straight joint, between the junction of the tower and the wall, was a source of weakness; and they accordingly attempted to mask the joint by this covering. Its masonry is of workmanship very inferior to that of the wall. It is built of rough stones, shewing no signs of any tooling except occasional hammer-dressing, of average dimensions 1' 6" to 2 in every direction, and put

together without much attention being paid to proper coursing. The whole seems a rough and hasty piece of work.

At the N.E. tower the bastion is strengthened by a yet further outer shell of masonry, which covers the whole surface of a great rock platform, surrounded by a scarp having a maximum height of 13' and extending 23' out beyond the face of the original tower.

On the plan of the wall at the northern side, a section will be seen

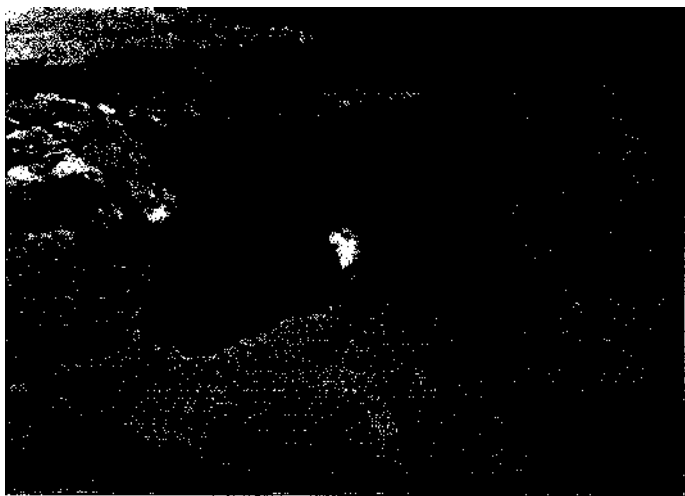


FIG. 129.—TOWER WITH BASTION REMOVED

to be marked "REBUILT." This section is conspicuously different in its masonry from the rest of the wall, and approximates rather to the style of the square towers. A specimen of it is drawn in fig. 127b. The courses are 1' 9 $\frac{3}{4}$ " high, the stones well squared and tooled, without drafts, by the use of a $\frac{5}{8}$ " chisel held diagonally so as to make a "saw-tooth" cutting. I have little doubt that the rebuilding of this part of the wall entered into the scheme of repairs executed at the same time as the insertion of

the towers, and probably was made necessary by the same circumstances, whatever these may have been.

It may be asked if we are to infer that the original wall had no towers. This is in itself very improbable; and the three towers of the masonry of the wall and bonded with it, are evidence that this was not the case. The masonry of these towers is in all respects similar to that of the original wall itself, and we may infer that these are survivals of the original towers, which were not demolished when all the others were rebuilt.

With reference to the plans, it must be remarked that only in a few places was the space between the walls excavated. This space was, as already mentioned, artificially filled with limestone debris, and contained next to no antiquities; and as the excavation of each pit cost on the average £20, it was not thought profitable to devote too much attention to so unproductive a region, when so much of the hill itself would better repay investigation. Thus I cannot claim that the internal projection of the towers is correctly represented, or even that internal towers do exist, except in places where the line of the wall is blacked in. Indeed it is probable that the outer and inner towers do not always correspond. It will also be noticed that in two places—at the north end of trench 20 and the south end of trench 29—there are two little buttresses in the internal face of the towers. These (which measure 8' in breadth and 11' 4" in projection) seem to be original features of the wall. It is possible that a row of such buttresses, alternating with larger towers, may be a characteristic of the wall as a whole: nothing but complete excavation could determine this point.

The following detailed description of the north side of the city wall will best shew to the reader the patchwork nature of its masonry. Beginning at the north-east corner, and working westward, we have, first, a square tower, solid, with no sign of having had an internal chamber, composed of successive courses or platforms of stones set in mud. These stones display little or no signs of dressing except at the two outer corners, where there are some well-squared stones. The corner-stone of the present top course, at the N.E. angle, is 2' 8 $\frac{1}{8}$ " long by 1' 6 $\frac{1}{8}$ " broad by 1' 10 $\frac{1}{2}$ " high: on both exposed faces there is a draft all round 6" broad; this has been cut by rather irregular strokes of a chisel held edgewise. The central boss is very slight. The corresponding stone at the other end is not drafted, but smoothed to an even face by strokes of a chisel $\frac{3}{4}$ " across. It is 3' 6 $\frac{1}{4}$ " long, 1' 3 $\frac{3}{4}$ " broad, and 1' 6 $\frac{1}{8}$ " high. The masonry is fairly well coursed, the interstices being filled with smaller stones.

The bastion wall with which this tower is surrounded is a much rougher piece of work. None of the stones, with a few doubtful exceptions, shew signs of anything but simple hammer-dressing. They are all rough boulders measuring from 1' 6" to 2' in every direction, built without regard to careful coursing, and packed with smaller stones.

Before passing on it should be noticed that stones of a triangular shape, similar in dressing to the corner-stones of the square tower, have been cut and fitted to

the end of the east wall at the point where it butts against the tower. This was no doubt done when the tower was inserted.

The curtain wall between the corner-tower and the next projection is composed of large rough stones averaging about 2' in length. For the greater part they are merely hammer-dressed, though a few are trimmed on the face with chisels: none are squared carefully, like the stones used in the towers, except for 3' adjacent to tower ii; in this part there are well-squared stones, set with wide joints between them. The tower is bonded to this section, but it does not bond with the rest of the wall. The stones of this section are smoothed with irregular diagonal strokes of a chisel, and set in courses 1' 6" high. Evidently in this case the tower and part of the adjacent portion of the wall are insertions.

Tower ii was originally a small projection of only 1' 10½", built of well-squared stones with diagonal chisel-dressing. A sloping buttress was built against its outer face at the time when the rounded bastions were added to certain of the towers. This was necessary, as the face of the tower slopes outward considerably, and evidently a settlement of the foundations had taken place which led the inhabitants to apprehend a fall of the whole tower. The masonry of this sloping buttress is of the same character as that of the bastion added to the tower, though on the whole it is built of rather smaller stones.

The curtain wall between towers ii and iii is composed of fairly well-coursed masonry, the courses about 1' 8" high. The stones are hammer-dressed, but no attempt is made at squaring them evenly. There are a few faces trimmed with chisels. The joints are wide—about 2"—but sparsely filled with smaller stones.

Tower iii consists, like tower i, of a square shell with a round bastion outside it; but the bastion is single, not in several independent shells as in that surrounding the corner-tower. The inner face of this tower corresponds in type with the masonry of the other square towers for the two upper courses at present existing: the lower courses, which were probably underground, are of very rough rubble. The corner-stone at the S.W. angle, in the present top course, is 3' 8⁷/₈" long, 1' 5" broad, and 1' 10½" high. It has been smoothed with a ¾" chisel.

The curtain wall between towers iii and iv is similar to the preceding length, but the joints are a little closer.

The fourth tower projects 1' 10¾". It has squared corner-stones similar to those in the other towers: the courses are 1' 9" high.

At the beginning of the curtain wall between towers iv and v there are one or two squared stones displaying very short marks almost resembling pocking—made by a chisel like that used in the tower. These are to be found for 5'. At the end of this length the wall is much ruined, and it is impossible to say definitely that there is no bond at this point, but the probability is that there is none. The rest of this stretch of wall resembles the previous section in its masonry.

Tower v, which projects 6', displays no dressed stones like the others, with one or two exceptions, and the masonry in all respects resembles that of the adjacent lengths of wall. This tower is probably part of the original structure.

The next curtain wall resembles the previous sections and has no dressed stones in any part

Tower vi is certainly an insertion. The projection is 1' 6¼", but pressure from inside, or a settlement of the foundations, has forced the tower and walls outward. There are squared stones with diagonal dressing running through the wall, and owing to the ruined state of the wall itself it can be clearly seen that there was no bond between this masonry and that of the tower. On the west side the tower bonds with the well-cut portion of masonry at the adjacent end of the next stretch.

The curtain wall between towers vi and vii displays well-squared stones for 3' 9", after which is a joint without bond: the remainder of the masonry resembles that in the other lengths of wall.

Tower vii projects 2' ¾". It forms part of an insertion in the wall, reaching from 3' 0¼" east of the tower to about the same distance west of it. At these two points straight joints run through the walls, faced, on the tower side, by well-squared stones. It happens, however, that the facing-stones of this tower are not so well cut as those of previous towers.

In the next curtain wall, 1' 6" from the straight joint above referred to, occurs one much-weathered stone that appears to have been drafted. This is the only drafted stone noticed in the whole wall, except those in the corner tower already described. On the whole the masonry of this length of the wall is better than the average: though the stones do not display any clear signs of chisel-dressing, they are better squared and closer together.

The eighth tower, and the inset following it, shew square stones.

The following curtain is of very rough rubble construction. There is on the inner face one of the narrow buttresses above alluded to.

Tower x is certainly inserted. At 21' beyond it is a ruined fragment resembling part of a bastion: possibly the rest of it has all been removed for building material.

The remainder of the masonry of the wall is on the whole the same as that described in the foregoing paragraphs; the towers being of much better masonry than the stretches between them, and not bonded to them. The most striking exception is the stretch marked "REBUILT" on the plan, which is in all respects similar to the adjacent towers, and is bonded to them.

It will be seen from this description that the towers are of both large and small projection, but there is no regular scheme of alternation. All the towers that have received the added bastion are among the larger, with the exception of the second on the northern side.

No complete city gate remained in this wall, unless there be one at the west end, where the modern farmhouse and its appended mulberry plantation prevented excavation. At the east end, where the rock crops out above the surface of the earth, and where in consequence every stone of the wall founded upon it has been taken away, there very probably was a gate. It would be natural if this were so, as in that direction the main road to Jerusalem is approached, and also the principal spring is to be found. There was another gate in the south side, of which the western jamb remains. The long gap filled by the Maccabaeian Castle and its attendant rampart begins here, and the eastern jamb has disappeared with the rest of this portion

of the wall. The surviving jamb is shewn in fig. 130. Of the gap in question and the gates that occur in its course we have already sufficiently spoken.

The walls have now been described as far as the excavation permits, and it remains to consider the chronology of the various buildings and rebuildings that they display. The *relative* chronology is obvious. There can be no doubt that the rude earth rampart is the oldest of any of the walls. Such fragments of pottery as happen to be mingled with the earth of which it is formed are of the most primitive types. It is founded on the rock. It must have been covered almost completely when the other two walls were built: the inner wall crosses it at the



FIG. 130.—SURVIVING JAMB of SOUTH-WEST GATE, OUTER CITY WALL

north-east gate, and it is not conceivable that this comparatively useless defence would have been built when either of the two great walls was in existence. It is always *at a distance* from the inner wall, so cannot be taken as the base of a glacis built against its lower part and thus contemporary with it (like the construction of the city walls at Megiddo, Taanach, and Jericho). Nor does a careful examination of the section of the side of the trench give any ground for supposing that it was a retaining wall for an earth mound heaped against the city wall.

At the north end of trench I there is a tower projecting inwards from the face of the outer wall, partly founded on the outer face of the inner wall, which here comes very close to the exterior rampart. This at any rate proves that the

towers of the outer wall are later than the inner wall. But that the whole of the outer wall is older than the inner is more clearly demonstrated by the fact that it blocks the gates of the inner wall.

With regard to the rebuildings within the outer wall, it is obvious the added square towers must be earlier than the rounded sloping coverings that in some cases mask them.

Thus we require to assign dates to the following successive structures :—

- I. The earth rampart.
- II. The inner wall.
- III. The outer wall in its original form.
- IV. The square-tower additions to the outer wall.
- V. The round-tower additions to the outer wall.

The first of these has already been sufficiently considered, and we may proceed at once to the question of the second.

A minor limit for the date of the inner wall is afforded by the excavation just east of the south gate. Here, over the ruined top of the wall, run the foundations of three successive strata of house-walls. The lowermost of these is founded directly on the wall, and inside the chambers of these houses were found a number of Egyptian objects, scarabs, beads, and amulets, in sufficient numbers to allow us to accept their unanimous testimony to the date of the structures in which they were found. This date is that of Amenhotep III, that is, about the fifteenth century B.C. Of less value as a date-indicator in itself, but of some importance in considering the question, was a scarab of Khyan (assigned conjecturally to 2200 B.c. or later), found on the top of the wall at the north of trench 2.

Thus the great inner wall was already superseded by the outer in the middle of the second millennium BC. It must therefore belong entirely to the earlier Semitic inhabitants of the city ; and as they would probably set about the erection of their defences at the first occupation of the city, we must suppose the wall to have been originally built about 2500 B.C. As the outer wall lasted a thousand years in use, with only occasional repair or alteration, it is not excessive to assume another thousand years as the lifetime of the inner wall, which we have already seen to have been a superior structure.

As the city can at no time be supposed to have been without a wall, the destruction of the inner wall must have been immediately succeeded by the erection of the outer. Most likely the materials of the inner wall were to a large extent utilized over again for erecting the outer. It is probable that the growth of the city itself, both vertically and horizontally, was the prime cause in the supersession of a defence that might have been expected to last much longer. By successive rebuildings the level of the city must have risen so that the housetops were dangerously exposed above the summit of the wall, while the thresholds of the city gates must have become inconveniently low. It was probably felt also that it would be advantageous to build the wall a few feet farther out from its original site, thus gaining for the city a certain additional space all round. We have already seen that the date of this important change is to be assigned to some time in the fifteenth

century B.c. To fill the trench intercepted between the walls, and to bring the space thus gained up to the level of the city at the time of the rebuilding, a quantity of limestone chippings and other rubbish was thrown into it. Wherever this was excavated no antiquities of any kind were found.* This pile of cast rubbish is well shewn in the photograph, fig. 131. At the north-east gate of the inner wall, the cast limestone covers the northern jamb. It was noticed that here a thin film of earth separated the cast stuff from contact with the wall, as though the wall had been built in a trench sunk through the limestone, and therefore later than the



FIG. 131.—SECTION SHEWING CAST LIMESTONE BETWEEN THE TWO PRINCIPAL CITY WALLS

accumulation. But this is certainly to be accounted for otherwise: the thin film of clay is a deposit of percolation along the face of the wall.

Hitherto our task has not been difficult, as indications of chronology have not been wanting among the structures, and objects, found associated with the various walls with which we have been dealing. The case is, however, different when we consider the repairs that have been effected in the outer wall. There are no signs whereby without assistance from external sources we can assign dates to the towers added at a later time.

* Except a stray scarab, at the north end of trench 19.

Two preliminary questions have to be raised. The first is whether the square towers and round casings are the remains of two rebuildings or one. The presence of well-squared stones in the outer corner of the square tower leaves scarcely any room for doubt—as we have already said—that the round casings are a long-subsequent addition. The second question is whether the towers not bonded to the wall were built first and the curtain walls afterwards erected in order to join them, or whether (as we have hitherto assumed) the towers were inserted into prepared spaces in a Wall previously existing. This would be a question next to impossible to answer were it not for the existence of two towers, belonging intrinsically to the masonry of the wall on the north side; and, on the other hand, distinct evidence of a rebuilt patch in the wall itself, in the superior style of masonry used in the towers. These shew that the towers were a later addition to the structure of the wall, as we have already said to be the most probable hypothesis.

As there is little evidence of date to be found in the types of masonry in pre-exilic Palestine, we are led to an examination of the literary history of the city, in order to find whether any historical events likely to lead to these extensive repairs can be found recorded. It is a coincidence not a little remarkable that there are two, and only two, occasions recorded in which the city or its fortifications were rebuilt or repaired; and it is tempting to connect these two circumstances with the two successive repairs that have left traces in the existing remains. It is necessary, however, to be cautious in such identifications, for the history of Gezer, as it has come to us in written documents, is very fragmentary, and it may be that there were other repairs of which no record survives; while on the other hand all traces of the restorations of which we have historical evidence may at a later period have been swept away.

With this word of caution, we may refer to the two recorded restorations. They are of course the rebuilding of the city by Solomon after its destruction by the Egyptian king, and the fortification by Bacchides during the Judæo-Syrian Wars. It must be admitted that there is no definite statement in the meagre notice in I Kings ix 16 of the Solomonic repair—our only source of information on this event—that the walls of the city needed repairing: this may, however, be regarded as a probability. Pharaoh could not have even partially burnt the city without entering it, and he could hardly have entered a city so strongly fortified without breaching the walls at some place.

If we are correct in seeking for traces of the Solomonic repair in this wall, we may as a working hypothesis assign the rebuilding of the square towers, and of the stretch of wall marked on the plan "REBUILT," to this period. We may infer that in the capture of the city the walls were besieged, and greatly damaged at various points, but finally breached at the place indicated. It is by no means an unlikely place for such an operation, as the hill-slope at this place is much more gentle than elsewhere along the northern side: it is among the most easily attacked portions of the wall. In this connexion it is interesting to remark that Dr. Schumacher, on his visit to Gezer, was struck by the resemblance of the masonry of these square towers to that of structures which he had been led to assign to the time of Solomon in his excavations at Megiddo; and the observation

was amply confirmed by a photograph of the Megiddo buildings which I was afterwards permitted to see.

The assigning of the round towers to Bacchides is an identification that may be regarded as less doubtful. They form exactly such a fortification as might have been hastily put up under the circumstances. Bacchides was just a year in the city, and the strengthening of these six towers would be a good year's work. It may have been his original plan to strengthen them all, but his evacuation of the city led to the enterprise being abandoned.

Before leaving the city wall it may be worth noticing that, when deposits of antiquities were found outside, the later objects were as a rule at the bottom. This is to be accounted for by the successive stages of ruin through which the wall passed. The upper courses fell or were removed first, thereby giving an opportunity for rain to wash down the objects from the topmost strata. The courses next below followed, and so the objects from the second strata were superposed to those which had overlaid them. The process was of course continued till the debris inside the wall and that outside had both reached the same level, and the wall had been ruined flush with them.

§ 18.—WATERWORKS

The Water-passage.—In trench 29, and in the middle of the court of the First Semitic Palace, there was found a rock-cutting of the highest interest and importance.

At the south end of this trench, as the maps will shew, no walls (except a few insignificant fragments of foundations standing on the rock) were found of an earlier date than the Third Semitic Period. Instead of the normal maze of foundations there were about ten feet of solid alluvial silt, which contained nothing but a few stray scarabs, fragments of pottery, and such objects. All of these belonged to the culture-period named. It appeared as though there had been a waste space at this point, to which water and mud were allowed to drain: indeed several drains were found converging towards this spot, and the strata that represented ancient ground-surfaces all dipped in this direction.

After this uninteresting bed of soil had been cut through, and the surface of the rock was reached, the edge of a keyhole-shaped pool made its appearance, descending vertically in the rock, with well-scarped sides.

Soon steps were found at its northern end; and it appeared as though I had another pool resembling the great excavation in the Central Valley, described hereafter, but rather smaller.

A couple of days' work shewed evidence of an extension eastward, and, shortly after this was found, a hole was uncovered in that side of the pit, through which it was possible to creep. It was found to lead into a long passage sloping downward through the rock. Being evidently a



FIG. 132.—ENTRANCE TO WATER-PASSAGE

work of considerable importance, it was resolved to clear it completely, although when I contemplated it first I feared it would take the whole of the rest of the permit to do so.

The various theories that were formed about it during the process of excavation—that it was a sewer, an ancient exit from the city, the descent of some underground sanctuary or catacomb—had all to be finally abandoned when, after more than a month's hard work, it was found to give access to a powerful spring of water, rising in a natural cave sunk in the heart of the



FIG. 133.— THE WATER-PASSAGE, LOOKING DOWN

cylindrical niche, 2' 8" deep and 5' across: it bears a curious resemblance to the *mihrab* of a mosque. It will be seen between the two cranes in fig. 132. A rebating of the east and west edges of the pit, as though to receive the foundations of walls, seems to indicate that a building of some sort was erected over the hollow: of this, however, not a trace remains. It may be taken for granted that some protection would be built to prevent persons from falling into the pit. There are no coherent foundations of buildings connected with this rock-cutting in any way: a few small and unintelligible fragments of walls are all that surround the mouth.

The floor of the pit was entirely occupied by a flight of steps, cut in the rock, starting from the northern edge. They run southward for the length of the narrow part of the pit, and then turn eastward. All the southward-running steps, with the

rock. It was practically entirely filled with earth and stones, all of which had to be carried to the surface.

With this preliminary account of the discovery and the nature of the tunnel, we may now proceed to a detailed description. Reference should be made to Plate lii, where will be found a plan and sections, and to the accompanying photographs.

Entrance is gained, as above mentioned, by a keyhole-shaped sinking in the rock (fig. 132), 34' 6" in length along its western side, which is a straight perpendicular scarp, 7' 5" broad at the northern end, and 14' 6" at the southern. In the middle of the edge of this side is a semi-

exception of the first two, have been broken and quarried away, evidently with intention : a probable reason for this will be noted in the sequel.

The pit reaches its maximum depth on the lowest step under the eastern edge, just at the entrance to the tunnel. The depth is 26' 6".

The entrance to the tunnel is by an imposing archway, 23' high and 12' 10" broad. These dimensions are maintained through about two-thirds of its length. It descends in the rock, at an angle of 38 or 39° to the vertical: in the floor is cut a flight of steps occupying the whole width of the tunnel, and continuous with those in the entrance shaft.

The roof of the tunnel is cut to a barrel vault, and the sides are made well plumb. Fig. 133, looking downward, gives a good idea of the scale of the work, the excellence of the finish, and the texture of the rock. The tool-marks of the quarrymen are well preserved in the upper part of the tunnel, especially about the roof. They resemble those in the cave 16 III, and equally demonstrate that the cave was excavated by means of flint tools.

The general appearance of the staircase, viewed from below, is shewn in fig. 134. I found this a very difficult subject for the camera: the lower part of the cave required at all times to be illuminated by a magnesium flash, while some daylight (though not too much to cause halation) was necessary for the upper part, as the magnesium light would not carry sufficiently far. The photograph here given is the best I could obtain after several trials : I would have attempted to improve upon it, but unfortunately a few days



FIG. 134.—THE WATER-PASSAGE, LOOKING UPWARD

after I had secured it the sides of the trench above collapsed in a great storm, burying the tunnel in the ruins. To clear it out again would have involved a serious expenditure of money that would not be justified.

The staircase throughout is much worn and broken. Indeed, toward the end of the period during which it was in use, it was evidently considered dangerous, and rows of small hollows were cut at intervals on each side to serve as hand-grips. These are shewn in the sections on Plate lii.

They are not the only hollows in the walls; there are also a number of niches formed in the rock. These are of various sizes, from tiny pigeonholes to large shelf or cupboard-like recesses. Most of them are too high up to reach to from the staircase. On the other hand, one of them is sunk about 1' below the level of the steps on the south side, near the top. I found this hollow very useful in wet weather: by erecting a temporary dam just below it rainwater was diverted into it, and prevented from wetting the steps and making them slippery.

It is conceivable that this was its original purpose. A short distance farther in is an irregular hollow in the rock, running up the whole height of the tunnel. This is a natural fissure. It is not impossible that some of these niches were made for the deposition of ex-voto gifts to the spirit of the spring below. If a less imaginative explanation be required, they might have been made by workmen for putlog holes, or for holding their tools when not in use. Certain of these recesses—especially those of irregular outline about the middle of the tunnel—are

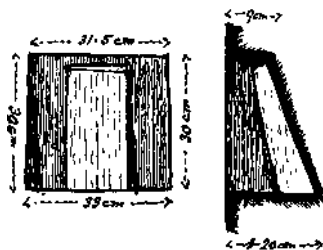


FIG. 135.—BAETYLI (?) IN THE WATER-PASSAGE

natural, being caused by the fracture of a thin layer of rock behind which was hidden a great boulder of flint. There are two or three strata of such flint boulders in the course of the tunnel. There is one jecess on the left-hand side (descending) just before reaching the arch, an elevation and section of which are shewn in the annexed cut (fig. 135). The square block left in the middle may be an indication that it is left unfinished, whatever its original purpose may have been; but it is also possible that (as was suggested to me by Pere Vincent) the block had a baetylic significance.

The passage is divided into three approximately equal parts by (1) a well-cut archway in the upper part of the tunnel, 47' 5" from the entrance, ending abruptly on each side about 5' from the level of the adjacent step—this archway has a reveal of 6"-8" on the outer side, but dies into the wall of the tunnel on the inner; (2) the entrance into a bed of much harder limestone, fissured by wide strata that dip at an angle of about 9°, but evidently so difficult to work that it gave considerable trouble to the quarrymen. From this point onwards the dimensions of the tunnel are reduced, and the workmanship and finish very inferior. There are no niches in this lower bed.

The staircase terminates at a pool of unknown depth—a long crowbar failed to reach the bottom—now full of soft watery mud. Water stands wherever this mud is dug away, and the level of the water remains constant no matter how much be taken away. The first day on which the water was found it was uncertain whether it was a spring or merely an accumulation of rainwater. Buckets were provided, and at least two hundred gallons of water drawn off and poured away, without making the smallest impression on the level. This is 94' 6" vertically below the surface of the rock, or about 130' below the present surface of the ground.

I decided that to clear the spring—which would require the employment of divers—would be difficult and archaeologically unprofitable. The water was tasted by some of the workmen, who pronounced it salty—but it was so impregnated with mud that that is little wonder. Abandoning the spring, I had a causeway of flat stones laid across the mud, from the bottom step, and proceeded to an examination of the farther extension of the tunnel.

By an examination of the sections in Plate lii, it will be seen that the slope of the roof is continued for some distance beyond the end of the staircase—indeed until it comes so close to the surface of the watery mud filling the pool that it is necessary to stoop low in order to pass underneath. It then rises again, and the excavation ends in a long narrow cave, measuring 80' by 28'.

This chamber was full of earth, and I began to clear it out, but soon abandoned the undertaking for several reasons. First and foremost was the question of risk. The collapse of the trench just referred to had already been threatened, by an ugly crack, some time before the work was concluded: had it taken place during the excavation of the tunnel it could not fail to have caused several fatalities. On that account I was anxious to be finished with the excavation as soon as possible. This indeed was not the only danger: the roof of the cave itself was in a most unsound condition, cracked, flawed, and rotten, and I was in daily dread of an unlucky concussion bringing down great masses of it upon the workmen below. I therefore decided to be satisfied with cutting trenches along the sides, and through the middle, in order to see whether the cave was artificial or natural, and to find out whether there was a continuation—another entrance, an exit, or an opening into farther chambers.

The question of the artificial or natural origin of the cave was not very easy to decide, as little or none of its original surface remained *in situ*. It had evidently suffered severely from earthquakes, which had loosened lumps of earth from the roof and sides and piled them up all round. Some of these accidents had taken place at a time sufficiently remote for 3'-6' of earth to accumulate above the broken fragments—in the section of the cave the position of two such layers of fallen rock is shewn; while others, lying on the surface of the earth, shewed fractures so fresh that they might well have been broken off in the moderately severe earthquake that shook Palestine in March 1903. In the middle of the cave the accumulated earth—alluvial deposit left by the spring when the water happened to be high—reached a height of about 13' above the water-line. The watery mud was reached wherever a deep enough hole was dug.

The entrance to this cave had almost completely been closed by blocks fallen

from the roof, which it was necessary to quarry away before the cave could be examined.

I made many efforts, all in vain, to secure a flash-light photograph of the interior of this cave. The air was warm, and so heavily charged with moisture that the camera lenses became obscured with condensation instantaneously after being uncovered, so preventing a satisfactory image being printed on the plate.

The final conclusion that I came to was that the cave was entirely natural; and no trace of an opening was found in its wall leading to an extension of the system of any kind.

It has been mentioned that the silt-like earth that closed the entrance to the tunnel contained objects of the Third Semitic Period; that is, of the Mycenaean and sub-Mycenaean civilizations. Thus the tunnel was abandoned and filled up about that date—say 1450-1250 B.C. We can hardly allow less than about 500 years for the steps to have got into the dilapidated condition in which they were found, so it is fair to assign a date of about 2000 B.C., at the latest, to this excavation.

When we consider the probable condition of Palestine at that date, this wonderful work becomes yet more wonderful. There is every likelihood that the disorganized state of society so graphically mirrored in the Tell el-Amarna letters was not peculiar to the fifteenth century B.C. It would be difficult to imagine Yapahi or one of his kind finding leisure and tranquillity enough, in the midst of all his anxieties and his intrigues, to conceive and carry out a work of this magnitude. Who then before him could have done so? To this question there is no answer forthcoming; but it gives a higher idea of the state of Canaanite civilization than we would have gathered from the meagre remains of their houses and property, to learn that a Canaanite governor could plan, and Canaanite engineers execute, a work so grandiose.

But is it to be ascribed to the Canaanites? We would not be surprised to find a work of this nature in the metropolis of a settled civilization; but could it possibly find place without foreign aid or influence in a country town of Palestine? Possibly some Egyptian overlord designed the work, or else a Babylonian king. If so, however, we should have expected to find more definite traces of Egyptian or Babylonian house-building throughout the city—characteristic architectural ornaments, for example; and at least an Egyptian or Babylonian monarch might have been trusted to write his name up in various places in the tunnel and around it. No trace of an inscription of any sort was observed.

Beside this difficult historical problem, there are some practical questions that call for discussion. How was the spring first discovered? By what system of calculations did the engineers so design their work as to hit exactly on this subterranean cave? And why was the great labour undertaken of making a passage-way (rather than a vertical well-shaft)? There is now no external indication whatever of the cave and its water-source. Clearly to fix its position accurately a trickle of water must be postulated running out of a tunnel at least large enough for a boy to pass through. This may possibly have existed in 2000 B.C.; but there is now no evidence for anything of the kind, either inside the cave or in the surface of the country outside. Again, from every point of view, a vertical well-shaft would have been much more practical than the stepped passage. It would have been shorter in the proportion (approximately) of 3 to 5; it would have served a larger number of persons at once; it would not need to have been so carefully finished; and the task of carrying water to the top would have been far less toilsome. So far as I can see, the only reason for making the water-passage rather than a vertical shaft (assuming the position of the cave to have been fixed by the engineers) was the desire to bring the mouth of the passage into the courtyard of the important dwelling adjacent.

These difficulties may be most easily solved by supposing that the discovery of the spring was a happy accident, made in the course of quarrying the tunnel for some entirely different purpose—most probably to serve as an exit from the city in time of siege. In that case an explanation of its great size can easily be reached, as it would clearly be advantageous to have as much light as possible in the passage.* When the spring was found, it would at once be recognized as being almost, if not quite, as advantageous a possession in time of siege as an underground exit would be. Indeed it is quite possible that on some occasion it enabled the defenders to hold out for a long time, and that the exasperated conqueror, when he at last succeeded in forcing an entrance, destroyed the steps that led down to the passage. This is a not improbable explanation of the condition of the upper part of the staircase. The lower

* Pere Vincent, who disagrees from this argument and considers that the tunnel was excavated from the first simply and solely to obtain water, has referred me as a parallel to a similar tunnel discovered at Susa, and described in the report of the excavations there for 1907-8.

part having become worn and dangerous, the citizens may not have considered it worth while to repair the damage, and for the future decided to depend on cisterns. So the tunnel was abandoned, and gradually became silted up.

On p. 20 above a remarkable example of the persistence of a historical tradition among the modern inhabitants is quoted. It may be that a yet more remarkable recollection of an historic fact may centre round this water-passage. There is a constant tradition all over the Moslem world, and referred to in the tenth sura of the Koran, that the water of Noah's flood rose in a *tannur*, or baking-oven. This *tannur* is placed by various authorities in a wide variety of different places; and the modern inhabitants of Abu Shusheh are positive that to their district belongs the doubtful honour of having once contained this instrument of destruction. Indeed it is definitely situated at 'Ain et-Tannur, between Abu Shusheh and 'Ain Yerdeh. There is quite a cycle of legends referring to this Tannur and the water that rose out of it.* Now when we remember that the Hebrew word for watercourse or gutter, which occurs in the narrative of II Sam. v 8, is *sinndr* [סנדר], it is tempting to believe that these legends are founded on a subconscious folk-recollection of this great engineering work. The fact that there once existed here a hole in which water rose, and the fact that it was called *Sinndr*, are both dimly remembered, and both perverted: the unknown word *sinndr* has been turned into an Arabic word of a known meaning, whose significance has coloured the associated legends; and these legends, like all popular traditions respecting water-bursts, have become associated with the story of the universal deluge.f

As might perhaps be expected, not much was found in the water-passage, and what there was had obviously silted in by accident and had no radical connexion with the excavation. The chief objects are collected together in Plate xix, figs. 10-24. Fig. 10 is the neck of a large jar covered with a creamy white wash, adorned with painted decoration in sepia (hatched in the figure) and yellow (dotted). Fig. 11 is part of the edge of a bowl in white stone. Fig. 12 is a fragment of First Semitic pottery decoration, consisting of a broad black band with a narrow white stripe, and then red stripes beyond. Fig. 13 is a bronze arrowhead with a thick rib, resembling the hoard from tomb no. 30. Fig. 14 is a fragment of an animal figure in saffron-yellow ware, ornamented with thick stripes. Fig. 15, perhaps the most important *trouvaille*, is a small conical vessel in polished green serpentine: no doubt of Egyptian provenance. Fig. 16 is one of the not very common moulds for casting "Astarte" plaques: it was interesting to notice that impressions from this very mould were found in the excavation. Fig. 17 is an "Astarte" plaque of a type not elsewhere found in the works, with the hands crossed between the breasts. The face is broken away. Fig. 18 is the bone haft of a bronze tool; fig. 19, the rounded bottom of a jar with a circular hole cut in it; fig. 20, a small hemispherical pottery

* On which see AR P.

† This elegant identification is due to Pere Vincent.

cup; fig. 21, a pendant of green enamel porcelain; fig. 22, an ivory button with deep grooves upon it; fig. 23, a fragment of Aegean ware, with the usual brown lines on a yellow slip; and fig. 24 is a curious object not very easy to explain, apparently a fragment of a tubular lamp (of the kind explained in the section on pottery) larger and deeper than usual. It is in light brown ware, burnished with red-painted lines.

Besides these objects we may mention: the horn of a cow, sawn clean off; the disc-base of a vessel in porous white ware, with a smooth white wash on the surface; a spherical sling-stone, $2\frac{1}{2}$ " diameter; a charred fig; a ledge-handle in drab ware; a large oval black stone, worn smooth by rubbing; tine of an antler; a large *buccinum* or similar shell; a large number of rude flint knives and chips; the leg of a stone three-legged dish of the ordinary kind; a fragment of an Egyptian glass vessel; a cubical block of limestone, about $34" \times 2\frac{1}{2}" \times 2"$, of irregular shape, with a depression on one side; the head of a cow in pottery with white lines on a grey slip; also a fragment of similar ware; a flint scraper; a bronze pin with no special characteristics; a block of clunch; a circular disc, 3" diameter, $1\frac{1}{4}"$ thick, with a small depression on each side; a one-handed jug, with a rather dumpy pointed base in which is a hole; a specimen of a variety of "ladder-pattern" ware, rather rare at Gezer, in which the "ladder" is white on a dark grey slip.

Most of these objects were found in the entrance shaft and at the upper part of the staircase: from the lower part of the staircase and the cave at the bottom there came nothing but potsherds with no special character, and a few animal bones and flints.

Especially interesting was a cake of clay on which a straw basket had at some time been laid. The clay had preserved the impression, and shreds of the outer surface, of the straw. The basket seems to have been made of a single rope of straw, about a quarter inch in diameter, twisted round into a spiral. The end of the rope is plaited in and through the adjacent whorls of the spiral—it can be traced to the fifth whorl. One or two ill-defined grooves radiating outwards from the centre suggest that the whorls of the spiral were kept in position by being passed through loops of a string. The base of the basket was slightly convex externally: the radius of its bottom was about $2\frac{1}{2}"$, but the centre of the spiral was not precisely in the middle of the base. The sides then turn up sharply, but here we reach the edge of the clod, and can glean no further information. See fig. 136.

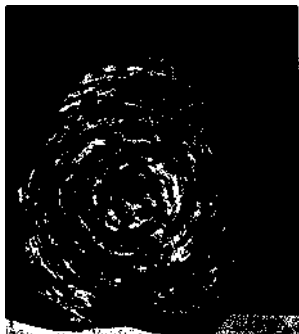


FIG. 136.—EARTHCLAY WITH IMPRESSION OF A BASKET

The Central Reservoir.—Another of the grandiose waterworks of the city was the great reservoir just north of the Maccabean Castle.

The clearance of this pit was a matter of considerable labour, as, like the deep Maccabaeen well on the Eastern Hill (described below), it had been filled with larger stones cast into it.

It was quarried in the rock: the 15' 9" of earth by which it was covered contained no walls and scarcely any antiquities — a "sign that it had remained open till the latest period, and had been hidden by the rain washing earth over it, and by the gradual accumulation of vegetable soil. The length and breadth of the opening, on the surface of the rock, were 57' and 46' respectively ; the pit descends with these cross-dimensions to a

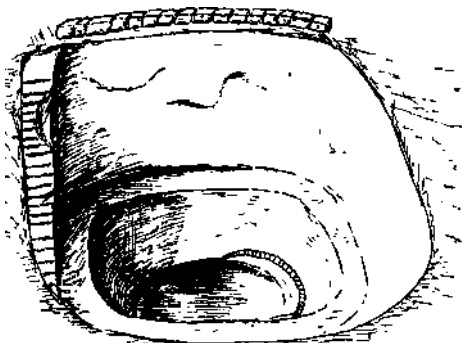


FIG. 137.—THE CENTRAL RESERVOIR

depth of 29' 6". In the floor at this depth a second pool was deepened, measuring 27' x 24' 6" at the top, but narrowing towards the bottom, which proved to reach a farther depth of 29' 6".

This double pool is wholly quarried in the soft, porous, chalky limestone which forms the core of the hill. The sides are irregular, and have many hollows and projecting bosses: they are covered with two coats of cement, each about $\frac{3}{8}$ " thick, the outer coats being smooth and comparatively fine, the inner coat gritty and rough. Careful search was made for inscriptions or graffiti, but none were found. Access to the bottom was gained by flights of steps: the flight in the upper pool is partly rock-cut, partly (in the upper steps) of masonry, much broken ;

that in the lower pool is altogether rock-cut. The drawing (fig. 137) gives a good idea of the general appearance of the whole.

A rough calculation shews that the pool, when full, contained rather over 600,000 gallons. That it was excavated as a public work is evident. How it was filled with water is a problem on which the excavation has thrown no light.

The lower stage had been allowed to get completely full of silt before the abandonment of the city; and after the mound had been turned to a pasture land the upper stage had been filled in with the large stones already referred to. Among these stones were found some with coarse mouldings, etc. (see Plate liii), and also a fragment of the volute of an Ionic capital. No buildings were discovered with which such remains could be associated, unless it be the ornamental city gateway near the Maccabaeon Castle. All the datable objects found among this debris, with one exception, were certainly of the Hellenistic Period: the exception was a jar-handle with the royal stamp of "Memshath." The other objects were potsherds and a few more or less sound vessels, handles of Rhodian wine-amphorae, a few small Ptolemaic coins, beads, fragments of iron picks, and a curious little clay tablet $2\frac{3}{4}$ " long, bearing impressed upon it a representation of a wild beast devouring a man (fig. 138).



Several fragments of pottery shewed glazes (like the glaze on Samian ware): these were principally red, FIG. 138.—CLAY TABLET FROM THE CENTRAL RESERVOIR

A few flint knives and flakes of commonplace types, very rudely formed, and a good many fragments of iron nails, much corroded, were also discovered scattered through the silt and stones, but there was very little that could be called characteristic. Bronze was but poorly represented, one or two earrings being the only objects worth mentioning, and lead by one or two shapeless lumps.

There were also slips of bone of the common types (*EP*, Plate 76, 11), cut from the shank-bones of animals: probably used for rough prickers in sewing skins.

In pottery there was a predominance of fragments of the characteristic elongated ointment vessels (*EP*, Plate 60, 6). Some fragments of Rhodian handles were found. One bearing half of 3. circular stamp was found: the stamp bore the usual rose and the letters . . .] M A [. . . the rest was illegible or broken off. Another, also imperfect, had a similar circular stamp, with the inscription EM IN; and a third, likewise with an imperfect circular stamp, was inscribed APXEMBOTOY . . .

A fragment of a hippopotamus's tooth also calls for mention.

My first idea was that this great excavation belonged to the latest period of occupation: the total absence of any earlier objects in the silt seemed to favour this hypothesis. But the observation that it is apparently surrounded by a wall resting on the rock, going back to the earliest times, rather inclines me to consider that it

really is one of the oldest works in the mound ; possibly enlarged and cemented and certainly cleaned out in later times. On the east side there was a large area in which there were no walls at all. This was probably a place where silt was dumped when the pool was cleared out.

Cisterns.—In every ancient city it was of the first importance to store water sufficient to satisfy the city's needs in case of a siege. Accordingly we find the rock honeycombed with cisterns, one appropriated to each group of houses. There are a very much larger number of these, in all, than were in use at any one time : at any moment in the city's history the cisterns of older strata had become choked and forgotten, while those of later periods had of course not yet been dug. In the maps of the city I have done my best to assign the various cisterns to their proper epochs, basing the deductions on the height to which the opening was carried up through the ddbris, and the character of the pottery and other objects found inside the cistern itself. Cisterns are indicated in the maps generally by the letter c, except where a special mark is used to indicate any to which particular attention is called.

The general type of the cistern is unchanged throughout the centuries. A bottle-shaped excavation, generally circular, sometimes square in plan, is sunk in the rock to a depth of about 16'-23'. The diameter of the floor maybe 11'—26'. The sides are sometimes more or less vertical, approaching together rapidly near the roof; or else they taper in the fashion of a cone, from the floor upward. The only entrance is a hole, always circular, more or less in the middle of the roof, about 3' in diameter and 4' 6" more or less in depth. This mouth is carried up by masonry through the ddbris underlying the date-level of the cistern. The walls are covered with cement or coarse plaster, usually much decayed: sometimes this covering is quite absent, and it is often difficult to understand how the cistern continued to hold water at all.

In the floor, immediately under the entrance, is sunk a hollow, hemispherical or conical—sometimes not much larger than a cupmark, but occasionally of considerable size and depth—say about 4' 6" across and 2 deep. I thought at first that this was for allowing the bucket or picher to descend to the bottom, when the water happened to be low; but my men assured me that in modern cisterns similar hollows are made with the purpose of receiving impurities that might happen to fall into the water. They called it a *musfei*, that is a filter.

As the Gezerites allowed their valuable spring, and the tunnel which with immense labour their ancestors had hewn to reach it, to become choked with silt and pass out of recollection, it will not be a matter of surprise that they displayed the same carelessness in regard to their ordinary cisterns. As a rule, each cistern served one period only, and instead of searching for and clearing out old water-stores, which would have involved little labour, every generation requiring cisterns incurred the enormous labour of cutting new ones. Occasionally, however, there are exceptions to this rule. The large cistern at the north end of trench 27. for example, was used in several periods, and its masonry shaft shewed distinct traces of having been lengthened as each successive stratum was added to the accumulation on the hill-top. As an indication of its long period of usefulness, specimens of potsherds of all periods from Mycenaean to Maccabaeen were found within it.

We have now described the normal type of cistern. A few special peculiarities displayed by individual cases may here be referred to.

Some of the cisterns had evidently been adapted from previously existing caves, and shewed at the entrance the steps, more or less broken, whereby the cave had been entered. An example of this is II 18 A, in which traces of the steps remain at the entrance of the cave. This cave has undergone complete modification in the process of being converted to a cistern, the plan being made round, and the chamber deepened. The original appearance of the dwelling-cave is in consequence quite lost, nothing remaining to tell of it but the fragments of steps. The diameter of the existing chamber is 16' 2".

Another interesting example of the appropriation of an ancient dwelling-cave as a cistern is presented by the large cave 21 I, the plan of which will be found on Plate xiii, fig. 2. The staircase hewn in the rock at the northern end* shews that it was originally one of the Pre-Semitic dwellings. The entrance was originally wider, a large part of the northern side having been built up with rude masonry.

The original floor remains for a breadth of 7', after which the cistern-cutters have deepened the excavation by a drop of 5' 4". There is a recess on the east side which has also been deepened. The total depth at present beneath the surface of the rock is 20' 8": the maximum diameter north to south is 38' 9". The whole wall has been covered with hard cement.

The cave seems first to have been used as a cistern in the Second Semitic Period and a hole was cut in the roof with a circular shaft rising from it, to about a yard above the rock. At this level a water conduit leads away from the mouth, running 13' in a N.W. direction, and then turning sharply round and running 4' to the N.E.

* By an unlucky oversight the drawing has been inverted on the plate, the south being turned up and the north down.

It will be seen at III 21 *d*. This conduit 'is formed of stones set on end, about 8" high : the diameter of the conduit is 10" internally and 20" externally. Its ultimate destination does not appear, as it stops suddenly and no farther continuation of it was to be found. Afterwards the shaft seems to have been carried up past this conduit for another 5' in order to bring this cistern into use by the Fourth Semitic people. There is no perceptible change in the masonry.

So large and well-cemented a cistern would not easily pass out from memory—it is too valuable a property. It was otherwise with a smaller First Semitic cistern which will be seen at the north end of II 21. This was so completely forgotten that another cistern was cut beside it in the Fourth Semitic Period, shewn in V 21, north end. Those who laboriously cut out the later excavation were in blissful ignorance that they came almost within a yard of another, rather more capacious * than that which they made for themselves. This excavation of the two cisterns was instructive : it was carried on simultaneously, and the contrast between the early pottery found in the first and the later ware found in the second was very striking. A good deal of painted ware and some Egyptian objects were found in the Fourth Semitic cistern. There was also a stone measuring 2' x 1' 6" x 6", with a circular depression 1' 1½" across and 4" deep in the upper surface.

Another example of the transformation of a cave is shewn by that at the south end of trench 21, which appears as a dwelling in Map I and as a cistern in II. A vertical section (north to south) will be found in Plate xiii, fig. 5. At the entrance the tell-tale steps remain. Their continuation downwards has been quarried away, but traces shewing the level of the old floor, 6' 3" below the entrance, remain all round: from this it has been deepened a farther 4' 10" with sides gradually converging *downwards*—a peculiarity which distinguishes this cistern from all others found at Gezer. In the floor will be seen the usual filtering hollow.

Inside this cave were found fragments of three skulls, a large number of bones, especially of the camel, fragments of Second Semitic pottery, including small bowls of the common type with wavy sides and one-handled jugs with pointed base. There were also a curious cup of very light porous friable brick, roughly modelled, measuring 9" x 8" x 4", with a depression 2" deep in one of the broad sides, and a number of flints and of prickers made of birds' leg-bones sharpened.

A case of exceptional length of the rock-cut part of a cistern-shaft, on the Western Hill, has already been referred to, in connexion with its bearing on the age of an adjacent cave.

At the south end of V 2 will be seen a cistern peculiar for having its orifice at the side, not in the middle.

The shape of the orifice is uniformly circular ; but in one case (VI 18 A) it is cut at the end of an oblong sinking in the rock. This cistern is one of a small minority that are rectangular or square on plan : the sides measure 13' and the depth 21'. The oblong sinking is 5' 10" long, 2' 8" broad and 1' 6" deep: it runs north and south.

Other cisterns of exceptional plan are occasionally found. Thus in the Fourth

* Depth 20, diameter at base 17' 8½".

Semitic cistern at the north end of V 21, already referred to, the plan is a circle, 14' 3" in diameter, with a segment cut off on the east side by a chord 11' 3" long.

At the south end of I 30 is a cistern of peculiar shape, as shewn in the section Plate xiii, fig. 3. It is of no great depth (13'), and 8' 6" diameter at bottom. There are two footholds in the entrance shaft. The purpose of the shelf by which the curve of the expanding part of the cistern is interrupted is probably to enable a man to enter and leave the excavation without using a rope: for an active man this would not be an impossible feat. Some objects found here are shewn in Plate xlv, figs. 7-10.

The unfinished cistern in I 14 is a cylindrical shaft 7' 9" deep, with a small depression in the middle at the bottom: it is 3' broad. There were some potsherds in it, not however of the oldest periods.

The cistern at the south end of VI 7 is slightly wider and more cylindrical than the majority. Hellenistic pottery was found in it, as well as the skull of an aged horse. The depth is 21' 4" (the silt-pit an additional 2' 2½") and the breadth 9' 5½".

One of the largest of the ordinary cisterns found was that which will be seen in II 30. It measured 30' in depth, and 28' 5½" in diameter at the base. The neck is 11' deep. A great stone 7' 2" long by 2' 5½" broad and 1' 4" thick was lying over the entrance and partly blocking it. From this cistern, besides the usual pottery sherds, there was taken a waterpot of the common type so frequently found in cisterns; a small jug with rounded base; fragments of a broad flat bowl in light Venetian red; a splinter of alabaster; a fragment of a pseudo-Mycenaean bowl with frieze pattern, containing metopes divided by four panelled zigzags, in them a double axehead and an octopus alternating; fragment of a Mycenaean lentoid vessel; a bit of an oblong shuttle-shaped tray of pottery; a fragment of pottery with a light pink daub upon its drab surface; and a fragment of a bone of a bird split longitudinally, with a groove across top end. This catalogue shews that the cistern continued in use into the period following that in which it seems to have been made; though not a stone remained of the built shaft which in that case must have been necessary to carry its entrance upward to the specified stratum.

A few cisterns were sunk at the bottom of small circular pools. These are all of early date, as might be expected, as the pools could not have been dug easily unless the rock was exposed. A good example is that at the north end of I 10, which contained nothing but First Semitic potsherds. Another is marked in IV 7, because it must have been used (to judge by its contents) in the Third Semitic Period. In this there is a pit, 8' across and 2' 8" deep, sunk in the rock. In its middle is a shaft, 7' deep and 6' 5" across, contracting suddenly by a few inches at the bottom, and then expanding into the ordinary bell-shaped type of chamber, 15' 5" high and 15' 10" across at the base. It may be suggested that the pool is meant to increase the catchment capabilities of the cistern.* For the same purpose, no doubt, were made the curious radiating grooves round the mouth of a cistern at the north end of trench 6, here shewn in fig. 139.

* It might also in some cases have been intended to afford a more secure foundation for the masonry part of the shaft.

Unfinished cisterns are sometimes to be found. Thus at II 29 A is a vertical cylindrical hole cut in the rock, 8' deep by 3' 0¼" across. Even less finished is V 30 B, which is merely a large pit dug in the earth, abandoned before the rock was reached: it probably was begun with the intention of forming a cistern. The unfinished cistern in I 14 is 7' 9" deep, 3' 0¼" wide, and has a little depression in the middle.

That cisterns were not without danger to the inhabitants of the houses to which they were attached is shewn by the occasional discovery of

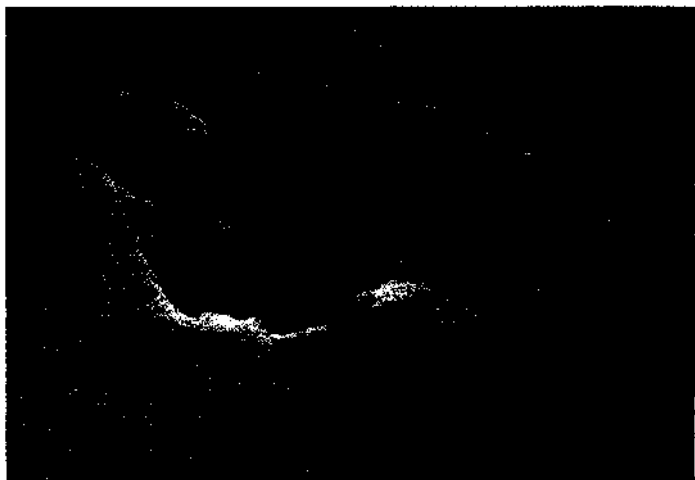


FIG. 139.—RADIATING GROOVES ROUND CISTERN MOUTH

skeletons and parts of skeletons within them, which can be most reasonably explained as the remains of persons who had accidentally fallen in and been drowned. One such was found in the cistern in the middle of II 2. That no attempt seems to have been made at recovering the body shews a remarkable callousness, not merely to natural feeling, but also to the danger resulting from the consequent tainting of the water.* In one or two cases

* Which is not without its parallel even in modern Palestine. During the cholera epidemic of 1902 no small mischief was done in Jaffa and elsewhere by people secretly disposing of victims of the pestilence by throwing the bodies into cisterns, in order to avoid the temporary

rods of bronze * or of iron were found in the cistern. It is not unlikely that these originally spanned the well-mouth, and were designed to prevent such accidents.

Besides the cisterns within the walls, many were found in the surrounding hills in the course of searching for tombs. Of these only one presents features worthy of special notice. It is the cistern in *Waret Saldmeh*, near tomb no. 7. It has two mouths: one of these is in the top, the other communicates by steps with the side of the neck. It was empty save for sherds of late Roman pottery. It is excavated with more art than such cisterns usually display: the lower part is bell-shaped, there is then an intermediate square portion, and the mouth is conical. The depth is 15', the breadth at bottom about 13' 8". In fig. 140, which shews the two vertical sections, *a* is north to south, *b* is east to west. From the plan it will be seen that the uppermost step is shorter than the others. Some objects found in another hill-side cistern are shewn in Plate xix, figs. 25-28.



FIG. 140.—PLAN AND SECTIONS OF CISTERN IN WA'RET SALÂMEN

Besides the cisterns, some small rectangular **tanks** were found in the slopes of the hill. One of these, which measures 6' $2\frac{7}{8}$ " deep by 5' square, breaks through into tomb no. 9: probably a rash attempt was made to deepen the tank, after it had been finished, which led to the accident, as otherwise the excavators would not have taken the trouble to cover its walls with cement. Nothing was found in the tank itself, but the lamp, represented with the objects from tomb 9, Plate lxxi, fig. 30, must have fallen through it into the cave below. Again, the tank between tombs 7 and 8 is rectangular, 4' $2\frac{7}{8}$ " deep and 3' $11\frac{7}{8}$ " X 4' 6" across. It was cleared out, but found to contain nothing but earth washed in. Other tanks will be noticed here and there on the plan Plate viii. These are essentially similar to the two that have been selected for description.

In two or three places on the mound were found masonry **reservoirs**, inconveniences which the repressive sanitary measures taken by the Government imposed upon those who had come into contact with the infection.

* One such from the large cistern in trench 21, measuring 1' $8\frac{3}{4}$ ", was described at first as a "sceptre" (QS, 1903, p. 302). But I feel now that the simple explanation given above is the more probable.

with steps descending at one end, and covered internally with a lining of cement. These were confined to the Hellenistic stratum.

These tanks are almost rectangular in shape, and built of well-cut stones, carefully coursed. Access to them was gained at the end or side, where there is a platform, from which a flight of steps leads downwards to the bottom. The platform and steps are paved with cement similar to that which lines the walls. In the plan (Map VI) they are indicated by the letter *r*.

We may describe more particularly one of these tanks, as they are so much alike that with few differences the description will suffice for all. The western example in VI 18 is the best preserved. Enough traces remain in the cement floor to shew that it was entered from the west, and that the platform was a vaulted (?) vestibule

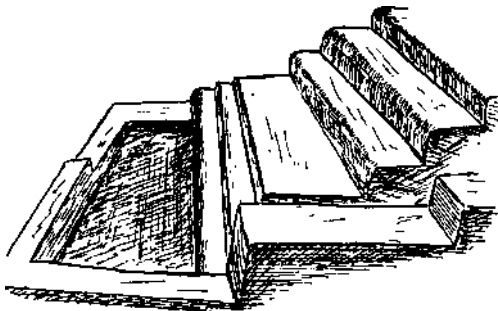


FIG. 141.—STEPED RESERVOIR

giving, through two arches, access to the steps. On Plate liv will be found a plan and attempted restoration of the whole, which will shew its leading characters. That the pool was vaulted is proved by the voussoirs with which it was filled, when first discovered, which had evidently fallen from the roof. The whole is ruined to the level of the platform floor, but for all the vertical details shewn in the restoration there is justification in the broken edges of the cement floor.

The differences in detail between the individual specimens of such reservoirs are unimportant. Thus of the two in VI 18 the pier dividing the top step was square in the western tank, round in the other. There are nine steps leading to the bottom in the western tank, seven in the other. In the western tank the bottom step has a rise of a few inches only; in the eastern it is 2' 3½" high. It is clear moreover that the eastern tank was entered from the east side, the western from the west. The western tank is slightly the larger of the two.

A very similar tank was found at Tell Zakariya: see *EP*, p. 21.

As the reservoir at the north end of trench 2 happens to have lost its side walls, it is a favourable example for exhibiting the construction of the steps. A sketch (fig. 141) is accordingly here given. They are of stone cemented : the nosing of the step is rounded. The breadth of the tread and height of the rise are not regulated by any system, broad and narrow steps alternating. Naturally, the masonry of such structures as this, being required to retain water, was much better than the average masonry of the houses.



FIG. 142.—RESERVOIR IN VI 4

The contrast between this reservoir and the large but much ruined building of which it formed a part (the long wall to the north was no doubt part of it) is instructive. The building containing this reservoir is a rubble construction of large irregular stones—one of them, not exceptionally large, measures 3' x 2'—not squared in any way except by spalling with a hammer. The southern wall is better built than the northern, the stones being long and comparatively flat—one measures 6' x 1' 6". The reservoir itself is better built, the stones being well squared with a $\frac{3}{4}$ " chisel held obliquely, so as

to make "saw-tooth" cuts, and neatly fitted together. These stones are covered with thick cement.

An especially interesting example of a built reservoir with steps occurs in VI 4, marked on the plan with the usual symbol *r*. It is perhaps an adaptation of an older structure, dating from the Fourth Semitic Period, built of well drafted and squared stones. The masonry dressing resembles that of the square towers in the outer city

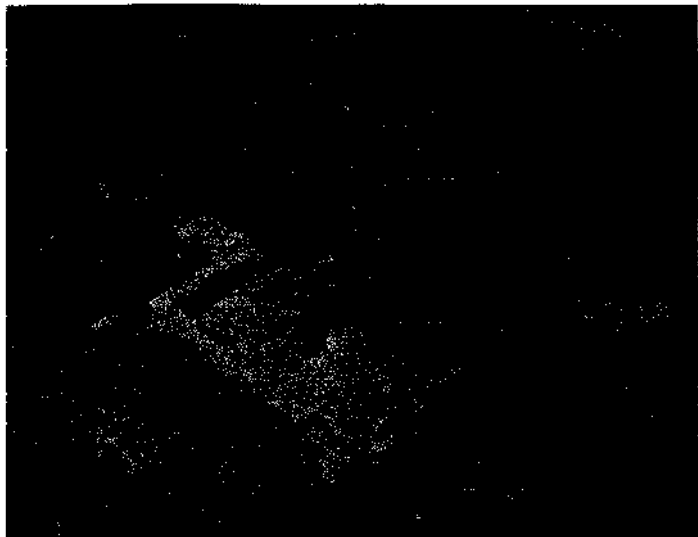


FIG. 143.—CEMENTED POOL IN II 26 A

wall, and taken as a whole is one of the best pieces of building on the hill. Three sides of this building remain: the western side is gone altogether, and in its place a flight of steps of rough masonry has been built across, butting against and concealing the good masonry of the side walls. Some of the stones have marginal drafts, but not projecting bosses. The *outside* of the structure is simply rough rubble brought to courses, with a layer of cement between each course. There were a large number of finely dressed stones lying about, especially inside the reservoir, which had been dressed with a $\frac{3}{8}$ " chisel, in long strokes and sometimes diagonal, but by no means resembling the diagonal dressing of the Crusaders. Four of the stones are

cut with rounded sides as though for an arch or corbel. Cement still adheres to some of these stones. A good specimen of the square blocks measures 1' 10½" X 1' 1" x 10". There are no masons' marks on any of these stones. The accompanying photograph (fig. 142) will make the description clear.

An early example of a cemented **pool** will be seen in II 26 A, a long narrow shallow depression, for which see the accompanying photograph (fig. 143).

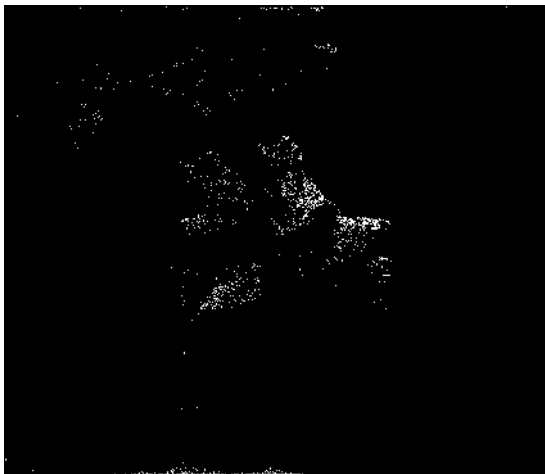


FIG. 144.—WATER CHANNEL IN VI 3 A

Drains and Conduits.—Water (and possibly sewage) was conveyed from place to place by means of built drains, fragments of which were found here and there. These were all unfortunately so much ruined that in no case was the origin and destination of the drain to be discovered with certainty. They consisted of a double row of small stones, set on end and cemented with mud: the more perfect examples were covered with similar stones laid across. The channel was paved with stones or with beaten mud.

Specimens of water channels will be found in various places : they are indicated on the maps by the letter *d*. The example in V 2 is a small crooked example with earth floor. I112 contains a minute fragment. VI 3 A is in connexion with a large house having the floor paved with stones—the pavement was all removed before the photograph, fig. 144, was taken. In this case the channel is cut on a row of stone slabs. It runs straight for 2', and then expands into a broad trough 2' by 1' 9" broad.

The water channel VI 29 A was a curious structure, not quite easy to understand. The source of the water was probably some reservoir that had been com-



FIG. 145.—DRAIN OF JARS IN V 5 B

pletely destroyed. The channel began abruptly and ran from east to west: it was 10" broad and $7\frac{7}{8}$ " deep, and had a fall towards a triangular basin, 4' long by 2' 8" across. At the entrance to the basin was a stone set on edge, having a cup in it 6" across and 3" deep, apparently to block the mouth of the channel: the stone was 10" high, $8\frac{1}{4}$ " thick, and 1' 1" broad. The cavity was on the vertical face towards the triangular basin. From the opposite end of the triangular basin was an overflow channel, 8" across.

At V 5 B are to be seen vertical drains of jars, or rather fragments-of jars, in a vertical line, one above the other, with a hole broken in

their butt ends so as to make a pipe (fig. 145). These did not lead to any sewer or cesspool, but merely allowed the water carried away to be dispersed through the soil underlying the house. Similar is the horizontal drain leading into the cistern with bones, described in a later chapter. Vertical *built* drains were so rare that only one example was found, at the north end of trench 3, fig. 146.

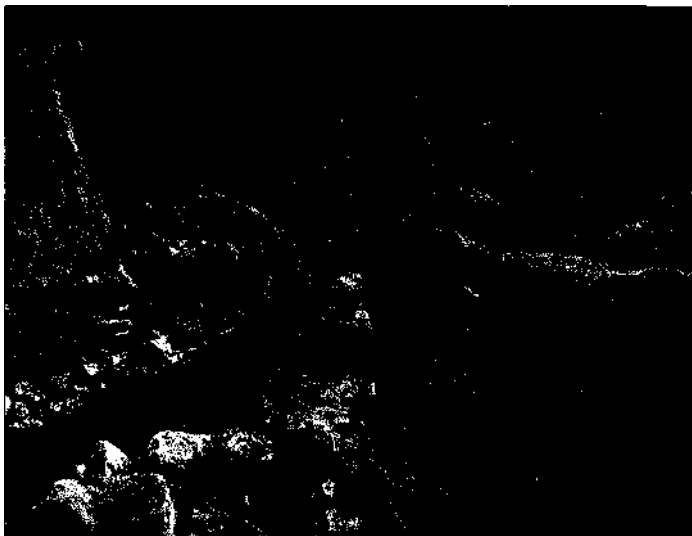


Fig. 146. VERTICAL. BUILT DRAIN, TRENCH 3

The neighbourhood of the great tunnel was remarkable for the number of fragments of watercourses remaining. Whether they were intended to add to the water in the spring by conducting rainwater to it, or whether they were made after the spring had fallen out of use, to turn it into a cesspool, are questions that cannot be answered. All the drains seemed to lack the beginning and the end ; but they all seemed ultimately to tend in the direction of the tunnel. One of these, in III 29, is branched, which is unusual. It is shewn in fig. 147.

The Maccabaeon Well.—In the last period the attempt was

once more made to bring an abundant supply of water into the city, by means of a deep well sunk on the Eastern Hill, about the middle of trench 2. This consisted of a chamber about 16' 5" square. The floor and walls were covered with cement, which was laid direct on the surface of the rock at the eastern half of the chamber: at the western half, where the rock falls away, a rough bedding of stone and mud had been laid to make the floor even (see the section fig. 148). The walls were standing to a maximum height of 2' 8". Numerous drafted stones



FIG. 147.—BRANCHED DRAIN IN III 29

with bosses found in the enclosed shaft shewed that it had been a handsome building: one stone bore on the draft the mason mark that was also found in the Maccabaeon Castle, and sufficiently attested the date of the structure (fig. 149). The stones of the well-shaft were dressed and squared: those of the building over it were squared and (in addition) drafted with projecting bosses, the final dressing being given with a gouge-shaped chisel !" across.

In the centre of the chamber was cut a circular shaft 9' 10" in diameter, and sunk 7' 9" through the rubble bedding and rock. It then expanded below like a cistern. Indeed it is probable that the whole work

was adapted from a previously existing cistern by sinking a shaft in the floor and widening the mouth.

The well-shaft is sunk through the floor of the cistern. How deep it may be it is impossible to say: I carried the excavation as far as the eighteenth course of masonry, at a depth of 35' from the cement floor of the building above. The difficulty of the excavation will be realized when I say that the shaft was filled, not with earth, but with large stones, no doubt thrown in with intention in order to choke the well. Each of these stones had to be hauled up singly to the surface with a crane; and as the fellah is generally careless as to details of his work, there was the ever-present danger of a badly tied stone falling back and crushing the labourers below. The probability is that the shaft descends so far as to tap the source which supplies 'Ain Yerdeh, which means that it is probably not less than 120' deep. If so, two reasons for its being choked up may be assigned with fair probability: to prevent animals falling into it when the mound was turned into a pasture land; and to increase the supply of 'Ain Yerdeh by preventing water from being diverted to the useless hill-top well. The



FIG. 149.—MASON'S

MARK

OVER

it.

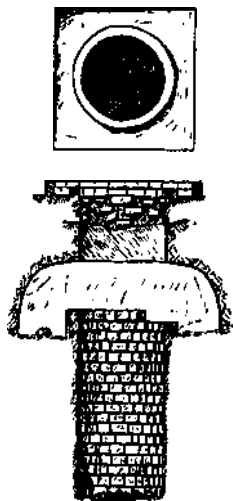


FIG. 148.—PLAN AND SECTION OF THE MACCABAEON WELL

mason's mark suggests the probability that it was excavated under the direction of Simon Maccabaeus or Hyrcanus, to supply the city with water in case of a siege.

Nothing was found in the well, so far as the excavation was carried, except some fragments of contemporary pottery. The stones in the well-shaft were themselves not drafted, which increases the probability that the drafted stones found within it came from some building erected

Some little way to the south of the well, standing on a wall of the period next before, was a large stone vat (fig. 150). This probably was for watering cattle, washing clothes, etc., with the water brought up from the cistern. Such vats stand round all the wells in modern Palestine, and are used for similar purposes.



FIG. 150.-STONE VAT

CHAPTER V

THE BURIAL OF THE DEAD

§ 19.—PRELIMINARY REMARKS

FROM the beginning of the excavation it was felt to be a matter of great importance that the cemeteries surrounding the town should be examined carefully. But little systematic information has hitherto been obtained regarding the history of burial customs in Palestine, and to gain some knowledge on this subject was one of the aims of the excavation. And it was important that some such investigation should be taken in hand without delay, for the material for scientific research will before long be dissipated beyond recall. The hordes of savages and semi-savages that have from time to time overrun Palestine have worked far less irreparable injury to science than the soulless fellabin, the conscienceless curiosity-mongers, and the brainless but alas! moneyed tourists who between them are tearing the ancient tombs of Palestine to pieces to obtain what they style "old things," "souvenirs," and "curios." It was desirable if possible not to leave any important tombs to be discovered by these pests and parasites of science.

The district round Abu Shusheh has not a good name with the professional tomb-plunderers, some of whom were in my employ. Rarely, if ever, as they told me, had valuable objects been found in this neighbourhood. This seems to contradict a statement that was reported to me, alleged to have been made by a Ramleh dealer, that formerly the best glass used to come into his hands from Abu Shusheh. This, however, probably means merely that it was brought to him by Abu Shusheh men, or by people who alleged that it came from Abu Shusheh. As a general rule the statements of those employed in the antiquity trade regarding the provenance of any object are presumptive evidence that it came from somewhere else.

This general poverty, in local reputation, of the Gezer tombs was

borne out by the results of their examination. Nothing was found in the least comparable with the great tomb of Apollophanes at Beit Jibrin, or even with some of the less ornate sepulchres in that once incomparable site. The general results, however, were of considerable importance.

Some of the earliest sepulchres found were *intra-mural*; but the vast majority of those from the Third Semitic Period onwards—and all, without exception, from the Fourth Semitic Period onwards—lay without the city walls. These are indicated by reference numbers on the map, Plate viii, so far as they lie within its area: there are a few outside to the east and west. I now proceed to describe the sepulchres discovered, both inside and outside the city walls. I have decided, after careful consideration, to take the latter in *geographical* rather than in chronological order, as there are a number of tombs which, as they contained no datable deposit or other indications of the period to which they were to be assigned, cannot be chronologically classified. The tombs on the slope of the hill itself are taken first, beginning with the field known as *Wdret Saldmeh*, as the oldest tombs happen to lie within that area: afterwards those in the neighbouring hills are described.

In the description contained in the present chapter it will be convenient to have a nomenclature for the different parts of the chamber that shall be independent of the cardinal points. The names *door wall*, *left wall*, *right wall*, and *back wall* will therefore be used for 'the sides of a quadrangular chamber—"right" and "left" denoting the hands of a visitor as he enters the cave. The graves themselves will be denoted by italic letters—*a* being always the first grave to the left of a visitor entering, and the others denoted in order from left to right. The received name *kok*, plural *kokim*, will be used for horizontal shaft-graves: some, evidently intended for two bodies, will be called *double kokim*. The shelf-grave resembling the berths in a steamer's cabin, recessed in the wall of the tomb chamber, will be called by the usual name *arcosolium*. The exceptional case in which there is no raised edge to the shelf on which the body is laid will be denoted by the term *bench arcosolium*. A *bench grave* is a variety of *arcosolium* in which the shelf, instead of being recessed in the wall of the chamber, projects outside it, being the top of a block of rock left uncut. When this is hollowed so as to resemble a sarcophagus I term it a *sunk bench grave*. A *sunk grave* is a receptacle

hollowed in the rock-surface, either in the open air or in the floor of a chamber.

After the descriptions of the tombs with their contents, an endeavour—necessarily brief owing to exigencies of space—will be made to sketch the course of the development of Burial Customs as indicated by the remains found in the excavation.

§ 20.—THE TROGLODYTE CREMATORIUM

In describing the evidence of burial customs unearthed at Gezer, we resume the description of cave 2 I (marked on the map "Crematorium") and its very important contents. We saw in the description already given in Chapter IV that the floor of this cave was found to be covered with burnt human ashes, within the limits of the dot-and-dash line on the plan (p. 74, fig. 20). Under the sill of the chimney passage these ashes had been burnt *white*, evidently under the influence of a much more concentrated fire than the rest. The layer of bone ash was about 1' thick about the entrance, and diminished to the border of the area within the broken line, where mere traces were found.

Two things were obvious with regard to the burning. In the first place, it had not taken place all at one time; for under the chimney-sill the ashes were in strata—white and black alternately—shewing that the fire had died down and later been renewed. This shewed that the bones were not those of the victims of a single conflagration. In the second place, the bodies had been burnt whole on the spot where they had been found. Though trampled and broken, they were, comparatively speaking, continuous, each bone occupying its proper position relative to neighbouring bones. The hyoid bones, which would probably have been lost in transporting ashes, were in place. A bone amulet, which had evidently been burnt with the body of its owner, was found in its proper position.

It is at first sight a matter for surprise that there is no trace of smoke-blackening on the walls or roof of the cave: in this respect it contrasts remarkably with the caves used by modern shepherds in Palestine, the limestone walls of which are smoked to glossy, almost bituminous-looking black colour. This is perhaps due to the friable nature of the limestone, the outer skin having perished; but it is more probably due to those who, in the First Semitic Period, adapted the cave for burial,

and who, as we shall see, appear to have enlarged it, thereby of course removing all marks of smoke from the walls.*

The rude pottery found deposited with the burnt bones will be described in a later chapter: its correlation with the pottery of the cave-dwellers is sufficient to prove, if proof were needed, that this Crematorium was the place for the disposal of the dead of the Troglodytes. The only other object found in the burnt stratum was the amulet made of the metacarpal bone of a kid, which has just been referred to. It is pierced with two holes for suspension, and doubtless was hung on the body of its owner and burnt with it.

Above the stratum of burnt bones was another entirely different series, unburnt. In these the dead were deposited all over the floor, and, so far as could be determined, were lying on their sides in a contracted position. There was no attention whatever paid to orientation. The bodies of different individuals were heaped one on top of the other: as the bodies decayed the bones intermingled; and the operations of rats—whose burrows extended in all directions within the cave—greatly increased the confusion.

Ranged around the wall were a series of enclosures (probably the graves of persons of distinction) and some other features of interest. They are indicated on the plan (fig. 20) by index letters. The following is a description of these details, in order :—

A. A grave enclosure consisting of a pavement of flat stones, laid together in regular order, about 5" above the rock floor of the cave, and bounded by rows of large stones. It contained fragments of three adult and two infant skeletons. Of the adults one was male, the other female; the third was too fragmentary to be satisfactorily determined. The skeletons had been much disturbed by rats.

Between A and B was a similar raised platform, not, however, limited by a boundary wall, on which was deposited a large jar of coarse, gritty, brick-red porous ware 2' 4" long, with flat base, inverted conical body surrounded by a rope-moulding, gently curved shoulders, and mouth abruptly turned back. It was supported in position by a packing of stones and sherds of a similar large jar. This vessel contained the bones of a newly

* In *QS*, 1902, p. 350, I stated that the interstices of the rock in the chimney shewed stains of smoke-blackening. I am now not altogether certain that the stains are to be so explained: the infiltration of earth makes similar black stains.

born infant: the mouth of the vessel had been broken to allow of the insertion of the body, as was usually the case with such interments. A few minute beads were found intermingled with the bones—evidently they formed part of a necklace that decorated the body. It is possible that this infant was offered in sacrifice at the inauguration of the cemetery: there were a considerable number of infants deposited with the mass of bones in the middle of the cave, and except on some such hypothesis it is difficult to explain the special treatment of this individual.

B. A large enclosure composed of stones set in stiff mud—unlike the other enclosures, which are built of dry stone. It was perhaps originally of a half-beehive shape. The interior of the enclosure contained a number of fallen stones. Some time after these stones fell from the wall of the enclosure, a very fine collection of pottery was deposited over them.

C was an erection of flat stones, 1' above the floor of the cave, and 3' 3 $\frac{3}{4}$ " x 3' 10 $\frac{1}{8}$ " across its upper surface. This was carefully demolished and afterwards rebuilt, but nothing was found inside or about it to indicate its purpose. It is more like an altar than anything else, but I should hesitate to assign such a purpose to it.

D is an enclosure similar to A. It contained three crania—two of them male; the third was much broken, and its sex doubtful. There were also fragments of a female skeleton in this enclosure.

E differed from A and D in having had a boundary rather higher than theirs. This contained the fragments of a male skeleton, represented only by a few bones, and a female. The stones of the boundary of this enclosure had fallen and much injured the bones of these skeletons.

Though the bones in the enclosures had been much pulled about by rats, it appeared that the bodies to which they belonged were originally deposited at full length, while those cast into the middle of the floor were, as already remarked, in a contracted posture. As there was no physical reason to suppose that those buried in the enclosures differed in race from those in the body of the cave, we must suppose that the variation of the mode of sepulture indicated a difference of rank.

There was a considerable quantity of pottery lying about on the floor of the cave, but not grouped in any particular order. A selection of the finest pieces was, as already noticed, heaped up inside enclosure B. Others (usually in pairs, a jug and a saucer) were built into crevices of the grave enclosures. Besides the pottery, there were found, inside the

door, the very rude limestone figure fig. 17 ; a few perforated Venus shells; about half a dozen minute blue-enamelled beads (found among the stones inside enclosure B); a perfectly plain silver ring (between enclosures D and E) ; and, scattered through the debris in the cave, about fifty beads of agate and carnelian, consisting of small circular discs with countersunk holes drilled through them.

At the mouth of the cave, as we have already said, a number of cupmarks were cut in the rock. These in process of time became covered with accumulated earth. When this earth had become about 1' thick, the small standing stone mentioned in the description in Chapter IV was erected over it. It is conceivable that the cupmarks are ritual adjuncts of the cave belonging to the period of its use as a crematorium, and that the standing stone is a relic of the religious rites of those who later adapted the cave for inhumation.

§ 21.—INTRA-MURAL CAVE-BURIALS AND OTHER INTERMENTS

Human bones were found inside the cities under various conditions. Some were inside cisterns : in that case the remains were probably those of the victim of an accident or possibly of a murder, and cannot strictly be described as an interment. We have noticed such already, in describing the cisterns, and one or two special cases will be referred to in the chapter on Warfare in Vol. II. Again, bones buried under the foundations of houses, or the sacrifices interred in the precincts of the High Place, belong properly to the chapter on Religion, and are there more particularly described. In the same chapter is noticed the strange deposit of a mutilated female with some male skeletons in a cistern. Here we speak only of cases in which the body seems to have been intentionally disposed of as a *burial*, without ulterior aims or circumstances.

The simplest form of interment is that of a body placed in the ground without accessory of any kind, and not, apparently, *in* relation with any building. A few examples were found, which are noted (by the letter *i*) on the plans of the city. The skeleton in these cases was stretched out and laid on its back or side. No rule of orientation was observed. In none was any ante-mortem injury traceable on the skeletons; but it is not improbable that all these cases of intra-mural earth-burial—so much at

variance from the cave-burial, which is the normal form—were the remains of murdered people, disposed of in this casual way by their murderers.

It is unnecessary to enter at length into a detailed description of the cave-burials, as this has already, for the greater part, been given in describing the caves themselves in Chapter IV. In all the caves where Early Semitic sepultures were found, the character of the burial was uniform. The bodies were placed, in a crouching position as a rule, though this was not invariable, in the middle of the cave; and round the wall were ranged pottery vessels large and small. No remains of food were found in any of the vessels buried inside the walls. Apparently most of the deposits were liquid. Large wine-jars were the commonest deposit, and very often a small jug was found inside them, no doubt intended as a dipper to assist the deceased to help himself. An alabaster pot or two was added to the deposit in a few cases, and perhaps a bronze spearhead (the complete spear was no doubt originally deposited, but of course the haft had corroded away). The wine-jars were almost always standing on their ends, shewing that they had been full when placed in position. None of them had a stopper of any kind, though possibly a wad of cloth or of grass may have been pressed into the mouth of the jar at first. Not infrequently, however, the large or small jars lay on their sides, in which case they must have been empty (or possibly containing cheese or butter), and occasionally they were even found mouth downwards.

A few notes on special cases will be all that is necessary to complete the above generalizations. In 3 III a rude receptacle for bones had been improvised by splitting a large wine-jar longitudinally, and placing them in the concavity of a half of it. The bodies in II III were stretched at length: about twenty jars were deposited with them, not arranged in any order. In 19 I there was a case of a built enclosure erected around the skeleton.

§ 22.—THE "PHILISTINE" GRAVES

Five graves were found in V 15 distinguished by their character from any other discovered in the neighbourhood. Though the space all around them was opened out in the hope of finding more, no others were discovered.

They are numbered 1-5 in the diagram, fig. 151, which shews their relative position, though not the proportions of the distances between

them—this of course would be impossible. The general plan, Plate v, marks this duly. It shews that graves i and 2 are on the same north-south "longitude," though separated by an interspace, and that 4 and 5 make a similar pair; also that 4 is on an east-west "latitude" between those of 1 and 2, while 5 is farther to the south than any of the others. No. 3 differs in important respects from the rest, though no doubt it belongs to the same series.

The four graves 1, 2, 4, 5, were oblong rectangular receptacles, built

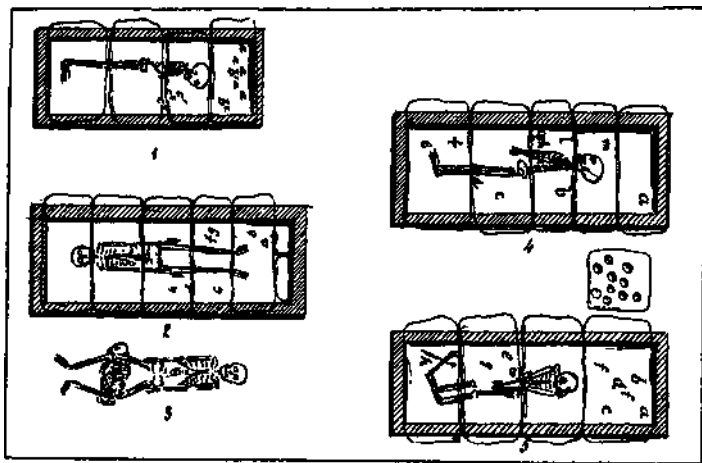


FIG. 151.—DIAGRAM OF THE "PHILISTINE" GRAVES

of masonry, and covered with large horizontal slabs. In each was a single body stretched out, lying on the back or side. There was a uniform east-west orientation of both grave and body, the head being to the east, except in no. 2, where for some reason it lay westward. Around them were deposited articles of ornament and food. The fifth interment (3) differed from the rest in the absence of the built grave and cover-slabs.

The following is a detailed description of the five graves :—

(1) Length, 6' $9\frac{7}{8}$ " ; breadth, 2' $4\frac{3}{4}$ " ; depth, 4' $3\frac{1}{8}$ ". Covered with four massive stones and lined with cement. Skeleton of a young girl, about eighteen years of

age. Head to east, and body apparently lying on left side. East of head a heap of food-bones, mutton and chicken (*a*)* among which were the broken fragments of the neck of a jar of compact light reddish brown ware (fig. 152, no. 1). At the south side of the grave, a little west of the food-bones, were some fragments of alabaster (*b*¹ *b*²), and two more fragments were against the breast of the body (*c*¹, *c*²). These together made two vessels of the type of fig. 152, no. 2. There was also a small plate of silver with perforations for threading. This was a mouth-plate, such as have been found in Cretan tombs, but never elsewhere in Palestinian. It is found in other tombs of the series under description, and an important indication that they belonged to an exotic race. This is shewn in fig. 152, no. 3.

(2) Length, 9'; breadth, 3' 3½"; depth, 3'. Lined with plaster and covered with

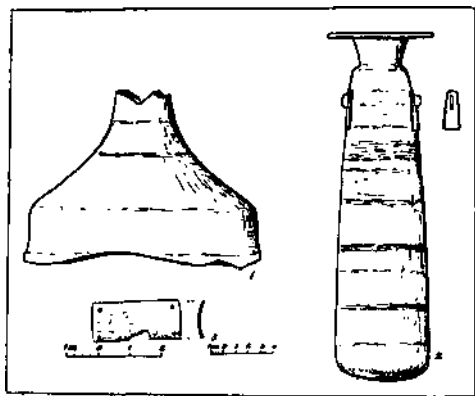


FIG. 152.—OBJECTS FROM PHILISTINE GRAVE NO. 1

five slabs, embedded in cement, with two smaller stones at the end, where the last slab was not sufficiently broad to cover the opening. Skeleton of a man about 5' 10" in height and about forty years of age, lying on his back. The head (exceptionally) pointed westward. The tomb contained a few mutton bones, at the feet, and six alabaster jars, all similar in type to the jars found in fragments in the first tomb (*a*–*f*: Plate lv, figs. 1, 2). There was a small fragment of an iron knife on the left-hand side at about the level of the middle of the tibiae (*g*); and near it was a small square glass bottle with two handles, about half an inch in diameter and two inches long. This object, as well as a seal-cylinder with a

* These letters refer to the index-letters in the diagram (fig. 151) by which the position of objects is marked. Where there is no index-letter the object was found in the sieves when the earth was finally examined, so that its exact place cannot be shewn.

conventional Assyrian pattern, were missed after a party of visitors had been to the excavation, and I fear they were stolen. On the right-hand side, about the level of the knees, was a remarkable little pot of black ware (*h*), having four handles: its cover (Plate lv, figs. 3,* 4), as well as a bone chisel-pointed spatula (Plate lv, fig. 7), an agate scaraboid seal with an Assyrian design (fig. 153), and a bone case containing a fragment of lead (Plate lv, figs. 5, 6), were strewn about the clay that partly filled the bottom of the tomb. In Plate lv the principal objects from this tomb are collected together. Of the lost objects no drawing had been made.

(3) This was the skeleton of a tall man, 6' 3" in length, stretched, with head to east, outside and to the south of tomb no. 2. There had been no building erected round it; but the associated objects shewed that this was no mark of inferiority. The dead had been provided, for his nourishment, with a whole sheep, placed under his knees. He had a silver mouth-plate, which lay on the teeth of the skull (Plate lv, fig. 8), and his dress was fastened with two fibulae and a pin of bronze (Plate lv, figs. 9, 10). The latter has a square head divided by small grooves into four horns. At his side was lying a leaden object (fig. 11), apparently the handle of something which has decayed; and beside the neck was a plain gold ring (fig. 12), perhaps an ear-pendant or an ornamental attachment of a head-dress. The thigh-bone of this person was in a badly diseased condition (see *ante*, p. 67).



FIG. 153.—AGATE
SBAL.

(4) In this grave, which was about the same size as no. 2, was the skeleton of a woman, with a rich assortment of deposited objects. The head in this case was turned eastward, and the body lay on its right side. There were a few sheep-bones near the head. The deposits may be described in order beginning at the S.E. corner, and working round the margin of the tomb westwards, northwards, and eastwards. In that corner was the bronze pot (*a*, fig. 154, no. 7). About the middle of the back of the figure was a bronze hand-mirror (*b*), rather corroded, with a bunch of grapes (?) in relief on the back (no. 5). Behind the thighs was an alabaster vase (*c*), similar to those from tomb 2; and just behind the knees was a plain basalt scarab (*d*, no. 16). Just under the feet was a small plain saucer (*e*) of silver (no. 2). In front of the middle of the tibiae was another alabaster pot (*f*) of the same design as the last; and in front of the lower ribs were a silver bowl, much decayed, with repousse and incuse ornamentation (*g*, fig. 4), and an iron knife in the remains of a wooden haft, to which the blade seems to have been fastened with some kind of cement (*h*, Plate lv, fig. 13). Near this was a plain bronze ladle (*k*, no. 6). The bronze pot, mirror, and ladle appear in the photograph, fig. 155. Against the chest was another alabaster pot (*l*), and in front of the face a handsome silver vase (*m*), with fluted side and long cylindrical neck (fig. 154, no. 1). The silver vase and bowl are seen in the photograph, fig. 156. On the right upper

* The vessel is whole, but in the drawing part of it is broken away to shew the section of the mouth.

arm was a bronze bracelet (no. 10), and on each ankle a silver anklet, the ends of the silver bar terminating in the heads of animals (no. 3). In sifting the soil after these objects were removed there were found a couple of beads (nos. 8, 11), two small non-descript fragments of bronze (nos. 9, 12), a small cone of limestone trimmed to the appearance of a human figure (no. 13), an eighteenth-dynasty scarab bearing the name of the fourth-dynasty king Men-ka-ra (no. 15), and a fine carnelian seal (no. 14) shewing a priest adoring a winged disc, with underneath a crescent and sphinx.

(5) This was the richest of the five tombs. The grave was 9' 0 $\frac{1}{4}$ " long, 2' 11 $\frac{1}{2}$ " broad, 3' 9 $\frac{3}{8}$ " deep. There were four coverstones embedded in cement. One of these had a number of pits cut in its

end. The head was severed from the neck and was lying on its right side on the breast, and one of the radii was dissociated from its companion ulna and was lying

PHILISTINE (?) TOMB DEPOSITS



FIG. 154.—OBJECTS FROM PHILISTINE GRAVE NO.

with one of the femora away from all connexion with the rest of the body. This disturbance was due to rats, whose burrows radiated all through the tomb. The objects will be found in fig. 157. They were: (No. 1) A large and fine lentoid jar (*a*) of light reddish brown ware, with burnished circles surrounding the central points of both sides: 14" high (it is drawn to a smaller scale than the rest of the objects in the figure). It was found above the silt with which the tomb had become filled, being floated upwards as the mud percolated in. (No. 2) A silver ladle (*b*), 8¼" long: a rectangular shaft with chamfered edge ending upwards in a ring in the top of which rise two representations of lions' heads, and downwards in the bowl of the ladle, set at right angles to the stem. There is a simple palmette ornamentation at the back of the junction between spoon and shaft. (No. 3) In the north-east corner, the mouth-plate, in this case of bronze, 2½" long. (No. 4) West of the jar, and close by the head of the skeleton, a handsome hemispherical silver bowl (*c*), 4⅞" in diameter, with a rosette in the base and on the sides a



FIG. 155. BRONZE OBJECTS FROM PHOENICIAN GRAVE NO. 4

lotus pattern in low relief (not repousse). The interior is plain except for four concentric circles drawn round the centre. The bowl was lying on its side. (No. 5) Just west of the ladle, a plain bronze mirror (*d*), 6⅞" long. There was no ornament on the reverse side. This object had been deposited in a cloth case, and a few fragments—enough in all, perhaps, to cover a space the size of a postage-stamp—still remained adhering to one side of the mirror. The cloth was rather coarse, with n threads to the centimetre in the warp and 19 in the woof. (No. 6) Two bronze gilt bracelets (*e, f*), 2" in diameter, with a delicate herring-bone pattern running along their whole length. The ends arc closed with fiat plates, to which are secured the loops by which the bar closing the ring is fastened. This bar has a loop at each end which fits between the loops on the bracelet: at one end it is free, at the other it is secured in position by two narrow strips of gold running past the loops inside and outside. These rings were actually on the arm-bone, so must have been bracelets: they arc, however, so small that they must have been placed on the wearer's wrist when a child, and never removed. Nos.

7-15 are a hoard of beads (*e*), evidently the components of a chain, found about the level of the elbow at the right side of the body. There were others of a resinous paste, that had disintegrated. They are as follows: (7) a seal-shaped onyx (but without device on the base), polished smooth, set in a silver loop; (8) spherical, black paste; (9) a splinter of flint set in a silver mount on which a zigzag line is traced; (10) spheroidal, yellowish crystal, with a looped silver wire passed through the hole in the bead for suspension (one end of the wire is bent

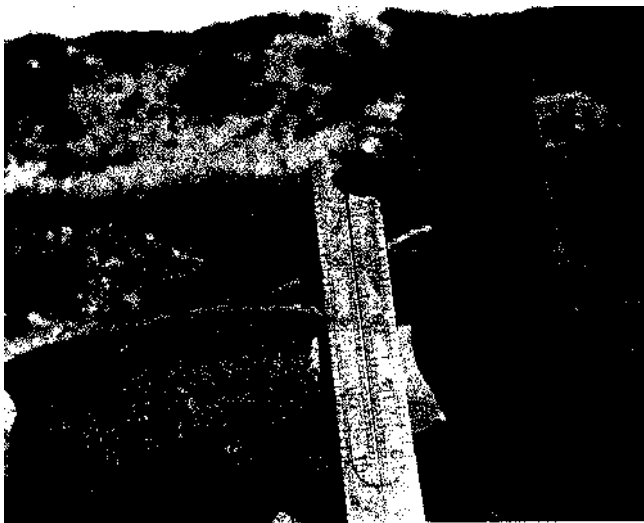


FIG. 156.—SILVER OBJECTS FROM PHILISTINE GRAVE NO. 4

into an L to make it catch: the other end is looped, twisted round itself, and carried down outside the bead to meet the L, round which it probably coiled—the other end is broken); (11) a bead of haematite, with loop for suspension: the bead is three-sided and has been cut into the semblance of a human head, in which the eyes are represented by projecting knobs in large triangles—the art is strangely savage; (12) an opaque bluish stone with notches cut out of the sides (not a groove encircling the whole); (13, 14) two beads of resinous amber-like paste, covered with bright yellow lines—one is drop-shaped, the other is cylindrical; (15) a handsome bead of agate, barrel-shaped. Nos. 16-18 are scarabs, from the same hoard. No. 16

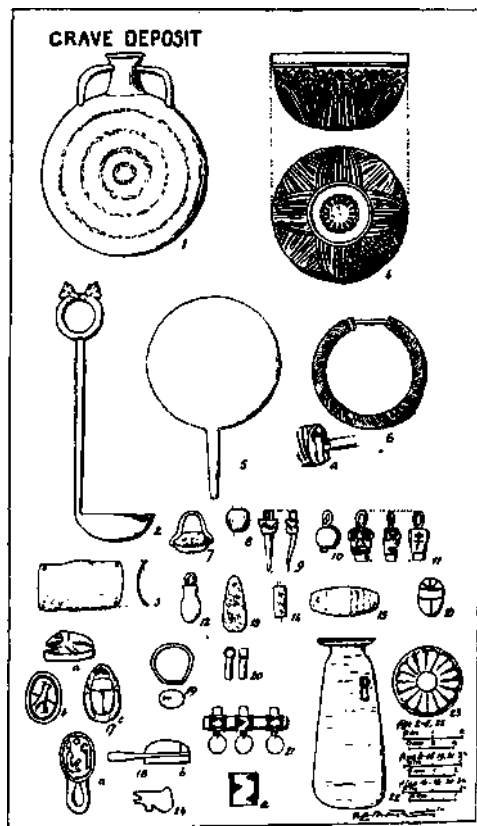


FIG. 157.—OBJECTS FROM PHILISTINE GRAVE NO. 5

circular gold discs. The belts are ornamented on their surface with a delicate pattern of granulations—a ring round each edge, from which, at intervals, triangles project over the surface. In the two outer belts the triangles correspond, point to point; in the central belt they alternate. An enlarged drawing is given of the details of this ornamentation. No. 22 is an alabaster vase, found in the north-western

is of amethyst. No. 17 is of jade, clumsily cut and probably not Egyptian: it bears a hawk within an oval border. No. 18 is steatite, enclosed in a silver loop fitting tightly round the legs of the beetle, in such a way that when suspended the inscription (*Hk-M"t-R'*) was upside-down. No. 24 is a small Horus-eye in the same resinous material, which also belonged to this chain. A little below the beads was the silver seal-ring (*g*) no. 19. The silver was corroded and the design quite undecipherable. No. 20 is a minute tube of gold, with a loop at the top. I thought at first that it might be one of the missing rivets of the bracelets, no. 6; but the tube is just too wide to fit through the loops of the bracelet hinge. No. 21 is a beautiful little ornament, consisting of a cylindrical bar of polished jasper, $1\frac{7}{10}$ long, on which are three gold belts—with a little loop of gold above each, and below each smaller loops *from* which depend plain circular

corner of the grave (h), resembling those found in the other graves. Beside it was a bronze pin. No. 23 is a small silver disc with a plain rosette in *repousse*, which like the jar, no. 1, somehow worked itself upward in the silt to near the surface. It had been deposited at the western end of the grave.

These tombs were discussed by Professor J. L. Myres of Liverpool (QS, 1907, p. 240), and by him compared to the shaft graves of Mycenae and Knossos, the contents recalling the art of Cyprus in the period next following the Mycenaean age. The result of this inquiry is thus summed up: "While therefore the structure and ritual of these tombs connect them with the period of *Ægean* Sea Raids . . . the contents would favour a rather late date, or at least a lower *limit* of date. And this is just what we should expect if they represented the burials of a people who had invaded the Philistine coastland in the period of the Sea Raids, and maintained themselves there, in occasional contact with Cyprus, but not with anything further west, for a century or two after the tenth. This general character and these limits of date would therefore agree closely with the little that we know of the Philistine occupation of Philistia. To cail them the tombs of ' *Ægean* Intruders' would, I think, be safe already: to label them provisionally ' Philistine' would not be over-bold."

It will be remembered that there is Biblical evidence for a Philistine occupation of Gezer just at the time to which these tombs are to be assigned. It should be mentioned that they were *sunk* in the stratum to which they belonged, the cover-slabs being at or near the contemporary surface of the ground.

If these conclusions be justified, the discovery negatives two or three popular conceptions regarding the Philistines which have been derived from a misunderstanding of the records of their implacable enemies the Hebrews. Shortly after the discovery of these tombs I received a copy of a journal containing an article by a well-known divine,* from which I quote the opening paragraph, as it very well expresses what nine out of ten people would probably give as their idea of the Philistines.

"The Philistines were the aboriginal inhabitants of Palestine [!]. Philistia was the original name of Palestine, and the original inhabitants of Philistia were known by the name of Philistines. As far back as we are able to trace the Philistines, their chief cities were Gaza [etc.]. And their chief gods were Ashtoreth and Baal [!] and Beelzebub : three of the most cruel and most obscene of all the cruel and

I forbear to give a more exact reference.

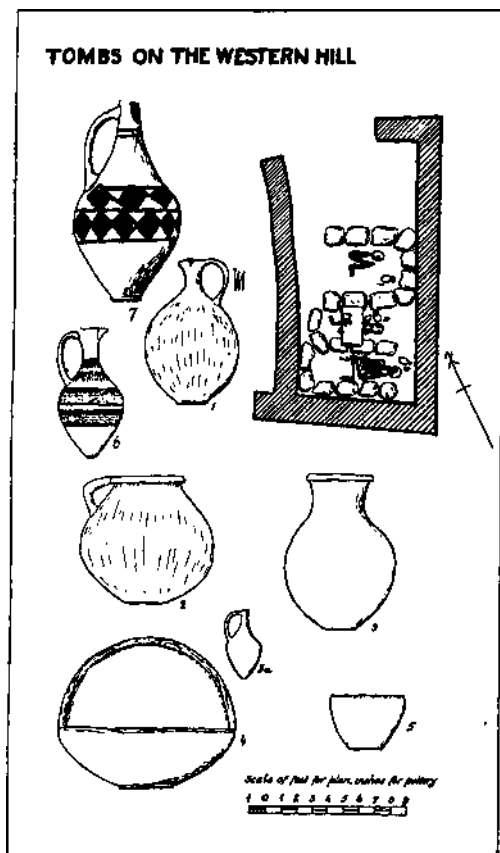


FIG. 158.—PLAN OF TOMBS IN III 30, AND DEPOSITS THEREIN

obscene gods of the Gentiles. The Philistines were of a gigantic size and of herculean strength . . . brutish size and brutish strength of body, brutish grossness and brutish stupidity of mind and heart. . . . These were the outstanding characteristics of the Philistines."

The only points that need comment in this unkind characterization of an ancient people are the ascription to them of (a) gigantic stature and (b) the "stupidity of mind and heart" now politely called "Philistinism." That the latter is unfair is evident, if these tombs be Philistine, for the most artistic objects found in all the excavation come from them. The former is of course founded on the description of Goliath; but

there is no hint that Goliath's physical peculiarities were shared by any except his immediate relatives; and indeed it is probable that he was not

a Philistine at all, but of the stock of the tall Rephaites who are said to have settled in Gath after Caleb drove them out of Hebron (Josh. xi 22).

The presence of *iron* knives in some of these tombs is of interest. An obscure passage (I Sam. xiii 19) seems to hint that the Philistines had entered on the iron age, but by controlling the coast trade were able to ensure that the inland dwellers should still be in the bronze stage of culture.



FIG. 159.—PHOTOGRAPH OF TOMBS IN III 30

A curious group of tombs was found in III 30 which seems to belong to an older wave of a population having a similar ritual. They are shown in plan in fig. 158, and there is a photographic view of them in fig. 159.

Inside a long and irregularly shaped quadrangular chamber—the walls of which are represented in hatched lines on the plan—and beneath the level of the beaten earth that formed its floor, were two horseshoe-shaped enclosures about 6' long and between 2' and 3' broad. The open end of the horseshoe pointed westward in the one, eastward in the other. These two, and the

rather narrower space that they intercepted between them, formed three graves, each containing a single body. The central grave was spanned by one cover-slab, 2' 4" x 1' 3" x 4", but none remained on either of the horse-shoe graves. The depth of the three graves was 1' 9": they were built of three courses of stones. They are here numbered from north to south.

1. A skeleton, male, lying crouched on the left side, head eastward, face turned southward. The small jug, fig. 159, no. 1, lay in one corner. It was globular, of fine homogeneous ware of a light cream colour, deeply scored with vertical strokes of a burnishing tool: the base flat and projecting very slightly; the mouth channeled or spouted; one handle, consisting of two bars of pottery running side by side. It, as well as the skeleton, was broken into small fragments by the pressure of the superincumbent earth. Measurements of the skull made before the bones were disturbed gave an approximate cephalic index of 80.

2. A boy about eight years of age, in the same attitude as the first, only on the right side, so that the face turned northward. With him were the clumsy drab pot, no. 2, between the tibiae and the wall of the grave; a handleless pot (no. 3), of brownish white ware, very gritty, in front of the shoulders; a small graceful jug of burnished brown ware (no. 30) *inside* no. 3; a bowl, broken, of dull drab ware, with a dark brownish red line painted on the rim (no. 4), just north of no. 3. In this example the upper surface has been grooved and furrowed with the burnishing tool, but the potter has not succeeded in obtaining the effect desired. A smaller bowl (no. 5), also of dull drab ware, was underneath no. 4.

3. A man, who like the boy was lying on the right-hand side. The knees in this case were not drawn up under the chin; the tibiae were laid at right angles to the vertebral column, and in the L-shaped space thus obtained was deposited the complete body of a goat. The hands of the skeleton were drawn up and the head was resting on them. Two vessels were deposited with this body: one (no. 6), near the head, an oval jug with small flattened base and one handle; channeled mouth; the vase a light Vandyke brown, with faint burnishing upon it in vertical lines, and adorned with painted horizontal lines in very dark sepia or brownish red, thus disposed—on the neck, a sepia line and a red line just below; on the shoulders, a series of short vertical strokes in red; on the body, one line sepia, five lines red, one sepia, then a second group consisting of a line (double along part of its course and partly concealing the red line next below) sepia, four lines red, one line sepia. The other vessel (no. 7) was near the knees. It was of a dark coffee-brown ware, burnished with vertical lines. Two black bands are painted on the neck, and on the sides, two broad bands, separated by black lines, each containing a series of lozenges in which are finely painted frets, all in black.

§ 23.—THE EXTRA-MURAL TOMBS

We now proceed to describe the tombs of all periods found outside the city walls, in the order that has been already explained in § 19. The

names of the field-divisions in which tombs were found are printed in italics, and these will facilitate their position being found on the map, Plate viii.

Waret Salameh

I. *Plan*, PI. Ivi 1 ; *deposits*, Pis. lx—lxiii. This very important tomb consists of a cylindrical shaft, measuring 8' 0½" in depth and 6' 4" in diameter, with an irregular chamber at the bottom, measuring 10' 6" x 11' 2" x 3' 10". The interments were deposited in this chamber, the shaft then being filled with earth. No objects were found in the shaft itself except a stray iron bracelet that had somehow got into the earth filling it up (PI. Ixiii 61). The bones had decayed to impalpable dust, and it was quite impossible to estimate how many persons had been buried in the tomb. The presence of spearheads shewed that it was a warrior's grave. The objects consisted of pottery, bronze weapons and ornaments, a few beads, and one or two other odds and ends. Its chief importance lies in its giving a conspectus of contemporary types in pottery. The date is clearly in the Second Semitic Period, and probably towards its close.

There is nothing much to be said of the grouping of the vessels. Some of the tombs contained bones, apparently of meat deposits for the deceased. One of these deposits had a second bowl inverted over it, as though to keep the cooked flesh warm, and one of the spearheads inserted into the meat as though to enable the shade to cut the food provided for it.

The illustrations will speak for themselves, and do not require long description. The curved knife (PI. lx 1), perforated for rivets, is a characteristic form of the period: another example was found in the contemporary deposit in cave 15 I. Both tanged and riveted spearheads were found in the tomb, as lx 2-6 shew. The perforation on the tang of lx 4 is rare. Bronze pins are shewn in lxi 25, Ixiii 54, 56, 59, and 60: two of these have club heads; one (Ixiii 59) is of the common Cypriote type with an eye on the shaft of the head. PI. Ixiii 56 is curious, a round shaft merging into a tapering pyramidal head with a lozenge-shaped section. No other pin like this was found in the excavation. Two plain bracelets were found, one of these a minute fragment only (Ixiii 57, 58); and also two knives with tapering blades the smaller specimen provided with a stop-ridge to prevent the haft slipping over the blade. The haft, which probably was a section of the shank-bone of some animal, was perforated longitudinally, and the tang—square in section in the one, round in the other—split and bifurcated to prevent it slipping off (Ixiii 52, 53). Two quartzite dagger-heads of common pattern (lxi 23, 24), and a few beads of paste, carnelian, and diorite* (Ixiii 55), complete the series of the objects, other than pottery, from this tomb.

Of the pottery the chief pieces were the large wine-jars, of which there were several (Ixi 21 is a typical example). These were tapering vessels without handles,

* The small bead immediately to the right of the long barrel-shaped one just above Ixiii 55 is diorite; the similar but larger one next to this carnelian; the others are paste.

and moulded rim. Inside most of them there was a small jug of the common type of lx 10, deposited apparently to serve as a dipper. This particular example has a hole broken in the side, possibly with intention. Other specimens of the type are lx 8, 14, lxi 31; and cognates to it, with different *nuances* of shape and size, are lxi 22, lxiii 68, 70. PI. lxiii 62 is similar to lxiii 68, with a collar added to the shoulder. A vessel that we would hardly have expected to find in so early a deposit, with a blunt base and a handle well down on the shoulders, is lxi 27: the cyma-shaped bowl, lxiii 74, with wishbone handle, is also a little unexpected. It is *possible* that these may belong to an interment slightly later than the others, for which the tomb was reopened.* On the other hand the two-handled jars, lxi 18, 20, are thoroughly characteristic of the period. PI. lxi 20 approximates to the shape of the strange round pot from tomb 3. The button-foot, one of the most unmistakable marks of the Second Semitic Period, appears in lx 7, 9, lxi 32, lxii 35; in an attenuated form in lx 12, lxii 43; and in an exaggerated form in the very characteristic vessels lxi 17, lxii 38. No doubt it was also displayed by the broken vessel lxii 49. In lxii 41 the button is developed into a true disc base, this vessel being essentially similar to lxii 43. This and lx 12 are good specimens of the black ware with whitened dot ornament which is found in the First and Second Semitic Periods. The moulded bowls, lx 11, 13, lxii 37, 42, 48, lxiii 63, call for no special remark; but the peculiar mouldings in lxii 39, lxiii 76 and 78 are worth passing notice, as are also the varieties of this common type of vessel — lxii 34 and 50 of unusual depth in comparison with the diameter, lxii 45 with a flat base and lxiii 77 with a concave base in place of the usual disc or ring. Flat bowls without moulding were also common in the tomb. These were without handles (lxi 15, 26, 28, 29, 30, lxii 44, lxiii 64, 69, 71), with two loop-handles (lxi 16—in this case the rim is picked out with red paint, and two red bands cross the upper surface; 19), or with shaped ledge-handles (lxii 46). Of the latter rare shape only one other example was found in the excavation. Plate lxii 36 is a deep example of the same type of bowl, but, like lxi 28, with a slight moulding round the rim. The most ornate vessel, certainly not of local manufacture, is lxii 51, decorated with black basket-work upon a yellow slip and black horizontal bands round the neck. This type of vessel is among the earliest of the foreign imports of pottery in Palestine. The lamps from this tomb are curious in displaying the straight spout, which does not usually appear till later: specimens will be seen in lxii 40, lxiii 65 and 67. The last is even more abnormal in seeming to display an incipient *foot*. The other vessels are of no special importance: the footed jug lxi 33, the small rude hand-modelled saucer lxiii 66, and the broken jugs lxiii 72, 73—the latter with two transverse ear-handles.

The steatite scarabs, lxiii 79, 80, were brought me by workmen some time after the excavation of the tomb, telling me they had found them in the waste earth thrown out from the chamber.

2. A tomb similar in plan to the last, though the dimensions differed to some

* And perhaps it was then that the bracelet lxiii 61 got into the shaft.

extent—the shaft being 7' 4¼" deep and 5' 0¼" across, and the chamber 7' 8" x 6' 8¼" X 3' 7". In another respect also the tomb differed—there were no deposits!

3. This important tomb is a shaft-tomb, consisting of a rectangular shaft 7' 11½" X 6' 2⅜" x 7' 11½," with a door at the bottom of the south side leading to a chamber 10' 0⅝" x 9' 7⅜" X 3' 10¼" high.

The pottery found in this tomb was similar but inferior in quantity to that from I. The only type not there or elsewhere represented is that of two round-bottomed jars (fig. 160, no. 2*): these are quite exceptional in form in such early deposits. Beside this were two large wine-jars of the common type with handles, and a number of small ornamental jugs with "button" bases.

If this tomb was inferior to one or two of its contemporaries in pottery, it

The jar figured is 1' 3½" high, being drawn to a smaller scale than the rest of the objects.

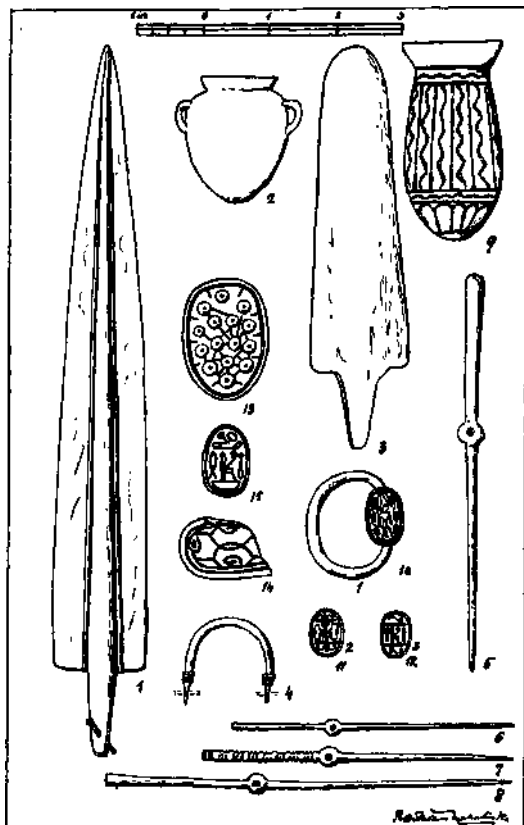


FIG. 160.—OBJECTS FROM TOMB 3

excelled them in other deposits. They consisted of a very fine bronze spearhead (fig. 161, no. i); a bronze ring, intended for mounting a scarab; and bronze hairpins, with an eye in the centre of the shaft (nos. 6-8). There were also a number of scarabs (one of them mounted in a bronze ring), and a charming cosmetic pot of Egyptian porcelain (no. 9), enamelled green with ornament in brown lines.

Of the scarabs, nine in number, two were in basalt and one in dark brown pottery. These bore no device. The remaining specimens, which are of steatite, are figured nos. 10-15.* They bear the characteristic symmetrical patterns of Middle Empire scarabs.

4. *Plan*, Pl. lvi 7. A shaft-tomb of peculiar type. The shaft in this case is rectangular, not circular, and measures 4' x 4' 3"; it is 3' 2½" deep. A small doorway at the bottom leads to an antechamber, which by means of rude steps and a slope in the floor leads to the tomb-chamber proper. The antechamber measures 6' 8¾" X 7' 4½", and is 8' 5⅝" high. The doorway opening to the tomb-chamber is cut in the shape of a low arch: when uncovered it was found to be blocked with large stones. The tomb-chamber is a plain beehive-shaped room, 13' 8½" long by 12' 1⅞" broad and 7' 6½" high.

The deposits consisted of a meagre collection of common pottery of the period, resembling those from tomb I. The only specially interesting vessel was a specimen of the flasks with vertical lip (as Pl. lxxv, fig. 25).

5 was a small cave about 7' 2" square. A shallow square shaft in front of the doorway gave admission thereto. Inside, on the left, is a hollow sunk in the wall and floor, as though an anticipation of a *kok*. This tomb-chamber contained no deposits.

6 was a small cave, similar in type to no. 5, measuring 4' 11 ⅛" x 8' 6⅝" x 3' 3⅜" in height. There were no graves in the rock and no deposits.

7. *Section*, Pl. lvi 2; *deposits*, Pis. lxiv-lxviii, cii 15. From the vertical section of this very remarkable tomb it would appear to have been originally a cistern with two mouths. It is 15' 6⅝" deep, and 11' broad at the bottom. About 3' of silt had accumulated on the ground before the deposits were laid in position.

Of the interments themselves nothing could be made out, the bones being crumbled to dust. The pottery, of which there was a very great quantity—in fact this tomb supplied one of the richest stores of early Fourth Semitic pottery found at Gezer—was laid in the tomb at random. Besides the pottery vessels there were two figures, and also two alabaster vessels. Somewhat strangely, perhaps, the tomb contained no metal deposits.

From the section it will be seen that there are two rude steps cut in the side of

* Nos. 13-15, which were found some time after the excavation of the tomb (being exposed by a shower of rain in the earth thrown out of it by the workmen), are drawn to double scale.

the excavation ; but these can have been of no use for providing access, which must always have been attained by ropes.

The two figures found in this cave are here illustrated. Fig. 161 is a hollow vessel in form of a cow : the mouth of the vessel is at the back of the neck of the animal. The handle loops over the back. This object is $6\frac{3}{4}$ " long. It is in the fine Cypriote ware with grey slip, so characteristic of the period. Some traces of white lines are to be seen on the snout of the animal. I regret that I did not notice these till after the drawing was completed and forwarded to the Fund Office for reproduction in the *Quarterly Statement*. They are arranged like the lines on the similar cow's head figured *EP*, Plate 68, fig. 14. The right horn of the animal, and also the fore-legs, were broken off: the latter were recovered, but not the former, which is restored in the drawing.

The second figure is also a vase in the form of a coarsely modelled representation of the *dea nutrix*, 10" high (fig. 162). The mouth of the vase is in the top of the figure's head. There is a fillet round the head, and the remains of a collar round the neck (which has been in a separate piece and has for the greater part been broken away); there are also bracelets round the wrists with perforations, possibly to suggest jewels or inlays. Otherwise the figure is undraped, as is usual in representations of this kind. The legs, which are solid, are disproportionately short, no doubt in order to waste as little space as possible from the internal capacity of the vessel. The left foot is broken. There are perforations through the shoulders, apparently for suspending the figure by means of cords.

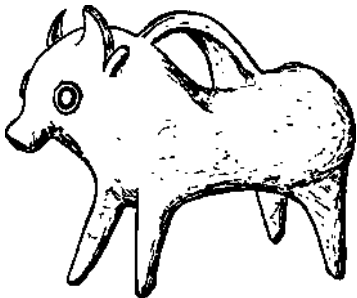


FIG. 161.—COW FIGURE FROM TOMB /

The two alabaster vases are shewn in Pl. lxiv, figs. 18, 19. They are characteristically Egyptian, of the period of the eighteenth dynasty, to which this tomb unmistakably belongs. Fig. 19 has a tenon intended to fit into a mortice on a moveable foot, which however was not forthcoming.

Of the mass of vessels found in this tomb I selected 76 for preservation, rejecting quite as many broken duplicates which were not worth preservation. Thus there cannot have been less than 150 vessels placed in the tomb altogether. The broken vessels were probably intentionally fractured, as we have already seen. All were empty, except one jug which contained a child's finger-bones: examples of this strange custom have also been found in the cave-burials in cave 28 II.

Almost all the types of pottery belonging to this period are exemplified by the collection in this tomb ; and of some of the rarer types this series has yielded the only examples found at Gezer. This is the case, for instance, of the long narrow

vessel, Pl. Ixiv I, which is in Cypriote ware with grey slip.* The spouted vessel with loop over the mouth (Ixiv 10) is also an unusual type in this period.

The types and provenances may thus be briefly classified :—

Local ware.—One-handled cylindrical jugs of yellow-brown ware, the common type; found with pointed base (Ixiv 4, 5, 8, 21; another example, also from this tomb, is figured on Pl. cii, fig. 15), conical base (Ixiv 15), and rounded base (Ixiv 7, 11, 12, 20). Peculiar jug with swelling neck (Ixvi 52). Large one-handled jugs with conical body, having base flat (Ixiv 9) or pointed (Ixiv 14, lxv 30, 33, Ixvi 45). Pyx with panelled zigzag ornament in red and black (Ixvi 50). Two-handled jugs with

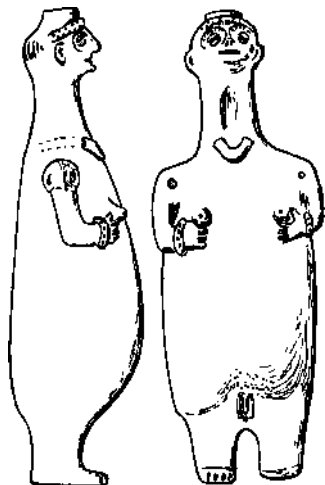


FIG. 162.—DEA NUTRIX FIGURE FROM TOMB 7

pointed (Ixiv 13) or conical (Ixiv 6) bases. Plain hemispherical bowls on ring-base (Ixiv 17, lxv 38, 39, Ixvi 41). Cyma bowls (Ixiv 22, lxv 37, Ixvi 47). Cylindrical saucer with slightly waved side (lxv 35). Spouted vessel with loop above mouth (Ixiv 10). Lentoid vessel with two loop-handles (lxv 23), with broad flat band instead of edge (Ixvi 43). Lentoid vessel with ear-handles, mouth developed into a saucer (lxv 25). Lamp, straight spout (lxv 36).

Cypriote ware with grey slip.—Long narrow jug, hollow conical foot, inverted cone body, loop-handle of rather flat section with a collar round the neck at its upper attachment (Ixiv 1). Lentoid jugs with neck, and handle with lower attachment on the broad side, basket-work in white lines painted on the vessel (Ixiv 2, 3). Large ovoid jugs with cylindrical neck and loop-handle of flat section, basket-work in white lines painted on the vessel (Ixiv 16, lxv 31), without basket-work (lxv 32, Ixvi 48). Globular jugs with neck more or less crooked,

basket-work in white lines on the slip (lxv 26-29).

Cypriote ware with white slip.—Hemispherical bowl with wishbone handle and ladder pattern painted in black (Ixvi 40).

Aegean ivare.—Flat pyx, with rounded base (lxv 24), with ear-handles (lxv 34), with colour decoration (Ixvi 53). Cyma-shaped vase with figures of animals rudely painted (Ixvi 49). Another (not drawn; with spirals similar to Ixvi 44). Lentoid vessel with red concentric circles, each red band bordered by black lines (Ixvi 46).

* The bird-headed fragments of a rattle, fig. 42, and the *stamnos*, fig. 44, have been placed on Plate Ixvi with the pottery from this tomb by error: they belong to tomb no. 30.

Saffron-yellow ware with black lines.—Spouted cup (Ixvi 51).

As the group of pottery from this tomb might almost be taken as a standard of comparison for Fourth Semitic ware—nearly every type of vessel being exemplified—it seems desirable that it should be illustrated as fully as possibly, so as to shew both *form* (which can best be represented by measured drawings) and *texture* (which cannot be adequately exhibited except by photographs). To the plates of diagrams Ixiv-lxvi I have therefore added two plates, lxvii, Ixviii, of photographic groups of the principal vessels from this hoard. They will readily be identified by comparison of the two series—the only vessel of importance omitted from the diagrams being the cyma bowl with wishbone handle (in Cypriote ware with grey slip), which is the fourth vessel on Pl. Ixviii.

8. *Plan and deposits*, Pl. Ixix. This tomb is unique among those of Gezer. As will be seen by the ground-plan and sketch on the plate, it is an irregular chamber with the walls recessed into apses, one shallow and two deep, from each of which there radiate three *kokim*. There is in addition one *kok* under the two upper steps of the entrance, at the left-hand end; the three lower steps being cut short to allow for the opening of this grave. Just left of the entrance is a small shelf with a raised rim, possibly meant for holding a jar of water used in washing at or after an interment, such as were found in other tombs of the series. Between the two *kokim g* and *h* is a recess in the wall the floor of which, like that of the adjacent *kok h*, is sunk one or two inches under the floor of the chamber.

The *kokim* are of very different lengths: *i* is 9' long, which is an unusual length; while *b* is quite too short to receive even an infant's body, and is probably unfinished.

Between *j* and the doorway another *kok* seems to have been begun; but it broke into tomb 9. It is, however, also possible that this communication was intended from the first, and that the tomb was originally an inner chamber of tomb 9 which was cleared and adapted for sepulture in the Maccabæan Period. If there were no *kokim*, the chamber would exactly resemble a sepulchre contemporaneous with tomb 9: compare the plan of the latter tomb given on Pl. Ixxi.

The objects found in the tomb are of the ordinary type of rather late Maccabæan tomb-deposits. The form of the lamps is passing into the Byzantine shape, but there is no sign of any Christian emblem on any of them. There are eleven of these (two, not drawn, being duplicates of Ixix 9) and fragments of others, all decorated with geometrical and floral patterns. In bronze there were three bowl-like discs of a sort common in tombs: they were perforated in the middle and were probably buttons, though it is possible that they were meant to be threaded two or more together, to make a noise like a rattle or a pair of castagnettes (fig. 10). In *iron*, the curious bowl on a flat base, of which a restoration is shewn in fig. 11 (the original was in fragments), and the knife and pin, figs. 12, 13. In *ivory* there were two pins with carved pomegranate-pattern heads, both broken.

These objects were found in the *kdktm b*, *c*, and *d*, or in the centre of the floor. The rest of the cave was more or less empty. There were in addition to the objects figured a number of indefinite fragments of glass, bronze, and pottery, of which nothing can be said.

9. *Plan*, Pl. Ixxi; *deposits*, Pis. lxx, Ixxi. This tomb is a large cave consisting of one main and two subsidiary chambers, cut out of the rock without art. There are two broad benches in the back wall of the main chamber, and one in each of the subsidiary chambers. The roof of the main chamber is supported by two pillars, left uncut from the mass of rock. The entrance is approached by a roughly hewn flight of steps. The total extent of the excavation is 51' 6" x 31' 8½", and its maximum height is about 6' 3". It will be noticed that the tomb breaks into a water-tank and, as has just been noticed, into the later tomb 8.

There was no evidence that the benches were used for the deposition of interments, like the *arcosolia* of later tombs. The bones (which were all rotten) were mingled with the debris in the floor of the chamber.

The contents of this tomb were interesting, on account of the close connexion they shewed with Aegean civilization: indeed most of the objects of this class found were importations, or copies of importations.

They may be described as follows: Two arrowheads of bronze, one (lxx 1) of anomalous shape (a narrow four-sided spike, mounted on a tang), the other (lxx 2) a broad leaf-shaped arrowhead of not uncommon form. Three jugs of the ordinary Cypriote ware with dark grey slip ornamented with white basket-work (lxx 3, 5, 10): the first and third of these are of the common type, with crooked handle, the second is straighter and more conventionalized. Four lentoid flasks, one plain (lxx 7), two ornamented with red concentric circles (lxx 9, 11), and one of the peculiar type with a vertical saucer-lip (lxx 8). Four *Biigelkannen*, one of local ware (lxx 14), two imported, ornamented with groups of lines and spirals in brown on a highly glazed yellow ground (Ixxi 17, 22, 25). These were all much broken, and of Ixxi 22 only a small fragment was found.

The fine three-handled bowl (Ixxi 27), which is of local ware after Aegean models, is interesting: it is a prototype of a class of bowl with two handles that became very popular in a later period. The *Bugelkanne* (lxx 14) is to be noticed in connexion with this, as the bird-forms are prototypes of the figures with which the same bowls were most commonly ornamented. This will be more fully discussed in the section on pottery.

Pl. Ixxi 20, 21, 23, are also fragments of Aegean pottery.

We need not do more than notice the commonplace jugs and bowls of local ware—lxx 4, 6, 12, 13, Ixxi 15, 16, 26, 29. The small saucer, Ixxi 28, with two horizontal ear-handles is perhaps worth passing mention: of the others the illustrations give all the information necessary.

There were one or two lamps, of which Ixxi 19 represents the type. It is intermediate between the type with triangular and that with rectangular spout.

Pl. Ixxi 18 represents a small alabaster vase, with a tenon for fitting in the mortise of a moveable stand. The button, Ixxi 24, was of limestone.

The late lamp, Ixxi 30, is of course an intrusion. It was found in the soil just under the hole broken under the water-tank, and no doubt fell through it. The water-tank itself is of late date (Hellenistic or Roman).

The interments were not arranged in any definite order. The vessels were

nearly all broken, and were mingled with bone debris in the interior of the cave.*

10. *Plan*, PI. lvi 3; *deposits*, PI. cxvi 14-19. A tomb having three *kokim* in the right, two in the back, and one in the left wall, at its inner end. The chamber measures 11' 3" x 5' 1" x 5' 7". The roof has a barrel vault. The objects found within this cave consisted of two lamps with circular reservoirs (PI. cxvi, figs. 15, 16), an iron hook (fig. 18), a small pottery vessel (fig. 17), and two beads of the type shewn, both of them paste—one green enamelled, the other striped dark and light blue (fig. 19). The most interesting object was a figure of the *dea nutrix* (fig. 14) in terra-cotta, with a large wig, evidently derived from the pre-exilic types. The conception of the goddess is no less crude than in these. To be noticed is the fashion testified for armlets high up on the arm (still so worn by the peasant women). These are uncommon in the pre-exilic "Astarte" plaques.

11. *Plan*, PI. lvi 4. A sunk grave with two subsidiary arcosolia, at a lower level. One of these is shorter than the other, and the edge of the rock around it is revealed for a cover-slab, which no doubt would be so arranged as to make the opening rectangular: this then would be covered with a large stone, probably secured to a staple fixed in a hole in the side, shewn in the plan and section on the plate.

12. *P/an*, PI. lvi 5. A sunk grave 6' 11" x 2' 3¼" x 6' 0⁷/₈" deep, with three *kokim* opening out of it at the bottom—a very unusual arrangement. There is one *kok* at the north end and two on the east side. Some fragments of glass were found in this tomb. One of the *kokim* breaks into tomb 13.

13. *Plan*, PI. lvi 5. A rectangular chamber 11' 9¾" x 12' 5⁵/₈" x 5' 5¾" high. It contained no graves; but one of the *kokim* belonging to tomb 12 broke through its wall, and it may be that it was intended as an ossuary chamber for tomb 12, and not as an independent sepulchre. The chamber contained two ossuaries,^f with fragments of glass and bronze.

14. *Plan*, PI. lvi 6. A very irregularly cut group of two chambers, the plan of which can best be understood from the plate. The small passage at the side of the door is curious. There is a cut jambstone on the right of the entrance, with a bolt-hole in it. The tomb was empty.

Habl el-Lulu

15. *Plan*, PI. lvi 8. ' A chamber 6' 7¹/₈" x 5' 8" with an arcosolium in each of the three inner sides. Three steps lead down from the door inside the chamber, and outside the door is a vertical shaft 5' 1" long and 2' 0" across.

* From the circumstance of a hyaena having once been killed inside this cave, it goes by the local name of *El-Mudb'a*, "the hyaena-place."

^t Ossuaries are described on pp. 397 sq.

16. *Plan*, Pl. lvi 9. This chamber measures 5' 9" x 5' 1". There is an arcosolium in each of the inner sides, and a secondary arcosolium behind the grave in the back wall. The doorway was closed by a swinging stone door, now fallen into the chamber, a drawing of which will be found with the plan: it is approached by three steps sunk in a rectangular shaft, the edge of which is revealed for cover-slabs.

17. *Plan*, Pl. lvi 10. A large round cave about 18' in diameter and 9' high. It is approached by an oblique shaft containing nine steps. The shape of the chamber is conical. There are three broad benches from 3' 11 ¼" to 5' 10" in width, in the sides, resembling those in tomb 9, with which the excavation is comparable. There were no deposits of importance. The two later tombs, nos. 16 and 18, both break into this cave.

18. *Plan*, Pl. lvi 11; *deposits*, Pl. lxxii 1-12. A chamber 7' 1" x 3' 8 1/8" x 5' 2", approached by a very narrow doorway, splayed inwards. The doorway is at the end of a passage scarped in the rock: there are square blocks left uncut in each corner at the side of the door. The tomb contains five *kokim*, two to the left, three in the back walls: in the right wall (where the tomb breaks into no. 17) there are none. By a coincidence the workman who cleared this tomb out for me had previously been concerned in plundering it for saleable antiquities, and he told me he had taken three hundred lamps from it—probably a gross exaggeration, though no doubt he had got a good haul. The remnant which he left for science consisted of the following objects: 11 lamps (Pl. lxxii 1-11); a small collection of beads, including one long oval specimen ornamented with wavy lines (fig. 12)—the others are all commonplace varieties in resin and stone. There were also the base of a *square* glass vessel—not a very common shape—and some fragments of a strip of bronze toothed like a saw. The latter is much broken and corroded. In thickness it is a mere lamina: where perfect its breadth is if", and the length of the fragments if put together would be about 1' 5". On one side the edges are curved over slightly, and a row of small rivets project on the same side.

Waret 'Aysa

19. A cave measuring 5' 2" x 5' 7 ¾" x 2' 8 ¼", with a much broken doorway that has had simple recessed square mouldings. This cave was entirely cleared out for a habitation by one Milham, who ultimately died here: the cave and the neighbouring valley are still called by his name, *Mughdret Milham* and *Khallet Milham* (M.'s "cave" and "valley"). There are no graves of any kind in the chamber.

Jadwal esh-Shdmi

20. A tomb measuring 8' 9 1/8" x 9' 2 ¼" x 5' 3" with two *kokim* in each wall: the first *kok* in the right wall is unfinished. The door faces north. The tomb contained some broken fragments of ossuaries.

El-Munyasah

21. *Deposits*, PI. lxxii 21, 22. A chamber measuring 20' 9½" x 15' 9¾", with a square rock-cut pillar supporting the roof about midway between the middle point of the chamber and the back end. The entrance is a hole in the roof with footholds below. A bench roughly cut runs along the right side and the back. The tomb contained a small ointment pot of black ware, a type common in the Fourth Semitic Period, a saucer in compact red ware with a black wash over it, a lamp of the Fourth Semitic type (lxxii 21), and a rather Greek-looking saucer (lxxii 22). There were four skulls, all fragmentary, and some other much injured bones, as well as a fragment of an iron nail.

22. A rude circular cave measuring 17' x 17' 11⅜" x 6' 6¾", with a depression in the middle.

23. *Deposits*, PI. lxxii 13-20. A small four-sided chamber 9' 5" x 7' 9", with two *kokim* in each of the inner walls. In the door wall is a niche on each side of the door and on the floor level, possibly receptacles for offerings. The roof has fallen in. The tomb, however, was not absolutely empty: it still contained a large glass vessel (lxxii 20) and fragments of some smaller ones (lxxii 18, 19), four lamps (lxxii 13-16), a small bronze bell (lxxii 17), an iron signet, a small bronze coin (illegible, like nearly all the coins found in the tombs), and a number of spherical beads of resin.

24. *Plan*, PI. lvi 12. A passage measuring 14' 9" x 3' 3", with a doorway in the side opening into a chamber 17' 6½" x 9' 6¼" x 6' 4⅜", having a single *kok* in the middle of the left wall. The roof is ridged, i.e. the transverse section is that of a broad flat inverted V. An irregular hole in the right wall breaks into a second chamber at a lower level from the first: the greater part of the floor of this second chamber is occupied by the steps that descend to it. At the foot of the steps, in the middle, was an ossuary: this, and some insignificant pottery fragments and iron bracelets lying about at the sides of the steps, were all that the spoilers had left. There is one hole at the end of the left wall of this chamber: the chamber measures 9' x 10' 4⅝" x 7 ½".

25. An unfinished tomb, abandoned after cutting the doorway, which has a square moulding round it.

26. A roughly circular cave approached by five steps under the entrance hole. It measures 14'9½" x 17' 11" 5' 11⅝". Owing to the rotten state of the roof, large masses of which rested upon the earth with which the cave was filled, it was impossible to clear it out.

27. A large irregular cave 10' 4⅞" x 9' 5" x 4' 11", empty.

28. *Plan*, PI. lix 12; *deposits*, PI. lxxiii. This tomb consisted of a single

circular chamber, the roof supported by a pillar. Its contents consist of jugs and other vessels of ordinary Fourth Semitic types, and a glance at the plate will be sufficient to gain an idea of their appearance; a few notes on the ware, etc., being all that is necessary. Fig. 1 is drab; fig. 2 (of which there were two duplicates, i.e. three specimens in all), a yellowish brown; fig. 3 is red, burnished, as is also fig. 5; fig. 4 is red, as also is fig. 9. The lines with which fig. 7 is decorated are red. There were two duplicates of the small black pot, fig. 8. Fig. 13 was red, burnished, with black lines upon it. There were two duplicates of pot fig. 15, and six of the lamp, fig. 17. The head-rest in form of a bird, which is in red ware, is the only specially interesting article from this tomb. Fig. 16 is a bronze bracelet.

29. *Plan*, Pl. lix 13. An irregular cave about 11' 6" in diameter, with a recess in the left side. There is a broad raised bench against the back wall, fenced by a row of stones on edge. The only important object from this tomb was a cylinder in basalt with an Egyptian inscription (fig. 163).



FIG.163.—Cylindder from

30. *Plan*, Pl. lvi 13; *deposits*, Pis. lxxiv, lxxv. This very important sepulchre was unique for the richness and variety of its deposits.

There were three chambers *en suite*, the outermost, containing the entrance, being the largest. In this chamber there is a pit, 4' deep, at one side of the entrance. The roof was originally supported by a pillar, which has, however, been quarried away. The second chamber is at a lower level than the first: the step down to it is interrupted by a pit, as shewn, and there is a deeper pit just inside it. These appear in the photographic view, fig. 164, which is taken from the extreme end of the innermost chamber: the words "Stump of pillar," "First pit," "Second pit," denoting the features just referred to. The large pit in the first chamber is not visible: it is concealed behind the stump of the pillar. The innermost chamber shews no special features. It appears in fig. 165, which is taken from outside looking inwards, the camera being erected in the outer chamber.

As was so frequently the case, the bones were practically completely destroyed. One woman's skull was recovered; but it was lying on the surface of the soil—in this case considerably deep—that filled the cave and covered the older deposits. There were also six glass bracelets, apparently modern, such as are made in Hebron; and twelve bracelets of iron, with some fragments of others, which latter are less likely to be quite modern, though certainly later than the original deposit. These bracelets are shewn in fig. 166. The ends of the iron bracelets are welded together. Those of glass are triangular in section, and black in colour with a white incrustation: the marks on the edge are coloured yellow, greenish blue, yellow—in one, yellow, black, yellow. Possibly (as was suggested by one of the workmen, who ought to know the likelihood of the suggestion) the woman was the victim of a hyaena who dragged her into the cave and there disposed of her.

The principal "finds" in the cave were made in the pit in the first chamber.

This was full of vessels and sherds. The fine Cypriote jar (lxxiv 3), by far the most striking example of the "ladder-pattern" found at Gezer, was here found, besides the dish lxxiv 1, and several vessels of the common types lxxiv 2, 4, 6. With these were fourteen fine copper javelin-heads between 4" and 5 $\frac{1}{8}$ " in length, with long tangs having a lozenge-shaped section and narrow leaf-shaped blades; the fragments of the Mycenaean sword lxxv 13; and, most remarkable of all, the fine scimitar lxxv 16. This weapon is 1' 1" long. The handle is flanged for receiving hafting-plates of ivory, of which the corroded traces are visible. Above this handle



FIG. 164.—INTERIOR OF TOMB 30 (FROM INSIDE)

is a straight portion, rectangular in section; and above this again is a curved blade, ornamented with longitudinal ribbing. The cutting edge is on the convex side of the blade. Six club-headed arrow-points (lxxv 19, 20) were also found here. These were not found elsewhere in the excavation. (Possibly they were pins, but on this point I have some doubt.)

In the rest of the chamber there was little except potsherds. The pit in the second chamber was empty, but the earth above it was rich in antiquities. No less than 131 javelin-heads similar to those found in the pit were extracted: all the various types are illustrated Pl. lxxv, figs. 1-12. Here there was also the armlet of bronze wire, fig. 18, twisted into an ingenious plait; the section of the armlet being

triangular, with the base turned towards the wrist. There was also a knife, Ixxv 14, and a twisted object which looks like a horse-bit.

The inner chamber contained five large wine-jars, of the type shewn in Pl. lxi, fig. 21, but with handles—four with two, and one with four—and a graceful Mycenaean three-handled vessel decorated with spirals. There was also a fragment of a bird's-head rattle. These two pieces by an oversight have been placed with the pottery from tomb 7, on Pl. lxvi, figs. 42, 44. There were three vessels resembling Ixxiv 9 Fig. 5 on the same plate was of rough drab ware.

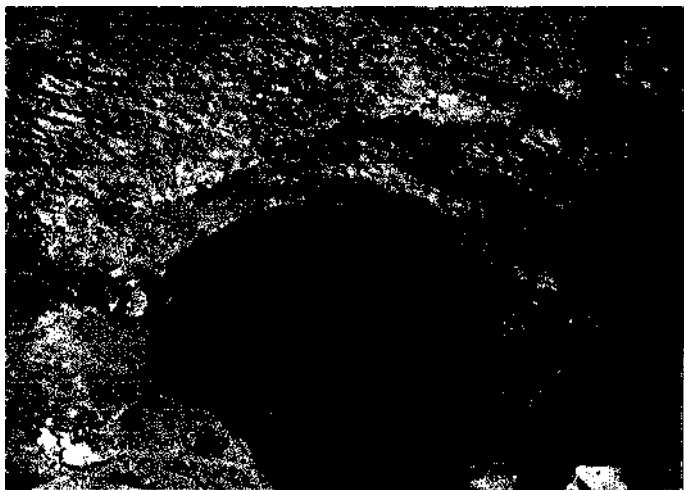


FIG. 165.—INTERIOR OF TOMB 30 (FROM OUTSIDE)

31, *Plan and deposits*, Pl. lxxvi. This tomb consists of two chambers, hewn out without art, like all the pre-exilic burial places. The overall dimensions are 32' 10" x 23'. There are three pits, about a foot deep, in the middle of the floor of the outer chamber. These all contained deposits: in no. i was a contracted interment; in no. ii were the remains of no less than five bodies, of which the only measurable bones were a femur 457 mm. long and a tibia, length 377 mm. The other bones were all reduced to fragments. There is a bench 3' 3" to 4' 2" in breadth along the left side and back wall of the outer chamber of this tomb, divided by projections in the rock at the back into three divisions, and a slightly hollowed sunk bench—the only specimen found in the pre-exilic tombs—along the right-hand

wall of the same chamber. There is also a bench in the back wall of the inner chamber: but none of these receptacles seem to have been used for interments.

The objects found in this tomb are as follows: A jug of reddish ware with round base and wide mouth. It was full of bones, among which was a human patella (lxxvi 1). A small jug of yellowish ware (lxxvi 2). Six small vessels in burnished black ware (lxxvi 3, 13, 14, and duplicates of 3, 13, and 14). This is a very common type of pottery, as we have already seen, in this period. The ear-handles of lxxvi 13, are, however, uncommon in this ware. A larger jug, evidently an imitation of the Cypriote jugs with basket-pattern painted on their sides. This vessel has groups of red lines painted on the sides (lxxvi 4).

Among a number of sherds which call for no special notice is the bowl-rim lxxvi 5, with two knob-handles upon it. A small globular vessel in red ware with pointed base:

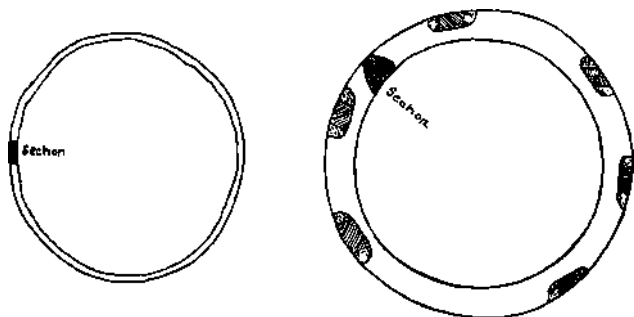


FIG. 166.—BRACELETS FROM TOMB 30

neck and handle broken off (lxxvi 6). The bowls (7, 9, 11), the jugs (16, 17), and the lamps (8, 15, 18, 21) speak for themselves. Notice the rectangular spouts and broad rims of the latter. There were duplicates of 18 and 21. The sherd lxxvi 13 is in the coffee-brown ware, with neatly drawn black lines, characteristic of small Cypriote jugs. Except pottery, very little was found in this tomb. The iron knife lxxvi 10 is the most remarkable: it is an early example of the use of iron at Gezer. Pl. lxxvi 19 is a saucer of alabaster. The punch-marks on the rim are coloured alternately green and blue; the letters "g," "b" are added in the plate to denote the colour employed. Pl. lxxvi 20 is a small plain bronze armlet. As to the position of these objects, they were scattered through the debris; but lxxvi 13, 14 and its duplicate, and 15 were deposited in pit no. i; lxxvi 16, 17, 18 and its duplicate in pit no. ii; and 19, 20, 21, and the duplicate of 13 in pit no. iii.

32. *Plan*, Pl. lix 4. A tomb that seems to have been adapted from a previously existing water-tank. It consists of an open four-sided court sunk in the

rock (the water-tank in question), measuring $8' 2\frac{1}{2}" \times 6' 11\frac{7}{8}" \times 5' 8\frac{7}{8}"$ deep. The sides arc slightly undercut. Three rock-cut steps at one side give admission; and from the same side a doorway opens into the tomb-chamber. It is cut without graves of any kind: it measures $8' 2\frac{1}{4}" \times 7' 1\frac{1}{4}" \times 3' 1\frac{3}{4}"$.

Shab Ya'kub

33. *Deposits*, PI. cxvi 20, 21. A tomb-chamber measuring $6' 0\frac{7}{8}" \times 5' 8\frac{7}{8}" \times 5' 6\frac{7}{8}"$, approached by a sunk passage with two steps and formerly closed by a rolling stone. There are three arcosolia, one in each of the inner walls. A cross is cut in the left wall. All that the tomb contained was a plain bronze ring and a corroded iron knife. Immediately in front of the door of this tomb is the large winepress *Shab Ya'kub* (b); but it is not necessarily connected with it.* There is a small unfinished cave under the winepress.

34. A sunk grave, long rifled, measuring $5' 10\frac{7}{8}" \times 2' 5\frac{1}{2}" \times 1' 9\frac{1}{4}"$.

35. The doorway of an otherwise unfinished tomb.

36. *Deposits*, PI. lxxvii, ci (a) 15, 16. A quite irregular chamber, which moreover is so broken internally that measurements would be of no use. It may be said that its area is slightly larger than the average Byzantine tomb-chamber of three arcosolia. There are two sunk bench graves, running longitudinally inwards from the inner wall, and a much broken arcosolium in the right wall. The rock is very soft, and can easily be broken away piecemeal with a slight pressure of the hand. The right-hand sunk grave contained three bodies, their heads all inward: the left-hand contained at least one, the head outward. In the floor of the chamber, near the door, was a confusion of bodies, all thrown in at random.

Of the deposits in this tomb, the ribbed pot (lxxvii 1) was found close to the door in fragments. The four lamps (lxxvii 2-5), with the bone button (lxxvii 6), fragment of iron bracelet (lxxvii 7), bronze spatula (lxxvii 8), and ornamental enamelled bead (lxxvii 9), were from the two graves with skeletons. The very fine lamps which form the remainder of the collection, with the iron hook (lxxvii 21) and the bronze ring and pin (lxxvii 22, 23), were found on the floor of the chamber, † They had been a row of lamps set against the end of the two sunk bench graves, otherwise the arrangement of the objects in the tomb was quite random. Two other lamps from this tomb for which no room could be found in the plate will be found on PI. ci (a). There was besides a duplicate of fig. 14, and another similar, but with a cross pattee, and seven lines in the side. Note the remarkable blundered cross fourchee in fig. 16. The

* Though probably the tomb and the winepress belonged to the same family. Compare the case of the tomb of Joseph of Arimathaea.

† Except 10, 11, 12, 15, 19, which come from tomb 228, and have been mixed with those from this tomb by an oversight.

multiple lamps from this tomb are noteworthy, as also the prevalence of an ornament on the spout consisting of an upright object under an arch.

37. A sunk grave measuring 4' 11 $\frac{1}{8}$ " x 2' 3 $\frac{1}{2}$ " x 1' 5 $\frac{3}{4}$ ".

38. The doorway of an otherwise unfinished tomb.

39 The doorway of an otherwise unfinished tomb.

40. *Plan*, Pl. lvi 14; *deposits*, Pl. Ixxviii 1-46. A chamber measuring 7' 1 $\frac{1}{2}$ " x 11' 6 $\frac{5}{8}$ " by 6' 6 $\frac{3}{4}$ " high: it contains two arcosolia, in the right and back walls respectively, and two sunk bench graves, one left of the entrance, the other in the left wall.

Though this tomb had been pillaged, there remained a collection of small objects which gave a good idea of the nature of the simpler deposits in a fairly rich tomb of the Early Christian period. Plate Ixxviii 1-31 represent the objects cast on the floor: they are—a spatula (Ixxviii 1); five plain fragments of bronze bracelets of which Ixxviii 2 is one specimen, and two complete bracelets (Ixxviii 3, and another of thinner wire with a wider gap between the ends); a plain band bronze ring (Ixxviii 4), and several fragments of a bronze ring (of which Ixxviii 4a is one) with the edges thickened; two minute bronze pins, one of them (Ixxviii 5) adorned with two globular swellings, but broken at the thicker end, the other (Ixxviii 6) with rings cut round the stem; a small square disc of bronze (Ixxviii 7); fragment of a bronze ring made of a V-shaped band (Ixxviii 8); three small fragments of looped bronze wire (Ixxviii 9, 10, 10a), probably part of the thread of a bead ornament; three fragments of bronze bells (Ixxviii 11-13); a bronze signet-ring decorated with a branch of a plant (Ixxviii 14); a loop of bronze wire (Ixxviii 15); a spatula with V-shaped spoon (Ixxviii 16); much-corroded fragments of iron signet-rings* (Ixxviii 17-20); an iron arrowhead (Ixxviii 21), and some other minute fragments of iron and bronze pins, not much longer than Ixxviii 6, and displaying no characteristics whatever; two fragments of glass (Ixxviii 22), which except for a few splinters were practically the only fragments of glass left by the spoilers in the tomb; a lamp of pottery (Ixxviii 23), painted red on the upper surface, the base a ring with a raised dot in the middle; a saucer (Ixxviii 24), fluted inside and out, and the bottom also ornamented with concentric rings; three small pendent crosses, two of bronze and of the type shewn in Ixxviii 25, one in silver without the central cavity (of the bronze crosses, one had a minute disc of glass cemented into the central socket, possibly covering a relic: the other was open); a very irregularly shaped playing die, of a green stone resembling serpentine (Ixxviii 26); four or five fragments of ivory pins, of which Ixxviii 27, 28 shew the only specimens with carving; the head for a similar pin (Ixxviii 29) of porcelain covered with light brownish green enamel; a coil of iron wire (Ixxviii 30); a perforated disc of iron (Ixxviii 31); and a number of beads, all the types of which are illustrated and sufficiently described by the legends attached to them in the

Probably dummy signet-rings, without device.

plate. There were also two of the common kind of closed lamp ornamented with diagonal strokes on the sides and a conventionalized representation of the seven-branched candlestick * on the spout, and a fragment of chain mail in iron, which have not been illustrated. In the southern grave were found Ixxviii 32-41: they are—a fragment of lamp ornamented with spirals, much worn and broken (Ixxviii 32); a bronze earring, secured by a loop at the side (Ixxviii 33); a bronze loop, probably that by which some pendent ornament was hung on a chain (Ixxviii 34); a small section of an ornamental bronze band ring (Ixxviii 35)—another fragment of a similar ring was found but too corroded for the pattern to be made out; a narrow iron hook (Ixxviii 36); a bent iron rod (Ixxviii 37); an iron shoenail (Ixxviii 38); a stone spindlewhorl or button (Ixxviii 39); a setting from a ring, of green enamelled porcelain (Ixxviii 40); a small fragment of light green glass, probably part of the handle of a vessel; the three beads beside this in the plate are also from this grave. The western arcosolium contained the iron bracelet (Ixxviii 43); a fragment of a bell like Ixxviii 13, two fragments of iron like Ixxviii 17, and some other objects not worth illustrating: these were a minute fragment of a lamp, part of a plain iron bracelet, and three beads; of the latter one was a duplicate of the triangular brown-paste bead from the floor of the tomb, another a duplicate of the flat bead in the same material from the southern arcosolium, and the third a rather flat oblate spheroid in dark blue glass. The northern arcosolium contained a fragment of a bronze bracelet similar to Ixxviii 2, and a bit of an iron finger-ring resembling Ixxviii 19. There was also an iron shoenail like Ixxviii 38, and the bell Ixxviii 42, which differs from the other bells found in the tomb in having an *iron* clapper. The four beads drawn beside it were from this grave. From the eastern grave came two beads resembling the larger of the two from the floor of the cave in black paste with red dots; but in this example the paste was blue. There was also a duplicate of the cubical glass bead with chamfered angles; the iron nail Ixxviii 44, the lamp Ixxviii 45, and the small jug Ixxviii 46.

41. A tomb in the doorway of which a fig-tree is planted, making investigation impossible.

42. *Deposits*, Pl. Ixxix 5-27. A roughly circular cave, about 36' in diameter, with a tunnel-like sloping passage descending to it. There is a hole like the mouth of a cistern in the middle of the roof. In the earth with which this cave was filled there was a valuable series of First Semitic pottery—indeed the deposit here was one of the earliest tomb-deposits found. No scarabs or other datable objects, unfortunately, came to light. Pl. Ixxix 5 is a vessel ornamented with a row of knobs (compare fig. 24); it is in a very porous and gritty ware: Ixxix 6 is unique so far as Gezer is concerned, and to the best of my knowledge in Palestine, in having three ledge-handles; it is in a compact yellow ware, not very gritty: Ixxix

* For which reason I term it the "candlestick" lamp. The varieties of which it is capable will be described in the section on pottery.

7 is in a gritty ware of a rather reddish colour: lxxix 8 is in red ware: lxxix 9 is yellow, rather less gritty than no. 5: lxxix 10, the handle of which is a double strand, is in light brown ware slightly gritty: similar in type are figs, 11, 12. There was found the fragment of another vessel resembling fig. 12. Fig. 14 is in ware darker and more homogeneous than the rest. Three saucers were found similar to fig. 17. Fig. 18 is a spout, and fig. 19 the handle of a vessel with ornamental grooves at its upper attachment. Fig. 21 is decorated with a vertical and horizontal criss-cross in red lines: the neck is covered with a red wash. A similar vessel but smaller and with a neck longer in proportion was found: the latter had no colour decoration. Fig. 22 is a vessel with a filter fixed in the neck: it is in a porous light red ware, shewing traces of a darker red wash. Fig. 23, a spouted vessel with two handles, is of a light Venetian red colour. Fig. 24 is in a gritty yellow ware: there are four knobs upon it as shewn. Fig. 25 is a dish, 9½" in diameter, 2⅛" high, 7⁄8" deep, made of a black micaceous stone. It was found at the entrance of this tomb. There were besides a number of potsherds, all of early type. The bar of dark green glass fluted on one side, which is shewn in fig. 27, is no doubt an intrusion, most likely fallen through the hole in the roof. A camel's tooth was the only other object found in this cave calling for notice.

43. A grave the entrance of which is at the end of a trench 7' 7¼" x 2' 11½" X 5' 10⁷⁄₈", cut in the rock, and covered by a large stone. The chamber measures 7' 6½" x 9' 2¼" X 5' 8⁷⁄₈". There are three arcosolia, arranged in the normal way: the partition between the left and back arcosolia is broken.

44. *Deposits*, PI. lxxix 1-4. A tomb-chamber, roughly cut, measuring 9' 10½" x 9' 11" X 5' 8¹⁄₈". There is an arcosolium in the back and the right walls, and a bench against the left wall, at the end of which there is a shallow lozenge-shaped pit in the floor of the tomb. Over the doorway is a square sinking, 2¾" broad and 2' 5½" high, as though a panel had been inserted—possibly a stone with inscription. This tomb had been rifled and contained but little: beside a "candlestick" lamp its principal objects were a bronze pendent disc (lxxix 3), an illegible coin and an equally illegible bronze signet-ring, and an earring and double-headed button, both of silver (lxxix 1, 2). There were also a few beads (lxxix 4).

45. A sunk grave, 5' 61" x 2' 10⁵⁄₈," empty.

46. *Deposits*, PI. lxxix 28-31. A tomb with three arcosolia measuring 5' 3¾" x 4' 5" x 4' 11¹⁄₈". A few objects were neglected by the plunderers and cast into the middle of the floor—a fragment of one of the common late shoe-shaped lamps with horizontal flutings (lxxix 28); head and neck of a green glass vessel (lxxix 30); base of another (lxxix 31); a small hollow hemisphere of bronze, perforated at the centre, probably part of a bell (lxxix 29); and a fragment of the margin of one of the common bronze discs which elsewhere we have called castagnettes. In one of the arcosolia were fragments of a skull, too broken to serve any scientific purposes, and a couple of flint knives.

47. A sunk bench grave, $5' 8\frac{1}{8}" \times 1' 1\frac{5}{8}" \times 4' 7\frac{1}{8}"$, with two subsidiary arcosolia, one at each side. The edge is revealed for a very large cover-stone, which, however, has been removed.

48. *P/an*, Pl. lvi 15. A tomb in very soft rock measuring $6' 10\frac{3}{4}" \times 6' 6\frac{3}{4}" \times 6' 2"$. There are three sunk bench graves arranged longitudinally in the back and right walls, and an arcosolium in the left wall: these are not included in the dimensions given above. There was nothing in the tomb (though it had not been opened previously) but fragments of bones.

49. An unfinished tomb—a doorway cut in a vertical face of rock.

50. Three unfinished sunk graves.

51. An unfinished tomb—a round-headed entrance, well made, with steps leading down it, but the chamber itself not quarried.

52. A sunk grave, $5' 6\frac{7}{8}" \times 6' 0\frac{7}{8}" \times 4' 3\frac{1}{8}"$, with arcosolia at the sides and a small hollow, probably meant for the reception of bones, at the head end of the central grave.

53. *Deposits*, Pl. lxxix 32-35. A chamber $3' 7\frac{3}{8}" \times 4' 11\frac{7}{8}" \times 3' 6\frac{1}{8}"$, closed with a rolling stone. There are three arcosolia. Nothing was left by the spoilers but a number of beads, cylindrical and spherical, of glass and green, yellow, and blue paste, as well as those represented on Pl. lxxix, which are of more special type. With them were two flat oval pendent discs of iron (lxxix 32, 33), and a hook-shaped pendent amulet of bronze (lxxix 34), the last-mentioned bearing impressed upon it the figure of an angel.

54. An unfinished grave.

55. A sunk grave which cannot be examined as there is a fig-tree growing in it. Presumably, however, those who planted the tree were careful to leave no plunder behind.

56. *Deposits*, Pl. lxxix 36, lxxx, c 19-28. A cave with a round-headed entrance, roughly circular, about 23' in diameter. It contained a large number of vessels—about seventy—nearly all much broken, and most of them in a gritty red ware. There were also a number of scarabs and a cylinder. The scarabs bear the names of Thutmose III and IV and of Amenhotep III, which date the tomb, or at any rate its latest interment, to a period rather later than one would be inclined to infer from the pottery alone: this mostly, as an inspection of the plate will shew, is of well-established First Semitic types. There is not much catling for remark in this collection, the drawings speak for themselves. It may be noticed that lxxx 16 is in white ware, very flaky; and that there is a ledge-handle on the opposite side of lxxx 17,

corresponding to the handle shewn, but there is not a second loop-handle on the vessel. A curious *askos* of greyish yellow friable ware from this tomb is shewn in Ixxxix 36. It is shaped like the body of an animal and has four projections, which might be legs, but more probably are the stumps of two vertical loops. Between them is the only orifice. Plate c 19 is a vase in porous red ware, inside of which was the fragment of bronze pin fig. 20 (drawn to double scale). Fig. 21 is half of the neck of a vessel. Fig. 22 is a small fragment of porcelain: the surface dotted in the drawing is in the original covered with a green glaze. Fig. 23 is part of the flat bottom of a large vessel, and the outer surface is covered with a dark Indian red wash. Fig. 29 is in porous red pottery. Fig. 25 is a small rod of bronze, square in section, with knobs at each end. Fig. 26 is a small vessel with ledge-handle. Fig. 27 is of special interest. It is a sherd of light cream-coloured pottery with dark brown bands painted on it, and narrow lines marked in sgraffito upon the bands. It is the only *early* example of sgraffito found in the excavation. The beads are sufficiently elucidated in fig. 28.

Ard 'Ain el-Butmeh

57. A cave measuring $11' 9\frac{3}{4}" \times 24' 4\frac{1}{4}" \times 5' 8\frac{7}{8}"$, with a round doorway. It is of a long irregular shape, and has a shelf at the right end and a recess at the left. No deposits.

58. *Plan*, Pl. lvi 16; *deposits*, Pis. lxxxi, lxxxii, lxxxiii. This tomb consists of a single chamber containing three rudely cut benches and two small circular cells. The chamber measures $14' 8"$ across, and its maximum height (at one spot only) is $7' 5\frac{3}{4}"$. The cells are sunk below the level of the floor—about $9"$ in the case of that between graves *a* and *b*, and $1' 9\frac{5}{8}"$ in that beside *c*. Each is approached by two steps, those to the second cell being naturally higher than those to the first. The second cell is only $4' 3\frac{1}{8}"$ high. The bench graves are raised from $1' 3"$ to $1' 6\frac{1}{8}"$ above the level of the floor of the chamber.

A considerable quantity of pottery was deposited in this tomb, though nothing at all approaching the amount found in the contemporary sepulchre close by (no. 59). What this tomb lacked in quantity, however, it more than made up in the superior interest of its contents.

The objects were almost all cast into the second cell, which evidently served the purpose of an ossuary-chamber for old interments. Other vessels were found in the graves with the latest interments, and others on the floor of the chamber.

A remarkable feature of this tomb was the occurrence of four pottery groups, of which three are figured just as they were found in lxxxi 1, 2, 6. The fourth was identical with fig. 1. These were found on the floor of the chamber.

Plate lxxxi 1 shews a group of two bowls on trumpet-shaped feet, one lying within the other. The upper surfaces of the margins of these vessels are painted red. A large number of such vessels (mostly fragmentary) were found in this tomb. In fig. 2 is another group, consisting of a similar-footed bowl, with the margin coloured red as in the previous specimens and with a red dot in the centre of the depression. Upon it lies the tubular flask drawn in fig. 2a. This type of vessel, Cypriote in origin,

is very rare in Palestine: so far as I know this is the only perfect specimen yet found there. A few fragments of such vessels have from time to time been found in the excavations. Upon this vessel stood a small jug in friable red ware. It was remarkable that this jug, though apparently deposited with intention, was broken.

Plate lxxxix 3 is a plain V-shaped saucer in brick-red ware, and fig. 4 a small bowl of the common Mycenaean shape, bearing traces of a red wash on its surface, on which is painted a brownish red line just under the handles. Fig. 5 is a bowl covered with a dark red wash: it was found broken in two. Fig. 6 represents the third of the pottery groups above-mentioned. The footed bowl which forms a stand is in this case more ornate, and is decorated with mouldings and with a red wash covering the whole surface. In it stands a bowl, burnt in firing to a black colour, and this in its turn contains a lamp. A small lentoid vessel lies on its side close by, and no doubt forms an intrinsic part of the group. The drawing of the saucer, fig. 7, in brick-red ware, speaks for itself, as does the large bowl in similar ware, fig. 8. The inside of the lip of the latter vessel is painted red. Fig. 9 is a Mycenaean importation, of the usual glazed buff colour, with horizontal lines in rich brown upon it. Fig. 10 is a lentoid vessel with a flat band substituted for the sharp edge at which the two concave surfaces usually meet. The junction of the band with the concave sides is emphasized by a beading. This vessel, which was found broken into many fragments, was of a very hard compact ware of a light chrome-yellow colour. Fig. 11 is a small globular vessel with two ear-handles on a ring base. It contained the base of the third metatarsal bone of a left foot. Fig. 12 is a wide-mouthed pot, *hand-made*, of a rough compact ware, originally red but burnt black in the firing over the greater part of its surface.

Plate lxxxix 1 is a remarkable vessel, which is one of those found in the ossuary-chamber. It is a large bowl with two mammillary button handles on one side. The ware is of brick-red colour. In the depression are painted groups of concentric circles in red, six in each group, the two outermost circles being concealed by the lip of the vessel which is curved over them. The bowl stands on three long narrow looped feet.

There is little to be said about the rest of the vessels on this plate. Fig. 2 is a small jar in a soft brick-red ware. Fig. 3 is similar in type though differing in detail: it is in ware of a coffee-brown colour. Fig. 4, also belonging to the same general type, is light yellow. Fig. 5 is a specimen of the Mycenaean pyx which has obviously inspired these native imitations. Like the Mycenaean vessel drawn on the previous plate, it is of a buff colour with brown lines. Fig. 6 is a globular jug that has lost its neck and handle: like most of the other vessels in this tomb, it is of a brick-red ware. Fig. 7 is one of several small jugs of light red ware, containing bone debris. These have been moulded on the wheel, but the sharp and prolonged point shews evident traces of having been trimmed with a knife of metal, bone, or wood. One of these jugs contained the first phalanx of a third toe. Fig. 8 is a lamp, rather larger and flatter than the normal shape. Fig. 9, a small jug, is in brownish red ware, and fig. 10 is a bowl of reddish ware. Fig. 11 is a bowl on a trumpet-shaped foot, like those included in the groups drawn on the preceding plate. It differs, however, in the edge, which instead of being a flat

horizontal disc is turned down obliquely. Such a form is exceedingly rare in this type of vessel. Fig. 12 is a bowl in reddish ware: the original is much broken. Fig. 14 is ornamented with a dark Indian red wash internally. Fig. 15 is a side of a bowl with a frieze-pattern of spirals upon it. The jug, fig. 15, is of Venetian red ware, covered with a dark red wash.

The series of pottery is completed on Pl. lxxxiii. Fig. 1 is the only large jug found in the cave—the *side* of another, containing bones, was also discovered. The spouted globular jug, fig. 2, is decorated with dark purplish red lines. This was the only vessel of this type found in the present tomb, though the neighbouring tomb yielded several specimens. Figs. 3, 4 are jugs, one conical, the other globular on an expanding foot, both imperfect: they are decorated with dark red lines, now with difficulty traceable. The pyx, fig. 5, is decorated with alternate red and black lines. Fig. 6 is a jug of drab ware: the flat base, contrasting with the sharp pointed base of the otherwise similar vessels illustrated on the previous plates, is to be noticed. Fig. 7 is a peculiar vessel with concave sides, in dark red ware: the ear-handles with which it was provided are broken off. The fragment, fig. 8, is part of another vessel that has been decorated with frieze-pattern; the double axe and spiral alternating in red and black. The colours are now almost faded away. The fractured edge of the fragment comes just at the beginning of the attachment of the handle. Fig. 19 is one of several fragments—which, however, it was impossible to fit together—showing the "ladder-pattern" painted on a brownish yellow ground.

The above are all the vessels of which it was thought necessary to make drawings. Besides these there were found (among a considerable number of fragments showing no particular character) a small lentoid vessel of the usual type, with four red concentric circles near the margin on the sides—the sides were perhaps slightly more convex than is usual in vessels of this kind; seven footed bowls like those in the pottery groups on Pl. lxxxi; nineteen * lamps of the ordinary kind, with *straight* spouts; a broken Cypriote crooked-necked jug of the ordinary type; the bottom of a jug similar to lxxxiii 6, but larger; and fragments of a duplicate to lxxxii 15.

There were also two other pottery groups besides the four enumerated above: the one consisted of two lamps, one inside the other; the other of a saucer much broken, but apparently resembling lxxxii 12, at the bottom of a jar resembling lxxxiii 1.

The only object resembling a figurine is the small nondescript represented in lxxxiii 1 a. Except for a small fracture at the top it is complete, so that if it really is meant to represent an animal's head—and if not, I cannot imagine what it may be—it never was attached to a body.

In considering the other deposits in the tomb care has to be taken to discriminate the original objects from later intrusions. A rather large crack in the roof, always open, made the cave accessible to rain, and as a result a rather remarkable collection of intrusive objects was found in the upper layers of the earth

* Exclusive of the two lamps in the group mentioned below and the lamps containing bone deposits.

that filled it. Several of these intrusive objects are illustrated in Pl. lxxxiii. Among them are the glass handle fig. 10, the only one of several fragments of glass that displayed any special characteristics; the iron holdfast, fig. 13; the nail of the same material, fig. 15—one of several found in the tomb; two coins (fig. 16), worn quite smooth and unrecognizable; iron fragments (figs. 20, 22), probably distorted nails like fig. 15; a bent iron pin, fig. 21. An Arab tobacco-pipe (fig. 28) and two Maccabean lamps, one of them shewn (fig. 31)—the other was quite plain, with a raised rim round the mouth of the reservoir, but without corner pieces and thumb-knob—were found, together with some small fragments of green glazed vessel that may possibly be as old as the time of the Crusaders, and two or three sherds of a modern Arab cooking-pot, apparently from one of the potteries in the neighbourhood of Hasbeya.

The pieces that remain certainly belong to the original interments. They include several bronze finger-rings of the usual small size: fig. 9 is typical. Fig. 9a represents the head of a bronze pin, of a type frequently illustrated in the debris of the mound: a very thin bronze pin, fig. 11, was also discovered. Fig. 12 is a small ingot of bronze: possibly a weight, but unfortunately a large part of one corner is broken off. Fig. 14 is a curious object, consisting of a bronze pin on which a perforated disc of the same material and bent (accidentally) to the shape of a V is strung. It is probably the head of an ornamented pin. Fig. 17 is evidently the end of a bracelet, and fig. 18 a fragment of an earring or some similar ornament. Fig. 23 is a broken scaraboid of crystal. Fig. 24 is a four-sided bar of ivory ornamented with the patterns shewn punched upon it. Figs. 26, 27 are two fragments of alabaster saucers, one of them ornamented with a row of knobs. Fig. 30 is one of two or three flint knives.

The use of iron is testified to by two objects, figs. 25 and 29, found with the interments. One of these is a thin flat band of bronze, apparently a bucket handle, which has had an iron rivet in each end—one of them still remains. The other is an iron knife, containing three bronze rivets by which the hafting plates were secured.

A sheet of bronze, broken into a large number of small and distorted fragments, shewed no definite evidence of its original purpose: it may have been a dish. There was no ornament upon it: one of the fragments shewed a small perforation like a pinhole.

The beads, etc., grouped together on Pl. lxxxiii 32 are: *a*, *d*, barrel-shaped, of grey paste; *b*, a slightly tapering frustum of a cone, camclian; *c*, spherical, light green enamelled paste; *e*, a small hook, evidently part of an earring, of silver.

The bones in the tomb were partly lying loose, partly collected into vessels. Among the vessels that contained bones may be mentioned the sherds of two large bowls, with peculiar varieties of the palm-and-panelled-zigzag painted pattern, described in the section on pottery. Bones were likewise deposited in the sherd of a large two-handled jar, which also contained a lentoid vessel of the common type (not enumerated above); a small globular jug of red ware with one handle (broken off); six lamps; two hemispherical bowls like lxxxii 10, but without the projecting base disc; a large bowl like lxxxi 8; a flat saucer like lxxxii 13, but smaller and shallower in proportion; and the saucer lxxxii 16. The bones were all human.

Among the people buried here were the following individuals: a young man of tall stature; a man of mature age with a very large head; a third male, also mature; an old person with senile jaws; and a female. These are certainly the remains of people of the Semitic stock.

59. *Plan*, Pl. lvi 17; *deposits*, Pis. lxxxiv, lxxxv. This tomb consists of a roughly circular chamber, 14' 7¼" in maximum diameter and 6' 2⅜" high. It is approached by a flight of four steps, and was closed by a large stone resting on the topmost step. This stone was 3' 1" broad, 3' 0½" long, and 1' 3¾" thick: one corner was broken off, but it appears to have originally been a rectangular block.

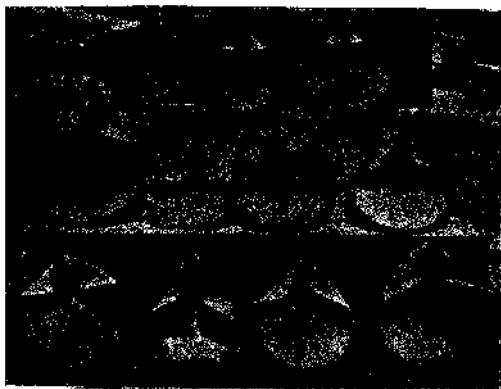


FIG. M 167.-LAMPS FROM TOMB 59

Inside the chamber is cut a series of recesses, a kind of primitive anticipation of the *arcosolia* of late tombs. There are five of these, of irregular shape as the plan shews. The recess *e* (following the notation explained at the beginning of this chapter) contained an extraordinarily rich assortment of objects—indeed practically everything in the tomb was there found, a few bones and sherds being the only objects yielded by the other compartments. It seems as though this were the receptacle where deposits from previous interments were cast to make room for fresh burials. The bones and pottery were piled up in complete disorder. The recess was partly enclosed by a large flat slab of stone set on edge.

The contents of this chamber were: (1) a large number of human bones, all unhappily much broken and destroyed—there cannot have been less than thirty individuals represented; (2) a great quantity and variety of pottery; (3) a few other objects of personal adornment, enumerated below.

Of the pottery a selection is drawn on Pis. lxxxiv, lxxxv, and other specimens are illustrated in the accompanying figures. There were at least a hundred pieces, the majority of which were lamps, such as are shewn lxxxiv 3, 8, and fig. 167. There were over forty lamps not here illustrated: most of them were broken. Of the eleven lamps shewn in fig. 167 note the unusually short spout of the central example in the uppermost row. The left-handmost lamp in the middle row is larger and flatter than usual. Its spout is crooked, a peculiarity also to be seen in others, as in the third lamp of the lowermost row. The flanges of the spout of lamp 2 in the

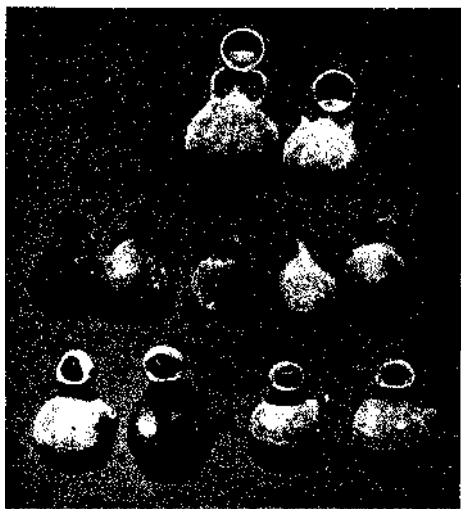


FIG. 168.—POTTERY FROM TOMB 59

central row are brought remarkably close together. In the third lamp of the same row the edge is picked out in dark red. The shape of the second lamp in the lowermost row is anomalous: it is long, narrow, and deep, and its spout is prolonged out of the usual proportion.

The vessels in fig. 168 are of three different groups. The lowermost row contains specimens of a class of vessel not very common, though characteristic of this period—globular jugs, on ring bases, with circular mouths over which curves a small loop-handle. They are provided with spouts, which is not a common feature of pottery so old as this. The sides are ornamented with lines painted round them:

in the second of the row these lines are confined to the shoulder and neck, which is unusual. These lines are generally red or reddish brown : in the third specimen of the row red lines alternate with black. The ware is brown or Venetian red. The third is covered with a cream-coloured slip. This vessel is probably to be explained as a practical modification of that most unpractical vessel the *Biigelkanne*.

In the middle row are specimens of lentoid vessels of the usual type, with two loop-handles attached to the neck. They are in ware ranging in colour from deep red (no. 1) to light yellow (no. 3). Most of them shew traces of lines forming concentric circles round the umbilic of the side of the vessel, as shewn in the fragments lxxxiv 12, 14. A more elaborately decorated example in that is shewn lxxxv 4. This specimen was much broken : the neck, handles, and one side were gone. A black line was ruled round the edge of the vessel, crossed by two black X's (appearing, of course, as V's in the drawing). There were then two groups of concentric circles, 4 and 3 in number, united by groups of radial lines, 9, 7, and 7 in number. The innermost circle contained two double axes in red and black forming a cross pattee.

The topmost row of the figure contains specimens of the curious lentoid vessel which so far Gezer alone of Palestinian sites has yielded, though this can only be due to the chances of excavation. The lip is developed into a vertical cup. The larger specimen of the two figured is a unique example, the usual ear-handles being replaced by loop-handles. There were several other examples of this type of vessel in the tomb, all of them broken.

The dimensions of the vessels illustrated in this photograph may be deduced from those of the largest in each row. In the top row the largest measures $9\frac{3}{4}$ " in length ; in the central row $5\frac{1}{2}$ " ; in the lowest row 7". There was a yet larger flask discovered, of the type of the second row, 7" in height. This vessel was ornamented with concentric circles in very fine lines, red alternating with black.

The pottery figured on the plates requires few words, as the drawings speak for themselves. Pl. lxxxiv, fig. 1, is a jug in a compact homogeneous ware with very small and few black grits. The surface is well smoothed and covered with a cream slip, ornamented with brown lines in the pattern shewn. Fig. 2 has dark reddish brown lines surrounding the sides. Figs. 3, 4, 5, 6 call for no special remark, except that fig. 3 is ornamented with a red line on the margin and fig. 5 bears faint comb-markings on the sides. Fig. 7, a dish on a trumpet-shaped stand, is painted inside along the margin with a line of red—shewn as a dotted band in the drawing. Fig. 10 is one of the small black ointment vessels that first appear at the beginning of the Fourth Semitic Period and immediately become common. Fig. 11 is a curious vessel coarsely made in compact reddish earth burnt black in places. The sides are ribbed as shewn in the figure. Fig. 13 is a fragment of a small bowl of the type most characteristic of this period, ornamented with red lines. Numerous fragments of the larger bowls of the same shape, with "frieze" ornament, were found: an example of the very common bird figure appears in fig. 20; this as usual is black, with a triangle of the bird's body (of which but a small fragment remains) in red. The yet commoner groups of panelled zigzags appear in fig. 21, though the row of dots is not a very frequent device. This

specimen is all in red. Fig. 22, a chequer pattern founded on the double-axe motive, in brown on a cream slip. Note how even in the small fragment remaining there is evidence that the alternation of the double axes was not regular. Fig. 23 shews an example of the common spirals with a "gridiron" lozenge between them. There is a minute triangle of red inside the spiral which seems to shew that there was some extra device here, now broken away. On Pl. lxxxv there are some more examples of this class of ware. Fig. 9 shews red zigzags between black lines; fig. 10, a red triangle bordered by groups of black lines. But the most remarkable of all is that of which several fragments were found, the pattern of which is drawn out in fig. 17. This is entirely in black, though there is some red in two of the branches of the right-hand date-palm. This frieze was divided into metopes by frets: besides the handles were double axes. In each metope was a representation of a horned animal feeding on the fronds of a date-palm, the pendent clusters of fruit in which is summarily but recognizably represented. Below is a zigzag, which is not a very common way of indicating the bottom line of one of these friezes.

Pl. lxxxiv 15 is similar to fig. 2, save in having a ring base instead of the round bottom. The vessel is of red ware, covered with a cream slip. Fig. 16 is the bottom of one of the curious boot-shaped vessels of which a more perfect example, ornamented with chevrons and frets of red and black lines, is shewn in Pl. lxxxv, fig. 3. The vessel is a gently tapering cone, with a single horizontal ear-handle projecting from the base. Fig. 17 on Pl. lxxxiv is of red ware, the sides shewing faint combmarks. Fig. 18 is of a somewhat friable dark red ware. The lamp, fig. 19, is slightly larger than such vessels usually are.

The vessels on Pl. lxxxv are more elaborately decorated with colour, or otherwise more remarkable, than those hitherto described from this important tomb. Fig. 1, which bears red bands, has a filtering spout. Figs. 2, 5, 6 are specimens of vessels of which several other examples (without decoration) were found—flat-bottomed cylindrical vessels with a slight entasis, two ear-handles on the shoulder, incurved neck and round mouth. The decoration varies from single lines in red (fig. 5) to the elaborate though roughly executed alternation of red and black panelled zigzags in fig. 6. Fig. 8 is a variant, with one handle only. The *Bugelkanne*, fig. 7, is a direct importation.

A good many of the vessels in this tomb were broken. This may be explained by careless throwing into the receptacle where they were found; but that explanation will hardly fit the three holes that with evident intention have been punched in the jug lxxxv 12.

Fig. 13 is a fragment of one of the bowls sometimes found, with three handle-like feet under the bottom. In fig. 14 is shewn the shoulders of a globular cup ornamented with whitish yellow lines on a pale red slip. Fig. 15 is of Aegean origin, being of the characteristic homogeneous Venetian red ware with burnished brick-red slip. The two-handled jug, fig. 16, is ornamented with red lines. Besides these vessels we may mention one or two large bowls, like lxxxix 8, one of which was decorated internally with the common painted palm-and-panelled-zigzag ornament.

The curious coloured sherd Ixxxiv 33 is in deep red ware with the pattern indicated in black lines.

Fig. 169 represents a peculiar grotesque human head found in this tomb. It

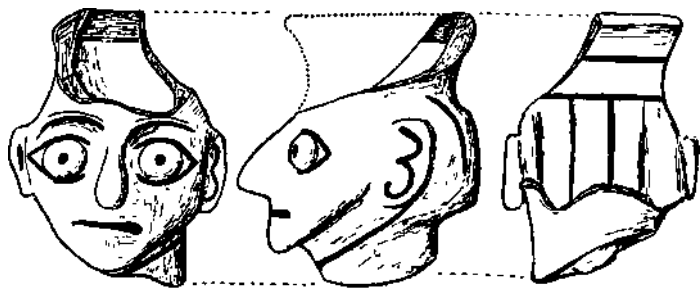


FIG. 169.—GROTESQUE HEAD FROM TOMB 59

is of Mycenaean origin, being of homogeneous Venetian red ware, covered with a burnished dark red slip. The head is hollow, and when complete terminated upwards in a cup-like rim: there is no communication, however, with any hollow that may have been in the body, nor indeed is there any indication of how the figure finished. The remainder was not found in the tomb. The features are picked out with black lines as shewn in the drawing.

FIG. 170.—BEADS FROM TOMB 59

The only other piece of pottery, as pottery, requiring notice is a small fragment of one of the common globular Cypriote cups, in coffee-brown ware.

A few beads of glass paste and carnelian were also found in the tomb, which are grouped together in fig. 170. These are flecked grey glass paste (1, 3, 8: the first of these has a yellow line encircling it at each end; the third is ornamented

with white wavy lines), carnelian (2, 4 which is flat in section as shewn by the dotted line, 5, 6, 7), grey paste (9), yellow paste (10), deep blue paste (11, 12, 13).

Of the other objects from this cave, the most interesting is the ornamented ivory comb, lxxxiv 24, which was found in several fragments, and imperfect. The ornamentation is identical on the two sides. Fig. 25 on the same plate is a fragment of an inlaying slip of the same material. Figs. 26-29, 31, 32 represent the objects in bronze: fig. 27 is perhaps the handle of a small wooden object that has, of course, perished; 28 no doubt is a small earring. Duplicates of 31 and 32 were found. The arrowhead fig. 29 has lost its tang.

Fig. 30 is a much disintegrated amulet in the shape of the god Bes. The green enamel with which it was protected has nearly all worn off, and the friable surface of the porcelain has in consequence partly powdered away.

Of objects of a more miscellaneous character there were two very rough flint knives and a small cake of red colouring matter.

Besides the pottery described above the following were found in this tomb: a bowl resembling lxxxi 7, but without base; a hemispherical bowl like lxxxii 10, but with flat base; another vessel like lxxxii 11, but with edge flatter; two small black jugs like lxxxiv 10, but in the case of one of them the point was less prominent; six lamps; a bowl like lxxxi 5; a one-handled jug of the ordinary type, with round base; a jug like lxxxv 5, without the painted lines; and a footed bowl like several illustrated on Pl. lxxxi. In addition to these were the pieces collected together in fig. 171. In this no. 1 is a jug of light brown ware on a narrow ring base with expanding body, surrounded by a groove, which has been emphasized by a red line. The handle is double. No. 2 is a small rather rude jug of a brick-red colour. No. 3 is a very peculiar fragment. It is a neck with a handle curving over the mouth: the natural colour of the ware is a light drab, but it is covered with a deep red slip ornamented with stripes of black, white, and red. The neck is stopped (as the section shews) by a block: it is evidently a false neck, and the fragment must belong to a "freakish" pot of local ware suggested by a Bugelkanne. No. 4 is the top part of a footed bowl of red ware, with a white wash covering the inner surface and a broad stripe of the same colour outside under the brim. No. 5 is a twist of pottery, evidently the handle of a vessel. No. 6 is a fragment of a small Cypriote jug of the usual coffee-brown ware. It is peculiar in having two sets of concentric circles on the shoulder: as a rule those found in Palestine have only one. No. 7 is a peculiarly curved fragment difficult to explain, unless it be the forepart of a vessel in the form of an animal figure. No. 8 is a sherd with a pattern in black lines, painted on a dark red slip.

In the same figure, no. 9 is a finger-ring of bronze, and fig. 10 is a bar of iron split along nearly its whole length. Besides these were found the neck and handles of a large lentoid bottle; half of a cylindrical bead of agate; and another bronze finger-ring—a plain loop of bronze wire, the ends just meeting.

There were, in addition to the above, the following vessels, which contained bones: three bowls resembling lxxxi 8; five lamps; two hemispherical bowls resembling lxxxii 10, but without base; two like lxxxii 13, but smaller and deeper

in proportion, and one of the same type but rather shallower; one like lxxxi 7, but shallower; the sherd of a large two-handled jar. The tibia of a goat was the only non-human bone in the cave.

60. A natural hollow in the rock: it contained some fragments of First Semitic pottery.

61. The doorway of an unfinished tomb.

62. A sunk grave, empty, measuring 4' $\frac{7}{8}$ " x 1' $\frac{15}{8}$ " x 2' $\frac{10}{16}$ ".

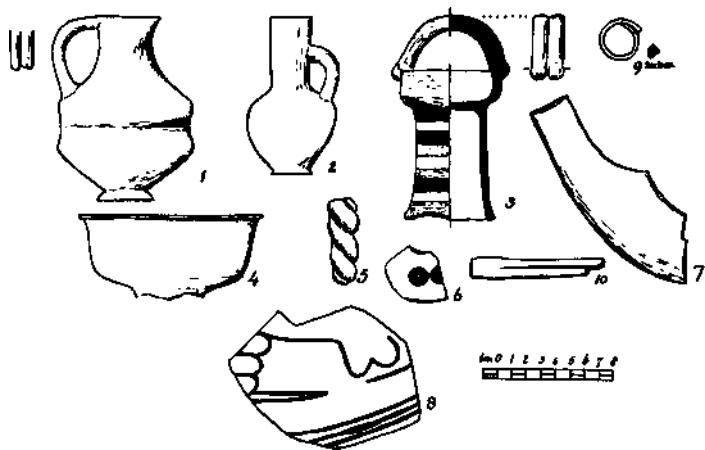


FIG. 171.--POTTERY FROM TOMB 59

63. A sunk grave measuring 4' 5" x 1' $\frac{9}{8}$ " x 5' $\frac{2}{4}$ ", with subsidiary arcosolia at the sides.

64. *Deposits*, Pl. c 6-18. A cave measuring 16' 1" x 21' $\frac{4}{2}$ " x 6' $\frac{3}{8}$ ", approached by a well-cut straight passage 2' $\frac{11}{2}$ " wide, which leads by five steps down to a square doorway by which the cave is entered. Though the passage and the doorway are well made, the cave itself is quite irregular. It was full of earth which contained a large quantity of Roman potsherds, only one small whole vessel and no other objects of importance.

The figures in the plate shew some characteristic sherds. Fig. 6 has a transverse, fig. 7 an upright handle. In fig. 8 there is also a transverse handle, which shews

the decoration of ribbing, almost universal in the Roman period. Fig. 9 is the bottom of a conical vessel. Fig. 10 is remarkable for its peculiar crooked handle and for the wide square ribbing it displays. Fig. 11 shews a flat horizontal rim, broadened out to form a shelf-like handle. The section shews the outline of the mouldings. Fig. 12 is the only whole vessel found in the cave. Fig. 13 is a strainer-spout. Figs. 14, 15, 16 are various types of edges of bowls—the last is more ornate than usual. Fig. 17 is a block of limestone $\frac{5}{8}$ " thick, with lines, as indicated, scratched upon it. Fig. 18 is a bronze pin with a flat spatula-like head.

65. A tomb with three arcosolia, 6' $1\frac{1}{4}$ " x 5' 5" x 4' $11\frac{3}{8}$ ".

66. *Deposit*, PI. cvi 7. A similar tomb, closed by a rolling stone, $5\frac{3}{4}$ " x 5' $6\frac{7}{8}$ " x 4' $11\frac{7}{8}$ ". The sides of the chamber are inclined to be concave on plan. A small glass vessel was found in it.

67. A sunk grave, 5'3" x 1' $11\frac{5}{8}$ ", breaking into a large natural cave. Nothing was found in either: the cave contained a large quantity of ashes.

68. A tomb-chamber with an unusually deep entrance shaft—9' 10"—measuring 7' 1" x 8' $2\frac{1}{2}$ " x 4' $11\frac{1}{8}$ ". There are three arcosolia, arranged on the ordinary plan.

69. A sunk grave with two subsidiary arcosolia—that on the left-hand side is blocked out only. It measures 5' $9\frac{3}{4}$ " x 2' 2" x 5' 3".

70. A sunk grave measuring 3' $6\frac{1}{8}$ " x 2' $3\frac{1}{2}$ " x 3' $9\frac{3}{4}$ ", but evidently unfinished, no doubt because it was found to break into a natural hollow in the rock.

71. An unfinished tomb.

72. A grave with five steep steps at the entrance. The chamber measures 6' $8\frac{3}{4}$ " x 6' $5\frac{7}{8}$ " x 5' $6\frac{1}{8}$ ". It has three arcosolia.

73. A tomb-chamber of which the roof has fallen in. It measures 5' $8\frac{7}{8}$ " x 7' $2\frac{5}{8}$ ". There are three arcosolia.

This group of similar and contemporary tombs, 65-73, had long been opened and despoiled of their contents. There were a number of stray scraps left behind as worthless or overlooked by the thieves, and these, such as they are, are collected together on PI. lxxxvi. These require no special comment, descriptive notes being added to the plate. The deposits evidently belong to the Byzantine period. The only objects to which it is desirable to add particulars beyond those given on the plate are the two to which the reference numbers 1, 2 are attached. The first of these is an iron bracelet, broken and much corroded, but which seems to have had a riveted swivel-bar closing it. The second is a lump of glass with three knobs on it, possibly a glazier's waste product: it is unbroken. A few duplicates of some of the beads and bracelets were found. It may be noted that *br.* means "bronze," *ir.* "iron," and *iv.* "ivory."

74, 75. Graves in the doorways of which are planted fig-trees, rendering access impossible.

76. *Deposits*, Pl. cix 18-29. A chamber 13' 8 $\frac{1}{4}$ " x 9' 10 $\frac{1}{8}$ " x 6' 5 $\frac{5}{8}$ " is the only tomb with *kokim* in this part of the necropolis of Gezer. They are nine in number, arranged in the usual way—three in each of the inner walls. There has evidently been a mausoleum erected over the entrance; but this, of course, has totally disappeared, leaving nothing but the rock-cuttings to receive the foundations. The most interesting deposit was the small figurine of a female divinity found in fragments in *kok b* (fig. 172): the other ornaments are shown on Pl. cix. An iron nail, fig. 22; an ivory button, in shape the segment of a cylinder, with green enamelled back, fig. 24; a small silver hook, fig. 25; a bronze hollow hemisphere, fig. 27; a bracelet of black resinous paste, fig. 20; a spindlewhorl of clay, ornamented with punched circles and strokes, fig. 21; a bead of brown enamelled paste with yellow lines, fig. 26; a bronze pin, fig. 23; a small glass vessel, fig. 19; and three lamps, figs. 18, 28, 29, were found in the cave scattered about. There were several ossuaries, all fragmentary and mostly plain, or ornamented with the usual banal decoration of circles and hexagons. The broken lamp, fig. 29, was found in one of these ossuaries.

77. *Deposit*, Pl. lxxii 23. A broken tomb, with *arcosolia* in the right and back wall. The dimensions are about 8' x 11' 2" x 6' 7", but the tomb is so much ruined that these can only be approximate. A number of beads and a twisted bronze bracelet (lxxii 23), the latter still upon a fragment of the ulna, were found in the tomb: they have an Arab look, and possibly the tomb was appropriated some time in the Arab period for an interment. There was found in it the mandible of a child of not more than ten years old. (The germ of the third molar is ossified, with its crown directed forwards; the germ of the twelve-year-old molar ossified, but not cut; second premolar has not yet cut).

78. A sunk grave, 5' 8 $\frac{7}{8}$ " x 5' 6 $\frac{1}{8}$ " x 6' 11 $\frac{1}{8}$ ", with two subsidiary *arcosolia*: it was closed by two large stones, one of which has disappeared. There is a step in the corner to facilitate descent.



FIG. 172.—FIGURE FROM TOMB 76

79. A sunk grave, $5' 8\frac{1}{8}" \times 2' 8\frac{5}{8}" \times 4' 6\frac{3}{4}"$, with two subsidiary arcosolia at the sides. This grave is in the middle of the great winepress *Ard'Ain el-Butmeh*, f.

80. A tomb-chamber, $6' 2\frac{3}{8}" \times 4' 0\frac{7}{8}" \times 5' 6\frac{5}{8}"$, with three arcosolia—that on the left wall has been quarried away. The door was closed with a rolling stone. Nothing but a coin and the fragment of a human jawbone, with the incisor teeth in a straight line, were found in the tomb. Outside the door were some scraps of Arab pottery, illustrated in Pl. c, figs. 29-31.

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81. A sunk grave, $5' 3" \times 5' 1" \times 4' 6\frac{3}{8}"$, covered by a large stone, in the centre of which is a cup-hollow for offerings(?). In each side of the grave is a subsidiary arcosolium.

82. *Plan*, Pl. lix 6; *deposits*, Pl. xciv 18-20. A roughly circular chamber $18' 2\frac{1}{2}"$ in diameter, with two smaller chambers opening off it, one on each side. The tomb contained the legular types of Fourth Semitic pottery, three representative specimens of which arc shewn in the plate: the only deposits of any importance being two scarabs (fig. 173), one in steatite, the other of XXVI Dynasty in ivory. The cartouche is not clear: it may be meant for Psametticus I, Psametticus II, or Amasis II.



FIG. 173.—TWO SCARABS
FROM TOMB 82

83. *Plan*, Pl. lix 5. An oval chamber, $15' 9\frac{3}{4}" \times 8' 2\frac{3}{4}"$, with an entrance consisting of a hole in the roof having rough footholds cut in the side underneath. A passage $3' 9\frac{3}{8}"$ broad is cut out of one of the sides, surrounding and isolating a section of the side which thus appears like a pillar. No deposits.

84. A chamber, $21' 7\frac{3}{4}" \times 17' 2\frac{5}{8}" \times 6' 6\frac{3}{4}"$, with a bay running in at the right side and turning at a right angle.

85. A chamber with a circular mouth at the end of the roof, measuring $13' 11\frac{1}{4}" \times 11' 5\frac{7}{8}" \times 4' 1\frac{1}{8}"$.

The pottery, of which there was a large quantity in these two neighbouring and contemporary tombs, has all been collected together on the three plates lxxxvii-lxxxix. A glance at these plates will be sufficient to shew the types. Specially should be noticed the flask with spoon-shaped mouth (lxxxvii 8), of which two were found in each tomb, and the Bugelkanne (lxxxvii 18) from 84. From both tombs came fine specimens of the Cypriote ware with grey slip: the bowl with wish-bone handle (lxxxvii 19) from 84; the pot (lxxxviii 7) from 85. One saucer (lxxxviii 12) had inside it the calvaria of a skull adhering to it. Several other of the saucers also contained bones. In Pl. lxxxvii the lines painted on the jug fig. 7 are of a purplish colour, in fig. 12 the lines on the neck are not painted but incised. Fig. 13

is a porcelain jug of Egyptian origin, green enamelled with black dashes upon it. In Pl. lxxxviii the cross inside the bowl is painted in red: the ornament in fig. 19 is in black and red lines. In Pl. lxxxix the lamp fig. 2 has a red painted margin.

Besides the pottery there were a few other objects from these tombs—the two heavy bronze anklets, one of which is shewn in lxxxix 15, from 84; from 85 a bronze fibula ornamented with mouldings, which has lost its pin (lxxxix 10), an axehead (17) and dish (18) in the same material, and an iron knife (lxxxix 19). Both tombs yielded some insignificant fragments of iron nails. There was also a large slate spindlewhorl, with concentric circles on the base (lxxxix 11), a club-shaped pendent amulet of pottery (12), an alabaster saucer with a tenon for fitting into the mortice of a moveable foot (13), and a larger bowl in the same material, with holes in the sides for a moveable loop base (14). There was also a plain bracelet of looped bronze wire (16). The iron object lxxxix 20, which seems to be the key of a horse's fetterlock, was found in 85: it is possibly a modern intrusion. The bronze rosette (21) and the small green enamelled figure of Sekhet (22) came from 84.

86. A small chamber, 5' 3" square and 5' 8⁷/₈" high, with three *arcosolia*. The entrance was stopped by a large stone.

87. An irregular cave, 16' 4⁷/₈" x 20' 9⁷/₈" x 6' 2", with a round mouth under which are rock-cut footholds in the wall.

88. A cave, 9' 8¹/₄" x 10' 7⁷/₈" x 4' 11¹/₈", with two *kokim* in the left side.

89. *Deposits*, Pl. xciv 15-17. A small irregular cave, about 16' 4" x 14' 6" x 5' 10", but not wholly cleared out owing to the risk of accident from the rotten roof. There was a considerable quantity of Roman pottery on the surface of the earth filling the cave: otherwise the only objects discovered were an iron sickle, a bronze spearhead, and one or two flint chips and knives. One of the latter, as well as the sickle and spearhead, are shewn on Pl. xciv, figs. 15, 16, and 17.

90. An irregular chamber, oval on plan, having the entrance in the middle of one of the long sides. There is a bay at the right-hand end. The chamber measures 16' 9⁵/₈" x 22' 3⁵/₈". A couple of bronze bracelets were found in it.

91. A cave measuring 21' 3⁷/₈" x 20' 9⁷/₈" x 5' 5", apparently natural, but with a well-squared doorway. Sherds of Roman pottery alone were found in it.

92. A small circular bell-shaped chamber with a round mouth resembling a cistern, about 10' in diameter. At the right-hand side of the doorway is the entrance and a smaller chamber.

93. A sarcophagus, measuring 7' 6¹/₂" x 3' 3³/₈" externally, thickness of sides 6", internal depth 2' 3¹/₂", height of plinth of cover 3¹/₂", of gables 10", with an ornamental cover, sunk in the earth. The cover is of irregular shape. At the four corners are

rude acroteria: a ridge runs longitudinally through the middle: on one side of the ridge the cover is cut in a gable-form; on the other side (that towards the spectator in the photograph fig. 174) there is in the middle a cylindrical swelling, between two gable-formed projections. This is the only sarcophagus found at Gezcr. There was no rock-cutting of any kind, the stone being just like an ordinary coffin in a grave. One corner was broken, probably by thieves: nothing except the very disintegrated bones of one skeleton were found inside.



FIG. 174.—LID OF SARCOPHAGUS, TOMB 93

94. Two sunk graves, measuring respectively $6' 10\frac{3}{4}''$ x $2' 5\frac{1}{2}''$ and $5' 6\frac{7}{8}''$ x $1' 7\frac{3}{4}''$, side by side: the edges arc revealed for cover-slabs.

95. A small cave, $7' 3''$ x $13' 2\frac{1}{2}''$ x $2' 11\frac{1}{2}''$ high, with a pit $7' 10\frac{1}{2}''$ in diameter and $4' 7\frac{1}{8}''$ in depth sunk in the floor. The entrance is very narrow. Whatever this may have been, it was probably not a tomb: nothing was found in it.

96. *Plan*, Pl. lix 8; *deposits*, Pis. xc, xci. An irregular chamber, $14' 3\frac{3}{4}''$ x $15' 1\frac{1}{4}''$, with two little cells cut out of the back wall at a level slightly lower than the floor of the chamber. One of these is $5' 5''$ x $4' 7\frac{1}{8}''$ x $3\frac{3}{8}''$: the other $3' 3\frac{3}{8}''$ x $4' 5\frac{7}{8}''$ x $2' 9\frac{1}{2}''$. They were probably originally intended for ossuary

A flight of rock-cut steps leads down from the entrance, but otherwise the cave seems to have been left in its natural state. The cave contained some sherds of First Semitic pottery.

99. *Plan*, Pl. lvii 14; *deposits*, Pis. xcii, xciii, xciv 1 — 13. This tomb consists of a three-sided vestibule 15' u|'' long, and of two chambers, one behind the other. The outer chamber measures 11' 8⁵/₈'' x 12' 6³/₈'', and has ten *kokim*—four in each of the side walls and two in the back wall. Between and above the latter is the entrance to the inner chamber. There is a square depression in the middle of the



FIG. 175.—ENTRANCE TO TOMB 99

floor. The inner chamber measures 6' 8³/₄'' x 6' 9⁷/₈''. It has a raised bench surrounding the three inner walls.

The most peculiar feature of this tomb is the method of closing the entrance. Three dwarf walls with large stones lying upon them are built in front of the entrance. There can be little doubt that cover-slabs lay across these walls. This method of enclosure is unique in Gezer: it is illustrated in fig. 175.

The Maccabaeian origin of this tomb is attested by its construction with *kokim*, and also by some plain fragments of ossuaries scattered through the earth that filled the chambers. But it is evident from the designs of some of the splendid series of lamps recovered from the tomb that it was used in the Byzantine Christian period

for sepulture. The cross is unmistakably a Christian emblem on PI. xciii 11, 12. Fig. 30, *b* on the same sheet is an unusual example of the *under* surface of the lamp being decorated. The remaining patterns speak for themselves and will repay study. The magnificent example xcii 17 is one of the finest lamps found at Gezer. Some additional lamps from the series are shewn in PI. xciv, figs. 1-4.

Besides these lamps, which were the chief glory of this tomb, a number of other objects were found in the chamber. The spoiler, as usual, had raked them out of the graves where they were deposited and thrown them about as valueless, so that there is little to be done besides giving a catalogue of the objects, for nothing can be said as to their original disposition. The most important are drawn on PI. xciv. Fig. 6 of this series is an almost perfect specimen of a glass bottle, of which several other examples were found, all, however, in many fragments. Fig. 7 is also a glass bottle. It is to be noted that the two knobs and the oblique rim are not the result of fracture, but were made thus with intention by the artist: the vessel, though its shape as represented in the drawing gives a suggestion of imperfection, is complete. Nos. 8, 9, 11, 12, 13 are five glass bracelets, two of them plain, the third ornamented with a wavy side. No. 10 is a small pot of characteristic Roman ware. There were also a large number of beads, the most interesting of which are shewn in no. 14a—e* and the usual objects of late tomb furniture—fragments of small bronze bells; a fragment of mail-coat; five small coins, three illegible, the legible examples being Constantine I; two or three bronze shroud-pins and a number of iron shoe-nails; three corroded iron signets; an iron key on a loop; and two or three plain conical "spindlewhorl" buttons. Of such objects several examples have already been illustrated, and it is unnecessary to multiply drawings of duplicates.

In fig. 5 is shewn an iron bracelet, found in the outer chamber. The ends are rounded, and there is a knob in the middle.

In the right-handmost of the three compartments into which the dwarf walls at the entrance divide the vestibule was found a fragment (no doubt an accidental intrusion) of a Rhodian handle with the letters TOY upon it.

100. A small irregular shelter under a projecting ledge of rock. A few fragments of bones and some potsherds were found in it.

101. A wide circular pit in the rock, 4' 5 $\frac{1}{8}$ " in diameter—apparently an unfinished shaft tomb. Nothing was found in it.

102. A rough natural cave, 15' 6 $\frac{1}{4}$ " x 13' 7 $\frac{1}{2}$ " x 6' 6". It contained a few traces of decomposed bone debris, and a number of very early pieces of pottery. There were two large bowls, shaped like the frustum of a cave inverted. These contained

* The first of these is in (*a*) a bluish black paste: the straight lines are white, the zigzag lines yellow. The second (*b*) is also paste. The third (*c*) is of black glass with yellow dots upon it. The fourth (*d*) is a flat oval of paste, ornamented with dots and a raised knob in the middle. The fifth (*e*), a large spherical bead with two perforations and raised ribs on the sides, is of bone. It has at some time been partly burnt.

fragmentary human bones, which had evidently been collected and placed in them. There was also a broken fragment of a similar vessel. One of the two complete vessels was ornamented on the surface with coarse combing; the other was plain. There were also a number of small vases, of similar coarse drab pottery.

103. *Plan*, Pl. lix 14; *deposits*, Pis. xcv-xcvii. This excavation is, primarily, a large cistern. It is of a total length of 54', and a depth of 22' below the under side of the roof, 24' below the surface of the rock. The shape is peculiar, and it is *possible* that it was divided into two by a rock-cut archway over the narrow part: this, however, has fallen down and left nothing but what appear to be the projecting piers. Above the southern "pier" the cave widens upwards, and two holes, represented in the plan by dotted circles, have been broken through the roof, over the projecting pier. There are also two holes cut with intention through the roof, one at each end. The sides of the cave have been plastered with mud, put on with the palms of the hand: the separate handfuls, taking the mould of the concave palm, are still distinctly traceable, though an attempt seems to have been made to smooth them off. There is a depression in the floor of the chamber extending along nearly its whole length, approached by steps at the western end: this is 4' 2" below the floor and leaves a bench or shelf all round about 3' 3" in breadth. At the west end a crooked passage runs off northward, just above the floor: it is about 5' 6" high and ends externally in a high step about 3' high. The doorway giving access from outside to this passage is made in a vertical scarp of rock, possibly a counterscarp of some cutting outside the city wall.

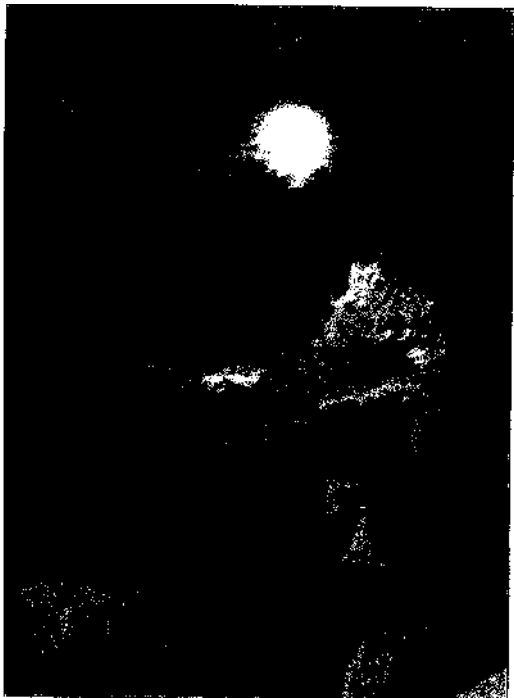
Also in the north side, at the east end, is a large hole broken in the side of the cave, close under the roof. It admits to a small square rock-cut chamber with an independent doorway. This seems to have no radical connexion with the cistern, the irregular hole connecting them being, I take it, merely an accidental fracture in the partition dividing them.

In the photographic view of the interior (fig. 176) these features are to be seen. The south "pier" is in the foreground to the left. The channel or sinking in the floor is also conspicuous.

Though not properly a tomb, I have counted this excavation with the tombs proper, partly for convenience, as it can more easily be described here than anywhere else, and partly because bones actually were found in it. There were several skulls, one of them shewing the pathological condition of *pachycephalus*. In the jaws the teeth were all unsound—even in the case of one which belonged to a child not more than six years of age. This condition of things was (as we have already seen) a characteristic of the Hellenistic age to which the deposits are to be ascribed.

On Pl. xcv are shewn the bronze objects from this cistern. Fig. 1 is a fine needle 9" long; fig. 2, a wire bent as shewn in the drawing; fig. 3, a bracelet, in the shape of a flat disc of bronze, $3\frac{3}{4}$ " diameter. There is a perforation at one end into which probably a hook (now lost) projecting from the other fitted. Fig. 5 is a plain bronze pin, round in section, bent into a C shape, while 5a is the shaft of another pin with conical head, broken. Fig. 6 is a bronze pot, much crushed and

distorted. The present height is 8". There apparently has been a recurved rim. Fig. 7 is a fragment of a finger-ring resembling a seal-ring, but there is no device on the expansion. Fig. 8 is the handle of a bronze vessel : it measures $6\frac{1}{4}$ " x 48". Fig. 9 is an earring, one of two, and figs. 10-12 are three out of six small bronze finger-rings. Fig. 13 is another ring, possibly an earring, of fine twisted wire : fig. 14 is an annulet resembling the "eye" of a "hook-and-eye" fastening, and very possibly this is what it is. There is a loop projecting from the convex side opposite the spiral twisted ends. Fig. 15 is a finger-bone with two bronze finger-rings fastened to it by corrosion. Fig. 16 represents a restoration made from the much crushed and broken fragments of a bronze bowl that has been gilt inside and out. It is broken into about eight distorted pieces. Fig. 17 is a massive fibula, which was much crushed. Figs. 18 and 19 are bronze saucers, both much broken : the first of these has a repousse



knob in the middle of the bottom. Fig. 20 is a leaf-shaped arrowhead, and fig. 21 part of a bronze chain passed through bronze ring. There was also a small Ptolemaic coin, much corroded.

On Pl. xevi are shewn the iron objects from this cave, which as one of the best collections of objects in this perishable material found at Gezer are of great

importance. They include the fine spearhead, socketed, with a prominent ridge on both sides, 8" long (fig. 1) ; a tanged axehead or chopper, $4\frac{1}{2}$ " long (fig. 2), and another (fig. 3) rather smaller and simpler, $3\frac{3}{8}$ " long. There was also a rectangular iron ring, probably intended to secure the head of some instrument to its wooden handle: this measured $2" \times 1\frac{3}{4}" \times \frac{3}{8}"$ (fig. 4). An arrowhead at present 4" long, the tip of the tang being broken off (fig. 5), with square-sectioned head and round-sectioned tang. The blade of a knife, bent backwards, total present length $6\frac{1}{2}"$, one rivet hole in the tang (fig. 6). A tanged sickle (fig. 7), the tang strong and square without rivet hole: blade much broken and end lost. An axehead (fig. 8) resembling fig. 3 but larger—length $4\frac{3}{8}"$. Three finger-rings (figs. 9, 11, 12), of which two have been seal-rings, but the device is almost or quite corroded away. Fig. 10 is another iron ring, fastened by corrosion to the finger-bone. A straight knife (fig. 13) with three rivets for securing in a wooden handle, of which a few fibres remain adhering to the rusty blade: length $10\frac{3}{8}"$. A similar knife (fig. 14), the tang of which is broken and the point corroded away. Evidently there was in this specimen a double row of rivets, which is uncommon. Fig. 15 is a bar of iron $8\frac{1}{2}"$ long, broken at both ends—what it may have belonged to is not clear. Two smaller fragments of similar bars were found. Fig. 16 is a knife with pointed blade, and fig. 17 a ring: these two objects had become corroded together. Fig. 18 is a square bar of iron $7\frac{1}{8}"$ long, with a loop at each end, in one of which a ring is passed. Perhaps this is part of a horse-bit. Besides these objects there was an upper millstone and some sheep-bones.

The pottery, beads, and some miscellaneous objects are collected in Pl. xcvi. Figs. 1-5 are lamps, of which the first had a hollow ring base, but all the others flat bases. The handle with a zigzag scratch on it is curious (fig. 6). The small jugs figs. 7-9 speak for themselves: they are obviously of Hellenistic type. Fig. 10 is part of an iron knife; fig. 11, a ring made of a bar of bronze with circular section. Fig. 12 is a flint; fig. 13, a disc of stone with a cup-shaped hollow in one side. Figs. 14-18 are miscellaneous bronze objects: there was another ring like 17, and another like 18 but thinner. Figs. 19-23 are silver: there were two duplicates of no. 22. Fig. 24 is ivory, and 25-27 limestone. The Horus-cye, fig. 28, is green enamelled porcelain picked out with black.

The beads are made of the following materials: *a, b, e, p, u*, carnelian (there were two duplicates to *a*: *p* is flat); *c*, ivory; *d*, white paste, eyes blue, with blue lines round them; *f, k, n*, green enamelled porcelain; *g, q*, cyan us; *h*, limestone; *i*, agate; *l*, black glazed porcelain; *m*, silver; *o*, white paste, yellowish green eyes with similar rings round them; *r*, crystal; *s*, blue glass; *t*, blue enamelled porcelain.

There was also a pestle of red stone, $4\frac{1}{8}"$ long by $2\frac{3}{8}"$ diameter, square in section with rounded edges, ends convex.

104-108, 110-115. Deposits, Pl. lxxviii 47-49. This is a series of eleven pits, in every respect resembling bell-shaped cisterns, except that they are not so deep on the average. These receptacles contained the bones of a large number of human beings, intermingled with those of camels, cows, horses, sheep, goats, and donkeys, thrown in indiscriminately. Besides the bones there were practically no deposits: a

few more or less whole pieces of pottery and a number of sherds, all of the plainest and most ordinary Fourth Semitic types; one single bead of cyanus; and the three objects—a pottery camel's head, an "Astarte-plaque," and a small disc of limestone with a nondescript design scratched upon it—figured in Pl. lxxviii; were the only objects found. Two or three sherds of a Cypriote milk-bowl and of a Mycenaean Bugelkanne probably had washed into the pits by accident.

The apparent date of these deposits would fit in with the capture of Gezer by the Egyptian contemporaries of Solomon, and it may be that these are the victims of a battle, cast into these pits. One humerus had been cut cleanly through, apparently just before death, which seems to favour such a theory. The difficulty is the presence of animal bones in such profusion—animals would be more likely captured and driven off than slaughtered so indiscriminately. It may be also that these bones are those of the victims of an epidemic affecting men and animals. A plague of men and sheep is referred to in the Tell el-Amarna tablets (ed. Winckler, no. 89). It may also be that these are simply the receptacles into which were cast the bodies of people too poor to own graves, and animals which had died of themselves. The total absence of valuable deposits accords with any of these theories.

It is probable that before being used for burial—about the tenth century B.c.—these pits were dug as water or grain stores. Perhaps this slope of the hill was once divided into small gardens, each with its own cistern. There was one pit which contained no bones, that was opened beside the winepress that lies in the middle of this area. This was similar in type to the other pits, but contained First and Second Semitic potsherds exclusively. This probably means that it had become closed up before the period of the interments.

It may be noticed that of these pits no. 104 was the deepest (19' 8" deep and about 15' wide at the bottom). Nos. 106, 113, 115 contained no deposits, and 108 very little. No. 107 was 12' deep and 22' in diameter at the bottom: its roof is supported by a pillar of rock left uncut in the middle, and between the pillar and the wall is a stone 4' 8" high, 2' broad, and 1' 4" thick, standing upright on the floor. No. 111 contained the maximum quantity of potsherds—112 had an enormous quantity of bones, both human and animal. No. 114 was a double pit, the two members being 9' 8" deep and each about 14' across, both bell-shaped with independent roof entrances, but by a doorway at the bottom communicating one with the other. In one of these there was a considerable number of bones, but the other contained very little.

There are not improbably other similar pits in the same region which I did not happen to strike.

109. A cave, 16' 10½" x 19' 2" x 5' 5", approached by a flight of rock-cut steps. In the floor are cut three shallow basins, the largest of them 4' in diameter and 1' deep. The cave contained some First Semitic potsherds.

116. A large cave, 16' 10³/₈" long, 25' 2¾" across, and 9' 9¾" high, with a round pit 4' 11¹/₈" across and 5' 5" deep just at the entrance. It contained no deposits.

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117. *Plan*, Pl. lvii 10; *deposits*, Pl. xcvi 1-15. Under a deeply recessed round-headed doorway, a small square opening gives admission to a chamber measuring 12' 3¼" x 10' 2⅞". The opening is lined with a frame consisting of two [-shaped stones, and was stopped by a rebated block of stone. There is a *kok* on each side of the door, five in the right wall (the only case where so many are found in one wall), four in the back, and three in the left. As usual there is a bench running all round the walls in front of the sills of the *kokim*. The place of the fourth *kok* in the left wall is taken by the entrance to an inner chamber, 7' 9" x 6' 4I", with a bench round each of the inner walls, but no graves. The function of this inner chamber was to contain the store of ossuaries, of which there were a considerable number, mostly fragmentary. They had been piled one on top of the other, and the soft stone of the under ones, softened still more by damp, had given way under the weight of the upper, so that they had collapsed. The ornamentation of these consisted entirely of circles and sexfoils with zigzags scratched upon them: none were inscribed. The other objects from the tomb, shewn on Pl. xcvi, were all in the outer chamber. Figs. 1-7 are glass: they were also fragments of a number of other glass vessels, of varying size, of the type of fig. 3. Fig. 2 is ornamented with four depressions on the sides. These glass vessels are all of a light greenish colour. Fig. 6 is a glass jar-stopper, and fig. 7, a kohl pencil of the same material. Fig. 8 is a fragment of what must have been a handsome little vessel in bronze, with some rather indefinite floral ornamentation in relief on its side. Figs. 9-12 are four fine lamps: fig. 9 is an especially remarkable example, with a guilloche on the spout; the hourglass-shaped ornaments on fig. 10 are also interesting. Whether the cruciform ornament on fig. 11 be merely accidentally in form of a cross I do not decide; but I think this is most probable. Another lamp, rather larger, was found in the tomb with a pattern similar to this, and four like no. 10—three of them with an egg-and-tongue device surrounding the opening, and one with knobs in place of the hourglasses. There were also three other lamps not here drawn—one like Pl. cxvi, fig. 22, without the handle and ornamental dots, another like Pl. cxvi, fig. 23, and a third similar to fig. 13 on the same plate without the curling ends to the C curves, and without the rest of the pattern round the reservoir. The small figure of a fish, fig. 13, was apparently in ebony: it was perforated through the sides, and the eye, a circle with a dot at the centre, was filled with a white composition: the two sides were similar. The spherical ribbed bead fig. 14a was in green enamelled paste; the two beads *b* under the fish, in black glass (there were several examples of the *single* bead); and the flat disc *c* was of resin. There was also a small ribbed cooking-pot, fig. 15.

118. *Plan*, Pl. lix 9; *deposits*, Pl. xcix 1-5. This tomb is entered by a most awkward little triangular hole—it can hardly be dignified by the name of doorway—4' above the floor of the chamber: there are no steps to facilitate descent into it, and the process of carrying in a body for interment must have been very

difficult. Though the chamber is unfinished, the deposits shew that it was made use of for burial. It measures 8' 6" x 8' 10" x 5' 6⁵/₈" high. There was an intention to make two *kokim* in each wall—eight in all—but only the four nearest the door are finished: three of the others are partially excavated, and the fourth is only just begun. The principal *trouvaille* in this cave was a fine lamp of bronze, xcix 1, found at the mouth of the inner *kok* on the right wall. There were also a small pottery lamp of a more ordinary type, fig. 2, and three small glass bottles, one of which is figured Pl. xcix, fig. 3: the others were similar to it. There were two cylindrical beads of brownish yellow enamelled paste, ornamented with wavy lines in green, fig. 4. Besides these, the chamber contained fragments of two or three glass vessels, too broken for their original design to be determined, and many fragments of ossuaries with the usual zigzag and sexfoil ornamentation, a detail of which is shewn in the plate, fig. 5.

119. A sunk grave, measuring 6' 0⁷/₈" x 2' of x 3' 0¹/₄". As usual with such tombs, it was completely rifled and empty.

120. A cave consisting of a depression in the rock, from which the mouth of a tunnel opens. It was impossible to excavate this, however: heavy blocks of the roof had become detached, and were resting on the earth with which the tunnel was filled; and one mass of loose rock fell during the work, shewing the serious risk that would be run if the work were continued. It was therefore thought advisable to abandon it. Some fragments of First Semitic pottery were found in the excavation.

121. A chamber, 9' 3" x 12' 8", with the entrance at the right-hand end of its wall. There is a low bench against the left wall, and in the inner end of the right wall a *kok*.

122. *Plan*, Pl. lvii 12; *deposits*, Pl. lxxviii 50, 51. A tomb, 7' 6⁷/₈" x 9' 6" x 5' 3³/₄". There are two *kokim* in the side walls, three in the back, and one set obliquely in the angle between the entrance and left walls. The contents of the tomb were meagre—a child's small bronze bracelet, consisting of a flat band of bronze, with rounded but not expanding ends—diameter 1¹/₂"; a lamp like ci 8; and a small flat cooking-pot of fine pottery, which was found in one of the *kokim*. The rim of this vessel had been broken away, and a circular hole cut in the bottom. There was also a fragment of a corn-rubber of the usual sort, with a rather square end turned slightly upwards, and a jug (lxxviii 50) found in one of the *kokim*, inside which was a broken glass bottle (lxxviii 51).

123. *Plan*, Pl. lvi 13; *deposit*, Pl. c 1. The plan of this tomb resembles in some degree that of the last. It is 9' 3" x 8' 5¹/₄" * 5' 8⁷/₈". There are three *kokim* in the right, three in the back wall, and two in the left; also two set obliquely, one at each angle of the door wall. The tomb contained a two-handled lentoid

vase (c i). There were several fragments of ossuaries, one of which is shewn in fig. 203, no. 7.

124. *Plan*, PI. lvi 11; *deposits*, PI. xcvi 16-26, ci. This elaborate tomb consists of three chambers. Not improbably the two additional chambers are afterthoughts, additions to a single-chambered tomb, with three *kokim* in the side walls, four in the back, and one to the left of the entrance. This chamber measures 11' 8 $\frac{1}{8}$ " x 13' 9". The second hole in the back wall has been enlarged to make a passage leading to the inner chambers. It is 8' 0 $\frac{7}{8}$ " long in its final form, and two arcosolia have been made, one in each of the sides, extending over the *kdktm* that run in from the inner chamber. Such an arrangement is common in the tombs round Jerusalem, but this is the only example near Gezer. The inner chamber is 9' 10 $\frac{1}{2}$ " long; the breadth ranges from 8' 10 $\frac{1}{8}$ " to 9' 9"; the height is 6' 11". It is quite plain, no tombs having been made in it. The inner chamber, which measures 9' 8 $\frac{1}{4}$ " x 8' 11 $\frac{1}{8}$ ", has a bench running round the three inner sides, and a recess in the left and back walls. At some time a shaft has been cut in the roof, possibly with the intention of making a cistern, which has broken into the tomb above the back wall of the outermost chamber, and partially destroyed the two right-hand *kokim* and the arcosolium above them. The principal deposits in this tomb were lamps, of a more commonplace type than usual: they are shewn on PI. ci. The second is the most interesting, in that it bears on its base a maker's name, or rather the initials, in Roman letters—UAL. CRI. This, and the PROP lamp from tomb **126**, are the only Latin inscriptions found at Gezer. On the base of no. 5 also is a device, no doubt also a maker's signature. Besides the lamps, which were all in the outer chamber, we may notice two stones, found in the second chamber, ci 17, 18. They appear to have belonged to some construction. One, with a curved channel, is 2' across, and the breadth remaining is 1' 8 $\frac{3}{4}$ ". The other, with a square groove in it—possibly part of the lining of a doorway—is 1' 8 $\frac{3}{4}$ " long, 2' if broad, and 1' 6 $\frac{1}{2}$ " across.

A number of other objects from this tomb are shewn in PI xcvi. They include a jar-stopper of clunch; a vessel of reddish ware, slightly ribbed, with a thick red band painted on it; a bronze bracelet, and a small loop of three bronze links with points on them, probably intended for suspension of beads; three iron nails and a bent flat pointed bar of iron; a few beads and a small pottery jug; also a little glass vessel of common type.

125. *Plan*, PI. lix 10; *deposits*, PI. exx 16-19. A small irregular chamber, 7' 8 $\frac{1}{8}$ " x 8' 11 $\frac{7}{8}$ " x 6' 0 $\frac{1}{8}$ ". There are four *kokim* complete—two in the back wall and one in each side wall—and a fifth, incomplete, set obliquely in the right-hand corner of the door wall. The tomb contained a number of fragments of ossuaries; two much broken skulls (one of them, like the skull from **103**, shewing pachycephalus); four lamps—one like ci 8, and the three shewn in PI. exx (one of these had a curious device on the base, which is drawn above it in the plate); a shapely globular glass vessel, exx 16; and many fragments of glass vases, most of them resembling xcvi 3.

125a. *Deposits*, PI. lxxix 37, 38. A cave with three arcosolia: one of them

is repaired with masonry and a pillar with plain abacus built at its side.* Nothing was found in the tomb except the globular vessel of greenish grey glass and the ivory pin represented in Pl. Ixxix, which were found in the central arcosolium.

Hawakir el-Balad

126. A chamber, 8' 3" x 9' 10½" x 5' 10⅞", the door facing N N.W. It contained one arcosolium in the left and two in the back wall. The deposits included a few late commonplace lamps.

127. *Plan*, Pl. lviii 14. A rough irregular cave, 15'9" x 13' of" x 8' 6". The entrance is an irregular hole, like the mouth of a natural cave. There is a recess on the right of the door, like a short *kok*, and three single *kokim* in the left and back walls: on the right a single and a double *kok*, the latter divided by a dwarf wall. The cave was full of earth, and contained a heap of ossuaries carefully piled up in the middle of the floor. They bore the usual banal ornamentation and were mostly painted red. Two were inscribed (fig. 178): they commemorate "Saro son of Eliezer" and "Hanun son of Jechoni" respectively. From the small size of the first of these inscribed ossuaries, it must have belonged to a child.

128. *Deposits*, Pl. xcix 6-12, cxiii 23. A cave, 8' 2" x 9' 7" x 5' 10⅞", the door facing S.W. It is at the right-hand end of the door wall.

The tomb contained nine fine lamps, seven of which arc shewn xcix 6-12 The

remaining two arc identical with the seventh (fig. 12): in the one, however, there is a triangle of seven pellets instead of the row of three on the shoulder; in the other there is a pellet in the cusp of the ornament in the tail. In one lamp (fig. 177) the potter has ingeniously concealed the Roman letters PROP (perhaps the beginning of his name) among the scrolls on the reservoir. There was also an iron key on a moveable ring, cxiii 23.



FIG. 177.—LAMP FROM TOMB xxb



No.2

129. *Plan*, Pl. lviii 12 ;

deposits, PI. cxiii 24-26, cxvi 23. An irregularly cut chamber, 11' $6\frac{1}{8}$ " x 11' 7", with two sunk bench graves in the back wall, an arcosolium in each of the three other walls, and a double arcosolium at right angles to the entrance wall, to the right of the door. I was told that this tomb had been opened by the fellahin about twenty years before in the hope of finding gold. Nothing of the kind appeared, however, but there were so many glass vessels in it that they called it *El-Hummdra*, "the tavern." The trade in glass had not then been developed, and in childish spite at their disappointment they broke all the glass vessels in the tomb. There must, however, be some flaw in this story, for on reopening the tomb, hoping to discover and perhaps piece together some of the glass, only one small pot in this material was found, too imperfect to make its restoration at all possible. There was also a small jug of the Byzantine Period, with three nicks on the side, and a number of lamps (seven of the "candlestick" * class, and the lamp figured cxvi 23): four of these and the jug were outside the door of the tomb. There were also a bronze signet-ring with an illegible device, a bronze coin of Constantine suspended to a bronze ring through a hole in the middle, and three beads and a circular ivory disc perforated in the middle (cxiii 24-26).

130. *Plan*, lviii 8. A tomb, the chamber of which measures 10' $7\frac{1}{8}$ " x 5' $10\frac{1}{8}$ " x 6' $0\frac{1}{8}$ ". There are two arcosolia, one on the left, the other in the back wall. The chamber is lined with plaster, faintly covered with triangular impressions made with a round-pointed knife: on the top of the edge of the arcosolium in the left wall is a herringbone ornament. The deposits consisted of a glass bottle at *a* (see the plan), a body, much decayed, of which the head was at *c*, and a lamp at *b*. There was also a fragment of a Roman waterpot.

130a. A fine tomb, long open and rifled. The chamber measures 14' $0\frac{1}{2}$ " x 8' $5\frac{3}{8}$ " x 8' 2". There are two arcosolia, 3' $5\frac{3}{8}$ " deep, in each of the inner walls. The walls are covered with cement. There are no marks on the surface except four oblique strokes on the sill of the inner arcosolium on the right side, and a V and three other strokes at irregular intervals on the sill of the corresponding arcosolium on the left side. There has apparently been a mausoleum erected in front of the door, of which a fragment of the door-jamb remains.

'Akabet el-Bir

131. *Plan*, PI. lviii 13; *deposits*, PI. c 3-5. This chamber measured 9' $1\frac{7}{8}$ " x 9' 5" x 5' $5\frac{1}{4}$ ". The door was raised 4' above the level of the broad bench that surrounded the floor, itself $7\frac{7}{8}$ " above the bottom of the chamber. There were eleven *kokim* arranged round the chamber: the radial angle *kokim* are noteworthy, being much less common than those in the sides. There were a number of ossuaries in these *kokim*—

* There are a number of varieties of this class of lamp, which will be found described and illustrated in the section on pottery. Of those in this tomb, two were of type 5, three (one of them a small neat example) type 5a, one 5c, and one 3k.

curious arrangement, which defeated the purpose for which the ossuaries were intended, namely that of leaving the graves free for later interments. One of them contained a small blue glass bottle. The tomb contained twelve "candlestick" lamps, two of type 1, three of type 2; also two paste beads strung on a wire (c 2); a large wide bowl, not ribbed, of fine purplish ware (c 3); a bottle of pottery (c 4); and a bowl, the top broken, with the outer surface ribbed (c 5). One of the ossuaries had an



FIG. 179.—INSCRIPTION ON OSSUARY FROM TOMB 131

inscription on the lid (fig. 179), commemorating "Eleazar son of Geni." The last name is rather obscurely scratched.

132. A vestibule, $8' 10\frac{1}{4}" \times 4' 11\frac{1}{8}"$, with three steps in it, leads down to a square door which admits to a chamber $11' 3\frac{7}{8}" \times 10' 7\frac{7}{8}" \times 5' 3"$. There are two *kokim* (one unfinished) in the left wall and a shallow recess in the right. This tomb is outside the limit of the map, Pl. viii: it is about a mile to the west of the mound. It was empty.

133. A ruined vestibule, $6' 2\frac{7}{8}" \times 8' 9\frac{7}{8}"$, with two steps descending into it. It breaks into a natural cave. This cave also contained no deposits. It is close by the last.

Jurn el-Gharbi

134. *Deposits*, Pl. ci (a) 1-12. A tomb west of the village: it goes at present by the name of *Mughdret el-Hurfan*, "the cave of the sheep," on account of its having been used quite recently (in 1904, I believe) as a receptacle for some sheep that had been stolen. There is a plain cross of two lines cut over the door. The chamber measures $11' 11\frac{3}{4}" \times 13' 1\frac{1}{2}" \times 6' 2\frac{1}{8}"$. It has a *kok* on each side of the doorway, at a lower level; three *kokim* in the side walls, and four in the back—twelve in all. The tomb contained fragments of ossuaries, a few bearing the common sexfoil ornament—none inscribed—some scraps of bronze and iron bracelets, fragments of glass, and a series of lamps gathered together on Pl. ci (a). The five objects lettered a-e (two beads of resinous paste, one grey with yellow wavy lines on it, the other black; a double-headed pin, a spatula,, and a small hollow hemisphere—the last three of bronze) came together from one of the *kokim*.

135. A well-cut doorway leading into a very rude chamber, $13' 9\frac{3}{8}" \times 16' 4\frac{7}{8}" \times 5' 1"$. There is a sunk bench grave in the back wall. The tomb has long been, open, and contained nothing.

136. *P/an*, Pl. lix 15. A fine tomb-chamber, measuring 19' 6" x 14' 6", with a series of six large wide arcosolia round the walls, some of which have lamp-brackets in the walls. Two crosses are cut on the wall inside. There is a small bay in the right wall with two graves in it. This tomb has long been opened: the natives say that when opened it was found empty. For some time it was used as a cattle shed, at one time it appears to have been used as a cistern. Before the entrance doorway is a broad porch or vestibule, open to the sky, approached by three long rock-cut steps extending the entire length of its side.

Khallet Kul'at er-Rinjis



FIG. 180.—IN ANCE,

SCRIBED GLASS
AMULET

137. A chamber in the valley leading down to Bir el-Lusiyeh, measuring 7' $3\frac{3}{8}$ " x 7' $8\frac{1}{2}$ " x 6' $6\frac{3}{8}$ ". It has three arcosolia. The only objects that need be noticed, besides some commonplace beads and fragments of biacelets, were a bronze chain of small links not unlike a modern watch-chain in appearance, and a small disc of yellow glass (fig. 180), bearing stamped UPON it in reversed letters. ΕΥΤΥΧΩΣ ΤΩ ΦΟΡΩΝΤΙ. "with good luck to the wearer."

Ward es-Suk

138. *Deposits*, Pl. cii 1-6. A quite irregular chamber, 12' $2\frac{5}{8}$ " x 15' $6\frac{1}{4}$ " x 3' $11\frac{1}{4}$ ". The contents were a few meagre specimens of early Fourth Semitic pottery, similar to those in the great hoard in tomb 96. There was also a small pot in alabaster (cii 5).

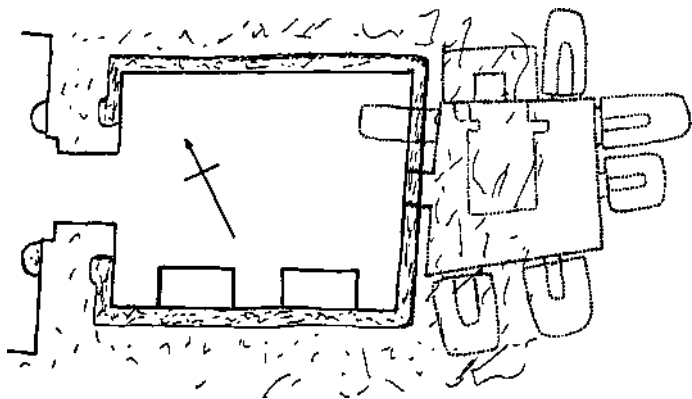


FIG. 181.—PLAN OF TOMB 139

139. *Plan*, fig. 181 ; *deposits*, Pl. cii 7-14. This important tomb consists of an open rectangular court, with an entrance vestibule, now open to the sky, but evidently once covered by a mausoleum. In front of the jambs of the entrance arc two blocks of rock that apparently supported pillars, on which, presumably, rested a porch. The foundation for the wall of the mausoleum is traceable all round the margin of the vestibule. This must have been a simple square building, probably surmounted by a pyramidal top, like the well-known "Tomb of Zacharias" at Jerusalem. At the south side the rock-surface is at a lower level than elsewhere,

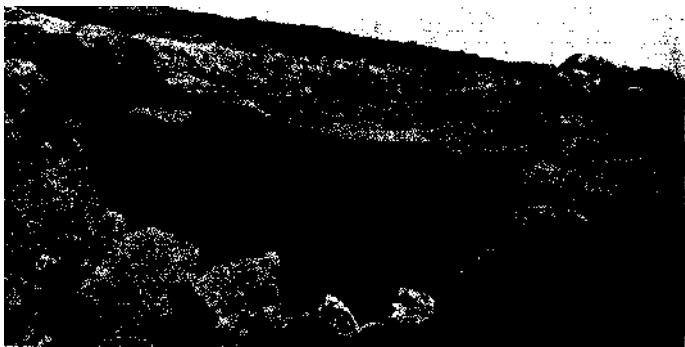


Fig.. 182—MASONRY AT ENTRANCE OF TOMB 139

so that the masonry foundations go deeper ; and here a couple of courses of the masonry actually survive. This is shewn in the photographic view, fig. 182. It is formed of carefully squared stones with very fine joints between them. In this vestibule, against the south wall, two graves are sunk in the floor, excavated about 7' deep in the rock. About half-way down they have an offset for cover-slabs.

The entrance to the tomb-chamber is a rough round-headed doorway, and the cave itself is cut out carelessly in a manner unworthy of the well-built monument with which it appears to have been covered. It measures about 13' square, but, as the plan shews, is very irregular. There are seven *double kokim*, the only examples at Gezer, the floor of each being divided in the middle by a long deep

groove into two compartments ; and a recess, in the left wall, sunk slightly below the level of the rest of the tomb-chamber, containing two rudely cut bench graves, or rather a single bench carried round the three walls, though the bay is too narrow to allow of a third body being laid at the end wall. This is an example of a feature that is very common in tombs throughout the country—the setting apart of two graves whose arrangement breaks the symmetry of design. These special graves are perhaps intended for the heads of the family to whom the tomb belonged. The mortice-and-tenon-like projections in the sides of the step surrounding the main chamber are not easy to explain.



FIG. 183.—COLUMBARIUM

The tomb had been opened long before, and everything of value taken from it. All the mausoleum, with the exception of the two courses mentioned, had been removed for the sake of its stones. The door of the tomb was open, and when my workmen commenced to dig they found within it the body of a freshly buried infant who possibly had been made away with and hidden here. The only gleanings left besides some fragments of ossuaries were: *Glass*: two double kohl-vases (cii 7, 8; two plain black bracelets (cii 12, 13). *Pottery*: a globular vessel with wide neck and heavy rim, one handle broken off (cii 14). *Bronze*: spatula with folded oval spoon (cii 11); plain bracelet formed of a loop of wire (cii 10). *Ivory*: pin with top-shaped head (cii 9).

140. *Plan and section*, Pl. lvi 18. This is the only columbarium known in the neighbourhood of Gezer. It consists of a court scarped in the rock, $16' 7\frac{5}{8}"$ long and $17' 9\frac{1}{8}"$ broad, with a lower space, $6' 11\frac{7}{8}"$ deep, sunk in its floor. To this latter, steps give access; and its walls are covered with round-headed loculi averaging about $7\frac{7}{8}"$ high, 7" broad, and 6" deep. They are irregularly disposed over the surface of the sides of the chamber. The plan and section shew the disposal of the members of the excavation and the arrangement of the loculi: a good idea of the appearance of the whole will be obtained from the photographic view, fig. 183.

The foundations of a wall remain crossing the courtyard: they will be seen in both the plan and the photograph. It will also be noticed that, as in some other excavations, the edge of the rock surrounding the courtyard is rebated as though to hold the foundation of a building. This can very distinctly be seen about 1" to the left of the five-foot rod in the photograph. All these indications shew that there was originally a mausoleum erected over this columbarium, as over some of the tombs around the city.

It is evident that the loculi are too small to hold urns with human ashes, skulls, or any other probable deposit. Nothing whatever was found in the chamber except a single small sherd of pottery, and no light was thrown by its examination on its purpose.

141. An irregular chamber, on plan roughly the quadrant of a circle, $11' 3\frac{1}{4}"$ x $12' 1\frac{5}{8}"$ x $4' 7\frac{7}{8}"$. There are five *kokim*, three in the straight wall to the left of the door, and two in the curved side at the back. The contents offered nothing-remarkable.

Waret 'Othmdn

142. *Plan*, Pl. lvii 3; *deposits*, Pl. ciii. A roughly rectangular cave, measuring $15' \times 10' 2\frac{1}{8}" \times 4' 2"$. There is a bench all round, $2' 3\frac{1}{2}"$ above the floor; but it is not against the back wall, between which and it is a trench $2' 7\frac{1}{2}"$ wide and $4' 3\frac{1}{8}"$ deep below the top of the bench. The tomb contained some fine specimens of rather late Fourth Semitic pottery. Pl. ciii I is a vessel of the typically ungraceful form of that inartistic period: the ware is a light brown colour, and the colour decoration is, as usual, confined to horizontal lines in brick-red and black. Fig. 2 is a jug of characteristic shape, in brownish ware, burnished. Fig. 3 is a fragment decorated with horizontal black painted lines. There were two vessels like fig. 4, and nine like the lamp, fig. 6. Fig. 5 is a jar-stand, more ornate with mouldings than usual; and fig. 9 is an unusual case of a footed bowl with horizontal lines (red) painted at intervals on the body. Fig. 13 is of the same general type of ware, though differing in detail, as fig. 1. Fig. 14 is glass, an unusual deposit at this early date: the vessel is square, which is still more uncommon. Fig. 15 is one of the ivory club-shaped amulets which are especially common at the period—about 600 B.C.—to which this tomb must be referred. Figs. 16, 17 are common objects in bronze, though the shape of 16—curved instead of angled—is less usual. Besides the above there was a remarkable "dovecote"

incense-burner, represented in PL cvi, fig. 6. It was in fragments, and the bottom end was not recovered. The height of the remaining portion was $8\frac{1}{2}$ ". It is of light red ware, ornamented with painted decoration in red and black. The curious irregular pattern round the top is remarkable. There are two rows of square holes in the side, about the middle of the surviving portion.

Some beads and pins were also found, as well as an ulna, length 246 mm., and a lower jaw (original breadth 92 mm.).

143. Deposits, PL cvi 3-5. A large cave, $30' 8'' \times 16' 4\frac{7}{8}'' \times 7' 5\frac{3}{8}''$, with a small circular entrance at the north end. The outline is quite irregular: the floor steps upwards irregularly towards the inner end. The principal objects are shewn on PL cvi. They consist of a bronze tanged knife, broken, fig. 3; a bowl of alabaster with moveable stand, fig. 4; a small pot of Mycenaean ware ornamented with vertical and horizontal strokes, fig. 5; and some fragments of others, including parts of Mycenaean *stamnoi* of the common shape with three handles. There were also some fragments of an incense-burner (?) in the form of a dove-cote, resembling that from tomb **142**, PL cvi, fig. 6; but this specimen has no trace of paint on it except one faint red line. A small fragment of plain moulding remains. There were several - fragments of grey Cypriote ware with white basket lines, also two lamp-and-bowl groups. In one of these an ordinary saucer was associated with the lamp, in the other a footed dish. The lamps were of the straight-spouted variety.

144. Deposits, PL cii 16-28. A rude cave, apparently natural, $M' 5\frac{7}{8}'' \times 16' 4\frac{7}{8}'' \times 6' 2\frac{1}{8}''$. The entrance however, a hole in the roof with four steps formed in it, is well cut. The steps are continued downward to the floor of the chamber by a rudely piled structure of stones. That the cave had long been opened was testified to by the unexpected find in the debris of two silver coins of Chosroes II, the Persian marauder who ravaged Palestine in 616 A.D. One of these was broken in pieces. The pillagers had, however, left a small deposit of beads, two scarabs, and a fragment of a bronze bell: these are shewn on PL cii. The beads in the top row there represented are in carnelian: the most remarkable is the celt-shaped pendant, fig. 16. Underneath this is an equally remarkable bead in paste, green enamelled, representing a date-stone, perforated through the side. There were three beads of the oblate spheroid shapes and two of the double cone: besides these there were two spherical, and one shaped like fig. 18 in haematite, a spherical bead in agate, and a barrel-shaped bead like fig. 17, in light-coloured jasper; as well as a few spherical and cylindrical beads in yellow paste, much decayed. The scarab ornamented with dots (fig. 26) was in carnelian, that with the sphinx (fig. 27) in much disintegrated white porcelain. The ribbing on the side of the bronze bell (fig. 28) is curious.

145. Deposit, PL cix 31. A rough cave, $16' 4\frac{7}{8}'' \times 8' 9\frac{7}{8}'' \times 6' 1\frac{1}{4}''$. A circular hole at one end gives admission. On one side is a shelf, cut in the rock, and on the other a small cupboard. The principal deposit in this cave was a string of about fifty spherical beads in yellow glass. The other contents were as follows: a

large number of fragments of rather late Fourth Semitic pottery; the blade of an iron knife; a small plain bronze finger-ring; about twenty beads, mostly carnelian, and one or two of basalt and paste green enamelled. One of these latter is simply a rough pebble, perforated: other two are drop-shaped pendants. Two are barrel-shaped, one cylindrical, the rest spherical or spheroidal, or else flat discs. There are also fragments of four small rings of bronze wire, each twisted into a spiral, maximum diameter $\frac{5}{8}$ ", probably links of a rude chain; the rim of a vessel like *EP*, Plate 51, 1 or 3, and of a small black jug of the type *EP*, Plate 53, 18; the base of a footed bowl; a fragment of a plain iron bracelet (cix 31). There were also fragments of three scarabs, in friable paste. One of them was obliterated (in fact I think there never had been any device on it), and crumbled to dust soon after it was exposed. Another also was so perished as to be illegible.

146. A sunk grave measuring 5' 1" x 3' 3".

147. *Plan and deposits*, Pis. civ, cv. This tomb is one of the finest of the series. It was evidently the burial place of some family of distinction, and was an elaborate and costly work. A long vestibule is driven into the hillside, running rather west of south. It suddenly narrows; and here, as in other tombs we have noticed, the rock shews signs of having been hewn to receive the foundations of a monumental structure erected over the entrance. On each side of this narrow part is a semicircular structure, evidently the piers of an ornamental gateway. Every stone of this erection has long since disappeared. On the left-hand side of the passage under this ornamental entrance was the doorway to a tomb-chamber, containing three sunk arcosolia and one subsidiary chamber having three sunk bench graves arranged in the usual way. Proceeding farther, we find ourselves in a square vestibule, now open to the sky, but formerly covered by the monumental building. There are two chambers opening out of this vestibule, one on the left, the other on the back wall. The first of these has six sunk arcosolia in the walls: the second has seven sunk bench graves, which are a much less common form of tomb in the necropolis of Gezer. At the entrance of this second tomb are two rows of stones (marked in the plan) that may possibly be the remains of the foundation of some ornamental architectural treatment of the doorway. This doorway was closed by a massive stone door swinging in the usual way on projecting horns: its outer surface was ornamented with panelling. The remains of this door—which was smashed by the first robbers who entered the chamber—lie scattered inside: a restoration is drawn, cv 40. It probably was fastened by a chain and padlock to some staple outside: there is no bolt-hole inside, nor do the remains of the door itself shew evidence (as in the door of tomb no. 16) that it was fitted with a lock.

In the middle of the back wall of this chamber, raised rather above the level of the bench graves, is the square entrance to an inner chamber. A simple moulding runs round the top and sides of this doorway, and above it are carved in relief two bulls' heads, with a wreath between them—the only bit of carved ornament in any of the tomb-chambers of the Gezer series (fig. 184). This inner chamber contains a small aumbry in the left wall, and a sunk bench grave in the back wall.

The following dimensions of this tomb may be useful: first chamber (under entrance gateway) 13' 8¼" x 10' 11⁷/₈" x 5' 9': 4' 1" below the level of the entrance passage; second chamber (left of vestibule) 12' 11¹/₈" x 11' 5⁷/₈" ; vestibule 19' 9" x 20' 4¾"; third chamber 16' 5¾" x 18'; fourth chamber 6' 9" x 6'; overall dimensions from the place where was the ornamental entrance (under the monumental building) inwards, about 65' 6" x 37' 8".

The outlines of the monumental building, as indicated by the sinkings in the rock for the reception of its foundation stones, are shewn by dotted lines in the plan.

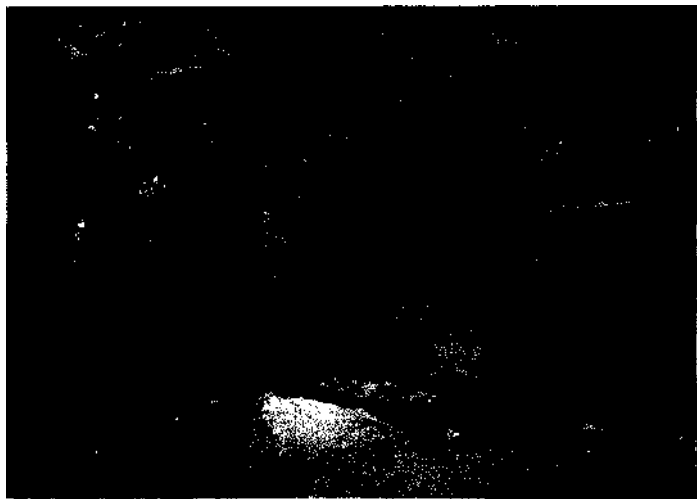


FIG. 184.—INTERIOR OF PRINCIPAL CHAMBER, TOMB 147

The graves throughout the tomb are not broad enough for more than one body. It is remarkable that there is but *one* grave in the innermost chamber: as a rule there are two in the chamber so placed.

There are two small plain brackets for lamps in the chamber containing the bulls' skulls. One of these shews the mark of smoke-blackening on the wall above it.

The tomb was partly open, and I need not say violated, when I first came to Gezer: it must have been in that condition for a considerable time. In fact the first plundering of this sepulchre is probably to be ascribed to a date at least three

hundred years ago, for in the first chamber the unexpected discovery was made of a token of Hans Schultes, the "Rechenmeister" or banker and money-changer of Nuremberg, whose coinages are very familiar to those few numismatists who concern themselves with the curious currency of that city. Schultes seems to have lived about the beginning of the sixteenth century; and if we put the spoliation of the tomb to about the end of the same period, we shall thereby allow sufficient time for this waif to find its way to its strange resting place.

The objects found are of course only the "leavings" of the robbers; and as they were found scattered about in the debris, it would not only be unnecessary but actually misleading to enter into details of their position in the chamber. It may be remarked, however, that all, except the beads represented on Pl. cv, came from the third or principal chamber.

Plate civ, figs. 1-4, 26-28 are the lamps from this tomb, and figs. 6-9 are fragments of others. They are, as will be seen, quite commonplace types. The inscription on fig. 3 is the common legend ~~ΘΩΣ ΚΥΡΕΝΗΤΑΙΝ~~ into unintelligibility by several stages of unintelligent copying, till it has been reduced to a mere symmetrical pattern.

The bronze objects are as follows: a small bell (fig. 13); a spatula (fig. 18); fragments of bracelets (figs. 20, 21); and a small bifid object, possibly part of a pin (fig. 25). There is nothing about these objects to call for particular remark, as they are the commonest types of bronze objects from these late tombs.

Neither are the iron objects noteworthy with the exception of the three-winged arrowhead, fig. 5. *Weapons* are not often deposited in tombs of this period. The other iron objects are the bit of bracelet (fig. 10); the nail (fig. 11); a bent band, perhaps part of an anklet (fig. 12); two small rings, apparently key-rings which have lost their keys (figs. 16, 17), and two other fragments of bracelets (figs. 23, 24), one of which is decorated with a little beading. There were also a small shapeless fragment of an iron plate with nicks in it, and a slender four-sided spike of iron, 4" long.

Very little glass was found: fig. 14 is the handle of a vessel in dark green glass, and fig. 19 is a bracelet of dark blue. There were some indefinite fragments of dark green glass besides, not worth drawing. The pendant (Plate cv 29) is a flat disc of glass: it was found in the second chamber.

Plate civ 15 is a slab of soft limestone with a cup-shaped depression in one side. In the same material was the incense-box (?), fig. 185, which was found in fragments in the vestibule. It is a box of soft limestone 6" square and " deep, standing on four legs. The outer surface is ornamented with rude linear patterns as shewn in the figure. Plate civ 22 is a tube of bone, possibly the handle of an implement.

The types of beads found are represented in Plate cv 30-38. Fig. 30 is a beautifully coloured paste enamelled bead. Fig. 31 is one of a set of thirteen, all alike. Fig. 33 is a filigree twist of bronze wire on which beads are strung: two or three other fragments of the same object were found. The rest speak for themselves: it may be remarked that 32, 34, 35 are glass, 36 is resin, and 37, 38 are paste enamelled.

Fig. 39 represents the elevation of the doorway to the first chamber, on the

left of the entrance: the upright line AB is the limit of the building formerly erected over the tomb. Fig. 40 is the restoration of the door to the principal chamber: its doorway differs from that drawn in fig. 39 in being round-headed. Fig. 41 is a section of the moulding of the door to a larger scale.

148. *Deposit*, PI. cix 30. A roughly rectangular cave, $9' 10\frac{1}{8}" \times 7' 8\frac{1}{2}" \times 5' 10\frac{7}{8}"$, with an arcosolium rudely cut in each of the inner walls. It contained five small pots (four broken) like *EP*, PI. 53, 18; several fragments of the ordinary Fourth Semitic lamps; the neck of a vessel (cix 30) in coarse red ware; and one bead of yellow enamelled paste. There was also the bottom of a vessel in yellowish ware

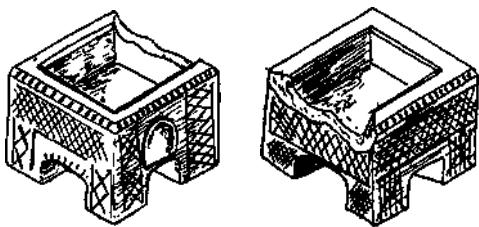


FIG. 185.—INCENSE-BOX (?) FROM TOMB 147

that had evidently been supported on three small pointed feet, and had had a loop-handle of which the lower attachment remained.

149. *Plan*, PI. lvii 7. A similar cave to the last, measuring $8' 7\frac{1}{8}" \times 5' 8\frac{1}{2}" \times 6' 4\frac{3}{8}"$. At the inner end of the right-hand arcosolium is a circular hollow, $1' 3\frac{3}{4}"$ deep, probably for bones.

150. *Plan*, PI. lviii 8; *deposits*, PI. xcvi 27-29. A similar cave, $6' 4" \times 15' 9" \times 5' 11\frac{5}{8}"$, with a bench all round. In the right-hand inner corner is a square ossuary-pit $3' 8\frac{1}{2}"$ deep.

Within the tomb were found two arrowheads, one bronze and one iron, and the pin of a "safety-pin" fibula, shewn in the plate.

151. The entrance to an otherwise unfinished cave.

152. *Deposits*, PI. cvi 1, 2. A natural cave, $14' 7\frac{1}{4}"$ by $9' 2\frac{1}{4}"$, which has been modified by deepening the middle part with a rectangular pit so as to leave a bench all round. Steps descend to the pit at the outer end. The total height is $6' 3"$. Nothing was found but the small jug and the closed lamp represented in the plate. The lamp looks like an Arab specimen.

153. Plan and section, PI. lvii 6; *deposits*, PI. cvii 1-19. A vertical shaft, 8' deep and 3' $5\frac{1}{8}$ " x 5' 11" in cross-dimensions. At the bottom is a small hole, as though the entrance to a chamber had there only just been begun; and about the middle of the shaft is the entrance to a roughly made chamber, measuring 11' $1\frac{7}{8}$ " x 16' $4\frac{1}{4}$ " x 3' $8\frac{1}{2}$ ". The tomb contained an Assyrian seal of blue glass, some beads, and two cylinders (fig. 186). There were also a certain amount of pottery, of Fourth Semitic type (cvii 1, 3, 4, 5), all mixed about in the earth filling the tomb, including a large complete lentoid flask, i' 1" high; a hemispherical slate spindlewhorl (cvii 6); the beads and scaraboids shewn in PI. cvii (7 in blue glass; 8, 9, 10, carnelian; 11, basalt; 12, agate; 13, black limestone). Fig. 14 is one of several fragments of a silver ornament consisting of rows of small silver discs with spherical embossings, tightly pressed together. Fig. 15 was of blue glass, and fig. 16, of which there were several duplicates, of silver. The rings figs. 17, 18, one of which is a signet, are also silver. There were also a fragment of bronze with two bronze nails in it, and a square stone box, broken into fragments from which the diagram cvii 2 is prepared. It was about $3\frac{1}{2}$ " square and $4\frac{1}{4}$ " high, including the feet.

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154. Plan, PI. lvii 9; *deposits*, PI. cxvi 22. A chamber, 8' $3\frac{1}{8}$ " x 6' $11\frac{1}{2}$ " x 5' $3\frac{3}{4}$ ". Round the wall is a low bench, above which are six *kokim*—two in the back wall, two (one unfinished) in the right wall, one in the left wall, and one, unfinished and crooked, running diagonally from the right-hand back corner. The tomb contained three lamps, one of which is shewn in PI. cxvi 22, and in the diagonal *kok* a small cooking-pot in fluted ware. In the tomb-chamber was a handsome little ossuary painted red, and ornamented with the ordinary sexfoil decoration.



FIG. 186.—CYLINDERS AND SEAL FROM
TOMB 153

154a. Unfinished entrance to tomb.

155. Wall-graffito, PI. lviii 16; *deposits*, PI. cxiii 10-20. This is a chamber measuring 9' $7\frac{1}{8}$ " x 8' $1\frac{1}{4}$ " x 6' 1": the left wall is prolonged with a niche that runs 1' 9" into the back wall. There are five arcosolia, two in each of the side walls, one in the back.

Grave *a*, though it had been carefully closed up with a wall of dry stone masonry filling its mouth, was empty. Grave *b* contained the handsome green glass flask exxiii 5 and some insignificant fragments of another green glass vessel ornamented with blue dots: there were also the neck of a glass bottle with a wide mouth; a concave bronze disc, perforated in the centre, 1" diameter (cxiii 10); and an iron pin, 2 1/2" long (fig. 11). There were also three fine bronze pins (figs. 12-14); a

bracelet of a fine bronze wire with the ends twisted together, and a chain of fourteen bronze links, each consisting of two loops set at right angles to one another (fig. 16); a bronze finger-ring, and a double glass kohl-vessel resembling fig. 19. Grave *c* had evidently been used as an ossuary, for it contained a great heap of



FIG. 187.—OLD QUARRY AT THE MOUTH OF TOMB

bones with skulls of thirteen persons. There were a small model of a pitcher in compact yellow pottery, $3\frac{1}{2}$ " high (fig. 17); the fine glass bottle *cxxiii* 6; the glass vessel *cxxiii* 4, by far the handsomest specimen of glass found at Gczer; a smaller vessel, of similar shape, but with a handle (*cxiii* 18); a double kohl-bottle of common shape (fig. 19); a bracelet of iron with bronze discs strung on it (fig. 20); and two lamps, one resembling *cxvi* 6, the other of the "candlestick" type, variety 3K, but without the vertical bars flanking the . In grave *d* were a lamp resembling *cxvi* 7, and a coin of Constans; also fragments of the fine glass vessel *cxxiii* 7. Grave *e* was empty. In addition to the objects above enumerated this tomb also

contained, in several of its graves, many beads, of common pattern, of paste, glass, and amber. Except that this tomb contained one *arcosolium* [less, it resembled in design tomb no. 160 (Plate *lviii* 15). On the right wall, between graves *d* and *e*, is

scratched the mark shewn in Pl. lviii 16. I can offer no explanation of this symbol.

156. *Plan and deposits*, Pl. cviii. In making this tomb advantage was taken of an old quarry, an oblong sinking measuring 44' 10" by 13', in the south wall of which the doorway of the tomb was made. At the opposite end of this quarry is a deep pit or pool, of oval shape; and in the middle of the wall is a doorway 2' broad—the beginning of a tomb never carried out. (These latter features are shewn



FIG. 188. —ROMAN JAE FROM TOMB 156

in the photograph, fig. [87]. An old winepress on the north side was destroyed by cutting the quarry.

In the tomb there are on the left side two subordinate bays, each containing three arcosolia, and in the back wall a similar bay. On the right wall are two single arcosolia. The chamber measures 14' 7¼" x 8' 10¼" x 7' 6½" high. The floor is, as usual, sunk below the level of the door-sill, and is reached by three steps. The tomb differs in no essential features from the normal arcosolium tomb-chamber.

Outside the doorway there is a porch sunk in the scarped quarry-face, descending by four steps. There is a recess in its right wall, at the foot of the staircase. The floor of this recess is sunk below the level of that of the porch: it is not easy to assign a purpose to this detail.

The tomb was untouched when opened: the door was closed by a moveable slab, rebated on three edges. The bodies, though they crumbled to dust when

touched, were in an unusually perfect condition of preservation, the bones being all in position, and even the outlines of the human forms being retained by the earthy matter that represented the decomposed flesh. The rats had not established themselves here, as in the majority of the tombs opened, so that with the exception of a few points the exact details of each interment could be noted.

The contents of the tomb and their positions were as follows:

In the right corner of the main chamber, between the door wall and the right wall, was an amphora, empty, standing upright. It is shewn in the annexed photograph (fig. 188). It is Roman both in shape and style of pottery. Probably this vessel was meant to hold water used in the funeral ceremony by those taking part—perhaps for washing after handling the corpse. Similar washings take place in modern Muslim funerals after the interment.

The lamp cviii 1 was lying inverted in, and near the outer end of, the passage between *a* and *c*, near the outer end.

In grave *a* there were two bodies, but no deposits. The bodies lay with their heads towards the chamber end of the benches, although the head-rest left in cutting the graves had been provided at the inner extremity. Such carelessness in detail is not uncharacteristic of Palestinians of all periods, and is not confined to the burial of the dead.

Grave *b* contained one body, the head to the right. No deposits.

Grave *c* had at least five bodies upon it, though originally prepared for two. Evidently the remains had been piled up on each other after the tomb had been filled. There were three above, when the tomb was first seen, and apparently two below. The heads were towards the main chamber.

In the second bay, grave *d* contained three bodies. On the edge of the grave was the lamp fig. 4. The bird figures on the spout are to be noticed.

In *e* there was one body only, that of a woman. The head was to the right. Against the inner side of the right thigh was a pendent amulet (a bronze disc with repousse ornamentation), fig. 6, and, outside, a kohl spatula of the same material, fig. 8. Close to the latter was a scrap of bronze wire with a couple of beads strung on it. There were also some small, indefinite fragments of glass.

Grave *f* contained at least three bodies, but no deposits. In the bay in the back wall, grave *g* had three bodies—two above, and the third between and beneath them. It is curious that the outermost body had the legs crossed at the thighs, after the fashion of the "crossed-legged" effigies in some mediaeval churches. Over the face of the innermost were fragments of some black leathery substance. This may have been a chance survival, partly mummified, of a scrap of the skin of the face: another possibility is that it belonged to a leather mask that might have been laid over the face. The latter is less likely. The substance crumbled to impalpable dust when touched.

Grave *h* contained five bodies. There were two below, a third above and between, and a fourth wedged between the last and the wall. The heads pointed to the right. The fifth body, that of a young child, was at the feet of the others. On the edge of the grave was the lamp, fig. 5, and inside, beside the head of the outermost body, was the glass lamp shewn in the annexed figure (fig. 189). Its

Tomb no. 156

purpose is explained by identical objects made at the present day in the glass factories of Hebron. The vertical tube in the centre is intended to contain a rod, on which the wick is twisted. This object is by far the most interesting deposit in glass recovered from the whole series of Gezerite tombs. It is noteworthy that it is imperfect, in respect both of the original workmanship and of its present state. The mouth is slightly bent, so that it is not a true circle—a defect not intentional, but due to carelessness. Of the three original handles, two are lost: one was never replaced, but for the other was substituted a handle of an entirely different style and an entirely different glass. The whole vessel, therefore, is a good example of the general "cheapness" of grave deposits in the later tombs.

Grave *i* contained five bodies. With them was intermingled a singular collection of fragments of broken glass. These pieces, sixteen in number, were as disconnected as would so many fragments be if picked at random from the top of a wall. There were not a single pair that belonged to one another, or even that appeared to belong to the same vessel. Bases, handles, mouths, and nondescript pieces were mixed together, differing in the texture and colour of the glass, and in the size and shape of the vessels to which they had once belonged.

Had there been any other object of value placed in this grave, I should have suspected that those fragments of glass were meant as a trap for the fingers of unwary plunderers—a purpose that they well serve, as a practical demonstration shewed me. But there was nothing except a lamp, identical with that represented in fig. 1, except that a six-pointed star is substituted for the trident on the spout. This being so, we are forced to the conclusion that the fragments of glass are cheap and worthless substitutes meant to suggest and represent more valuable and serviceable deposits. Glass no doubt was expensive, and by the time this tomb was used it had been realized that the value of the deposits was a matter of small moment to the deceased, and that precious objects were not only extravagant, but also a temptation to thieves to violate the sepulchre.

On the edge of the grave *j* there was an incense-box similar to that already described, but devoid of ornament except for a few meaningless scratches. It contained some charcoal and white ashes. Chemical analysis of this shewed no trace of incense or any other organic material. The human remains in this grave were more intermingled than in any other, and it was impossible to be sure how many bodies had been deposited: my note, taken on the spot, merely specifies a "large number of bodies," the bones being perfectly rotten, and all mixed together. There were two lamps, differing from fig. 1 only by the designs on the spouts, which are shewn in figs. 2, 3: one was on the edge with the incense-box, the other inside. The tomb also contained a plain bronze armlet.



FIG. 189.—GLASS LAMP FROM
ToMB 156

Grave *k* also contained a "large number of bodies," according to my note. In it were some large beads of resin, and a double glass vessel containing two bronze kohl spatulae and three pins of the same material. The vessel is shewn in Pl. cviii 7, and the bronze accessories (grouped according to the compartment of the vessel in which they were found) in figs. 7*a*, *b*.

157. *Plan*, Pl. Ivii 4; *deposits*, Pl. cix 1-10. A chamber measuring 11' $2\frac{5}{8}$ " x 14' $6\frac{7}{8}$ ". In the centre is a deep hollow. There is a broad high bench grave



FIG. 190. ENTRANCE TO TOMB 157

occupying the whole of the left wall, four *kokim* in the back and three in the right wall. The outermost of the right-wall *kokim* is at a lower level than the others: the first two on this wall break into the corner of tomb 158. The tomb was secured by a swinging door (stolen afterwards by the fellahin), which is shewn in fig. 190. There was nothing in it but the ribbed pottery vase (cix 1), the neck of a glass vessel (cix 8), a bronze pin with club head (cix 9), and a number of fragments of metal, possibly bits of a lock that had flown about when the door was burst open. The most important of these are shewn on the plate. Fig. 2 is $\frac{3}{16}$ " thick, $1\frac{1}{8}$ " broad: the two arms are respectively $4\frac{1}{2}$ " and $4\frac{1}{4}$ " long. There is an iron nail in each end. In fig. 3 the arms are respectively 4" and $1\frac{1}{4}$ " broad. In fig. 4 they

are $4\frac{1}{2}$ " and $1\frac{1}{4}$ ". In fig. 5, which has no nails in it, they are $4\frac{1}{2}$ " and $3\frac{3}{4}$ "; the iron is $\frac{3}{16}$ " thick: the angle is not, as in the others, approximately a right angle, but about 120° . Fig. 6 is not iron but bronze, 2" high, $3\frac{1}{2}$ " broad. Fig. 7 is iron, with arms respectively 4" and $4\frac{1}{2}$ " long. Fig. 9 is a disc of lead approximately $2\frac{1}{4}$ " square, with an iron nail through it.

158. *Plan*, PI. lvii 5; *deposits*, PI. xcix 14, cxiii 21-23. The door of this chamber was closed with a large square stone. Each wall contains long rectangular recesses, the long axis of the recess being at right angles to the wall of the chamber. There is one of these recesses in the left and back walls, two in the right. Each recess contains two tombs—parallel sunk bench graves, with a passage between them: in addition there is at the end of the back-wall recess another sunk bench grave which was found covered with slabs.

Against the wall of this chamber, just at the foot of grave *a*, were three small glass bottles. In *a* were a number of bones evidently collected from other graves: they were those of six individuals; some small scraps of glass were intermingled with them. In *b* were splinters of glass and a complete vase of the same material. Grave *c* was empty except for one vertebra apparently left behind when the grave was cleared for a later interment: there was also one small lamp (xcix 14), and the neck of a large vase slightly moulded. In *d*, the grave on which were the cover-slabs, was a bead, fragments of glass, two portions of a small bronze tube (cxiii 23), a bronze coin of Constantius, a large flat amber bead, and a bronze object with a hook for securing it in some material (cxiii 22). Grave *e* contained a glass vase and a small bronze bead. In *f*, *g*, *h*, *i* was nothing but clay and fragments of bones, except some small scraps of broken glass, and two large ribbed spherical beads, of green enamelled paste, in *i*. In the chamber at the foot of grave *l* was an ornamental piece of lead (cxiii 21).

On the walls of the tomb are two marks, at the places marked A, B in the plan. At A, A are deeply incised the symbols resembling an inverted -\ which may possibly be the well-known classical symbol of the inverted torch. These are large and conspicuous, and strike the eye at once on entering. Beside the mark on the left wall, but much fainter and smaller, though for clearness drawn to a much larger scale on the same plate, is a design in which it is not difficult to recognize the early Christian symbol of the fish. For these graffiti see PI. lvii.

159. *Deposits*, PI. cxvi 9-13. A chamber measuring $11' 5" \times 11' 10\frac{1}{8}" \times 6' 1\frac{1}{4}"$. Round the walls runs a bench above which are nine *kokim*, three in each of the inner walls. The door is at the left end of the door wall, and two steps lead up to it: it faces north north-east. A *kok* just begun is on the right-hand side of the door.

The centre of the tomb and the *kokim* yielded a number of objects, one from each: their arrangement shewed nothing of interest. There were a glass vessel with twisted body and two handles; the neck of a wide-mouthed glass bottle; the base of a small glass jug, surrounded by twisted glass wire; and the lower half of one of the common double glass vessels. The tomb also contained the lamp (fig. 13); the iron socketed

hook with a wire for securing it to the shaft (fig. 11); the upper half of a bronze pin with club head (fig. 9); a circular disc of bronze with a loop for suspension, one side plain, the other ornamented with concentric circles; three bronze discs (fig. 14); and six beads of vitreous paste—one flat disc, four of various common types, and one of the "suspended bottle" shape of purplish paste, also one long barrel-shaped of carnelian; a bronze coin of Constantine, and a small fragment of a bronze tube.

160. *Plan*, Pl. lviii 15; *deposits*, Pis. cx-cxii. This tomb consists of one chamber, 12' 5⁵/₈" long by 10' 9⁷/₈" broad. It is approached by a low doorway, round-headed, 2' 7⁷/₈" across and 3' 3¹/₂" high. This doorway was closed by a slab of stone which had become slightly displaced, so that the tomb was partly filled with earth that had silted in.

The graves are wide arcosolia, with arched openings to the chamber. They are six in number, two in each of the inner walls. Evidently they were intended, and subsequently used, to contain the remains of a considerable number of persons each; but unfortunately the bones were found in so decayed and rotten a state that little could be made of them. I counted an average of about six skulls and fragments of skulls in each arcosolium. As usual, no attention had been paid to orientation, the feet of one skeleton and the head of another being side by side. All the bones, with the exception of a few long bones, crumbled away when touched.

There was a rich hoard of deposited objects in this tomb: especially was it remarkable for the fine and varied series of lamps. Outside the door were two (cxi 1, and one similar to ex 5, but with a larger number of cross-bars in the ladder pattern). On the floor of the chamber were fifteen ordinary lamps with single spouts (ex 1-13, with one duplicate of each of figs. 5, 7), and the interesting six-fold lamp (ex 14). The slip of carved bone (ex 15) also came from this part of the tomb. Of the single lamps by far the most remarkable is the inscribed lamp, fig. 1. It bears upon it the legend

+ΑΥΧ(Ν)ΟΣ ΣΤΕΦΑΝΟΥ ΦΙΛΟΧΡΙΣΤ(ΟΥ)

The lamp of Stephanos Philochristos,

which may be interpreted as (1) a mark of ownership of the lamp—and therefore of the tomb, in which case this would be one of the very few tombs to which it is possible to assign a name*; (2) a maker's inscription; or (3) a dedicatory inscription, placing this lamp under the patronage of some "Stephen the Christ-lover"—whether Stephen the deacon and proto-martyr or not. I have no recollection of seeing a lamp with an analogous inscription, in whatever sense it is to be interpreted †: it remains, so far as I am aware, unique.

Fig. 2 is also inscribed, but the letters as they stand are meaningless. It is probable, however, that this is one of the many forms which the inscription ΦΩΣ ΧΡΙΣΤΟΥ ΦΕΝ ΠΑΤΡΙΝΙ assumes as a result of unintelligent copying. The first word

* The only others are the three containing inscribed ossuaries.

† Except one (not, I believe, unique) in the possession of the Armenian Convent at Jerusalem inscribed ΘΕΟΤΟΚΟΥ.

ΦΩC has become metamorphosed into HM and the first loop of the spectacle-shaped character following. The letters of ΧΡΙCΤΟΥ (reduced to ΧΥ) have become intermingled with the letters of ΦΕΝ. The ΦΕ is recognizable at the bottom" of the lamp, surmounted by a wavy ornament that represents the mark of contraction of ΧΥ; the second loop of the spectacle character represents the Χ of the latter word; the Υ follows the ΦΕ. Then comes the Ν of ΦΕΝ, after which is ΟΟΙΘ, in which? ΟΟ represents ΠΑC (probably through intermediate forms in which the Α was ligatured to the letters on each side of it, resulting ultimately in two triangles ΠΥ), and ΙΘ can without difficulty be recognized as representing ΙΝ. The third lamp on the plate probably shews this protean inscription in its final degradation, when it has assumed the form of an *almost* symmetrical ornament. The slight deviation from symmetry is the only indication which remains in this case of the fact that the design is the ultimate result of a process of evolution.

The other lamps from the floor of the chamber call for no special remark. Some are plain and commonplace designs, but others (especially fig. 4) are handsome specimens.

The deposits in the arcosolia are shewn on Pis. cxi, cxii. The iron bracelet cxi 2, and the bronze buckle fig. 3, were all that grave *a* yielded. Grave *b* contained a sheet of glass, evidently broken from the side of a large vessel and roughly trimmed to a circular form (fig. 4). There was also a bronze disc of common form (fig. 5). The bars of lead cxii 1 also came from this tomb. Grave *c* was richer than the rest: the magnificent lamp cxi 6, two lamps like fig. 7, and the more commonplace figs. 8, 9—the latter is unusual in having an ornament on the base (a cross in two concentric circles). Besides these lamps this grave also contained two fragments of leaden ornament (figs. 10, 11)—one of them a very pretty floral device; a bent pin of bronze (fig. 12), possibly the handle of a bucket or some such moveable part of an object otherwise perished; and some fragments of a sheet of bronze having ornamental work cut out of it (fig. 12a) after the fashion of a stencil plate. PI. cxii 2, a twisted bronze bracelet, and fig. 3, a child's bronze armlet, of which there was a duplicate, also came from this grave: there were also five lamps similar to PI. cxi, fig. 5. Grave *d* contained the lamps cxi 13-16, and another, cxii 4, which resembled ex 13, differing only in the filling up of the alternate loops of the pattern. Grave *e* yielded only the lamp cxii 5: the two bird figures are interesting. Grave *f* contained two iron nails (cxii 6), an iron bracelet (fig. 7), and the lamps, fig. 8 (with a thin, wiry design in very high relief), figs. 9, 10, and the very interesting fig. 11, with its ornament of fishes—perhaps a Christian symbol: but I suspect this is really a final evolution along one line of development from the ΦΩC ΧΥ inscription, the spectacle ornament in ex 2 supplying a link. The fragment fig. 12 also came from here.

161. This is a tomb-chamber, 11' 5" x 11' 6" x 8' 6". There are nine large wide *kokim*, three in each of the inner walls. The middle *kok* in the left wall has a square head: the others have arched tops. At the inner end of the left *kok* in the back wall is a square sunk depression resembling a place prepared for an inscription, though it is no doubt meant merely to lengthen the *kok* slightly.

162. A grave sunk in the rock, unfinished: the outline measures $y' 6\frac{1}{2}''$ x $2' 5\frac{1}{8}''$. It had only just begun to be deepened when it was abandoned.

163. A cave—long opened and rifled, full of water every winter—measuring $9' 7''$ X $13' 1\frac{1}{2}''$, with three sunk bench graves one against each of the inner walls.

164. *Plan*, Pl. lvii 1. This tomb, which was thoroughly rifled—nothing but a few bones remaining in the graves at the inner end—presents one or two peculiarities. One of the most curious is the vat, $3' 1\frac{3}{4}''$ deep, at the outer end of the vestibule: this is in all probability later than the tomb, and belongs to a subsequent appropriation of the outer part of the vestibule as the pressing-floor of a winepress. Again, it is one of the few tombs closed by a rolling stone disc; but in this cave there was in addition a moveable door, the bolt-hole of which remains on the left-hand jamb. Two steps lead downward to the principal chamber, which is from $14' 1\frac{1}{4}''$ to $15' 3\frac{1}{8}''$ long and $7' 9''$ to $9' 4\frac{1}{4}''$ across. There are two large arcosolia on each side, with round-headed entrances. At the end is a smaller chamber with four sunk bench graves. The combination of arcosolia with sunk bench graves is unusual in Gezer.

It would seem that there was originally an intention to make the chamber yet more extensive, as there is some cutting in the back wall of the inner chamber that looks like the beginning of another arcosolium resembling those in the inner apartment. This, however, was evidently abandoned as soon as begun.

165. A well-squared cave, $7' \times 14' 1\frac{1}{2}''$, containing no graves.

166. A neatly cut sqaie entrance in a vestibule $5' 6\frac{1}{8}''$ broad, leading into a small unfinished cave.

Wdret el-Jdihah

167.* *Deposits*, Pl. cxiii 1-9. A chamber $8' 5'' \times 10' 10'' \times 5' 9''$: the door faces north by west. There is a sunk bench grave in each of the inner walls. The rock in the back of the left-hand grave is rotten, and owing to the many fissures in it has at first sight the appearance of rude masonry.

In the centre was a collection of sixty-two lamps: one each of cxiii 1-5; one like cxvii 9, with a slight variation; "candlestick" lamps, varieties 1h, 2i, 3, 3a, 3k, and one like lxxii 11, with a flat rim at the top; two each of 5g, 5c, and with the $\Phi\Upsilon\Theta\Lambda$ inscription (one of them with an illegible word after $\Pi\Lambda\text{CIN}$); three of cxvii 14; five resembling lxxii 11, with a sharp rim on top; six of 1g, fourteen of 2, and sixteen of 2a. There were also a pair of "castagnettes" in bronze such as have already been described; a fragment of a bronze signet; four plain bronze bracelets, and the two figured cxiii 6, 7. Fig. 7 has a circular section with flattened ends.

* This tomb will be found on the map between nos. 216 and 217.

There were two small copper coins, one of Constantine, the other illegible. In iron were two or three shoe-nails, a fragment of a plain bracelet, and another with oval expansions in its course (cxiii 8); there was also the flat-sectioned nail cxiii 9. In grave *a* were fragments of a glass vessel—a globular bottle with hollow base and conical neck expanding upwards.

168. *Deposits*, PI. cxvi 5-8. This cave measures 15' 7" x 17' $\frac{7}{8}$ " x 8' $\frac{5}{4}$ ". The door is so lofty that it can be passed through without stooping—the only example in the entire series. There are eight steps leading down to it: it faces north north-west. The only grave is one *kok* in the back wall. The only objects found were the three lamps cxvi 5-7 (one of them outside the door, the other two in the centre of the chamber), the bronze bracelet cxvi 8, and a small glass vessel with conical body, dome-shaped shoulders, and cylindrical neck.

169. *Deposits*, PI. xcix 15. A large chamber, 3' 11" long, with two *arcosolia* in the back and one in the left wall. The door faces north-west: there were four steps at the entrance. The chamber was found full of earth; but nothing was discovered in it except half of a large circular millstone of shell breccia with a hole in the middle: the diameter is 1' $\frac{2}{4}$ ", that of the hole $\frac{2}{2}$ " : the thickness $\frac{2}{4}$ ". There was also a much corroded iron knife resembling that from 176*; a broken lamp (xcix 15); a fragment of a saucer of red glass, heavily covered with blue iridescence; and a fragment of the thick rim of another glass vessel of the common greenish colour.

170. A cave with three chambers. The first measures 21' $\frac{3}{8}$ " x 25' $\frac{3}{4}$ ", and has the unusual height of 23' $\frac{7}{8}$ ". There is a *kok* in the inner right-hand corner, about half-way up, and from the back wall run two arched recesses, each with three sunk bench graves. The second chamber, at the side, is smaller; and at the bottom the left wall is open, giving access to the third—a long low cell, 6' 6" x 10' 6", in which it is impossible to stand upright. There was a fine collection of early Arab pottery found in excavating this tomb. It is fitting to postpone the description of this to the section on pottery, as of course it represents a secondary occupation of this cave *as a dwelling*, and has nothing to do with the original interments. Of these not a trace remains.

171. A large cave, 27' $\frac{8}{8}$ " x 18' $\frac{3}{4}$ " (exclusive of a natural fissure in the left wall). It is artificially squared, and has one wide *arcosolum* in the back wall, 11' $\frac{5}{8}$ " long by 7' $\frac{6}{2}$ " broad. Empty.

172. This is a vat, 5' $\frac{8}{4}$ " x 3' 1", which may be an unfinished sunk grave, or else may belong to a winepress.

173. This tomb was unfinished: it consisted merely of a square hole, 6' $\frac{4}{8}$ " x

* The millstone and knife probably belong to a period when this cave was occupied as a dwelling.

2' $7\frac{7}{8}$ " x 5' $6\frac{1}{8}$ " deep. There is one *koh* just begun on each of two sides. The excavation contained no antiquities.

174. *Plan*, Pl. lix 3. A fine tomb, very well made. A narrow staircase in a rectangular shaft leads down to the doorway, which by two more steps gives admission to a chamber, 15' $4\frac{3}{4}$ " x 10' $7\frac{7}{8}$ " x 7' $4\frac{1}{2}$ ". There are two *arcosolia* in the left wall, two sunk bench graves in the right wall, and one in the back. The wall has been cemented. The entrance was covered by two great stones, one of which, measuring 5' $8\frac{1}{8}$ " x 3' $0\frac{5}{8}$ " x 1' 5", still remains. The tomb contained nothing.

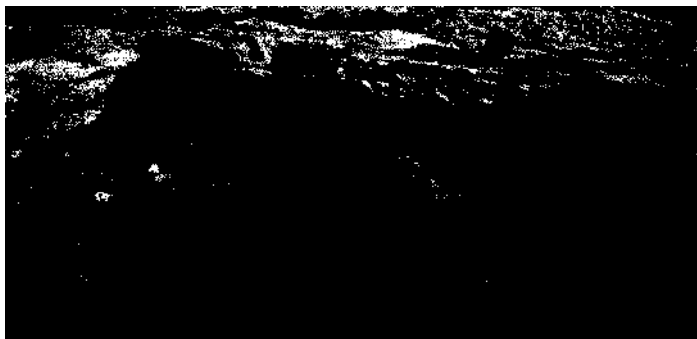


FIG. 191.—ENTRANCE TO TOMB 176

175. A sunk grave, measuring 6' 3" x 3' 3!" x 3' $3\frac{1}{2}$ ".

176. *Plan*, Pl. lviii 17; *deposits*, Pl. cxiv. This tomb is entered by a large square open vestibule: rebates round the edge of a rock indicated that a mausoleum in masonry had once stood above it. From the vestibule a door with arched head, having a projecting label moulding over it, and following its curve, leads into a chamber with eight *kokim*, four in each of the side walls. This is shewn in the photographic view, fig. 191. The floor of this chamber is curiously irregular, and has never been smoothed down: though the *kokim* are on the same horizontal level, those on the right side are 3' 3" above the floor, those on the left only 1' $6\frac{7}{8}$ ". In

the back wall are two doors, each leading into a small chamber. This is therefore one of the very few tombs in the whole series consisting of more than two chambers. The receptacles in the two back rooms are like *kokim*, but are too shallow, being only 2' 8½" long. They are probably meant for ossuaries.

The centre of the first chamber yielded a lamp of the conical boot shape, with a flat rim to the opening, and the rather late fragment cxiv 2. There were also an iron key on a ring (cxiv 4); an iron knife (cxiv 3); a bar of iron 4" in length; an ivory button or spindlewhorl with linear ornamentation (cxiv 6); a plain bronze pin with square section 5¼" long; a few green glass beads; the neck of a glass bottle;

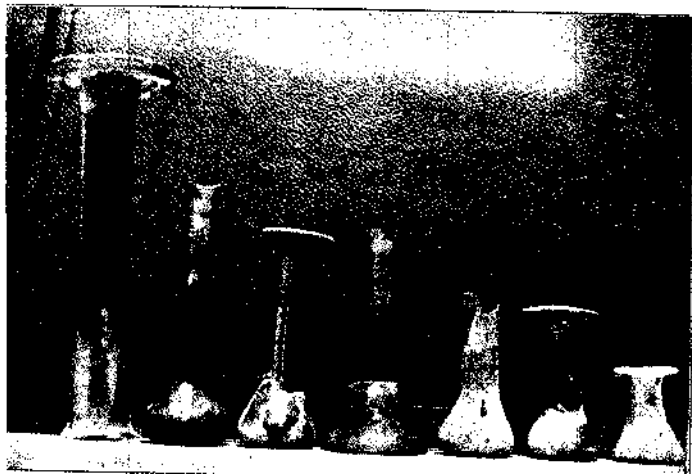


FIG. 192.—GLASS OINTMENT-VESSELS FROM TOMB 176

a polished pebble of basalt; many fragments of Arab ware with painted or relief ornamentation; the small wide-mouthed jug (cxiv 7); a circular saucer of limestone (half only), 3½" x 3" x 1¼" (cxiv 13); a saucer of pottery, 4" in diameter (fig. 8); a fragment of the head of an ivory pin (fig. 5); and a large iron nail (fig. 12).

In the left-hand room at the back were part of a flat bronze bracelet (fig. 9) and the stone box (fig. 1) with, on the two long sides, a bird with the inscription ... TAN and a ship, and on the two short sides some unrecognizable pattern. Both these objects were from the square hollow in the middle of the floor. The room on the right contained about twenty-five bottles of the commonest type, ranged along the wall; measuring from 1¼" to 6½" in height. These were all much broken:

corresponding to the handle shewn, but there is not a second loop-handle on the vessel. A curious *askos* of greyish yellow friable ware from this tomb is shewn in Ixxxix 36. It is shaped like the body of an animal and has four projections, which might be legs, but more probably are the stumps of two vertical loops. Between them is the only orifice. Plate c 19 is a vase in porous red ware, inside of which was the fragment of bronze pin fig. 20 (drawn to double scale). Fig. 21 is half of the neck of a vessel. Fig. 22 is a small fragment of porcelain: the surface dotted in the drawing is in the original covered with a green glaze. Fig. 23 is part of the flat bottom of a large vessel, and the outer surface is covered with a dark Indian red wash. Fig. 29 is in porous red pottery. Fig. 25 is a small rod of bronze, square in section, with knobs at each end. Fig. 26 is a small vessel with ledge-handle. Fig. 27 is of special interest. It is a sherd of light cream-coloured pottery with dark brown bands painted on it, and narrow lines marked in sgraffito upon the bands. It is the only *early* example of sgraffito found in the excavation. The beads are sufficiently elucidated in fig. 28.

Ard 'Ain el-Butmeh

57. A cave measuring $11' 9\frac{3}{4}"$ x $24' 4\frac{1}{4}"$ x $5' 8\frac{7}{8}"$, with a round doorway. It is of a long irregular shape, and has a shelf at the right end and a recess at the left. No deposits.

58. *Plan*, Pl. lvi 16; *deposits*, Pis. lxxxi, lxxxii, lxxxiii. This tomb consists of a single chamber containing three rudely cut benches and two small circular cells. The chamber measures $14' 8"$ across, and its maximum height (at one spot only) is $7' 5\frac{3}{4}"$. The cells are sunk below the level of the floor—about $9"$ in the case of that between graves *a* and *b*, and $1' 9\frac{5}{8}"$ in that beside *c*. Each is approached by two steps, those to the second cell being naturally higher than those to the first. The second cell is only $4' 3\frac{1}{8}"$ high. The bench graves are raised from $1' 3"$ to $1' 6\frac{1}{8}"$ above the level of the floor of the chamber.

A considerable quantity of pottery was deposited in this tomb, though nothing at all approaching the amount found in the contemporary sepulchre close by (no. 59). What this tomb lacked in quantity, however, it more than made up in the superior interest of its contents.

The objects were almost all cast into the second cell, which evidently served the purpose of an ossuary-chamber for old interments. Other vessels were found in the graves with the latest interments, and others on the floor of the chamber.

A remarkable feature of this tomb was the occurrence of four pottery groups, of which three are figured just as they were found in lxxxi 1, 2, 6. The fourth was identical with fig. 1. These were found on the floor of the chamber.

Plate lxxxi 1 shews a group of two bowls on trumpet-shaped feet, one lying within the other. The upper surfaces of the margins of these vessels are painted red. A large number of such vessels (mostly fragmentary) were found in this tomb. In fig. 2 is another group, consisting of a similar-footed bowl, with the margin coloured red as in the previous specimens and with a red dot in the centre of the depression. Upon it lies the tubular flask drawn in fig. 2a. This type of vessel, Cypriote in origin,

is very rare in Palestine: so far as I know this is the only perfect specimen yet found there. A few fragments of such vessels have from time to time been found in the excavations. Upon this vessel stood a small jug in friable red ware. It was remarkable that this jug, though apparently deposited with intention, was broken.

Plate lxxxix 3 is a plain V-shaped saucer in brick-red ware, and fig. 4 a small bowl of the common Mycenaean shape, bearing traces of a red wash on its surface, on which is painted a brownish red line just under the handles. Fig. 5 is a bowl covered with a dark red wash: it was found broken in two. Fig. 6 represents the third of the pottery groups above-mentioned. The footed bowl which forms a stand is in this case more ornate, and is decorated with mouldings and with a red wash covering the whole surface. In it stands a bowl, burnt in firing to a black colour, and this in its turn contains a lamp. A small lentoid vessel lies on its side close by, and no doubt forms an intrinsic part of the group. The drawing of the saucer, fig. 7, in brick-red ware, speaks for itself, as does the large bowl in similar ware, fig. 8. The inside of the lip of the latter vessel is painted red. Fig. 9 is a Mycenaean importation, of the usual glazed buff colour, with horizontal lines in rich brown upon it. Fig. 10 is a lentoid vessel with a flat band substituted for the sharp edge at which the two concave surfaces usually meet. The junction of the band with the concave sides is emphasized by a beading. This vessel, which was found broken into many fragments, was of a very hard compact ware of a light chrome-yellow colour. Fig. 11 is a small globular vessel with two ear-handles on a ring base. It contained the base of the third metatarsal bone of a left foot. Fig. 12 is a wide-mouthed pot, *hand-made*, of a rough compact ware, originally red but burnt black in the firing over the greater part of its surface.

Plate lxxxix 1 is a remarkable vessel, which is one of those found in the ossuary-chamber. It is a large bowl with two mammillary button handles on one side. The ware is of brick-red colour. In the depression are painted groups of concentric circles in red, six in each group, the two outermost circles being concealed by the lip of the vessel which is curved over them. The bowl stands on three long narrow looped feet.

There is little to be said about the rest of the vessels on this plate. Fig. 2 is a small jar in a soft brick-red ware. Fig. 3 is similar in type though differing in detail: it is in ware of a coffee-brown colour. Fig. 4, also belonging to the same general type, is light yellow. Fig. 5 is a specimen of the Mycenaean pyx which has obviously inspired these native imitations. Like the Mycenaean vessel drawn on the previous plate, it is of a buff colour with brown lines. Fig. 6 is a globular jug that has lost its neck and handle: like most of the other vessels in this tomb, it is of a brick-red ware. Fig. 7 is one of several small jugs of light red ware, containing bone debris. These have been moulded on the wheel, but the sharp and prolonged point shews evident traces of having been trimmed with a knife of metal, bone, or wood. One of these jugs contained the first phalanx of a third toe. Fig. 8 is a lamp, rather larger and flatter than the normal shape. Fig. 9, a small jug, is in brownish red ware, and fig. 10 is a bowl of reddish ware. Fig. 11 is a bowl on a trumpet-shaped foot, like those included in the groups drawn on the preceding plate. It differs, however, in the edge, which instead of being a flat

horizontal disc is turned down obliquely. Such a form is exceedingly rare in this type of vessel. Fig. 12 is a bowl in reddish ware: the original is much broken. Fig. 14 is ornamented with a dark Indian red wash internally. Fig. 15 is a side of a bowl with a frieze-pattern of spirals upon it. The jug, fig. 15, is of Venetian red ware, covered with a dark red wash.

The series of pottery is completed on Pl. lxxxiii. Fig. 1 is the only large jug found in the cave—the *side* of another, containing bones, was also discovered. The spouted globular jug, fig. 2, is decorated with dark purplish red lines. This was the only vessel of this type found in the present tomb, though the neighbouring tomb yielded several specimens. Figs. 3, 4 are jugs, one conical, the other globular on an expanding foot, both imperfect: they are decorated with dark red lines, now with difficulty traceable. The pyx, fig. 5, is decorated with alternate red and black lines. Fig. 6 is a jug of drab ware: the flat base, contrasting with the sharp pointed base of the otherwise similar vessels illustrated on the previous plates, is to be noticed. Fig. 7 is a peculiar vessel with concave sides, in dark red ware: the ear-handles with which it was provided are broken off. The fragment, fig. 8, is part of another vessel that has been decorated with frieze-pattern; the double axe and spiral alternating in red and black. The colours are now almost faded away. The fractured edge of the fragment comes just at the beginning of the attachment of the handle. Fig. 19 is one of several fragments—which, however, it was impossible to fit together—showing the "ladder-pattern" painted on a brownish yellow ground.

The above are all the vessels of which it was thought necessary to make drawings. Besides these there were found (among a considerable number of fragments showing no particular character) a small lentoid vessel of the usual type, with four red concentric circles near the margin on the sides—the sides were perhaps slightly more convex than is usual in vessels of this kind; seven footed bowls like those in the pottery groups on Pl. lxxxi; nineteen * lamps of the ordinary kind, with *straight* spouts; a broken Cypriote crooked-necked jug of the ordinary type; the bottom of a jug similar to lxxxiii 6, but larger; and fragments of a duplicate to lxxxii 15.

There were also two other pottery groups besides the four enumerated above: the one consisted of two lamps, one inside the other; the other of a saucer much broken, but apparently resembling lxxxii 12, at the bottom of a jar resembling lxxxiii 1.

The only object resembling a figurine is the small nondescript represented in lxxxiii 1 a. Except for a small fracture at the top it is complete, so that if it really is meant to represent an animal's head—and if not, I cannot imagine what it may be—it never was attached to a body.

In considering the other deposits in the tomb care has to be taken to discriminate the original objects from later intrusions. A rather large crack in the roof, always open, made the cave accessible to rain, and as a result a rather remarkable collection of intrusive objects was found in the upper layers of the earth

* Exclusive of the two lamps in the group mentioned below and the lamps containing bone deposits.

that filled it. Several of these intrusive objects are illustrated in Pl. lxxxiii. Among them are the glass handle fig. 10, the only one of several fragments of glass that displayed any special characteristics; the iron holdfast, fig. 13; the nail of the same material, fig. 15—one of several found in the tomb; two coins (fig. 16), worn quite smooth and unrecognizable; iron fragments (figs. 20, 22), probably distorted nails like fig. 15; a bent iron pin, fig. 21. An Arab tobacco-pipe (fig. 28) and two Maccabaeian lamps, one of them shewn (fig. 31)—the other was quite plain, with a raised rim round the mouth of the reservoir, but without corner pieces and thumb-knob—were found, together with some small fragments of green glazed vessel that may possibly be as old as the time of the Crusaders, and two or three sherds of a modern Arab cooking-pot, apparently from one of the potteries in the neighbourhood of Hasbeya.

The pieces that remain certainly belong to the original interments. They include several bronze finger-rings of the usual small size: fig. 9 is typical. Fig. 9a represents the head of a bronze pin, of a type frequently illustrated in the debris of the mound: a very thin bronze pin, fig. 11, was also discovered. Fig. 12 is a small ingot of bronze: possibly a weight, but unfortunately a large part of one corner is broken off. Fig. 14 is a curious object, consisting of a bronze pin on which a perforated disc of the same material and bent (accidentally) to the shape of a V is strung. It is probably the head of an ornamented pin. Fig. 17 is evidently the end of a bracelet, and fig. 18 a fragment of an earring or some similar ornament. Fig. 23 is a broken scaraboid of crystal. Fig. 24 is a four-sided bar of ivory ornamented with the patterns shewn punched upon it. Figs. 26, 27 are two fragments of alabaster saucers, one of them ornamented with a row of knobs. Fig. 30 is one of two or three flint knives.

The use of iron is testified to by two objects, figs. 25 and 29, found with the interments. One of these is a thin flat band of bronze, apparently a bucket handle, which has had an iron rivet in each end—one of them still remains. The other is an iron knife, containing three bronze rivets by which the hafting plates were secured.

A sheet of bronze, broken into a large number of small and distorted fragments, shewed no definite evidence of its original purpose: it may have been a dish. There was no ornament upon it: one of the fragments shewed a small perforation like a pinhole.

The beads, etc., grouped together on Pl. lxxxiii 32 are: *a*, *d*, barrel-shaped, of grey paste; *b*, a slightly tapering frustum of a cone, camclian; *c*, spherical, light green enamelled paste; *e*, a small hook, evidently part of an earring, of silver.

The bones in the tomb were partly lying loose, partly collected into vessels. Among the vessels that contained bones may be mentioned the sherds of two large bowls, with peculiar varieties of the palm-and-panelled-zigzag painted pattern, described in the section on pottery. Bones were likewise deposited in the sherd of a large two-handled jar, which also contained a lentoid vessel of the common type (not enumerated above); a small globular jug of red ware with one handle (broken off); six lamps; two hemispherical bowls like lxxxii 10, but without the projecting base disc; a large bowl like lxxxi 8; a flat saucer like lxxxii 13, but smaller and shallower in proportion; and the saucer lxxxii 16. The bones were all human.

Among the people buried here were the following individuals: a young man of tall stature; a man of mature age with a very large head; a third male, also mature; an old person with senile jaws; and a female. These are certainly the remains of people of the Semitic stock.

59. *Plan*, Pl. lvi 17; *deposits*, Pis. lxxxiv, lxxxv. This tomb consists of a roughly circular chamber, 14' 7¼" in maximum diameter and 6' 2⅜" high. It is approached by a flight of four steps, and was closed by a large stone resting on the topmost step. This stone was 3' 1" broad, 3' 0½" long, and 1' 3¾" thick: one corner was broken off, but it appears to have originally been a rectangular block.

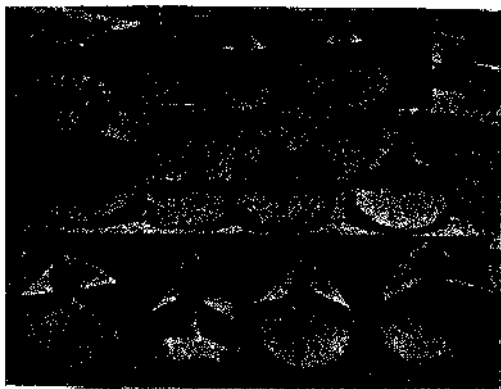


FIG. M 167. -LAMPS FROM TOMB 59

Inside the chamber is cut a series of recesses, a kind of primitive anticipation of the *arcosolia* of late tombs. There are five of these, of irregular shape as the plan shews. The recess *e* (following the notation explained at the beginning of this chapter) contained an extraordinarily rich assortment of objects—indeed practically everything in the tomb was there found, a few bones and sherds being the only objects yielded by the other compartments. It seems as though this were the receptacle where deposits from previous interments were cast to make room for fresh burials. The bones and pottery were piled up in complete disorder. The recess was partly enclosed by a large flat slab of stone set on edge.

The contents of this chamber were: (1) a large number of human bones, all unhappily much broken and destroyed—there cannot have been less than thirty individuals represented; (2) a great quantity and variety of pottery; (3) a few other objects of personal adornment, enumerated below.

Of the pottery a selection is drawn on Pis. lxxxiv, lxxxv, and other specimens are illustrated in the accompanying figures. There were at least a hundred pieces, the majority of which were lamps, such as are shewn lxxxiv 3, 8, and fig. 167. There were over forty lamps not here illustrated: most of them were broken. Of the eleven lamps shewn in fig. 167 note the unusually short spout of the central example in the uppermost row. The left-handmost lamp in the middle row is larger and flatter than usual. Its spout is crooked, a peculiarity also to be seen in others, as in the third lamp of the lowermost row. The flanges of the spout of lamp 2 in the

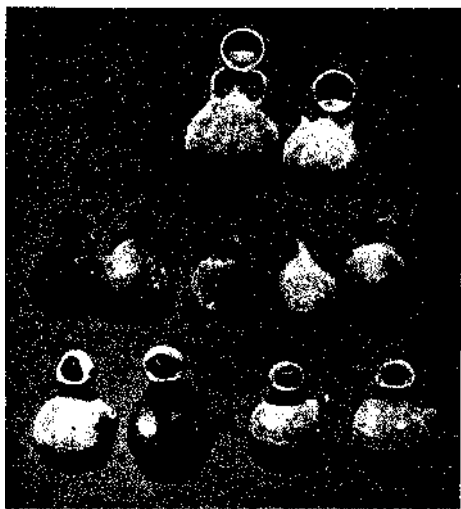


FIG. 168.—POTTERY FROM TOMB 59

central row are brought remarkably close together. In the third lamp of the same row the edge is picked out in dark red. The shape of the second lamp in the lowermost row is anomalous: it is long, narrow, and deep, and its spout is prolonged out of the usual proportion.

The vessels in fig. 168 are of three different groups. The lowermost row contains specimens of a class of vessel not very common, though characteristic of this period—globular jugs, on ring bases, with circular mouths over which curves a small loop-handle. They are provided with spouts, which is not a common feature of pottery so old as this. The sides are ornamented with lines painted round them:

in the second of the row these lines are confined to the shoulder and neck, which is unusual. These lines are generally red or reddish brown : in the third specimen of the row red lines alternate with black. The ware is brown or Venetian red. The third is covered with a cream-coloured slip. This vessel is probably to be explained as a practical modification of that most unpractical vessel the *Biigelkanne*.

In the middle row are specimens of lentoid vessels of the usual type, with two loop-handles attached to the neck. They are in ware ranging in colour from deep red (no. 1) to light yellow (no. 3). Most of them shew traces of lines forming concentric circles round the umbilic of the side of the vessel, as shewn in the fragments lxxxiv 12, 14. A more elaborately decorated example in that is shewn lxxxv 4. This specimen was much broken : the neck, handles, and one side were gone. A black line was ruled round the edge of the vessel, crossed by two black X's (appearing, of course, as V's in the drawing). There were then two groups of concentric circles, 4 and 3 in number, united by groups of radial lines, 9, 7, and 7 in number. The innermost circle contained two double axes in red and black forming a cross pattee.

The topmost row of the figure contains specimens of the curious lentoid vessel which so far Gezer alone of Palestinian sites has yielded, though this can only be due to the chances of excavation. The lip is developed into a vertical cup. The larger specimen of the two figured is a unique example, the usual ear-handles being replaced by loop-handles. There were several other examples of this type of vessel in the tomb, all of them broken.

The dimensions of the vessels illustrated in this photograph may be deduced from those of the largest in each row. In the top row the largest measures $9\frac{3}{4}$ " in length ; in the central row $5\frac{1}{2}$ " ; in the lowest row 7". There was a yet larger flask discovered, of the type of the second row, 7" in height. This vessel was ornamented with concentric circles in very fine lines, red alternating with black.

The pottery figured on the plates requires few words, as the drawings speak for themselves. Pl. lxxxiv, fig. 1, is a jug in a compact homogeneous ware with very small and few black grits. The surface is well smoothed and covered with a cream slip, ornamented with brown lines in the pattern shewn. Fig. 2 has dark reddish brown lines surrounding the sides. Figs. 3, 4, 5, 6 call for no special remark, except that fig. 3 is ornamented with a red line on the margin and fig. 5 bears faint comb-markings on the sides. Fig. 7, a dish on a trumpet-shaped stand, is painted inside along the margin with a line of red—shewn as a dotted band in the drawing. Fig. 10 is one of the small black ointment vessels that first appear at the beginning of the Fourth Semitic Period and immediately become common. Fig. 11 is a curious vessel coarsely made in compact reddish earth burnt black in places. The sides are ribbed as shewn in the figure. Fig. 13 is a fragment of a small bowl of the type most characteristic of this period, ornamented with red lines. Numerous fragments of the larger bowls of the same shape, with "frieze" ornament, were found: an example of the very common bird figure appears in fig. 20; this as usual is black, with a triangle of the bird's body (of which but a small fragment remains) in red. The yet commoner groups of panelled zigzags appear in fig. 21, though the row of dots is not a very frequent device. This

specimen is all in red. Fig. 22, a chequer pattern founded on the double-axe motive, in brown on a cream slip. Note how even in the small fragment remaining there is evidence that the alternation of the double axes was not regular. Fig. 23 shews an example of the common spirals with a "gridiron" lozenge between them. There is a minute triangle of red inside the spiral which seems to shew that there was some extra device here, now broken away. On Pl. lxxxv there are some more examples of this class of ware. Fig. 9 shews red zigzags between black lines; fig. 10, a red triangle bordered by groups of black lines. But the most remarkable of all is that of which several fragments were found, the pattern of which is drawn out in fig. 17. This is entirely in black, though there is some red in two of the branches of the right-hand date-palm. This frieze was divided into metopes by frets: besides the handles were double axes. In each metope was a representation of a horned animal feeding on the fronds of a date-palm, the pendent clusters of fruit in which is summarily but recognizably represented. Below is a zigzag, which is not a very common way of indicating the bottom line of one of these friezes.

Pl. lxxxiv 15 is similar to fig. 2, save in having a ring base instead of the round bottom. The vessel is of red ware, covered with a cream slip. Fig. 16 is the bottom of one of the curious boot-shaped vessels of which a more perfect example, ornamented with chevrons and frets of red and black lines, is shewn in Pl. lxxxv, fig. 3. The vessel is a gently tapering cone, with a single horizontal ear-handle projecting from the base. Fig. 17 on Pl. lxxxiv is of red ware, the sides shewing faint combmarks. Fig. 18 is of a somewhat friable dark red ware. The lamp, fig. 19, is slightly larger than such vessels usually are.

The vessels on Pl. lxxxv are more elaborately decorated with colour, or otherwise more remarkable, than those hitherto described from this important tomb. Fig. 1, which bears red bands, has a filtering spout. Figs. 2, 5, 6 are specimens of vessels of which several other examples (without decoration) were found—flat-bottomed cylindrical vessels with a slight entasis, two ear-handles on the shoulder, incurved neck and round mouth. The decoration varies from single lines in red (fig. 5) to the elaborate though roughly executed alternation of red and black panelled zigzags in fig. 6. Fig. 8 is a variant, with one handle only. The *Bugelkanne*, fig. 7, is a direct importation.

A good many of the vessels in this tomb were broken. This may be explained by careless throwing into the receptacle where they were found; but that explanation will hardly fit the three holes that with evident intention have been punched in the jug lxxxv 12.

Fig. 13 is a fragment of one of the bowls sometimes found, with three handle-like feet under the bottom. In fig. 14 is shewn the shoulders of a globular cup ornamented with whitish yellow lines on a pale red slip. Fig. 15 is of Aegean origin, being of the characteristic homogeneous Venetian red ware with burnished brick-red slip. The two-handled jug, fig. 16, is ornamented with red lines. Besides these vessels we may mention one or two large bowls, like lxxxix 8, one of which was decorated internally with the common painted palm-and-panelled-zigzag ornament.

The curious coloured sherd Ixxxiv 33 is in deep red ware with the pattern indicated in black lines.

Fig. 169 represents a peculiar grotesque human head found in this tomb. It

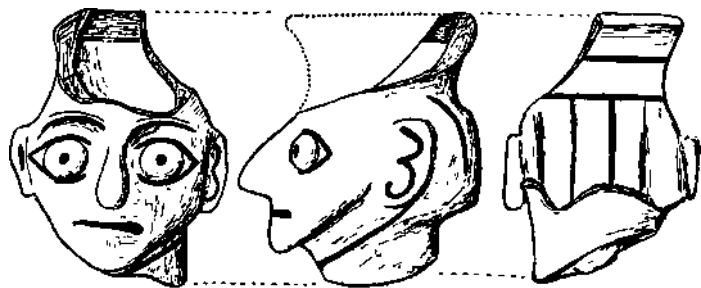


FIG. 169.—GROTESQUE HEAD FROM TOMB 59

is of Mycenaean origin, being of homogeneous Venetian red ware, covered with a burnished dark red slip. The head is hollow, and when complete terminated upwards in a cup-like rim: there is no communication, however, with any hollow that may have been in the body, nor indeed is there any indication of how the figure finished. The remainder was not found in the tomb. The features are picked out with black lines as shewn in the drawing.

FIG. 170.—BEADS FROM TOMB 59

The only other piece of pottery, as pottery, requiring notice is a small fragment of one of the common globular Cypriote cups, in coffee-brown ware.

A few beads of glass paste and carnelian were also found in the tomb, which are grouped together in fig. 170. These are flecked grey glass paste (1, 3, 8: the first of these has a yellow line encircling it at each end; the third is ornamented

with white wavy lines), carnelian (2, 4 which is flat in section as shewn by the dotted line, 5, 6, 7), grey paste (9), yellow paste (10), deep blue paste (11, 12, 13).

Of the other objects from this cave, the most interesting is the ornamented ivory comb, lxxxiv 24, which was found in several fragments, and imperfect. The ornamentation is identical on the two sides. Fig. 25 on the same plate is a fragment of an inlaying slip of the same material. Figs. 26-29, 31, 32 represent the objects in bronze: fig. 27 is perhaps the handle of a small wooden object that has, of course, perished; 28 no doubt is a small earring. Duplicates of 31 and 32 were found. The arrowhead fig. 29 has lost its tang.

Fig. 30 is a much disintegrated amulet in the shape of the god Bes. The green enamel with which it was protected has nearly all worn off, and the friable surface of the porcelain has in consequence partly powdered away.

Of objects of a more miscellaneous character there were two very rough flint knives and a small cake of red colouring matter.

Besides the pottery described above the following were found in this tomb: a bowl resembling lxxxi 7, but without base; a hemispherical bowl like lxxxii 10, but with flat base; another vessel like lxxxii 11, but with edge flatter; two small black jugs like lxxxiv 10, but in the case of one of them the point was less prominent; six lamps; a bowl like lxxxi 5; a one-handled jug of the ordinary type, with round base; a jug like lxxxv 5, without the painted lines; and a footed bowl like several illustrated on Pl. lxxxi. In addition to these were the pieces collected together in fig. 171. In this no. 1 is a jug of light brown ware on a narrow ring base with expanding body, surrounded by a groove, which has been emphasized by a red line. The handle is double. No. 2 is a small rather rude jug of a brick-red colour. No. 3 is a very peculiar fragment. It is a neck with a handle curving over the mouth: the natural colour of the ware is a light drab, but it is covered with a deep red slip ornamented with stripes of black, white, and red. The neck is stopped (as the section shews) by a block: it is evidently a false neck, and the fragment must belong to a "freakish" pot of local ware suggested by a Bugelkanne. No. 4 is the top part of a footed bowl of red ware, with a white wash covering the inner surface and a broad stripe of the same colour outside under the brim. No. 5 is a twist of pottery, evidently the handle of a vessel. No. 6 is a fragment of a small Cypriote jug of the usual coffee-brown ware. It is peculiar in having two sets of concentric circles on the shoulder: as a rule those found in Palestine have only one. No. 7 is a peculiarly curved fragment difficult to explain, unless it be the forepart of a vessel in the form of an animal figure. No. 8 is a sherd with a pattern in black lines, painted on a dark red slip.

In the same figure, no. 9 is a finger-ring of bronze, and fig. 10 is a bar of iron split along nearly its whole length. Besides these were found the neck and handles of a large lentoid bottle; half of a cylindrical bead of agate; and another bronze finger-ring—a plain loop of bronze wire, the ends just meeting.

There were, in addition to the above, the following vessels, which contained bones: three bowls resembling lxxxi 8; five lamps; two hemispherical bowls resembling lxxxii 10, but without base; two like lxxxii 13, but smaller and deeper

in proportion, and one of the same type but rather shallower; one like lxxxi 7, but shallower; the sherd of a large two-handled jar. The tibia of a goat was the only non-human bone in the cave.

60. A natural hollow in the rock: it contained some fragments of First Semitic pottery.

61. The doorway of an unfinished tomb.

62. A sunk grave, empty, measuring 4' $7\frac{1}{8}$ " x 1' $1\frac{5}{8}$ " x 2' $10\frac{1}{4}$ ".

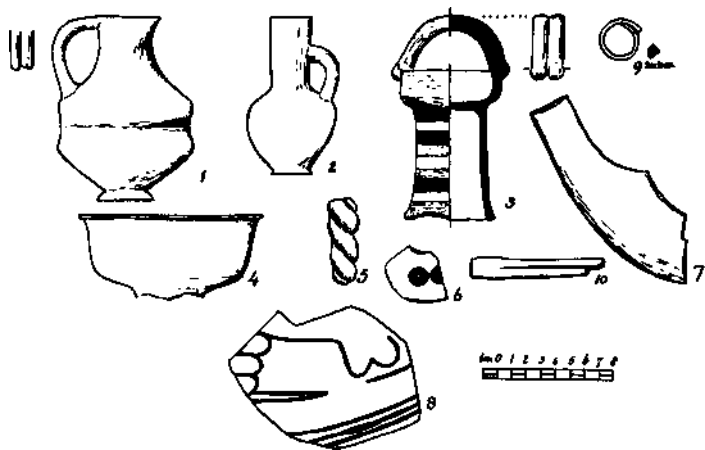


FIG. 171.--POTTERY FROM TOMB 59

63. A sunk grave measuring 4' 5" x 1' $9\frac{5}{8}$ " x 5' $2\frac{1}{4}$ ", with subsidiary arcosolia at the sides.

64. *Deposits*, Pl. c 6-18. A cave measuring 16' 1" x 21' $4\frac{1}{2}$ " x 6' $3\frac{5}{8}$ ", approached by a well-cut straight passage 2' $11\frac{1}{2}$ " wide, which leads by five steps down to a square doorway by which the cave is entered. Though the passage and the doorway are well made, the cave itself is quite irregular. It was full of earth which contained a large quantity of Roman potsherds, only one small whole vessel and no other objects of importance.

The figures in the plate shew some characteristic sherds. Fig. 6 has a transverse, fig. 7 an upright handle. In fig. 8 there is also a transverse handle, which shews

the decoration of ribbing, almost universal in the Roman period. Fig. 9 is the bottom of a conical vessel. Fig. 10 is remarkable for its peculiar crooked handle and for the wide square ribbing it displays. Fig. 11 shews a flat horizontal rim, broadened out to form a shelf-like handle. The section shews the outline of the mouldings. Fig. 12 is the only whole vessel found in the cave. Fig. 13 is a strainer-spout. Figs. 14, 15, 16 are various types of edges of bowls—the last is more ornate than usual. Fig. 17 is a block of limestone $\frac{5}{8}$ " thick, with lines, as indicated, scratched upon it. Fig. 18 is a bronze pin with a flat spatula-like head.

65. A tomb with three arcosolia, 6' $1\frac{1}{4}$ " x 5' 5" x 4' $11\frac{3}{8}$ ".

66. *Deposit*, PI. cvi 7. A similar tomb, closed by a rolling stone, 5 $\frac{3}{4}$ " x 5' 6 $\frac{7}{8}$ " x 4' $11\frac{7}{8}$ ". The sides of the chamber are inclined to be concave on plan. A small glass vessel was found in it.

67. A sunk grave, 5'3" x 1' $11\frac{5}{8}$ ", breaking into a large natural cave. Nothing was found in either: the cave contained a large quantity of ashes.

68. A tomb-chamber with an unusually deep entrance shaft—9' 10"—measuring 7' 1" x 8' 2 $\frac{1}{2}$ " x 4' $11\frac{1}{8}$ ". There are three arcosolia, arranged on the ordinary plan.

69. A sunk grave with two subsidiary arcosolia—that on the left-hand side is blocked out only. It measures 5' 9 $\frac{3}{4}$ " x 2' 2" x 5' 3".

70. A sunk grave measuring 3' 6 $\frac{1}{8}$ " x 2' 3 $\frac{1}{2}$ " x 3' 9 $\frac{3}{4}$ ", but evidently unfinished, no doubt because it was found to break into a natural hollow in the rock.

71. An unfinished tomb.

72. A grave with five steep steps at the entrance. The chamber measures 6' 8 $\frac{3}{4}$ " x 6' 5 $\frac{7}{8}$ " x 5' 6 $\frac{1}{8}$ ". It has three arcosolia.

73. A tomb-chamber of which the roof has fallen in. It measures 5' 8 $\frac{7}{8}$ " x 7' 2 $\frac{5}{8}$ ". There are three arcosolia.

This group of similar and contemporary tombs, 65-73, had long been opened and despoiled of their contents. There were a number of stray scraps left behind as worthless or overlooked by the thieves, and these, such as they are, are collected together on PI. lxxxvi. These require no special comment, descriptive notes being added to the plate. The deposits evidently belong to the Byzantine period. The only objects to which it is desirable to add particulars beyond those given on the plate are the two to which the reference numbers 1, 2 are attached. The first of these is an iron bracelet, broken and much corroded, but which seems to have had a riveted swivel-bar closing it. The second is a lump of glass with three knobs on it, possibly a glazier's waste product: it is unbroken. A few duplicates of some of the beads and bracelets were found. It may be noted that *br.* means "bronze," *ir.* "iron," and *iv.* "ivory."

74, 75. Graves in the doorways of which are planted fig-trees, rendering access impossible.

76. *Deposits*, Pl. cix 18-29. A chamber 13' 8 $\frac{1}{4}$ " x 9' 10 $\frac{1}{8}$ " x 6' 5 $\frac{5}{8}$ " is the only tomb with *kokim* in this part of the necropolis of Gezer. They are nine in number, arranged in the usual way—three in each of the inner walls. There has evidently been a mausoleum erected over the entrance; but this, of course, has totally disappeared, leaving nothing but the rock-cuttings to receive the foundations. The most interesting deposit was the small figurine of a female divinity found in fragments in *kok b* (fig. 172): the other ornaments are shown on Pl. cix. An iron nail, fig. 22; an ivory button, in shape the segment of a cylinder, with green enamelled back, fig. 24; a small silver hook, fig. 25; a bronze hollow hemisphere, fig. 27; a bracelet of black resinous paste, fig. 20; a spindlewhorl of clay, ornamented with punched circles and strokes, fig. 21; a bead of brown enamelled paste with yellow lines, fig. 26; a bronze pin, fig. 23; a small glass vessel, fig. 19; and three lamps, figs. 18, 28, 29, were found in the cave scattered about. There were several ossuaries, all fragmentary and mostly plain, or ornamented with the usual banal decoration of circles and hexagons. The broken lamp, fig. 29, was found in one of these ossuaries.

77. *Deposit*, Pl. lxxii 23. A broken tomb, with *arcosolia* in the right and back wall. The dimensions are about 8' x 11' 2" x 6' 7", but the tomb is so much ruined that these can only be approximate. A number of beads and a twisted bronze bracelet (lxxii 23), the latter still upon a fragment of the ulna, were found in the tomb: they have an Arab look, and possibly the tomb was appropriated some time in the Arab period for an interment. There was found in it the mandible of a child of not more than ten years old. (The germ of the third molar is ossified, with its crown directed forwards; the germ of the twelve-year-old molar ossified, but not cut; second premolar has not yet cut).

78. A sunk grave, 5' 8 $\frac{7}{8}$ " x 5' 6 $\frac{1}{8}$ " x 6' 11 $\frac{1}{8}$ ", with two subsidiary *arcosolia*: it was closed by two large stones, one of which has disappeared. There is a step in the corner to facilitate descent.



FIG. 172.—FIGURE FROM TOMB 76

79. A sunk grave, $5' 8\frac{1}{8}" \times 2' 8\frac{5}{8}" \times 4' 6\frac{3}{4}"$, with two subsidiary arcosolia at the sides. This grave is in the middle of the great winepress *Ard'Ain el-Butmeh*, f.

80. A tomb-chamber, $6' 2\frac{3}{8}" \times 4' 0\frac{7}{8}" \times 5' 6\frac{5}{8}"$, with three arcosolia—that on the left wall has been quarried away. The door was closed with a rolling stone. Nothing but a coin and the fragment of a human jawbone, with the incisor teeth in a straight line, were found in the tomb. Outside the door were some scraps of Arab pottery, illustrated in Pl. c, figs. 29-31.

Waret Dar wish esh-Sharkiye

81. A sunk grave, $5' 3" \times 5' 1" \times 4' 6\frac{3}{8}"$, covered by a large stone, in the centre of which is a cup-hollow for offerings(?). In each side of the grave is a subsidiary arcosolium.

82. *Plan*, Pl. lix 6; *deposits*, Pl. xciv 18-20. A roughly circular chamber $18' 2\frac{1}{2}"$ in diameter, with two smaller chambers opening off it, one on each side. The tomb contained the legular types of Fourth Semitic pottery, three representative specimens of which are shown in the plate: the only deposits of any importance being two scarabs (fig. 173), one in steatite, the other of XXVI Dynasty in ivory. The cartouche is not clear: it may be meant for Psameticus I, Psameticus II, or Amasis II.



FIG. 173.—TWO SCARABS
FROM TOMB 82

83. *Plan*, Pl. lix 5. An oval chamber, $15' 9\frac{3}{4}" \times 8' 2\frac{3}{4}"$, with an entrance consisting of a hole in the roof having rough footholds cut in the side underneath. A passage $3' 9\frac{3}{8}"$ broad is cut out of one of the sides, surrounding and isolating a section of the side which thus appears like a pillar. No deposits.

84. A chamber, $21' 7\frac{3}{4}" \times 17' 2\frac{5}{8}" \times 6' 6\frac{3}{4}"$, with a bay running in at the right side and turning at a right angle.

85. A chamber with a circular mouth at the end of the roof, measuring $13' 11\frac{1}{4}" \times 11' 5\frac{7}{8}" \times 4' 1\frac{1}{8}"$.

The pottery, of which there was a large quantity in these two neighbouring and contemporary tombs, has all been collected together on the three plates lxxxvii-lxxxix. A glance at these plates will be sufficient to shew the types. Specially should be noticed the flask with spoon-shaped mouth (lxxxvii 8), of which two were found in each tomb, and the Bugelkanne (lxxxvii 18) from 84. From both tombs came fine specimens of the Cypriote ware with grey slip: the bowl with wish-bone handle (lxxxvii 19) from 84; the pot (lxxxviii 7) from 85. One saucer (lxxxviii 12) had inside it the calvaria of a skull adhering to it. Several other of the saucers also contained bones. In Pl. lxxxvii the lines painted on the jug fig. 7 are of a purplish colour, in fig. 12 the lines on the neck are not painted but incised. Fig. 13

is a porcelain jug of Egyptian origin, green enamelled with black dashes upon it. In Pl. lxxxviii the cross inside the bowl is painted in red: the ornament in fig. 19 is in black and red lines. In Pl. lxxxix the lamp fig. 2 has a red painted margin.

Besides the pottery there were a few other objects from these tombs—the two heavy bronze anklets, one of which is shewn in lxxxix 15, from 84; from 85 a bronze fibula ornamented with mouldings, which has lost its pin (lxxxix 10), an axehead (17) and dish (18) in the same material, and an iron knife (lxxxix 19). Both tombs yielded some insignificant fragments of iron nails. There was also a large slate spindlewhorl, with concentric circles on the base (lxxxix 11), a club-shaped pendent amulet of pottery (12), an alabaster saucer with a tenon for fitting into the mortice of a moveable foot (13), and a larger bowl in the same material, with holes in the sides for a moveable loop base (14). There was also a plain bracelet of looped bronze wire (16). The iron object lxxxix 20, which seems to be the key of a horse's fetterlock, was found in 85: it is possibly a modern intrusion. The bronze rosette (21) and the small green enamelled figure of Sekhet (22) came from 84.

86. A small chamber, 5' 3" square and 5' 8⁷/₈" high, with three *arcosolia*. The entrance was stopped by a large stone.

87. An irregular cave, 16' 4⁷/₈" x 20' 9⁷/₈" x 6' 2", with a round mouth under which are rock-cut footholds in the wall.

88. A cave, 9' 8¹/₄" x 10' 7⁷/₈" x 4' 11¹/₈", with two *kokim* in the left side.

89. *Deposits*, Pl. xciv 15-17. A small irregular cave, about 16' 4" x 14' 6" x 5' 10", but not wholly cleared out owing to the risk of accident from the rotten roof. There was a considerable quantity of Roman pottery on the surface of the earth filling the cave: otherwise the only objects discovered were an iron sickle, a bronze spearhead, and one or two flint chips and knives. One of the latter, as well as the sickle and spearhead, are shewn on Pl. xciv, figs. 15, 16, and 17.

90. An irregular chamber, oval on plan, having the entrance in the middle of one of the long sides. There is a bay at the right-hand end. The chamber measures 16' 9⁵/₈" x 22' 3⁵/₈". A couple of bronze bracelets were found in it.

91. A cave measuring 21' 3⁷/₈" x 20' 9⁷/₈" x 5' 5", apparently natural, but with a well-squared doorway. Sherds of Roman pottery alone were found in it.

92. A small circular bell-shaped chamber with a round mouth resembling a cistern, about 10' in diameter. At the right-hand side of the doorway is the entrance and a smaller chamber.

93. A sarcophagus, measuring 7' 6¹/₂" x 3' 3³/₈" externally, thickness of sides 6", internal depth 2' 3¹/₂", height of plinth of cover 3¹/₂", of gables 10", with an ornamental cover, sunk in the earth. The cover is of irregular shape. At the four corners are

rude acroteria: a ridge runs longitudinally through the middle: on one side of the ridge the cover is cut in a gable-form; on the other side (that towards the spectator in the photograph fig. 174) there is in the middle a cylindrical swelling, between two gable-formed projections. This is the only sarcophagus found at Gezcr. There was no rock-cutting of any kind, the stone being just like an ordinary coffin in a grave. One corner was broken, probably by thieves: nothing except the very disintegrated bones of one skeleton were found inside.



FIG. 174.—LID OF SARCOPHAGUS, TOMB 93

94. Two sunk graves, measuring respectively $6' 10\frac{3}{4}"$ x $2' 5\frac{1}{2}"$ and $5' 6\frac{7}{8}"$ x $1' 7\frac{3}{4}"$, side by side: the edges arc revealed for cover-slabs.

95. A small cave, $7' 3"$ x $13' 2\frac{1}{2}"$ x $2' 11\frac{1}{2}"$ high, with a pit $7' 10\frac{1}{2}"$ in diameter and $4' 7\frac{1}{8}"$ in depth sunk in the floor. The entrance is very narrow. Whatever this may have been, it was probably not a tomb: nothing was found in it.

96. *Plan*, Pl. lix 8; *deposits*, Pis. xc, xci. An irregular chamber, $14' 3\frac{3}{4}"$ x $15' 1\frac{1}{4}"$, with two little cells cut out of the back wall at a level slightly lower than the floor of the chamber. One of these is $5' 5"$ x $4' 7\frac{1}{8}"$ x $3\frac{3}{8}"$: the other $3' 3\frac{3}{8}"$ x $4' 5\frac{7}{8}"$ x $2' 9\frac{1}{2}"$. They were probably originally intended for ossuary

A flight of rock-cut steps leads down from the entrance, but otherwise the cave seems to have been left in its natural state. The cave contained some sherds of First Semitic pottery.

99. *Plan*, Pl. lvii 14; *deposits*, Pis. xcii, xciii, xciv 1 — 13. This tomb consists of a three-sided vestibule 15' u|'' long, and of two chambers, one behind the other. The outer chamber measures 11' 8⁵/₈'' x 12' 6³/₈'', and has ten *kokim*—four in each of the side walls and two in the back wall. Between and above the latter is the entrance to the inner chamber. There is a square depression in the middle of the



FIG. 175.—ENTRANCE TO TOMB 99

floor. The inner chamber measures 6' 8³/₄'' x 6' 9⁷/₈''. It has a raised bench surrounding the three inner walls.

The most peculiar feature of this tomb is the method of closing the entrance. Three dwarf walls with large stones lying upon them are built in front of the entrance. There can be little doubt that cover-slabs lay across these walls. This method of enclosure is unique in Gezer: it is illustrated in fig. 175.

The Maccabaeian origin of this tomb is attested by its construction with *kokim*, and also by some plain fragments of ossuaries scattered through the earth that filled the chambers. But it is evident from the designs of some of the splendid series of lamps recovered from the tomb that it was used in the Byzantine Christian period

for sepulture. The cross is unmistakably a Christian emblem on PI. xciii 11, 12. Fig. 30, *b* on the same sheet is an unusual example of the *under* surface of the lamp being decorated. The remaining patterns speak for themselves and will repay study. The magnificent example xcii 17 is one of the finest lamps found at Gezer. Some additional lamps from the series are shewn in PI. xciv, figs. 1-4.

Besides these lamps, which were the chief glory of this tomb, a number of other objects were found in the chamber. The spoiler, as usual, had raked them out of the graves where they were deposited and thrown them about as valueless, so that there is little to be done besides giving a catalogue of the objects, for nothing can be said as to their original disposition. The most important are drawn on PI. xciv. Fig. 6 of this series is an almost perfect specimen of a glass bottle, of which several other examples were found, all, however, in many fragments. Fig. 7 is also a glass bottle. It is to be noted that the two knobs and the oblique rim are not the result of fracture, but were made thus with intention by the artist: the vessel, though its shape as represented in the drawing gives a suggestion of imperfection, is complete. Nos. 8, 9, 11, 12, 13 are five glass bracelets, two of them plain, the third ornamented with a wavy side. No. 10 is a small pot of characteristic Roman ware. There were also a large number of beads, the most interesting of which are shewn in no. 14a—e* and the usual objects of late tomb furniture—fragments of small bronze bells; a fragment of mail-coat; five small coins, three illegible, the legible examples being Constantine I; two or three bronze shroud-pins and a number of iron shoe-nails; three corroded iron signets; an iron key on a loop; and two or three plain conical "spindlewhorl" buttons. Of such objects several examples have already been illustrated, and it is unnecessary to multiply drawings of duplicates.

In fig. 5 is shewn an iron bracelet, found in the outer chamber. The ends are rounded, and there is a knob in the middle.

In the right-handmost of the three compartments into which the dwarf walls at the entrance divide the vestibule was found a fragment (no doubt an accidental intrusion) of a Rhodian handle with the letters TOY upon it.

100. A small irregular shelter under a projecting ledge of rock. A few fragments of bones and some potsherds were found in it.

101. A wide circular pit in the rock, 4' 5 $\frac{1}{8}$ " in diameter—apparently an unfinished shaft tomb. Nothing was found in it.

102. A rough natural cave, 15' 6 $\frac{1}{4}$ " x 13' 7 $\frac{1}{2}$ " x 6' 6". It contained a few traces of decomposed bone debris, and a number of very early pieces of pottery. There were two large bowls, shaped like the frustum of a cave inverted. These contained

* The first of these is in (*a*) a bluish black paste: the straight lines are white, the zigzag lines yellow. The second (*b*) is also paste. The third (*c*) is of black glass with yellow dots upon it. The fourth (*d*) is a flat oval of paste, ornamented with dots and a raised knob in the middle. The fifth (*e*), a large spherical bead with two perforations and raised ribs on the sides, is of bone. It has at some time been partly burnt.

fragmentary human bones, which had evidently been collected and placed in them. There was also a broken fragment of a similar vessel. One of the two complete vessels was ornamented on the surface with coarse combing; the other was plain. There were also a number of small vases, of similar coarse drab pottery.

103. *Plan*, Pl. lix 14; *deposits*, Pis. xcv-xcvii. This excavation is, primarily, a large cistern. It is of a total length of 54', and a depth of 22' below the under side of the roof, 24' below the surface of the rock. The shape is peculiar, and it is *possible* that it was divided into two by a rock-cut archway over the narrow part: this, however, has fallen down and left nothing but what appear to be the projecting piers. Above the southern "pier" the cave widens upwards, and two holes, represented in the plan by dotted circles, have been broken through the roof, over the projecting pier. There are also two holes cut with intention through the roof, one at each end. The sides of the cave have been plastered with mud, put on with the palms of the hand: the separate handfuls, taking the mould of the concave palm, are still distinctly traceable, though an attempt seems to have been made to smooth them off. There is a depression in the floor of the chamber extending along nearly its whole length, approached by steps at the western end: this is 4' 2" below the floor and leaves a bench or shelf all round about 3' 3" in breadth. At the west end a crooked passage runs off northward, just above the floor: it is about 5' 6" high and ends externally in a high step about 3' high. The doorway giving access from outside to this passage is made in a vertical scarp of rock, possibly a counterscarp of some cutting outside the city wall.

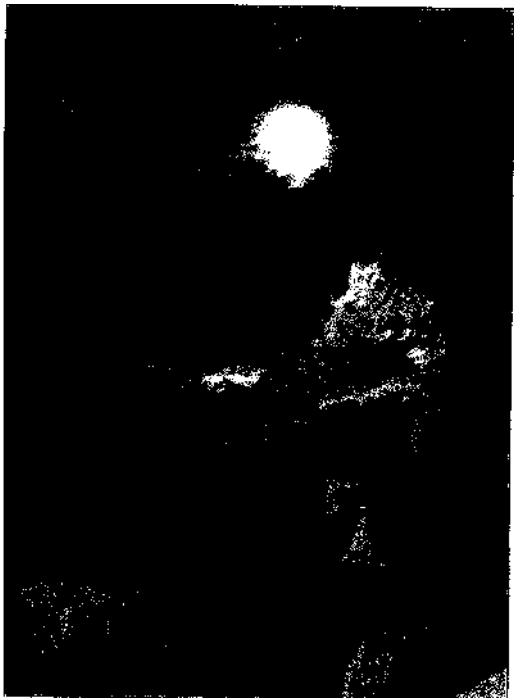
Also in the north side, at the east end, is a large hole broken in the side of the cave, close under the roof. It admits to a small square rock-cut chamber with an independent doorway. This seems to have no radical connexion with the cistern, the irregular hole connecting them being, I take it, merely an accidental fracture in the partition dividing them.

In the photographic view of the interior (fig. 176) these features are to be seen. The south "pier" is in the foreground to the left. The channel or sinking in the floor is also conspicuous.

Though not properly a tomb, I have counted this excavation with the tombs proper, partly for convenience, as it can more easily be described here than anywhere else, and partly because bones actually were found in it. There were several skulls, one of them shewing the pathological condition of *pachycephalus*. In the jaws the teeth were all unsound—even in the case of one which belonged to a child not more than six years of age. This condition of things was (as we have already seen) a characteristic of the Hellenistic age to which the deposits are to be ascribed.

On Pl. xcv are shewn the bronze objects from this cistern. Fig. 1 is a fine needle 9" long; fig. 2, a wire bent as shewn in the drawing; fig. 3, a bracelet, in the shape of a flat disc of bronze, $3\frac{3}{4}$ " diameter. There is a perforation at one end into which probably a hook (now lost) projecting from the other fitted. Fig. 5 is a plain bronze pin, round in section, bent into a C shape, while 5a is the shaft of another pin with conical head, broken. Fig. 6 is a bronze pot, much crushed and

distorted. The present height is 8". There apparently has been a recurved rim. Fig. 7 is a fragment of a finger-ring resembling a seal-ring, but there is no device on the expansion. Fig. 8 is the handle of a bronze vessel : it measures $6\frac{1}{4}$ " x 48". Fig. 9 is an earring, one of two, and figs. 10-12 are three out of six small bronze finger-rings. Fig. 13 is another ring, possibly an earring, of fine twisted wire : fig. 14 is an annulet resembling the "eye" of a "hook-and-eye" fastening, and very possibly this is what it is. There is a loop projecting from the convex side opposite the spiral twisted ends. Fig. 15 is a finger-bone with two bronze finger-rings fastened to it by corrosion. Fig. 16 represents a restoration made from the much crushed and broken fragments of a bronze bowl that has been gilt inside and out. It is broken into about eight distorted pieces. Fig. 17 is a massive fibula, which was much crushed. Figs. 18 and 19 are bronze saucers, both much broken : the first of these has a repousse



knob in the middle of the bottom. Fig. 20 is a leaf-shaped arrowhead, and fig. 21 part of a bronze chain passed through bronze ring. There was also a small Ptolemaic coin, much corroded.

On Pl. xevi are shewn the iron objects from this cave, which as one of the best collections of objects in this perishable material found at Gezer are of great

importance. They include the fine spearhead, socketed, with a prominent ridge on both sides, 8" long (fig. 1) ; a tanged axehead or chopper, $4\frac{1}{2}$ " long (fig. 2), and another (fig. 3) rather smaller and simpler, $3\frac{3}{8}$ " long. There was also a rectangular iron ring, probably intended to secure the head of some instrument to its wooden handle: this measured $2" \times 1\frac{3}{4}" \times \frac{3}{8}"$ (fig. 4). An arrowhead at present 4" long, the tip of the tang being broken off (fig. 5), with square-sectioned head and round-sectioned tang. The blade of a knife, bent backwards, total present length $6\frac{1}{2}"$, one rivet hole in the tang (fig. 6). A tanged sickle (fig. 7), the tang strong and square without rivet hole: blade much broken and end lost. An axehead (fig. 8) resembling fig. 3 but larger—length $4\frac{3}{8}"$. Three finger-rings (figs. 9, 11, 12), of which two have been seal-rings, but the device is almost or quite corroded away. Fig. 10 is another iron ring, fastened by corrosion to the finger-bone. A straight knife (fig. 13) with three rivets for securing in a wooden handle, of which a few fibres remain adhering to the rusty blade: length $10\frac{3}{8}"$. A similar knife (fig. 14), the tang of which is broken and the point corroded away. Evidently there was in this specimen a double row of rivets, which is uncommon. Fig. 15 is a bar of iron $8\frac{1}{2}"$ long, broken at both ends—what it may have belonged to is not clear. Two smaller fragments of similar bars were found. Fig. 16 is a knife with pointed blade, and fig. 17 a ring: these two objects had become corroded together. Fig. 18 is a square bar of iron $7\frac{1}{8}"$ long, with a loop at each end, in one of which a ring is passed. Perhaps this is part of a horse-bit. Besides these objects there was an upper millstone and some sheep-bones.

The pottery, beads, and some miscellaneous objects are collected in Pl. xcvi. Figs. 1-5 are lamps, of which the first had a hollow ring base, but all the others flat bases. The handle with a zigzag scratch on it is curious (fig. 6). The small jugs figs. 7-9 speak for themselves: they are obviously of Hellenistic type. Fig. 10 is part of an iron knife; fig. 11, a ring made of a bar of bronze with circular section. Fig. 12 is a flint; fig. 13, a disc of stone with a cup-shaped hollow in one side. Figs. 14-18 are miscellaneous bronze objects: there was another ring like 17, and another like 18 but thinner. Figs. 19-23 are silver: there were two duplicates of no. 22. Fig. 24 is ivory, and 25-27 limestone. The Horus-cye, fig. 28, is green enamelled porcelain picked out with black.

The beads are made of the following materials: *a, b, e, p, u*, carnelian (there were two duplicates to *a*: *p* is flat); *c*, ivory; *d*, white paste, eyes blue, with blue lines round them; *f, k, n*, green enamelled porcelain; *g, q*, cyan us; *h*, limestone; *i*, agate; *l*, black glazed porcelain; *m*, silver; *o*, white paste, yellowish green eyes with similar rings round them; *r*, crystal; *s*, blue glass; *t*, blue enamelled porcelain.

There was also a pestle of red stone, $4\frac{1}{8}"$ long by $2\frac{3}{8}"$ diameter, square in section with rounded edges, ends convex.

104-108, 110-115. Deposits, Pl. lxxviii 47-49. This is a series of eleven pits, in every respect resembling bell-shaped cisterns, except that they are not so deep on the average. These receptacles contained the bones of a large number of human beings, intermingled with those of camels, cows, horses, sheep, goats, and donkeys, thrown in indiscriminately. Besides the bones there were practically no deposits: a

few more or less whole pieces of pottery and a number of sherds, all of the plainest and most ordinary Fourth Semitic types; one single bead of cyanus; and the three objects—a pottery camel's head, an "Astarte-plaque," and a small disc of limestone with a nondescript design scratched upon it—figured in Pl. lxxviii; were the only objects found. Two or three sherds of a Cypriote milk-bowl and of a Mycenaean Bugelkanne probably had washed into the pits by accident.

The apparent date of these deposits would fit in with the capture of Gezer by the Egyptian contemporaries of Solomon, and it may be that these are the victims of a battle, cast into these pits. One humerus had been cut cleanly through, apparently just before death, which seems to favour such a theory. The difficulty is the presence of animal bones in such profusion—animals would be more likely captured and driven off than slaughtered so indiscriminately. It may be also that these bones are those of the victims of an epidemic affecting men and animals. A plague of men and sheep is referred to in the Tell el-Amarna tablets (ed. Winckler, no. 89). It may also be that these are simply the receptacles into which were cast the bodies of people too poor to own graves, and animals which had died of themselves. The total absence of valuable deposits accords with any of these theories.

It is probable that before being used for burial—about the tenth century B.c.—these pits were dug as water or grain stores. Perhaps this slope of the hill was once divided into small gardens, each with its own cistern. There was one pit which contained no bones, that was opened beside the winepress that lies in the middle of this area. This was similar in type to the other pits, but contained First and Second Semitic potsherds exclusively. This probably means that it had become closed up before the period of the interments.

It may be noticed that of these pits no. 104 was the deepest (19' 8" deep and about 15' wide at the bottom). Nos. 106, 113, 115 contained no deposits, and 108 very little. No. 107 was 12' deep and 22' in diameter at the bottom: its roof is supported by a pillar of rock left uncut in the middle, and between the pillar and the wall is a stone 4' 8" high, 2' broad, and 1' 4" thick, standing upright on the floor. No. 111 contained the maximum quantity of potsherds—112 had an enormous quantity of bones, both human and animal. No. 114 was a double pit, the two members being 9' 8" deep and each about 14' across, both bell-shaped with independent roof entrances, but by a doorway at the bottom communicating one with the other. In one of these there was a considerable number of bones, but the other contained very little.

There are not improbably other similar pits in the same region which I did not happen to strike.

109. A cave, 16' 10½" x 19' 2" x 5' 5", approached by a flight of rock-cut steps. In the floor are cut three shallow basins, the largest of them 4' in diameter and 1' deep. The cave contained some First Semitic potsherds.

116. A large cave, 16' 10³/₈" long, 25' 2¾" across, and 9' 9¾" high, with a round pit 4' 11¹/₈" across and 5' 5" deep just at the entrance. It contained no deposits.

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117. *Plan*, Pl. lvii 10; *deposits*, Pl. xcvi 1-15. Under a deeply recessed round-headed doorway, a small square opening gives admission to a chamber measuring 12' 3¼" x 10' 2⅞". The opening is lined with a frame consisting of two [-shaped stones, and was stopped by a rebated block of stone. There is a *kok* on each side of the door, five in the right wall (the only case where so many are found in one wall), four in the back, and three in the left. As usual there is a bench running all round the walls in front of the sills of the *kokim*. The place of the fourth *kok* in the left wall is taken by the entrance to an inner chamber, 7' 9" x 6' 4I", with a bench round each of the inner walls, but no graves. The function of this inner chamber was to contain the store of ossuaries, of which there were a considerable number, mostly fragmentary. They had been piled one on top of the other, and the soft stone of the under ones, softened still more by damp, had given way under the weight of the upper, so that they had collapsed. The ornamentation of these consisted entirely of circles and sexfoils with zigzags scratched upon them: none were inscribed. The other objects from the tomb, shewn on Pl. xcvi, were all in the outer chamber. Figs. 1-7 are glass: they were also fragments of a number of other glass vessels, of varying size, of the type of fig. 3. Fig. 2 is ornamented with four depressions on the sides. These glass vessels are all of a light greenish colour. Fig. 6 is a glass jar-stopper, and fig. 7, a kohl pencil of the same material. Fig. 8 is a fragment of what must have been a handsome little vessel in bronze, with some rather indefinite floral ornamentation in relief on its side. Figs. 9-12 are four fine lamps: fig. 9 is an especially remarkable example, with a guilloche on the spout; the hourglass-shaped ornaments on fig. 10 are also interesting. Whether the cruciform ornament on fig. 11 be merely accidentally in form of a cross I do not decide; but I think this is most probable. Another lamp, rather larger, was found in the tomb with a pattern similar to this, and four like no. 10—three of them with an egg-and-tongue device surrounding the opening, and one with knobs in place of the hourglasses. There were also three other lamps not here drawn—one like Pl. cxvi, fig. 22, without the handle and ornamental dots, another like Pl. cxvi, fig. 23, and a third similar to fig. 13 on the same plate without the curling ends to the C curves, and without the rest of the pattern round the reservoir. The small figure of a fish, fig. 13, was apparently in ebony: it was perforated through the sides, and the eye, a circle with a dot at the centre, was filled with a white composition: the two sides were similar. The spherical ribbed bead fig. 14a was in green enamelled paste; the two beads *b* under the fish, in black glass (there were several examples of the *single* bead); and the flat disc *c* was of resin. There was also a small ribbed cooking-pot, fig. 15.

118. *Plan*, Pl. lix 9; *deposits*, Pl. xcix 1-5. This tomb is entered by a most awkward little triangular hole—it can hardly be dignified by the name of doorway—4' above the floor of the chamber: there are no steps to facilitate descent into it, and the process of carrying in a body for interment must have been very

difficult. Though the chamber is unfinished, the deposits shew that it was made use of for burial. It measures 8' 6" x 8' 10" x 5' 6⁵/₈" high. There was an intention to make two *kokim* in each wall—eight in all—but only the four nearest the door are finished: three of the others are partially excavated, and the fourth is only just begun. The principal *trouvaille* in this cave was a fine lamp of bronze, xcix 1, found at the mouth of the inner *kok* on the right wall. There were also a small pottery lamp of a more ordinary type, fig. 2, and three small glass bottles, one of which is figured Pl. xcix, fig. 3: the others were similar to it. There were two cylindrical beads of brownish yellow enamelled paste, ornamented with wavy lines in green, fig. 4. Besides these, the chamber contained fragments of two or three glass vessels, too broken for their original design to be determined, and many fragments of ossuaries with the usual zigzag and sexfoil ornamentation, a detail of which is shewn in the plate, fig. 5.

119. A sunk grave, measuring 6' 0⁷/₈" x 2' of x 3' 0¹/₄". As usual with such tombs, it was completely rifled and empty.

120. A cave consisting of a depression in the rock, from which the mouth of a tunnel opens. It was impossible to excavate this, however: heavy blocks of the roof had become detached, and were resting on the earth with which the tunnel was filled; and one mass of loose rock fell during the work, shewing the serious risk that would be run if the work were continued. It was therefore thought advisable to abandon it. Some fragments of First Semitic pottery were found in the excavation.

121. A chamber, 9' 3" x 12' 8", with the entrance at the right-hand end of its wall. There is a low bench against the left wall, and in the inner end of the right wall a *kok*.

122. *Plan*, Pl. lvii 12; *deposits*, Pl. lxxviii 50, 51. A tomb, 7' 6⁷/₈" x 9' 6" x 5' 3³/₄". There are two *kokim* in the side walls, three in the back, and one set obliquely in the angle between the entrance and left walls. The contents of the tomb were meagre—a child's small bronze bracelet, consisting of a flat band of bronze, with rounded but not expanding ends—diameter 1¹/₂"; a lamp like ci 8; and a small flat cooking-pot of fine pottery, which was found in one of the *kokim*. The rim of this vessel had been broken away, and a circular hole cut in the bottom. There was also a fragment of a corn-rubber of the usual sort, with a rather square end turned slightly upwards, and a jug (lxxviii 50) found in one of the *kokim*, inside which was a broken glass bottle (lxxviii 51).

123. *Plan*, Pl. lvi 13; *deposit*, Pl. c 1. The plan of this tomb resembles in some degree that of the last. It is 9' 3" x 8' 5¹/₄" * 5' 8⁷/₈". There are three *kokim* in the right, three in the back wall, and two in the left; also two set obliquely, one at each angle of the door wall. The tomb contained a two-handled lentoid

vase (c i). There were several fragments of ossuaries, one of which is shewn in fig. 203, no. 7.

124. *Plan*, PI. lvi 11; *deposits*, PI. xcvi 16-26, ci. This elaborate tomb consists of three chambers. Not improbably the two additional chambers are afterthoughts, additions to a single-chambered tomb, with three *kokim* in the side walls, four in the back, and one to the left of the entrance. This chamber measures $11' 8\frac{1}{8}" \times 13' 9"$. The second hole in the back wall has been enlarged to make a passage leading to the inner chambers. It is $8' 0\frac{7}{8}"$ long in its final form, and two arcosolia have been made, one in each of the sides, extending over the *kdktm* that run in from the inner chamber. Such an arrangement is common in the tombs round Jerusalem, but this is the only example near Gezer. The inner chamber is $9' 10\frac{1}{2}"$ long; the breadth ranges from $8' 10\frac{1}{8}"$ to $9' 9"$; the height is $6' 11"$. It is quite plain, no tombs having been made in it. The inner chamber, which measures $9' 8\frac{1}{4}" \times 8' 11\frac{1}{8}"$, has a bench running round the three inner sides, and a recess in the left and back walls. At some time a shaft has been cut in the roof, possibly with the intention of making a cistern, which has broken into the tomb above the back wall of the outermost chamber, and partially destroyed the two right-hand *kokim* and the arcosolium above them. The principal deposits in this tomb were lamps, of a more commonplace type than usual: they are shewn on PI. ci. The second is the most interesting, in that it bears on its base a maker's name, or rather the initials, in Roman letters—UAL. CRI. This, and the PROP lamp from tomb **126**, are the only Latin inscriptions found at Gezer. On the base of no. 5 also is a device, no doubt also a maker's signature. Besides the lamps, which were all in the outer chamber, we may notice two stones, found in the second chamber, ci 17, 18. They appear to have belonged to some construction. One, with a curved channel, is 2' across, and the breadth remaining is $1' 8\frac{3}{4}"$. The other, with a square groove in it—possibly part of the lining of a doorway—is $1' 8\frac{3}{4}"$ long, 2' if broad, and $1' 6\frac{1}{2}"$ across.

A number of other objects from this tomb are shewn in PI xcvi. They include a jar-stopper of clunch; a vessel of reddish ware, slightly ribbed, with a thick red band painted on it; a bronze bracelet, and a small loop of three bronze links with points on them, probably intended for suspension of beads; three iron nails and a bent flat pointed bar of iron; a few beads and a small pottery jug; also a little glass vessel of common type.

125. *Plan*, PI. lix 10; *deposits*, PI. exx 16-19. A small irregular chamber, $7' 8\frac{1}{8}" \times 8' 11\frac{7}{8}" \times 6' 0\frac{1}{8}"$. There are four *kokim* complete—two in the back wall and one in each side wall—and a fifth, incomplete, set obliquely in the right-hand corner of the door wall. The tomb contained a number of fragments of ossuaries; two much broken skulls (one of them, like the skull from **103**, shewing pachycephalus); four lamps—one like ci 8, and the three shewn in PI. exx (one of these had a curious device on the base, which is drawn above it in the plate); a shapely globular glass vessel, exx 16; and many fragments of glass vases, most of them resembling xcvi 3.

125a. *Deposits*, PI. lxxix 37, 38. A cave with three arcosolia: one of them

is repaired with masonry and a pillar with plain abacus built at its side.* Nothing was found in the tomb except the globular vessel of greenish grey glass and the ivory pin represented in Pl. Ixxix, which were found in the central arcosolium.

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126. A chamber, 8' 3" x 9' 10½" x 5' 10⅞", the door facing N N.W. It contained one arcosolium in the left and two in the back wall. The deposits included a few late commonplace lamps.

127. *Plan*, Pl. lviii 14. A rough irregular cave, 15'9" x 13' of" x 8' 6". The entrance is an irregular hole, like the mouth of a natural cave. There is a recess on the right of the door, like a short *kok*, and three single *kokim* in the left and back walls: on the right a single and a double *kok*, the latter divided by a dwarf wall. The cave was full of earth, and contained a heap of ossuaries carefully piled up in the middle of the floor. They bore the usual banal ornamentation and were mostly painted red. Two were inscribed (fig. 178): they commemorate "Saro son of Eliezer" and "Hanun son of Jechoni" respectively. From the small size of the first of these inscribed ossuaries, it must have belonged to a child.

128. *Deposits*, Pl. xcix 6-12, cxiii 23. A cave, 8' 2" x 9' 7" x 5' 10⅞", the door facing S.W. It is at the right-hand end of the door wall.

The tomb contained nine fine lamps, seven of which arc shewn xcix 6-12 The

remaining two arc identical with the seventh (fig. 12): in the one, however, there is a triangle of seven pellets instead of the row of three on the shoulder; in the other there is a pellet in the cusp of the ornament in the tail. In one lamp (fig. 177) the potter has ingeniously concealed the Roman letters PROP (perhaps the beginning of his name) among the scrolls on the reservoir. There was also an iron key on a moveable ring, cxiii 23.



FIG. 177.—LAMP FROM TOMB xxb



No.2

129. *Plan*, Pl. lviii 12 ;

deposits, PI. cxiii 24-26, cxvi 23. An irregularly cut chamber, 11' $6\frac{1}{8}$ " x 11' 7", with two sunk bench graves in the back wall, an arcosolium in each of the three other walls, and a double arcosolium at right angles to the entrance wall, to the right of the door. I was told that this tomb had been opened by the fellahin about twenty years before in the hope of finding gold. Nothing of the kind appeared, however, but there were so many glass vessels in it that they called it *El-Hummdra*, "the tavern." The trade in glass had not then been developed, and in childish spite at their disappointment they broke all the glass vessels in the tomb. There must, however, be some flaw in this story, for on reopening the tomb, hoping to discover and perhaps piece together some of the glass, only one small pot in this material was found, too imperfect to make its restoration at all possible. There was also a small jug of the Byzantine Period, with three nicks on the side, and a number of lamps (seven of the "candlestick" * class, and the lamp figured cxvi 23): four of these and the jug were outside the door of the tomb. There were also a bronze signet-ring with an illegible device, a bronze coin of Constantine suspended to a bronze ring through a hole in the middle, and three beads and a circular ivory disc perforated in the middle (cxiii 24-26).

130. *Plan*, lviii 8. A tomb, the chamber of which measures 10' $7\frac{1}{8}$ " x 5' $10\frac{1}{8}$ " x 6' $0\frac{1}{8}$ ". There are two arcosolia, one on the left, the other in the back wall. The chamber is lined with plaster, faintly covered with triangular impressions made with a round-pointed knife: on the top of the edge of the arcosolium in the left wall is a herringbone ornament. The deposits consisted of a glass bottle at *a* (see the plan), a body, much decayed, of which the head was at *c*, and a lamp at *b*. There was also a fragment of a Roman waterpot.

130a. A fine tomb, long open and rifled. The chamber measures 14' $0\frac{1}{2}$ " x 8' $5\frac{3}{8}$ " x 8' 2". There are two arcosolia, 3' $5\frac{3}{8}$ " deep, in each of the inner walls. The walls are covered with cement. There are no marks on the surface except four oblique strokes on the sill of the inner arcosolium on the right side, and a V and three other strokes at irregular intervals on the sill of the corresponding arcosolium on the left side. There has apparently been a mausoleum erected in front of the door, of which a fragment of the door-jamb remains.

'Akabet el-Bir

131. *Plan*, PI. lviii 13; *deposits*, PI. c 3-5. This chamber measured 9' $1\frac{7}{8}$ " x 9' 5" x 5' $5\frac{1}{4}$ ". The door was raised 4' above the level of the broad bench that surrounded the floor, itself $7\frac{7}{8}$ " above the bottom of the chamber. There were eleven *kokim* arranged round the chamber: the radial angle *kokim* are noteworthy, being much less common than those in the sides. There were a number of ossuaries in these *kokim*—a

* There are a number of varieties of this class of lamp, which will be found described and illustrated in the section on pottery. Of those in this tomb, two were of type 5, three (one of them a small neat example) type 5a, one 5c, and one 3k.

curious arrangement, which defeated the purpose for which the ossuaries were intended, namely that of leaving the graves free for later interments. One of them contained a small blue glass bottle. The tomb contained twelve "candlestick" lamps, two of type 1, three of type 2; also two paste beads strung on a wire (c 2); a large wide bowl, not ribbed, of fine purplish ware (c 3); a bottle of pottery (c 4); and a bowl, the top broken, with the outer surface ribbed (c 5). One of the ossuaries had an



FIG. 179.—INSCRIPTION ON OSSUARY FROM TOMB 131

inscription on the lid (fig. 179), commemorating "Eleazar son of Geni." The last name is rather obscurely scratched.

132. A vestibule, $8' 10\frac{1}{4}" \times 4' 11\frac{1}{8}"$, with three steps in it, leads down to a square door which admits to a chamber $11' 3\frac{7}{8}" \times 10' 7\frac{7}{8}" \times 5' 3"$. There are two *kokim* (one unfinished) in the left wall and a shallow recess in the right. This tomb is outside the limit of the map, Pl. viii: it is about a mile to the west of the mound. It was empty.

133. A ruined vestibule, $6' 2\frac{7}{8}" \times 8' 9\frac{7}{8}"$, with two steps descending into it. It breaks into a natural cave. This cave also contained no deposits. It is close by the last.

Jurn el-Gharbi

134. *Deposits*, Pl. ci (a) 1-12. A tomb west of the village: it goes at present by the name of *Mughdret el-Hurfan*, "the cave of the sheep," on account of its having been used quite recently (in 1904, I believe) as a receptacle for some sheep that had been stolen. There is a plain cross of two lines cut over the door. The chamber measures $11' 11\frac{3}{4}" \times 13' 1\frac{1}{2}" \times 6' 2\frac{1}{8}"$. It has a *kok* on each side of the doorway, at a lower level; three *kokim* in the side walls, and four in the back—twelve in all. The tomb contained fragments of ossuaries, a few bearing the common sexfoil ornament—none inscribed—some scraps of bronze and iron bracelets, fragments of glass, and a series of lamps gathered together on Pl. ci (a). The five objects lettered a-e (two beads of resinous paste, one grey with yellow wavy lines on it, the other black; a double-headed pin, a spatula,, and a small hollow hemisphere—the last three of bronze) came together from one of the *kokim*.

135. A well-cut doorway leading into a very rude chamber, $13' 9\frac{3}{8}" \times 16' 4\frac{7}{8}" \times 5' 1"$. There is a sunk bench grave in the back wall. The tomb has long been, open, and contained nothing.

136. *P/an*, Pl. lix 15. A fine tomb-chamber, measuring 19' 6" x 14' 6", with a series of six large wide arcosolia round the walls, some of which have lamp-brackets in the walls. Two crosses are cut on the wall inside. There is a small bay in the right wall with two graves in it. This tomb has long been opened: the natives say that when opened it was found empty. For some time it was used as a cattle shed, at one time it appears to have been used as a cistern. Before the entrance doorway is a broad porch or vestibule, open to the sky, approached by three long rock-cut steps extending the entire length of its side.

Khallet Kul'at er-Rinjis



FIG. 180.—IN ANCE,

SCRIBED GLASS
AMULET

137. A chamber in the valley leading down to Bir el-Lusiyeh, measuring 7' $3\frac{3}{8}$ " x 7' $8\frac{1}{2}$ " x 6' $6\frac{3}{8}$ ". It has three arcosolia. The only objects that need be noticed, besides some commonplace beads and fragments of biacelets, were a bronze chain of small links not unlike a modern watch-chain in appearance, and a small disc of yellow glass (fig. 180), bearing stamped UPON it in reversed letters. ΕΥΤΥΧΩΣ ΤΩ ΦΟΡΩΝΤΙ. "with good luck to the wearer."

Ward es-Suk

138. *Deposits*, Pl. cii 1-6. A quite irregular chamber, 12' $2\frac{5}{8}$ " x 15' $6\frac{1}{4}$ " x 3' $11\frac{1}{4}$ ". The contents were a few meagre specimens of early Fourth Semitic pottery, similar to those in the great hoard in tomb 96. There was also a small pot in alabaster (cii 5).

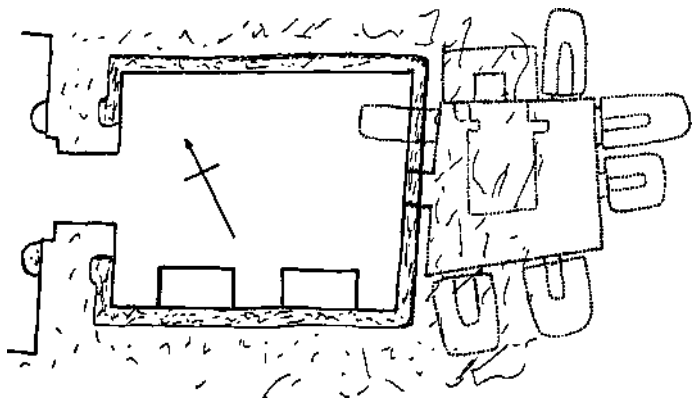


FIG. 181.—PLAN OF TOMB 139

139. *Plan*, fig. 181 ; *deposits*, Pl. cii 7-14. This important tomb consists of an open rectangular court, with an entrance vestibule, now open to the sky, but evidently once covered by a mausoleum. In front of the jambs of the entrance arc two blocks of rock that apparently supported pillars, on which, presumably, rested a porch. The foundation for the wall of the mausoleum is traceable all round the margin of the vestibule. This must have been a simple square building, probably surmounted by a pyramidal top, like the well-known "Tomb of Zacharias" at Jerusalem. At the south side the rock-surface is at a lower level than elsewhere,

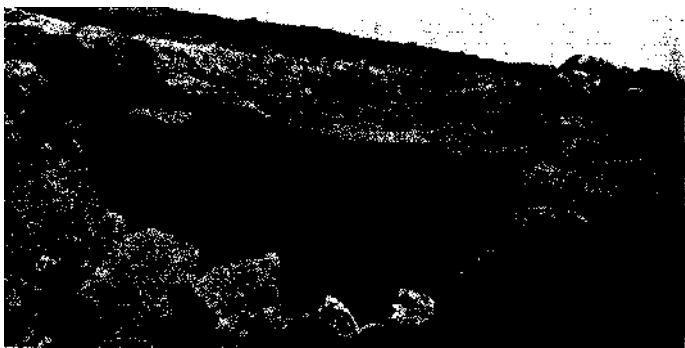


Fig.. 182—MASONRY AT ENTRANCE OF TOMB 139

so that the masonry foundations go deeper ; and here a couple of courses of the masonry actually survive. This is shewn in the photographic view, fig. 182. It is formed of carefully squared stones with very fine joints between them. In this vestibule, against the south wall, two graves are sunk in the floor, excavated about 7' deep in the rock. About half-way down they have an offset for cover-slabs.

The entrance to the tomb-chamber is a rough round-headed doorway, and the cave itself is cut out carelessly in a manner unworthy of the well-built monument with which it appears to have been covered. It measures about 13' square, but, as the plan shews, is very irregular. There are seven *double kokim*, the only examples at Gezer, the floor of each being divided in the middle by a long deep

groove into two compartments ; and a recess, in the left wall, sunk slightly below the level of the rest of the tomb-chamber, containing two rudely cut bench graves, or rather a single bench carried round the three walls, though the bay is too narrow to allow of a third body being laid at the end wall. This is an example of a feature that is very common in tombs throughout the country—the setting apart of two graves whose arrangement breaks the symmetry of design. These special graves are perhaps intended for the heads of the family to whom the tomb belonged. The mortice-and-tenon-like projections in the sides of the step surrounding the main chamber are not easy to explain.



FIG. 183.—COLUMBARIUM

The tomb had been opened long before, and everything of value taken from it. All the mausoleum, with the exception of the two courses mentioned, had been removed for the sake of its stones. The door of the tomb was open, and when my workmen commenced to dig they found within it the body of a freshly buried infant who possibly had been made away with and hidden here. The only gleanings left besides some fragments of ossuaries were: *Glass*: two double kohl-vases (cii 7, 8; two plain black bracelets (cii 12, 13). *Pottery*: a globular vessel with wide neck and heavy rim, one handle broken off (cii 14). *Bronze*: spatula with folded oval spoon (cii 11); plain bracelet formed of a loop of wire (cii 10). *Ivory*: pin with top-shaped head (cii 9).

140. *Plan and section*, Pl. lvi 18. This is the only columbarium known in the neighbourhood of Gezer. It consists of a court scarped in the rock, $16' 7\frac{5}{8}"$ long and $17' 9\frac{1}{8}"$ broad, with a lower space, $6' 11\frac{7}{8}"$ deep, sunk in its floor. To this latter, steps give access; and its walls are covered with round-headed loculi averaging about $7\frac{7}{8}"$ high, 7" broad, and 6" deep. They are irregularly disposed over the surface of the sides of the chamber. The plan and section shew the disposal of the members of the excavation and the arrangement of the loculi: a good idea of the appearance of the whole will be obtained from the photographic view, fig. 183.

The foundations of a wall remain crossing the courtyard: they will be seen in both the plan and the photograph. It will also be noticed that, as in some other excavations, the edge of the rock surrounding the courtyard is rebated as though to hold the foundation of a building. This can very distinctly be seen about 1" to the left of the five-foot rod in the photograph. All these indications shew that there was originally a mausoleum erected over this columbarium, as over some of the tombs around the city.

It is evident that the loculi are too small to hold urns with human ashes, skulls, or any other probable deposit. Nothing whatever was found in the chamber except a single small sherd of pottery, and no light was thrown by its examination on its purpose.

141. An irregular chamber, on plan roughly the quadrant of a circle, $11' 3\frac{1}{4}"$ x $12' 1\frac{5}{8}"$ x $4' 7\frac{7}{8}"$. There are five *kokim*, three in the straight wall to the left of the door, and two in the curved side at the back. The contents offered nothing-remarkable.

Waret 'Othmdn

142. *Plan*, Pl. lvii 3; *deposits*, Pl. ciii. A roughly rectangular cave, measuring $15' \times 10' 2\frac{1}{8}" \times 4' 2"$. There is a bench all round, $2' 3\frac{1}{2}"$ above the floor; but it is not against the back wall, between which and it is a trench $2' 7\frac{1}{2}"$ wide and $4' 3\frac{1}{8}"$ deep below the top of the bench. The tomb contained some fine specimens of rather late Fourth Semitic pottery. Pl. ciii I is a vessel of the typically ungraceful form of that inartistic period: the ware is a light brown colour, and the colour decoration is, as usual, confined to horizontal lines in brick-red and black. Fig. 2 is a jug of characteristic shape, in brownish ware, burnished. Fig. 3 is a fragment decorated with horizontal black painted lines. There were two vessels like fig. 4, and nine like the lamp, fig. 6. Fig. 5 is a jar-stand, more ornate with mouldings than usual; and fig. 9 is an unusual case of a footed bowl with horizontal lines (red) painted at intervals on the body. Fig. 13 is of the same general type of ware, though differing in detail, as fig. 1. Fig. 14 is glass, an unusual deposit at this early date: the vessel is square, which is still more uncommon. Fig. 15 is one of the ivory club-shaped amulets which are especially common at the period—about 600 B.C.—to which this tomb must be referred. Figs. 16, 17 are common objects in bronze, though the shape of 16—curved instead of angled—is less usual. Besides the above there was a remarkable "dovecote"

incense-burner, represented in PL cvi, fig. 6. It was in fragments, and the bottom end was not recovered. The height of the remaining portion was $8\frac{1}{2}$ ". It is of light red ware, ornamented with painted decoration in red and black. The curious irregular pattern round the top is remarkable. There are two rows of square holes in the side, about the middle of the surviving portion.

Some beads and pins were also found, as well as an ulna, length 246 mm., and a lower jaw (original breadth 92 mm.).

143. Deposits, PL cvi 3-5. A large cave, $30' 8'' \times 16' 4\frac{7}{8}'' \times 7' 5\frac{3}{8}''$, with a small circular entrance at the north end. The outline is quite irregular: the floor steps upwards irregularly towards the inner end. The principal objects are shewn on PL cvi. They consist of a bronze tanged knife, broken, fig. 3; a bowl of alabaster with moveable stand, fig. 4; a small pot of Mycenaean ware ornamented with vertical and horizontal strokes, fig. 5; and some fragments of others, including parts of Mycenaean *stamnoi* of the common shape with three handles. There were also some fragments of an incense-burner (?) in the form of a dove-cote, resembling that from tomb **142**, PL cvi, fig. 6; but this specimen has no trace of paint on it except one faint red line. A small fragment of plain moulding remains. There were several - fragments of grey Cypriote ware with white basket lines, also two lamp-and-bowl groups. In one of these an ordinary saucer was associated with the lamp, in the other a footed dish. The lamps were of the straight-spouted variety.

144. Deposits, PL cii 16-28. A rude cave, apparently natural, $M' 5\frac{7}{8}'' \times 16' 4\frac{7}{8}'' \times 6' 2\frac{1}{8}''$. The entrance however, a hole in the roof with four steps formed in it, is well cut. The steps are continued downward to the floor of the chamber by a rudely piled structure of stones. That the cave had long been opened was testified to by the unexpected find in the debris of two silver coins of Chosroes II, the Persian marauder who ravaged Palestine in 616 A.D. One of these was broken in pieces. The pillagers had, however, left a small deposit of beads, two scarabs, and a fragment of a bronze bell: these are shewn on PL cii. The beads in the top row there represented are in carnelian: the most remarkable is the celt-shaped pendant, fig. 16. Underneath this is an equally remarkable bead in paste, green enamelled, representing a date-stone, perforated through the side. There were three beads of the oblate spheroid shapes and two of the double cone: besides these there were two spherical, and one shaped like fig. 18 in haematite, a spherical bead in agate, and a barrel-shaped bead like fig. 17, in light-coloured jasper; as well as a few spherical and cylindrical beads in yellow paste, much decayed. The scarab ornamented with dots (fig. 26) was in carnelian, that with the sphinx (fig. 27) in much disintegrated white porcelain. The ribbing on the side of the bronze bell (fig. 28) is curious.

145. Deposit, PL cix 31. A rough cave, $16' 4\frac{7}{8}'' \times 8' 9\frac{7}{8}'' \times 6' 1\frac{1}{4}''$. A circular hole at one end gives admission. On one side is a shelf, cut in the rock, and on the other a small cupboard. The principal deposit in this cave was a string of about fifty spherical beads in yellow glass. The other contents were as follows: a

large number of fragments of rather late Fourth Semitic pottery; the blade of an iron knife; a small plain bronze finger-ring; about twenty beads, mostly carnelian, and one or two of basalt and paste green enamelled. One of these latter is simply a rough pebble, perforated: other two are drop-shaped pendants. Two are barrel-shaped, one cylindrical, the rest spherical or spheroidal, or else flat discs. There are also fragments of four small rings of bronze wire, each twisted into a spiral, maximum diameter $\frac{5}{8}$ ", probably links of a rude chain; the rim of a vessel like *EP*, Plate 51, 1 or 3, and of a small black jug of the type *EP*, Plate 53, 18; the base of a footed bowl; a fragment of a plain iron bracelet (cix 31). There were also fragments of three scarabs, in friable paste. One of them was obliterated (in fact I think there never had been any device on it), and crumbled to dust soon after it was exposed. Another also was so perished as to be illegible.

146. A sunk grave measuring 5' 1" x 3' 3".

147. *Plan and deposits*, Pis. civ, cv. This tomb is one of the finest of the series. It was evidently the burial place of some family of distinction, and was an elaborate and costly work. A long vestibule is driven into the hillside, running rather west of south. It suddenly narrows; and here, as in other tombs we have noticed, the rock shews signs of having been hewn to receive the foundations of a monumental structure erected over the entrance. On each side of this narrow part is a semicircular structure, evidently the piers of an ornamental gateway. Every stone of this erection has long since disappeared. On the left-hand side of the passage under this ornamental entrance was the doorway to a tomb-chamber, containing three sunk arcosolia and one subsidiary chamber having three sunk bench graves arranged in the usual way. Proceeding farther, we find ourselves in a square vestibule, now open to the sky, but formerly covered by the monumental building. There are two chambers opening out of this vestibule, one on the left, the other on the back wall. The first of these has six sunk arcosolia in the walls: the second has seven sunk bench graves, which are a much less common form of tomb in the necropolis of Gezer. At the entrance of this second tomb are two rows of stones (marked in the plan) that may possibly be the remains of the foundation of some ornamental architectural treatment of the doorway. This doorway was closed by a massive stone door swinging in the usual way on projecting horns: its outer surface was ornamented with panelling. The remains of this door—which was smashed by the first robbers who entered the chamber—lie scattered inside: a restoration is drawn, cv 40. It probably was fastened by a chain and padlock to some staple outside: there is no bolt-hole inside, nor do the remains of the door itself shew evidence (as in the door of tomb no. 16) that it was fitted with a lock.

In the middle of the back wall of this chamber, raised rather above the level of the bench graves, is the square entrance to an inner chamber. A simple moulding runs round the top and sides of this doorway, and above it are carved in relief two bulls' heads, with a wreath between them—the only bit of carved ornament in any of the tomb-chambers of the Gezer series (fig. 184). This inner chamber contains a small aumbry in the left wall, and a sunk bench grave in the back wall.

The following dimensions of this tomb may be useful: first chamber (under entrance gateway) 13' 8¼" x 10' 11⁷/₈" x 5' 9": 4' 1" below the level of the entrance passage; second chamber (left of vestibule) 12' 11¹/₈" x 11' 5⁷/₈"; vestibule 19' 9" x 20' 4¾"; third chamber 16' 5¾" x 18'; fourth chamber 6' 9" x 6'; overall dimensions from the place where was the ornamental entrance (under the monumental building) inwards, about 65' 6" x 37' 8".

The outlines of the monumental building, as indicated by the sinkings in the rock for the reception of its foundation stones, are shewn by dotted lines in the plan.

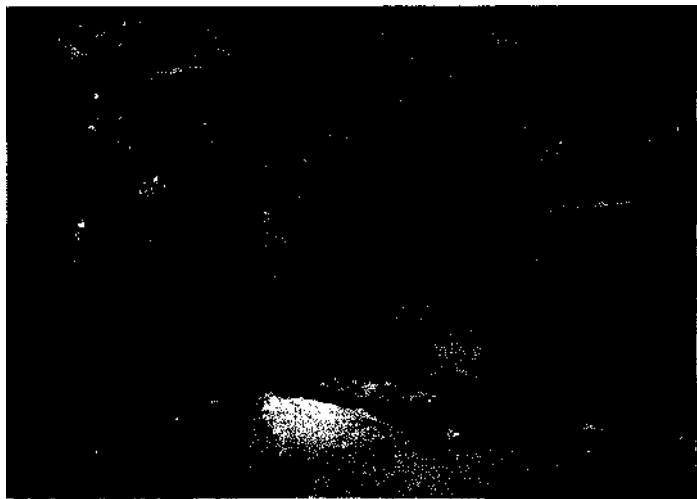


FIG. 184.—INTERIOR OF PRINCIPAL CHAMBER, TOMB 147

The graves throughout the tomb are not broad enough for more than one body. It is remarkable that there is but *one* grave in the innermost chamber: as a rule there are two in the chamber so placed.

There are two small plain brackets for lamps in the chamber containing the bulls' skulls. One of these shews the mark of smoke-blackening on the wall above it.

The tomb was partly open, and I need not say violated, when I first came to Gezer: it must have been in that condition for a considerable time. In fact the first plundering of this sepulchre is probably to be ascribed to a date at least three

hundred years ago, for in the first chamber the unexpected discovery was made of a token of Hans Schultes, the "Rechenmeister" or banker and money-changer of Nuremberg, whose coinages are very familiar to those few numismatists who concern themselves with the curious currency of that city. Schultes seems to have lived about the beginning of the sixteenth century; and if we put the spoliation of the tomb to about the end of the same period, we shall thereby allow sufficient time for this waif to find its way to its strange resting place.

The objects found are of course only the "leavings" of the robbers; and as they were found scattered about in the debris, it would not only be unnecessary but actually misleading to enter into details of their position in the chamber. It may be remarked, however, that all, except the beads represented on Pl. cv, came from the third or principal chamber.

Plate civ, figs. 1-4, 26-28 are the lamps from this tomb, and figs. 6-9 are fragments of others. They are, as will be seen, quite commonplace types. The inscription on fig. 3 is the common legend ~~ΘΩΣ ΚΥΡΕΝΗΤΑΙΝ~~ into unintelligibility by several stages of unintelligent copying, till it has been reduced to a mere symmetrical pattern.

The bronze objects are as follows: a small bell (fig. 13); a spatula (fig. 18); fragments of bracelets (figs. 20, 21); and a small bifid object, possibly part of a pin (fig. 25). There is nothing about these objects to call for particular remark, as they are the commonest types of bronze objects from these late tombs.

Neither are the iron objects noteworthy with the exception of the three-winged arrowhead, fig. 5. *Weapons* are not often deposited in tombs of this period. The other iron objects are the bit of bracelet (fig. 10); the nail (fig. 11); a bent band, perhaps part of an anklet (fig. 12); two small rings, apparently key-rings which have lost their keys (figs. 16, 17), and two other fragments of bracelets (figs. 23, 24), one of which is decorated with a little beading. There were also a small shapeless fragment of an iron plate with nicks in it, and a slender four-sided spike of iron, 4" long.

Very little glass was found: fig. 14 is the handle of a vessel in dark green glass, and fig. 19 is a bracelet of dark blue. There were some indefinite fragments of dark green glass besides, not worth drawing. The pendant (Plate cv 29) is a flat disc of glass: it was found in the second chamber.

Plate civ 15 is a slab of soft limestone with a cup-shaped depression in one side. In the same material was the incense-box (?), fig. 185, which was found in fragments in the vestibule. It is a box of soft limestone 6" square and " deep, standing on four legs. The outer surface is ornamented with rude linear patterns as shewn in the figure. Plate civ 22 is a tube of bone, possibly the handle of an implement.

The types of beads found are represented in Plate cv 30-38. Fig. 30 is a beautifully coloured paste enamelled bead. Fig. 31 is one of a set of thirteen, all alike. Fig. 33 is a filigree twist of bronze wire on which beads are strung: two or three other fragments of the same object were found. The rest speak for themselves: it may be remarked that 32, 34, 35 are glass, 36 is resin, and 37, 38 are paste enamelled.

Fig. 39 represents the elevation of the doorway to the first chamber, on the

left of the entrance: the upright line AB is the limit of the building formerly erected over the tomb. Fig. 40 is the restoration of the door to the principal chamber: its doorway differs from that drawn in fig. 39 in being round-headed. Fig. 41 is a section of the moulding of the door to a larger scale.

148. *Deposit*, PI. cix 30. A roughly rectangular cave, $9' 10\frac{1}{8}" \times 7' 8\frac{1}{2}" \times 5' 10\frac{7}{8}"$, with an arcosolium rudely cut in each of the inner walls. It contained five small pots (four broken) like *EP*, PI. 53, 18; several fragments of the ordinary Fourth Semitic lamps; the neck of a vessel (cix 30) in coarse red ware; and one bead of yellow enamelled paste. There was also the bottom of a vessel in yellowish ware

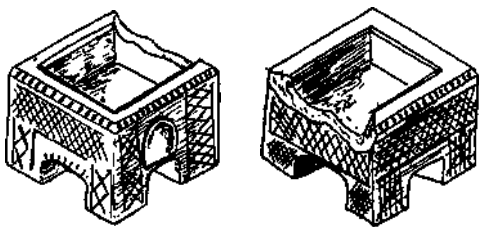


FIG. 185.—INCENSE-BOX (?) FROM TOMB 147

that had evidently been supported on three small pointed feet, and had had a loop-handle of which the lower attachment remained.

149. *Plan*, PI. lvii 7. A similar cave to the last, measuring $8' 7\frac{1}{8}" \times 5' 8\frac{1}{2}" \times 6' 4\frac{3}{8}"$. At the inner end of the right-hand arcosolium is a circular hollow, $1' 3\frac{3}{4}"$ deep, probably for bones.

150. *Plan*, PI. lviii 8; *deposits*, PI. xcvi 27-29. A similar cave, $6' 4" \times 15' 9" \times 5' 11\frac{5}{8}"$, with a bench all round. In the right-hand inner corner is a square ossuary-pit $3' 8\frac{1}{2}"$ deep.

Within the tomb were found two arrowheads, one bronze and one iron, and the pin of a "safety-pin" fibula, shewn in the plate.

151. The entrance to an otherwise unfinished cave.

152. *Deposits*, PI. cvi 1, 2. A natural cave, $14' 7\frac{1}{4}"$ by $9' 2\frac{1}{4}"$, which has been modified by deepening the middle part with a rectangular pit so as to leave a bench all round. Steps descend to the pit at the outer end. The total height is $6' 3"$. Nothing was found but the small jug and the closed lamp represented in the plate. The lamp looks like an Arab specimen.

153. Plan and section, PI. lvii 6; *deposits*, PI. cvii 1-19. A vertical shaft, 8' deep and 3' $5\frac{1}{8}$ " x 5' 11" in cross-dimensions. At the bottom is a small hole, as though the entrance to a chamber had there only just been begun; and about the middle of the shaft is the entrance to a roughly made chamber, measuring 11' $1\frac{7}{8}$ " x 16' $4\frac{1}{4}$ " x 3' $8\frac{1}{2}$ ". The tomb contained an Assyrian seal of blue glass, some beads, and two cylinders (fig. 186). There were also a certain amount of pottery, of Fourth Semitic type (cvii 1, 3, 4, 5), all mixed about in the earth filling the tomb, including a large complete lentoid flask, i' 1" high; a hemispherical slate spindlewhorl (cvii 6); the beads and scaraboids shewn in PI. cvii (7 in blue glass; 8, 9, 10, carnelian; 11, basalt; 12, agate; 13, black limestone). Fig. 14 is one of several fragments of a silver ornament consisting of rows of small silver discs with spherical embossings, tightly pressed together. Fig. 15 was of blue glass, and fig. 16, of which there were several duplicates, of silver. The rings figs. 17, 18, one of which is a signet, are also silver. There were also a fragment of bronze with two bronze nails in it, and a square stone box, broken into fragments from which the diagram cvii 2 is prepared. It was about $3\frac{1}{2}$ " square and $4\frac{1}{4}$ " high, including the feet.

Wa'ret Shakif Hammad

154. Plan, PI. lvii 9; *deposits*, PI. cxvi 22. A chamber, 8' $3\frac{1}{8}$ " x 6' $11\frac{1}{2}$ " x 5' $3\frac{3}{4}$ ". Round the wall is a low bench, above which are six *kokim*—two in the back wall, two (one unfinished) in the right wall, one in the left wall, and one, unfinished and crooked, running diagonally from the right-hand back corner. The tomb contained three lamps, one of which is shewn in PI. cxvi 22, and in the diagonal *kok* a small cooking-pot in fluted ware. In the tomb-chamber was a handsome little ossuary painted red, and ornamented with the ordinary sexfoil decoration.



FIG. 186.—CYLINDERS AND SEAL FROM
TOMB 153

154a. Unfinished entrance to tomb.

155. Wall-graffito, PI. lviii 16; *deposits*, PI. cxiii 10-20. This is a chamber measuring 9' $7\frac{1}{8}$ " x 8' $1\frac{1}{4}$ " x 6' 1": the left wall is prolonged with a niche that runs 1' 9" into the back wall. There are five *arcosolia*, two in each of the side walls, one in the back.

Grave *a*, though it had been carefully closed up with a wall of dry stone masonry filling its mouth, was empty. Grave *b* contained the handsome green glass flask exxiii 5 and some insignificant fragments of another green glass vessel ornamented with blue dots: there were also the neck of a glass bottle with a wide mouth; a concave bronze disc, perforated in the centre, 1" diameter (cxiii 10); and an iron pin, 2 1/2" long (fig. 11). There were also three fine bronze pins (figs. 12-14); a

bracelet of a fine bronze wire with the ends twisted together, and a chain of fourteen bronze links, each consisting of two loops set at right angles to one another (fig. 16); a bronze finger-ring, and a double glass kohl-vessel resembling fig. 19. Grave *c* had evidently been used as an ossuary, for it contained a great heap of



FIG. 187.—OLD QUARRY AT THE MOUTH OF TOMB

bones with skulls of thirteen persons. There were a small model of a pitcher in compact yellow pottery, $3\frac{1}{2}$ " high (fig. 17); the fine glass bottle *cxxiii* 6; the glass vessel *cxxiii* 4, by far the handsomest specimen of glass found at Gczer; a smaller vessel, of similar shape, but with a handle (*cxiii* 18); a double kohl-bottle of common shape (fig. 19); a bracelet of iron with bronze discs strung on it (fig. 20); and two lamps, one resembling *cxvi* 6, the other of the "candlestick" type, variety 3K, but without the vertical bars flanking the . In grave *d* were a lamp resembling *cxvi* 7, and a coin of Constans; also fragments of the fine glass vessel *cxxiii* 7. Grave *e* was empty. In addition to the objects above enumerated this tomb also

contained, in several of its graves, many beads, of common pattern, of paste, glass, and amber. Except that this tomb contained one *arcosolium* [less, it resembled in design tomb no. 160 (Plate *lviii* 15). On the right wall, between graves *d* and *e*, is

scratched the mark shewn in Pl. lviii 16. I can offer no explanation of this symbol.

156. *Plan and deposits*, Pl. cviii. In making this tomb advantage was taken of an old quarry, an oblong sinking measuring 44' 10" by 13', in the south wall of which the doorway of the tomb was made. At the opposite end of this quarry is a deep pit or pool, of oval shape; and in the middle of the wall is a doorway 2' broad—the beginning of a tomb never carried out. (These latter features are shewn



FIG. 188. —ROMAN JAE FROM TOMB 156

in the photograph, fig. [87]. An old winepress on the north side was destroyed by cutting the quarry.

In the tomb there are on the left side two subordinate bays, each containing three arcosolia, and in the back wall a similar bay. On the right wall are two single arcosolia. The chamber measures 14' 7¼" x 8' 10¼" x 7' 6½" high. The floor is, as usual, sunk below the level of the door-sill, and is reached by three steps. The tomb differs in no essential features from the normal arcosolium tomb-chamber.

Outside the doorway there is a porch sunk in the scarped quarry-face, descending by four steps. There is a recess in its right wall, at the foot of the staircase. The floor of this recess is sunk below the level of that of the porch: it is not easy to assign a purpose to this detail.

The tomb was untouched when opened: the door was closed by a moveable slab, rebated on three edges. The bodies, though they crumbled to dust when

touched, were in an unusually perfect condition of preservation, the bones being all in position, and even the outlines of the human forms being retained by the earthy matter that represented the decomposed flesh. The rats had not established themselves here, as in the majority of the tombs opened, so that with the exception of a few points the exact details of each interment could be noted.

The contents of the tomb and their positions were as follows:

In the right corner of the main chamber, between the door wall and the right wall, was an amphora, empty, standing upright. It is shewn in the annexed photograph (fig. 188). It is Roman both in shape and style of pottery. Probably this vessel was meant to hold water used in the funeral ceremony by those taking part—perhaps for washing after handling the corpse. Similar washings take place in modern Muslim funerals after the interment.

The lamp cviii 1 was lying inverted in, and near the outer end of, the passage between *a* and *c*, near the outer end.

In grave *a* there were two bodies, but no deposits. The bodies lay with their heads towards the chamber end of the benches, although the head-rest left in cutting the graves had been provided at the inner extremity. Such carelessness in detail is not uncharacteristic of Palestinians of all periods, and is not confined to the burial of the dead.

Grave *b* contained one body, the head to the right. No deposits.

Grave *c* had at least five bodies upon it, though originally prepared for two. Evidently the remains had been piled up on each other after the tomb had been filled. There were three above, when the tomb was first seen, and apparently two below. The heads were towards the main chamber.

In the second bay, grave *d* contained three bodies. On the edge of the grave was the lamp fig. 4. The bird figures on the spout are to be noticed.

In *e* there was one body only, that of a woman. The head was to the right. Against the inner side of the right thigh was a pendent amulet (a bronze disc with repousse ornamentation), fig. 6, and, outside, a kohl spatula of the same material, fig. 8. Close to the latter was a scrap of bronze wire with a couple of beads strung on it. There were also some small, indefinite fragments of glass.

Grave *f* contained at least three bodies, but no deposits. In the bay in the back wall, grave *g* had three bodies—two above, and the third between and beneath them. It is curious that the outermost body had the legs crossed at the thighs, after the fashion of the "crossed-legged" effigies in some mediaeval churches. Over the face of the innermost were fragments of some black leathery substance. This may have been a chance survival, partly mummified, of a scrap of the skin of the face: another possibility is that it belonged to a leather mask that might have been laid over the face. The latter is less likely. The substance crumbled to impalpable dust when touched.

Grave *h* contained five bodies. There were two below, a third above and between, and a fourth wedged between the last and the wall. The heads pointed to the right. The fifth body, that of a young child, was at the feet of the others. On the edge of the grave was the lamp, fig. 5, and inside, beside the head of the outermost body, was the glass lamp shewn in the annexed figure (fig. 189). Its

Tomb no. 156

purpose is explained by identical objects made at the present day in the glass factories of Hebron. The vertical tube in the centre is intended to contain a rod, on which the wick is twisted. This object is by far the most interesting deposit in glass recovered from the whole series of Gezerite tombs. It is noteworthy that it is imperfect, in respect both of the original workmanship and of its present state. The mouth is slightly bent, so that it is not a true circle—a defect not intentional, but due to carelessness. Of the three original handles, two are lost: one was never replaced, but for the other was substituted a handle of an entirely different style and an entirely different glass. The whole vessel, therefore, is a good example of the general "cheapness" of grave deposits in the later tombs.

Grave *i* contained five bodies. With them was intermingled a singular collection of fragments of broken glass. These pieces, sixteen in number, were as disconnected as would so many fragments be if picked at random from the top of a wall. There were not a single pair that belonged to one another, or even that appeared to belong to the same vessel. Bases, handles, mouths, and nondescript pieces were mixed together, differing in the texture and colour of the glass, and in the size and shape of the vessels to which they had once belonged.

Had there been any other object of value placed in this grave, I should have suspected that those fragments of glass were meant as a trap for the fingers of unwary plunderers—a purpose that they well serve, as a practical demonstration shewed me. But there was nothing except a lamp, identical with that represented in fig. 1, except that a six-pointed star is substituted for the trident on the spout. This being so, we are forced to the conclusion that the fragments of glass are cheap and worthless substitutes meant to suggest and represent more valuable and serviceable deposits. Glass no doubt was expensive, and by the time this tomb was used it had been realized that the value of the deposits was a matter of small moment to the deceased, and that precious objects were not only extravagant, but also a temptation to thieves to violate the sepulchre.

On the edge of the grave *j* there was an incense-box similar to that already described, but devoid of ornament except for a few meaningless scratches. It contained some charcoal and white ashes. Chemical analysis of this shewed no trace of incense or any other organic material. The human remains in this grave were more intermingled than in any other, and it was impossible to be sure how many bodies had been deposited: my note, taken on the spot, merely specifies a "large number of bodies," the bones being perfectly rotten, and all mixed together. There were two lamps, differing from fig. 1 only by the designs on the spouts, which are shewn in figs. 2, 3: one was on the edge with the incense-box, the other inside. The tomb also contained a plain bronze armlet.



FIG. 189.—GLASS LAMP FROM
ToMB 156

Grave *k* also contained a "large number of bodies," according to my note. In it were some large beads of resin, and a double glass vessel containing two bronze kohl spatulae and three pins of the same material. The vessel is shewn in Pl. cviii 7, and the bronze accessories (grouped according to the compartment of the vessel in which they were found) in figs. 7*a*, *b*.

157. *Plan*, Pl. Ivii 4; *deposits*, Pl. cix 1-10. A chamber measuring 11' $2\frac{5}{8}$ " x 14' $6\frac{7}{8}$ ". In the centre is a deep hollow. There is a broad high bench grave



FIG. 190. ENTRANCE TO TOMB 157

occupying the whole of the left wall, four *kokim* in the back and three in the right wall. The outermost of the right-wall *kokim* is at a lower level than the others: the first two on this wall break into the corner of tomb 158. The tomb was secured by a swinging door (stolen afterwards by the fellahin), which is shewn in fig. 190. There was nothing in it but the ribbed pottery vase (cix 1), the neck of a glass vessel (cix 8), a bronze pin with club head (cix 9), and a number of fragments of metal, possibly bits of a lock that had flown about when the door was burst open. The most important of these are shewn on the plate. Fig. 2 is $\frac{3}{16}$ " thick, $1\frac{1}{8}$ " broad: the two arms are respectively $4\frac{1}{2}$ " and $4\frac{1}{4}$ " long. There is an iron nail in each end. In fig. 3 the arms are respectively 4" and $1\frac{1}{4}$ " broad. In fig. 4 they

are $4\frac{1}{2}$ " and $1\frac{1}{4}$ ". In fig. 5, which has no nails in it, they are $4\frac{1}{2}$ " and $3\frac{3}{4}$ "; the iron is $\frac{3}{16}$ " thick: the angle is not, as in the others, approximately a right angle, but about 120° . Fig. 6 is not iron but bronze, 2" high, $3\frac{1}{2}$ " broad. Fig. 7 is iron, with arms respectively 4" and $4\frac{1}{2}$ " long. Fig. 9 is a disc of lead approximately $2\frac{1}{4}$ " square, with an iron nail through it.

158. *Plan*, PI. lvii 5; *deposits*, PI. xcix 14, cxiii 21-23. The door of this chamber was closed with a large square stone. Each wall contains long rectangular recesses, the long axis of the recess being at right angles to the wall of the chamber. There is one of these recesses in the left and back walls, two in the right. Each recess contains two tombs—parallel sunk bench graves, with a passage between them: in addition there is at the end of the back-wall recess another sunk bench grave which was found covered with slabs.

Against the wall of this chamber, just at the foot of grave *a*, were three small glass bottles. In *a* were a number of bones evidently collected from other graves: they were those of six individuals; some small scraps of glass were intermingled with them. In *b* were splinters of glass and a complete vase of the same material. Grave *c* was empty except for one vertebra apparently left behind when the grave was cleared for a later interment: there was also one small lamp (xcix 14), and the neck of a large vase slightly moulded. In *d*, the grave on which were the cover-slabs, was a bead, fragments of glass, two portions of a small bronze tube (cxiii 23), a bronze coin of Constantius, a large flat amber bead, and a bronze object with a hook for securing it in some material (cxiii 22). Grave *e* contained a glass vase and a small bronze bead. In *f*, *g*, *h*, *i* was nothing but clay and fragments of bones, except some small scraps of broken glass, and two large ribbed spherical beads, of green enamelled paste, in *i*. In the chamber at the foot of grave *l* was an ornamental piece of lead (cxiii 21).

On the walls of the tomb are two marks, at the places marked A, B in the plan. At A, A are deeply incised the symbols resembling an inverted -\ which may possibly be the well-known classical symbol of the inverted torch. These are large and conspicuous, and strike the eye at once on entering. Beside the mark on the left wall, but much fainter and smaller, though for clearness drawn to a much larger scale on the same plate, is a design in which it is not difficult to recognize the early Christian symbol of the fish. For these graffiti see PI. lvii.

159. *Deposits*, PI. cxvi 9-13. A chamber measuring $11' 5" \times 11' 10\frac{1}{8}" \times 6' 1\frac{1}{4}"$. Round the walls runs a bench above which are nine *kokim*, three in each of the inner walls. The door is at the left end of the door wall, and two steps lead up to it: it faces north north-east. A *kok* just begun is on the right-hand side of the door.

The centre of the tomb and the *kokim* yielded a number of objects, one from each: their arrangement shewed nothing of interest. There were a glass vessel with twisted body and two handles; the neck of a wide-mouthed glass bottle; the base of a small glass jug, surrounded by twisted glass wire; and the lower half of one of the common double glass vessels. The tomb also contained the lamp (fig. 13); the iron socketed

hook with a wire for securing it to the shaft (fig. 11); the upper half of a bronze pin with club head (fig. 9); a circular disc of bronze with a loop for suspension, one side plain, the other ornamented with concentric circles; three bronze discs (fig. 14); and six beads of vitreous paste—one flat disc, four of various common types, and one of the "suspended bottle" shape of purplish paste, also one long barrel-shaped of carnelian; a bronze coin of Constantine, and a small fragment of a bronze tube.

160. *Plan*, Pl. lviii 15; *deposits*, Pis. cx-cxii. This tomb consists of one chamber, 12' 5⁵/₈" long by 10' 9⁷/₈" broad. It is approached by a low doorway, round-headed, 2' 7⁷/₈" across and 3' 3¹/₂" high. This doorway was closed by a slab of stone which had become slightly displaced, so that the tomb was partly filled with earth that had silted in.

The graves are wide arcosolia, with arched openings to the chamber. They are six in number, two in each of the inner walls. Evidently they were intended, and subsequently used, to contain the remains of a considerable number of persons each; but unfortunately the bones were found in so decayed and rotten a state that little could be made of them. I counted an average of about six skulls and fragments of skulls in each arcosolium. As usual, no attention had been paid to orientation, the feet of one skeleton and the head of another being side by side. All the bones, with the exception of a few long bones, crumbled away when touched.

There was a rich hoard of deposited objects in this tomb: especially was it remarkable for the fine and varied series of lamps. Outside the door were two (cxi 1, and one similar to ex 5, but with a larger number of cross-bars in the ladder pattern). On the floor of the chamber were fifteen ordinary lamps with single spouts (ex 1-13, with one duplicate of each of figs. 5, 7), and the interesting six-fold lamp (ex 14). The slip of carved bone (ex 15) also came from this part of the tomb. Of the single lamps by far the most remarkable is the inscribed lamp, fig. 1. It bears upon it the legend

+ΑΥΧ(Ν)ΟΣ ΣΤΕΦΑΝΟΥ ΦΙΛΟΧΡΙΣΤ(ΟΥ)

The lamp of Stephanos Philochristos,

which may be interpreted as (1) a mark of ownership of the lamp—and therefore of the tomb, in which case this would be one of the very few tombs to which it is possible to assign a name*; (2) a maker's inscription; or (3) a dedicatory inscription, placing this lamp under the patronage of some "Stephen the Christ-lover"—whether Stephen the deacon and proto-martyr or not. I have no recollection of seeing a lamp with an analogous inscription, in whatever sense it is to be interpreted †: it remains, so far as I am aware, unique.

Fig. 2 is also inscribed, but the letters as they stand are meaningless. It is probable, however, that this is one of the many forms which the inscription ΦΩΣ ΧΡΙΣΤΟΥ ΦΕΝ ΠΑΙΝΙ assumes as a result of unintelligent copying. The first word

* The only others are the three containing inscribed ossuaries.

† Except one (not, I believe, unique) in the possession of the Armenian Convent at Jerusalem inscribed ΘΕΟΤΟΚΟΥ.

ΦΩC has become metamorphosed into HM and the first loop of the spectacle-shaped character following. The letters of ΧΡΙCΤΟΥ (reduced to ΧΥ) have become intermingled with the letters of ΦΕΝ. The ΦΕ is recognizable at the bottom" of the lamp, surmounted by a wavy ornament that represents the mark of contraction of ΧΥ; the second loop of the spectacle character represents the Χ of the latter word; the Υ follows the ΦΕ. Then comes the Ν of ΦΕΝ, after which is ΟΟΙΘ, in which? ΟΟ represents ΠΑC (probably through intermediate forms in which the Α was ligatured to the letters on each side of it, resulting ultimately in two triangles ΠΥ), and ΙΘ can without difficulty be recognized as representing ΙΝ. The third lamp on the plate probably shews this protean inscription in its final degradation, when it has assumed the form of an *almost* symmetrical ornament. The slight deviation from symmetry is the only indication which remains in this case of the fact that the design is the ultimate result of a process of evolution.

The other lamps from the floor of the chamber call for no special remark. Some are plain and commonplace designs, but others (especially fig. 4) are handsome specimens.

The deposits in the arcosolia are shewn on Pis. cxi, cxii. The iron bracelet cxi 2, and the bronze buckle fig. 3, were all that grave *a* yielded. Grave *b* contained a sheet of glass, evidently broken from the side of a large vessel and roughly trimmed to a circular form (fig. 4). There was also a bronze disc of common form (fig. 5). The bars of lead cxii 1 also came from this tomb. Grave *c* was richer than the rest: the magnificent lamp cxi 6, two lamps like fig. 7, and the more commonplace figs. 8, 9—the latter is unusual in having an ornament on the base (a cross in two concentric circles). Besides these lamps this grave also contained two fragments of leaden ornament (figs. 10, 11)—one of them a very pretty floral device; a bent pin of bronze (fig. 12), possibly the handle of a bucket or some such moveable part of an object otherwise perished; and some fragments of a sheet of bronze having ornamental work cut out of it (fig. 12a) after the fashion of a stencil plate. PI. cxii 2, a twisted bronze bracelet, and fig. 3, a child's bronze armlet, of which there was a duplicate, also came from this grave: there were also five lamps similar to PI. cxi, fig. 5. Grave *d* contained the lamps cxi 13-16, and another, cxii 4, which resembled ex 13, differing only in the filling up of the alternate loops of the pattern. Grave *e* yielded only the lamp cxii 5: the two bird figures are interesting. Grave *f* contained two iron nails (cxii 6), an iron bracelet (fig. 7), and the lamps, fig. 8 (with a thin, wiry design in very high relief), figs. 9, 10, and the very interesting fig. 11, with its ornament of fishes—perhaps a Christian symbol: but I suspect this is really a final evolution along one line of development from the ΦΩC ΧΥ inscription, the spectacle ornament in ex 2 supplying a link. The fragment fig. 12 also came from here.

161. This is a tomb-chamber, 11' 5" x 11' 6" x 8' 6". There are nine large wide *kokim*, three in each of the inner walls. The middle *kok* in the left wall has a square head: the others have arched tops. At the inner end of the left *kok* in the back wall is a square sunk depression resembling a place prepared for an inscription, though it is no doubt meant merely to lengthen the *kok* slightly.

162. A grave sunk in the rock, unfinished : the outline measures y' 6½" x 2' 5⅛". It had only just begun to be deepened when it was abandoned.

163. A cave—long opened and rifled, full of water every winter—measuring 9' 7" X 13' 1½", with three sunk bench graves one against each of the inner walls.

164. *Plan*, Pl. lvii 1. This tomb, which was thoroughly rifled—nothing but a few bones remaining in the graves at the inner end—presents one or two peculiarities. One of the most curious is the vat, 3' 1¾" deep, at the outer end of the vestibule: this is in all probability later than the tomb, and belongs to a subsequent appropriation of the outer part of the vestibule as the pressing-floor of a winepress. Again, it is one of the few tombs closed by a rolling stone disc; but in this cave there was in addition a moveable door, the bolt-hole of which remains on the left-hand jamb. Two steps lead downward to the principal chamber, which is from 14' 1¼" to 15' 3⅛" long and 7' 9" to 9' 4¼" across. There are two large arcosolia on each side, with round-headed entrances. At the end is a smaller chamber with four sunk bench graves. The combination of arcosolia with sunk bench graves is unusual in Gezer.

It would seem that there was originally an intention to make the chamber yet more extensive, as there is some cutting in the back wall of the inner chamber that looks like the beginning of another arcosolium resembling those in the inner apartment. This, however, was evidently abandoned as soon as begun.

165. A well-squared cave, 7' x 14' 1½", containing no graves.

166. A neatly cut sqaie entrance in a vestibule 5' 6⅛" broad, leading into a small unfinished cave.

Wdret el-Jdihah

167.* *Deposits*, Pl. cxiii 1-9. A chamber 8' 5" x 10' 10" x 5' 9": the door faces north by west. There is a sunk bench grave in each of the inner walls. The rock in the back of the left-hand grave is rotten, and owing to the many fissures in it has at first sight the appearance of rude masonry.

In the centre was a collection of sixty-two lamps : one each of cxiii 1-5 ; one like cxvii 9, with a slight variation; "candlestick" lamps, varieties 1h, 2i, 3, 3a, 3k, and one like lxxii 11, with a flat rim at the top; two each of 5g, 5c, and with the ϕυακ inscription (one of them with an illegible word after ΠΑCIN); three of cxvii 14; five resembling lxxii 11, with a sharp rim on top; six of 1g, fourteen of 2, and sixteen of 2a. There were also a pair of "castagnettes" in bronze such as have already been described ; a fragment of a bronze signet ; four plain bronze bracelets, and the two figured cxiii 6, 7. Fig. 7 has a circular section with flattened ends.

* This tomb will be found on the map between nos. 216 and 217.

There were two small copper coins, one of Constantine, the other illegible. In iron were two or three shoe-nails, a fragment of a plain bracelet, and another with oval expansions in its course (cxiii 8); there was also the flat-sectioned nail cxiii 9. In grave *a* were fragments of a glass vessel—a globular bottle with hollow base and conical neck expanding upwards.

168. *Deposits*, PI. cxvi 5-8. This cave measures 15' 7" x 17' $\frac{7}{8}$ " x 8' $\frac{5}{4}$ ". The door is so lofty that it can be passed through without stooping—the only example in the entire series. There are eight steps leading down to it: it faces north north-west. The only grave is one *kok* in the back wall. The only objects found were the three lamps cxvi 5-7 (one of them outside the door, the other two in the centre of the chamber), the bronze bracelet cxvi 8, and a small glass vessel with conical body, dome-shaped shoulders, and cylindrical neck.

169. *Deposits*, PI. xcix 15. A large chamber, 3' 11" long, with two *arcosolia* in the back and one in the left wall. The door faces north-west: there were four steps at the entrance. The chamber was found full of earth; but nothing was discovered in it except half of a large circular millstone of shell breccia with a hole in the middle: the diameter is 1' $\frac{2}{4}$ ", that of the hole $\frac{2}{2}$ " : the thickness $\frac{2}{4}$ ". There was also a much corroded iron knife resembling that from 176*; a broken lamp (xcix 15); a fragment of a saucer of red glass, heavily covered with blue iridescence; and a fragment of the thick rim of another glass vessel of the common greenish colour.

170. A cave with three chambers. The first measures 21' $\frac{3}{8}$ " x 25' $\frac{3}{4}$ ", and has the unusual height of 23' $\frac{7}{8}$ ". There is a *kok* in the inner right-hand corner, about half-way up, and from the back wall run two arched recesses, each with three sunk bench graves. The second chamber, at the side, is smaller; and at the bottom the left wall is open, giving access to the third—a long low cell, 6' 6" x 10' 6", in which it is impossible to stand upright. There was a fine collection of early Arab pottery found in excavating this tomb. It is fitting to postpone the description of this to the section on pottery, as of course it represents a secondary occupation of this cave *as a dwelling*, and has nothing to do with the original interments. Of these not a trace remains.

171. A large cave, 27' $\frac{8}{8}$ " x 18' $\frac{3}{4}$ " (exclusive of a natural fissure in the left wall). It is artificially squared, and has one wide *arcosolum* in the back wall, 11' $\frac{5}{8}$ " long by 7' $\frac{6}{2}$ " broad. Empty.

172. This is a vat, 5' $\frac{8}{4}$ " x 3' 1", which may be an unfinished sunk grave, or else may belong to a winepress.

173. This tomb was unfinished: it consisted merely of a square hole, 6' $\frac{4}{8}$ " x

* The millstone and knife probably belong to a period when this cave was occupied as a dwelling.

2' $7\frac{7}{8}$ " x 5' $6\frac{1}{8}$ " deep. There is one *koh* just begun on each of two sides. The excavation contained no antiquities.

174. *Plan*, Pl. lix 3. A fine tomb, very well made. A narrow staircase in a rectangular shaft leads down to the doorway, which by two more steps gives admission to a chamber, 15' $4\frac{3}{4}$ " x 10' $7\frac{7}{8}$ " x 7' $4\frac{1}{2}$ ". There are two *arcosolia* in the left wall, two sunk bench graves in the right wall, and one in the back. The wall has been cemented. The entrance was covered by two great stones, one of which, measuring 5' $8\frac{1}{8}$ " x 3' $0\frac{5}{8}$ " x 1' 5", still remains. The tomb contained nothing.

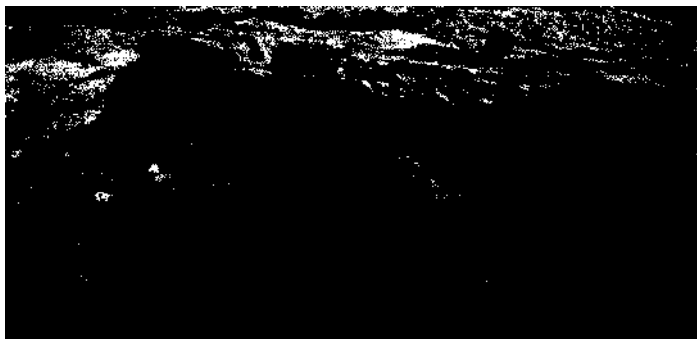


FIG. 191.—ENTRANCE TO TOMB 176

175. A sunk grave, measuring 6' 3" x 3' 3!" x 3' $3\frac{1}{2}$ ".

176. *Plan*, Pl. lviii 17; *deposits*, Pl. cxiv. This tomb is entered by a large square open vestibule: rebates round the edge of a rock indicated that a mausoleum in masonry had once stood above it. From the vestibule a door with arched head, having a projecting label moulding over it, and following its curve, leads into a chamber with eight *kokim*, four in each of the side walls. This is shewn in the photographic view, fig. 191. The floor of this chamber is curiously irregular, and has never been smoothed down: though the *kokim* are on the same horizontal level, those on the right side are 3' 3" above the floor, those on the left only 1' $6\frac{7}{8}$ ". In

the back wall are two doors, each leading into a small chamber. This is therefore one of the very few tombs in the whole series consisting of more than two chambers. The receptacles in the two back rooms are like *kokim*, but are too shallow, being only 2' 8½" long. They are probably meant for ossuaries.

The centre of the first chamber yielded a lamp of the conical boot shape, with a flat rim to the opening, and the rather late fragment cxiv 2. There were also an iron key on a ring (cxiv 4); an iron knife (cxiv 3); a bar of iron 4" in length; an ivory button or spindlewhorl with linear ornamentation (cxiv 6); a plain bronze pin with square section 5¼" long; a few green glass beads; the neck of a glass bottle;

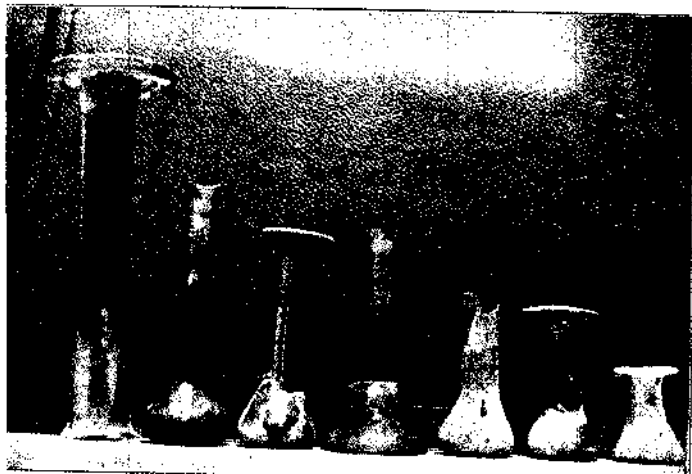


FIG. 192.—GLASS OINTMENT-VESSELS FROM TOMB 176

a polished pebble of basalt; many fragments of Arab ware with painted or relief ornamentation; the small wide-mouthed jug (cxiv 7); a circular saucer of limestone (half only), 3½" x 3" x 1¼" (cxiv 13); a saucer of pottery, 4" in diameter (fig. 8); a fragment of the head of an ivory pin (fig. 5); and a large iron nail (fig. 12).

In the left-hand room at the back were part of a flat bronze bracelet (fig. 9) and the stone box (fig. 1) with, on the two long sides, a bird with the inscription ... TAN and a ship, and on the two short sides some unrecognizable pattern. Both these objects were from the square hollow in the middle of the floor. The room on the right contained about twenty-five bottles of the commonest type, ranged along the wall; measuring from 1¼" to 6½" in height. These were all much broken:

a selection of the soundest specimens is shewn in fig. 192. There were also two delicately shaped glass handles, evidently belonging to a handsome vessel of which nothing else was found. There were two ivory pins (cxiv 10,11), one of them perforated at the upper end, slightly curved and of uniform thickness, the other pointed at the end. The section of a thick glass armband, the inner side being black, the outer orange with graining in light chrome-yellow (cxiv 15), is perhaps modern, and indicative of an Arab occupation of this tomb as a dwelling at some time—to which the many fragments of Arab pottery also bear testimony.* The deposits in this chamber further included a bronze bucket handle (cxiv 14); three nondescript iron objects (cxiv 17, 19, 20)—fig. 17 is fractured at the upper end. The jug of Roman workmanship (cxiv 18) was found in one of the *kokim*: it was much broken. The kohl-style (cxiv 16), a flat conical bead of blue enamelled paste, and a defaced coin were also found in this chamber, which further contained lamps—five resembling cxviii 2, one of type 5g, one with the $\Phi\Omega\epsilon$ $\chi\psi$ inscription, and another fragment.

177. Section, Pl. lix 7. A sunk grave, $6' 4\frac{7}{8}'' \times 2' 7\frac{1}{2}'' \times 6'$ deep, lying north-west by west and south-east by east. On each side is a tomb sunk below the level of the middle, so that the vertical cross-section is as shewn in the plate. The tomb had been rifled and contained nothing.

178. A sunk grave cut in the rock, $5' 10\frac{7}{8}'' \times 2' 1\frac{1}{4}'' \times 2' 5\frac{1}{8}''$, with a reveal for a large cover-slab. The grave lies north-east and south-west: at the former end is a small shelf for the head. Nothing was found in the grave, which had been rifled.

179. Near the tomb above described was a large irregular cave, with roughly arched doorway, evidently a natural hollow that had been roughly squared. It was probably a dwelling-place rather than a tomb: it contained no graves. It measures $16' \times 22' \times 11' 6''$ high. Nothing was found within it. The "cave" marked on the map close to the road north of this is merely a natural hollow under a projecting shelf that has not been worked in any way.

180. A square vestibule, $14' 3\frac{1}{4}''$ long by $18' 6\frac{1}{2}''$ broad. In the back wall a chamber, much broken toward the left side and modified to make a store for straw—dimensions $16' 6'' \times 26' 3''$: three *kokim* in the right wall; there were probably also *kokim* in the other inner walls which are now cut away. In the right wall of the vestibule under an arched recess an entrance to another tomb, $19' 8'' \times 18' 6\frac{1}{2}''$, with three *kokim* in the left wall but no signs of any others. Not having cleared out this cave—which was filled with the store of straw—I cannot give the height of the chamber. The edge of the rock round the vestibule is cut for receiving the foundations of a mausoleum.

181. An unfinished tomb: a well-cut square shaft, $3' 7\frac{3}{4}'' \times 2' 5\frac{1}{2}'' \times 4' 3\frac{1}{8}''$ deep.

* That the glass vessels just mentioned were not disturbed is to be explained by the fact that they had already been covered by earth when the Arab intruders took possession.

At the bottom it reaches a stratum of rotten rock, which is probably why it was not completely excavated.

182. *Plan*, Pl. lix 2; *deposits*, Pl. lxxix 39, 40. A tomb with two chambers approached by a rectangular hole in the roof, not improbably extended from a previously existing sunk grave. Just under the entrance in the right is one *kok*. The main chamber has a short arcosolium in the left wall, and in the back wall three sunk bench graves, two parallel to the wall, the third longitudinally across their ends. In front of the partition separating them from the area of the chamber is a bench. The second chamber has a small narrow sunk bench grave along the right wall. The entrance measures $8' 9\frac{1}{8}" \times 2' 3\frac{1}{2}"$ and is $5' 2"$ deep: the main chamber (exclusive of the graves) is $4' 7\frac{1}{8}" \times 9' 11"$, the second $7' \times 7' 2\frac{1}{4}"$. There were two small ornaments in gold—the only deposits in this metal found in the tombs—which are shewn in lxxix 39, 40; as well as a few plain lamps, some of variety 2 of the "candlestick" type, and others resembling ci 8; and a number of ordinary beads.

183. A vertical square sinking in the rock, $4' 1" \times 2' 7\frac{1}{2}" \times 4' 3"$, with a square hole in one side. This hole admits to a cave, $7' 6\frac{1}{2}" \times 6' 3\frac{7}{8}" \times 5' 1"$. There are no graves prepared in the cave, which contained Roman potsherds. The floor of the cave is sunk $3' 7\frac{3}{8}"$ below that of the sinking.

184. A chamber measuring $8' 4"$ square by $5' 3"$ high, with two *kokim*, one in the left, the other in the back wall. The door faces north-west. There was nothing in it but some fragments of ossuaries.

185. *Plan and deposits*, Pl. cxv. This tomb consists of three members—an open vestibule, a chamber in its south side with *kokim*, and a chamber in the east side with arcosolia. This and no. 187 are the only examples of importance in which arcosolia and *kokim* are found together at Gezer.

The vestibule measures $14' 10\frac{3}{4}" \times 11' 1\frac{7}{8}"$. The first chamber is $11' 5\frac{7}{8}" \times 11' 2\frac{1}{2}" \times 5' 3"$. There are eight *kokim*, three each in the left and back wall, and two in the right wall. These *kokim* are remarkably narrow. This chamber contained nothing but fragments of ossuaries, without any interesting feature.

The second chamber measures $9' 11\frac{5}{8}" \times 11' 5\frac{3}{8}" \times 6' 1\frac{5}{8}"$. It has two arcosolia, one in the back, the other in the right wall. In place of an arcosolium in the left wall, there is a built enclosure of masonry in front of it. There was a large collection of miscellaneous objects grouped in this tomb, some of which are shewn together in the plate. They are as follows: in the centre of the chamber three ivory pins, and fragments of three others (figs. 1-3); a beautiful but much disintegrated lamp (fig. 13); a number of small beads of common types, of carnelian, resin, and paste; a fragment of a small model jug of resin; the bottom of a glass vessel (fig. 14); and a fragment of chain mail of iron. In grave *a* was a large vessel of greenish glass, in two fragments: the drawing (fig. 5) is a restoration. In grave *b* were the remains of two pions: it contained a curious bronze object, perhaps a case for holding spatulae and pins (fig. 6). This was a square tube of bronze, one end broken

away, now $2\frac{3}{8}$ " long, made by wrapping a sheet of metal round upon itself: the cross-dimensions of the tube are respectively $\frac{5}{8}$ " and $\frac{1}{2}$ ". The surviving end of the bronze was turned down before the sheet was folded: through the collar thus formed there is a perforation on two opposite sides; in one of these a wire loop remains, to which is fastened a chain of nine links, each link consisting of two loops set at right angles and welded together. The chain ends in a hook. Besides this object there were two bronze bracelets (figs. 7, 8); a bronze disc (fig. 9), perforated; a small hollow hemisphere of bronze, probably part of a bell (fig. 10); an ivory pin (fig. 4); and a bronze spatula (fig. 15). In grave c was a iron buckle (fig. 16), and a fragment of another; a small bronze amulet in the form of a camel (fig. 12); a bronze model of a bell (fig. 17); a bronze ring (fig. 11); and a large number of beads, including one strung on an iron chain. There were also iron shoe-nails, a bronze bracelet (fig. 16), and a small but much defaced coin, apparently Roman of the fourth century.

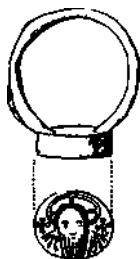


FIG. 193. -SIGNET-
RING FROM TOMB 185

But the most interesting object found in grave c was a bronze signet-ring upon which was a nimbbed male head engraved. On each side of the head are small crosses. Though rude, we may, I think, see with assurance in this engraving a very early example, perhaps the earliest in Palestine, of the bearded type of portrait of our Lord (fig. 193).

It is possible that the combination of *kokim* and *arcosolia* in this tomb is apparent rather than real, the southern chamber being the original, the eastern a later addition. In this case the older chamber would no doubt be robbed by those who made the later, which would account for its emptiness.

186. *Plan*, Pl. lviii 10. This tomb has an *arcosolium* in each wall, a sunk grave in the floor, and an altar-like bench grave, built of masonry, in the back. It seems to have been unopened, but was empty. There is a recess for a waterpot to the left of the entrance. The door was closed with a rebated slab. The chamber measures $10' 0\frac{5}{8}" \times 12' 8\frac{3}{4}" \times 6' 2"$.

187. A vestibule $10' 4\frac{1}{8}"$ long by $16' 6\frac{7}{8}"$ broad. In the back wall a chamber measuring $11' 5\frac{7}{8}" \times 12' 1\frac{5}{8}"$, having seven *kokim*—two, three, and two: in the right wall another chamber, $17' 6\frac{5}{8}" \times 10' 11\frac{7}{8}"$, with three *arcosolia*, one right of the door and one at the outer end of the two side walls; in the back wall a shelf occupying the whole length, in front of which are two sunk bench graves, side by side.

188. An unfinished tomb: a vestibule $19' 11\frac{1}{4}"$ long by 8' broad, but the chamber to which it was intended to lead was never excavated.

189. *Plan*, Pl. lviii 11; *deposits*, Pl. cxvi 1-3. This is a single chamber, $9' 10" \times 10' \times 7'$. The roof is arched. On each side of the door is a *kdk*: there are

two *kokim* (unfinished) in the back, and four (two finished and two only just begun) in the right. In one of the latter was a skull. There was a plain ossuary, one in front of each of the *kokim* beside the door, and fragments, of one or two others were scattered about. There were a Roman second brass coin, rather like a Claudius, but much worn; a bottle-shaped pendent bead of glass, and a number of miscellaneous beads; a cylinder of bronze about half an inch in length; a plain bronze thumb-ring signet with the device III upon it; also some iron nails, about 4" in length, retaining fragments of the wood around them. There were four lamps, one resembling cxviii 2 and the three cxvi 1-3. The tomb had been rifled, and as in no. 147 the spoilers had left behind them unexpected relics in the shape of two of the tokens of Hans Schultes, the "Rechenmeister" of Nuremburg. One of these had a hole bored in it to which a cloth was tied, shewing that it had been worn as a dress ornament. The entrance vestibule was curious: there was one step along the whole length of its entrance side, 1' 6⁷/₈" above the general level of the vestibule, interrupted at its right-hand end by a hole sunk 1' 2" below the general level of the vestibule—and below the step two shorter steps set at right angles to it.

190. A rough cave measuring 7' 5 ³/₄ x 6' 7". The door is in a square-cut vestibule. The cave was not cleared out.

191. A grave cut in the rock, with a sunk bench grave on each side: it lies almost due north and south. It measures 6' 2¹/₂" x 2' x 7' 4¹/₂" deep. There is no reveal round the edge, as is usual, for the reception of the cover-stones. This grave was empty.



FIG. 194.—SIGNET-RING FROM TOMB 193

192. A roughly laid out tomb with an arcosolium in each of the inner walls. The walls of the chamber are cemented, and the rock, being rotten in places, is repaired with masonry. The door faces north north-west: the chamber measures 6' 5⁷/₈" x 8' 3" x 5' 8¹/₈". The tomb was empty.

193. *Deposits*, Pl. cxvii. This was a single chamber of rather irregular plan, 8' 3" x 9' 10" x 5' 11". There is one arcosolium in the left, and two in the back wall. The door faces north north-west. In the centre were fifty lamps; two quite plain bangles; a signet-ring with a female head on it (fig. 194), possibly representing the Virgin Mary; two plain iron nails, about 2³/₈" long; a twisted coil of bronze wire with one bead remaining strung on it; two small defaced copper coins; and an iron signet.

Most of the lamps were varieties of the "candlestick" type. There were four each of 1g 2g (one of the latter of small size); three of 2; five of 2a; two of 2b and 2c; two of 3k and a variety without the two flanking lines; two each also of the "boot" type with flat rim, and of cxviii 13; and one each of 2d, 21; a variety of 3g with two vertical lines; a variety of 3 with only two branches on each side of the palm leaf; one each also of cxviii 17, of the $\Phi\omega\varsigma\ \chi\Upsilon$ type, and of the

lamps on Pl. cxvii; also one like cxviii 14, with a row of dots between the radiating lines and the reservoir hole. The small bronze pin cxvii 16 was also from this tomb.

194. *Plan*, Pl. lviii 7; *deposits*, Pis. cvi 8, cxviii 19-22. A chamber 10' 3 $\frac{1}{8}$ " x 12' x 6' 9 $\frac{7}{8}$ ": the door was closed by a rebated slab. There are five arcosolia—one left of the door, another at the left-hand end of the left wall, another in the back wall, and two in the right wall. The door faces north. Outside the door was a pottery jar (cvi 8), and in the centre of the floor a number of objects cast as worthless by the spoilers. There were thirteen lamps: one each of the "candlestick" varieties 1g, 2f, 2e, 1g, cxviii 21, 22, and one resembling cxix 15; two broken specimens of the "boot" type, and two each of 2a and ik. There were also part of the jaw and atlas of a child, a child's bronze bracelet with ends hooked together (cxviii 20); the bottom of a double glass vessel containing a little kohl; the neck of a delicate glass vessel; four beads, including one of blue glass (cxviii 19), cubical, with corners chamfered off, a small depression in the middle of the square sides. A flat ring like cxviii 9 and a small pin were also found here.

195. *Plan*, Pl. lviii 6. This tomb-chamber measures 12' 2 $\frac{1}{8}$ " x 14' 3" x 6' 7 $\frac{1}{8}$ ". There are six arcosolia, two in each of the inner walls. The door faces north-west. The tomb was empty.

196. *Deposits*, Pl. cxviii 8-18. A well-cut chamber, 6' 9 $\frac{7}{8}$ " x 6' 5" x 6', with three arcosolia. The door faces north-west: its threshold is a square block of stone built into position. The entrance is closed with a rolling stone. It had been rifled by gold-seekers, who had turned all the contents of the tomb on to the floor, with the exception of a scaraboid of white paste bearing the name of Thutmose III. This object (cxviii 3) had no doubt been picked up somewhere and adapted as an ornament by the Byzantine owners of the tomb. One end of this interesting object is injured, carrying away the cartouche which once balanced that still remaining.

The debris on the floor included beads, shoe-nails, fragments of green and blue glass, two plain discs of bronze and one perforated (cxviii 4), a fragment of a small bronze bell, a bronze earring (fig. 5), a bronze pin with a small club head (fig. 6); two bracelets of bronze—one of twisted wire (fig. 7) and one with a small knob head (fig. 8); also a ring cut out of a flat bronze disc (fig. 9). In iron there were five fragments of bracelets, one of which is represented in fig. 10, and a fragment of a signet. There were also three miniature glass jugs like cxix 9, and two small ornamental fragments of bronze.

The principal contents of the tomb, however, were lamps, of which there were thirty-five. Of these seven are shown in cxviii 12-18; the remainder belonged to the stock patterns—four of 1g, one each of 2g, 1a (with a cross instead of the candlestick), 3f, and one like cxvi 3 but without ornament. There were two of the "boot" type, one with a flat, the other with a sharp rim. There were six of variety 2, and eight of 2a, including one with the lines remarkably coarse, and another with very fine

lines. Of 4 there were one broken, and three examples with the tail device worn and indistinguishable. The inscribed lamp fig. 16 bears a conventionalized copy of the usual legend **ΦΩΣ ΧΥ ΚΟΥ ΦΕΝ ΠΑΣΙΝ** (the insertion of **κυβου** is not else where illustrated at Gezer). The ornament on fig. 15 is probably a derivation of the same inscription.

197. *Plan*, Pl. lviii 5. This tomb-chamber measured 6' x 5' $8\frac{7}{8}$ " x 5' 3". The entrance is under an arched recess at the bottom of a square shaft, 5' 3" deep, with four steep narrow steps going down to it. In the right wall was an arcosolium, with its floor straight, not sunk. In the back wall were two sunk bench graves arranged longitudinally. The tomb contained a "candlestick" lamp of type 2a; three beads (spherical, yellow paste; flattish disc with rounded edges, of black resin; flat, hog-backed, porcelain glazed blue above and white below, with two perforations in the sides). There were skulls of three persons in the tomb.

198. *Plan*, Pl. lviii 4; *deposit*, Pl. cxviii 1. This tomb measures 6' $10\frac{3}{4}$ " x 5' $9\frac{3}{4}$ " x 5' 3" high. There are two arcosolia only, one in the left, the other in the back wall: a slight shelf in the right wall shews that an intention to cut a third grave had been abandoned. It had been rifled, and nothing was left in it but a bronze anklet, ornamented with a piece of wire twisted round it (cxviii 1), and fragments of two lamps, one of the "candlestick" type, variety 2, the other resembling cxix 26, but with two parallel lines running along the spout in place of the ornament there drawn. The tomb also contained a fragment of an iron signet.

199. *Deposits*, Pl. cxix 8-24. A tomb-chamber with an arcosolium in each of the inner walls. The entrance is cut with an arched top, and contains a square door-frame, with the opening splayed outward, cut out of a single slab of stone $2' 2\frac{3}{4}" \times 2' 1\frac{5}{8}" \times 11"$, inserted in the doorway and fastened by being wedged with smaller stones: it was closed with a slab revealed all round for insertion into the opening. On the surface of the rock over this doorway is cut a rude linear representation of the seven-branched candlestick. Three steps lead down from the sill of the entrance to the floor of the chamber. The chamber measures 6' $10\frac{3}{4}$ " x 5' $9\frac{3}{4}$ " x 5' 3". The right arcosolium is repaired with masonry.

The tomb had been opened before, but a good many objects still remained unremoved. At the door were found part of a stone box (cxix 24) with an unintelligible device scratched on one of the remaining sides, and four beads—one minute sphere of jasper, one cylinder of blue glass, and two rather thick discs with rounded edges and wide holes, one of them of a black resinous paste, the other of a glossy yellow paste. There was also a minute model of a jug of black glass, with -shaped marks of yellow on the sides (cxix 9). In the centre of the tomb was a collection of lamps, thirty-three in number. Some were varieties of the "candlestick" type—three of 1g and of 5; two of 1h; one each of 5a, 2g, 1, 3, and 3k; ten of 2a; five of the "boot" type; and the five represented in Pl. cxix 14-18. There was a small irregular fragment of lead inside one of the lamps. A broken model jug resembling that already mentioned was also here, with a few beads, mostly of blue

glass, spherical, cylindrical, and cylindrical divided by rings into segments • there was one bead of yellow glass in shape a hexagonal cylinder. There were five fragments of children's bronze bracelets, and two bronze pins—one of them a coarse bar of bronze without decoration, the other (fig. 21) with a round head and square point, the latter shewing a (possibly accidental) screw twist. A pair of bronze "castagnettes" (fig. 23) and a spatula (fig. 20) and two iron bracelets, one of them a fragment (figs. 11, 12); a small fragment of an iron pin, and the head of an ivory pin (fig. 10); also a large bead of dark brown glass with two yellow lines on it (fig. 8), were all found in the centre of the tomb.

In grave *a* were twenty-six irregular spherical beads of amber, and eleven small ribbed cylindrical beads of glazed paste, much decayed; also an iron signet-ring resembling fig. 2; three fragments of iron bracelets; a bronze buckle (fig. 22); some fragments of bronze pins; a fragment of a bronze signet with no distinguishable device upon it; and an iron shoe-nail (fig. 19).

Grave *b* contained a few small beads and two very small discs of bronze, probably spangles: they resembled coins, but had no device upon them. One of the beads was strung on a fragment of bronze wire. There was also a peculiar rude prism-shaped bead of pottery with horizontal lines marked on it (fig. 13).

Grave *c* was empty.

200. *Deposits*, Pl. cxix 25. This is a long irregularly cut chamber, 7' 4" x 16' 1", and 6' 7 ⁷/₈" high. There are six arcosolia—one on each side of the door, one in each of the side walls, and two in the back wall. The door faces north and was stopped with a rebated slab.

Though unripped, the deposits in this tomb were very scanty. Grave *a* contained a bracelet of opaque black glass, ornamented with diagonal impressions on the outer surface (Plate cxix 25), and a small collection of flat circular black paste beads. In grave *c* were the bones of two people, mixed at haphazard. The other graves contained bones which, however, were perfectly rotten.

201. *Deposits*, Pis. cix 32, cxix 1-6; *wall graffito*, Pl. cxix 7. This is a single chamber with a square door facing west, closed with a large square slab of limestone fastened in position with cement. There are three arcosolia, one in each of the inner walls. The chamber measures 6' 9 ¹/₈" x 7' 5" x 6' 2" high. Under the right-hand end of grave *b* a representation of the seven-branched candlestick 2' 1 ¹/₄" long (cxix 7) is cut in the rock.

In grave *a* were some much decayed fragments of bones, and seven bronze shroud-pins with spherical head (cxix 1); also two beads, one of a black resin, the other of blue glass ornamented with dots in green and red (cxix 3, 4). In the drawing of the latter bead the green dots are hatched, the red dots blackened in. There were also a third bead, much broken, with green dots upon it; a fourth of amber; and a fifth ribbed, spherical, of green enamelled paste; a few small fragments of glass; pieces of a bronze spatula; an iron signet-ring and portions of two others; and fragments, amounting in all to about 6", of a small bronze ornamental chain. Grave *d* contained a skeleton, much decayed: the head was to the right-hand end. There

was a globular vessel of greenish glass, empty, with a flattened, slightly hollowed base, and with neck expanding at top. This was lying on its side, near the lower right ribs of the skeleton (cxix 1). Grave *c* contained a skeleton, the head to the right-hand end; mixed up with it were the bones of a child: all the bones in the tomb were much decayed and could not be examined properly. About the region of the left ribs, beside the wall of the tomb was a beautiful little glass vessel: it is of a greenish colour, globular on a disc base, with a band of blue glass surrounding the upper and lower end of the neck; the handle is of rather bluer glass than the rest of the vessel (cxxiii 2). There was also a double vessel of greenish glass, beside the head of the skeleton on the left side. This vessel is imperfect, one side being broken away. Both these vessels were lying down. There were three iron signet-rings (cxix 2) in this tomb: the device, if there had been any, was corroded away: and a bronze buckle (cix 32). In the centre of the tomb-chamber were the two glass vessels represented Pl. cxix 5, 6—one of them a cylindrical pot with moulded neck, $32' 9\frac{5}{8}"$ high; the other a graceful long vessel with two handles, the bottom of which is broken off.

202. This was a grave cut in the rock, $5' 9\frac{1}{8}"$ in length, in depth ranging from $2' 2\frac{3}{8}"$ at the head to $1' 6\frac{7}{8}"$ at the foot, $1' 10\frac{7}{8}"$ across. It was directed east by south to west by north: the head was at the former end. This grave was covered by a large stone, $8' 7\frac{7}{8}"$ long, $3' 6\frac{7}{8}"$ across, $2' 7"$ thick, which required the efforts of eight men to move it. The grave contained the meagre remains of one skeleton but no deposits. A crack under the stone on the north side was filled with plaster.

203. *Plan*, lviii 2. A tomb with two chambers. The first measures $9' 5" \times 9' 10" \times 7' 5"$. It has two sunk bench graves in the right and back walls—the latter very broad—and one in the left wall: in the door wall is an *arcosolium*. The second chamber is practically a raised recess, $4' 11\frac{3}{4}"$ high, behind the bench grave in the left wall, and is not divided by a partition from the first chamber. It has an *arcosolium* in each wall, making in all three: that in the back wall is unfinished. Except a couple of beads in the centre of the first chamber, nothing was left in this tomb.

204. A grave sunk in the rock, $4' 9\frac{1}{8}" \times 2' 3\frac{1}{2}" \times 2' 3\frac{1}{2}"$, which breaks into the above tomb.

205. *Plan*, Pl. lviii 3; *deposit*, Pl. cxviii 2. This tomb consists of two chambers. The door faces west by north. The outer chamber is $3' 11\frac{1}{4}" \times 9' 7"$. In the door wall, to the left of the entrance, there is a recess, 6" deep, perhaps for holding a water-jar, and at the left-hand corner is a *kok*. In the back wall is a cupboard $4' 3"$ deep, about the same length, beside and below which is a small recess measuring 1' 6" every way. Along the left wall is a bench, interrupted in the middle by steps leading up to the second chamber. This measures $9' 5" \times 7' 6\frac{1}{8}"$: it has three sunk bench graves—two at the sides, with a passage between them, and one along the inner wall.

At the entrance to the small cupboard in the first chamber were fragments of a ribbed cooking-pot, resembling lxxvii i, but with two handles. In the centre were six lamps—PI. cxviii 2, and three like cxvi 6; a fragment of another similar, with egg-and-tongue pattern round the reservoir; and another fragment of a bottom only, with a cross in the middle of the base. There were also a skull and some bones, the necks of two plain glass bottles, and the handsome vase of dark brown glass exxiii 3. The inner chamber contained nothing but some spherical beads of black glass. In the outer chamber was lying a rectangular stone box, 3' 2" x



FIG. 195.—ROMAN JAR FROM TOMB 206

the outside surface, the other was plain. There were five rings or bracelets in bronze, all of small size. Four of these were simply wires or bars bent to a curve, the other a flat disc 1" in diameter, but thicker on the inner than on the outer edge. A large copper Byzantine coin was also found, apparently a Justinian, perforated for suspension. In iron there were four bracelets and fragments, and two square rings, probably belonging to buckles, 2" long and $1\frac{3}{8}$ " broad. There was also a nail with a flat rectangular shaft and an expanding head, and the frag-

1' 6 $\frac{1}{8}$ " x 1' if, the internal depth 9 $\frac{1}{2}$ ", the thickness of the sides 3" to 4". This is probably an ossuary, though much larger and thicker than such receptacles usually are. The sides of the box were quite plain.

206. Plan, PI. lvii 2; deposits, PI. ci(V) 13, 14. A chamber 12' 3 $\frac{5}{8}$ " X 11' 3 $\frac{7}{8}$ " x 6' 6 $\frac{1}{4}$ "* with a round-headed doorway. Around the wall is a bench: there are two *kokim* in each of the inner walls. There was a large jar of Roman ware lying on its side on the right of the doorway inside, with its mouth toward the door (fig. 195); and there were also fragments of another similar vessel. In the corners of the space of the floor surrounded by the bench were lamps: four of the candlestick type (varieties 1g, 6k, 5), and two others (cia 13, 14). There were two broken handles of vessels, and two small bracelets, in glass—of the latter, one, 1 $\frac{1}{2}$ " in internal diameter, was ribbed on

* This is drawn a little too large on the plate.

ment of an iron punch, $3\frac{3}{8}$ " long, $\frac{3}{8}$ " broad at the top, $\frac{1}{4}$ " thick, tapering in thickness to a chisel point. There were also a number of beads, one of the suspended bottle shape, blue with yellow dots, one a long ellipsoid, with zigzag yellow lines on it, and one cube with angles chamfered off, in green glass. Some bones were found, including one skull.

207. *Plan*, PI. Iviii 1. A chamber measuring 12' $3\frac{1}{8}$ " x 13' 9" X 6' 11" There are six shallow sunk bench graves, two in front of each of the inner walls. The door faces north-east. Except for some bones of a dog in one grave, this tomb was empty.

208. *Deposits*, PI. cxix 26-29. This tomb was of the usual plan, with three arcosolia, one in each of the inner walls. It measures 6' 1' x 7' 6" x 6' 2" high. The door faces west. In the entrance was a bronze earring (cxix 28), and a blue glass bead; also a small stone weight (12'63 grammes). In the centre of the chamber were two lamps of the candlestick type, one of variety 5, the other 5/; another, similar to *la*, but with an eight-pointed star taking the place of the candlestick; and cxix 26, 27. There were also a circular disc of clunch, 2" in diameter, $\frac{3}{8}$ " thick, with a round hole in the centre $\frac{1}{4}$ " in diameter; and the small bracelet, cxix 29, consisting of a ring of bronze wire, the ends meeting and clasped together.

209. An unfinished sepulchre, the work in which had been abandoned after cutting the doorway. The latter is well made and round-headed.

210. An unfinished sunk grave.

211. A sunk grave, 6' $9\frac{1}{8}$ " x 2' 6" x 7' $6\frac{1}{8}$ "; it lies north and south. On the west side is a bench, and there are two steps descending at the south end. This tomb contained a few beads, one of them of the suspended bottle shape, in green glass, and one shroud-pin, with round club head, in bronze.

212. A small grave, full of earth: the horizontal dimensions are 5' $11\frac{5}{8}$ " x 2' $5\frac{1}{2}$ ".

213. *Deposit*, PI. xcix 13. An irregular cave, partly natural, 16' x $11' 6\frac{1}{2}"$ x $6' 7\frac{1}{8}"$. There are two *kokim* in the left wall, three in the back, and three in the right. These are very irregularly cut: they run partly into the wall (about 3' 3"), and are continued out into the chamber, being separated by dwarf walls.

In the centre of the cave was the lid of an ossuary, a plain bronze bracelet, and half of a lamp (xcix 13).

214. *Plan*, PI. Iviii 9. This was of the ordinary three-arcosolia plan, very irregularly laid out. The chamber is lined with cement, and the roof is cut into a barrel vault, its axis from door to back wall.

The entrance is closed with a rolling stone, and there is provision for cover-slabs at the level of the second step of the entrance passage. Above this level, over the

door, a cross is cut. The door faces north-west by north. The chamber measures $7' 10\frac{1}{8}" \times 6' 5\frac{1}{8}" \times 7' 3"$. Nothing was found within it. There is a lamp-bracket in the corner to the right of the door.

215. *Deposit*, Pl. cxviii 28. A grave sunk in the rock, $6' 6\frac{3}{4}"$ long, $2' 1\frac{1}{4}"$ broad, and of depth ranging from 5' to $3' 11\frac{1}{4}"$. The edge is revealed for cover-slabs. It contained nothing but the base of a glass vessel and the fragment of a glass pin, cxviii 28.



FIG. 196.—INTERIOR OF TOMB 218

216. A small rough cave, $9' \times 6' 10"$. It contains no graves.

217. A roughly cut chamber, $n' 7\frac{3}{8}" \times 11' 5\frac{3}{8}" \times 5' 3"$, with a sunk bench grave against each of the inner walls. A considerable number of small late beads of the commonest type were recovered from the debris of this tomb.

218. *Deposits*, Pl. cix 11-17. This tomb, soon after its excavation and before I measured it, was destroyed by the fellahin to make a lime-kiln. It consisted of one chamber with *kokim*, a corner of which is shewn in fig. 196. It will be seen that one of the graves is unfinished. The entrance was remarkable for the square lamp-niches cut in the wall at the side of the door (fig. 197). No such feature appeared

in any of the other tombs. There was a large number of fragments of ossuaries, two of which were inscribed. One (fig. 198) bore the curious name *Kushkosh* (כשקוש). The other, a mere fragment (fig. 199), was of especial interest as it illustrated the transition from the old Hebrew to the square script. The letters were שש, the first being square, the second and third old Hebrew. The fragment was broken off just after the) : careful search was made, but in vain, for the missing part. The other objects found in this tomb were a plain lamp (cix 66), a small disc of bronze (fig. 12), four bracelets (figs. 13, 15: the other two were similar to the latter), a bronze knife (fig. 14), and a kohl-bottle (fig. 17), in which was a small bronze pin (fig. 16).



FIG. 197. ENTRANCE TO TOMB 218

219. *Deposits*, PI. cxviii 23-27. This is a square chamber measuring 8' 6" x 6' 9 $\frac{1}{8}$ " x 4' 2": the door faces north-west by north, and was closed by a hog-backed stone (the ridge running vertically) rebated for insertion into the entrance. The chamber had the peculiarity of being perfectly plain, without graves of any kind made in it. The deposits were undisturbed, but scanty. They included a small globular vessel of yellowish glass, and four glass bottles, resembling those in fig. 192, in fragments; a pearl shell; an ivory spoon, and a handle of a similar object (cxviii, 23, 24); an iron nail; a fragment of a twisted wire bronze bracelet (fig. 25), a pendent amulet (?) of bronze (fig. 26), and a leaden buckle (fig. 27).

El-Marad

220. *Deposit*, PI. cxvii 4. This tomb consists of one chamber, $8' 0\frac{7}{8}" \times 8' 3\frac{1}{4}" \times 5' 3"$. Around the wall runs a bench. In each of the inner walls were two *kokim*. The plan is thus identical with that of tomb 206, but the work is much rougher. In the centre was a small defaced coin, about half a dozen small amber beads, the calvaria of a rather thick skull, and fragments of two glass vessels like those in fig. 192: one (of which the neck only was found) had an ornamental twist in the glass. There was also the large wide dish-cover of porous ware, cxvi 4, and a lamp resembling cxviii 2. The door faces N.W. by N.

Waret et-Taydsheh

221. A sunk grave, $6' 1\frac{5}{8}" \times 2' 2\frac{3}{8}" \times 2' 9\frac{1}{2}"$, with a low head-rest at the south end. It was covered by a large stone, $6' 9\frac{1}{2}" \times 2' 9\frac{1}{2}" \times 1' 5\frac{3}{4}"$. On one side of this stone, which is much broken, a row of triangles is faintly traced. These arc seen in the photograph, fig. 200.

222. A sunk grave, $6' 7\frac{7}{8}" \times 2' 2\frac{3}{8}" \times 1' 9\frac{5}{8}"$.

Om / t

FIGS. 198, 199.—INSCRIPTIONS ON OSSUARIES FROM TOMB ai8

Ard Saiddn

223. *Plan*, PI. lix 1; *deposits*, PI. exx 20-23. A square doorway, $2' 10\frac{5}{8}" \times 1' 11\frac{5}{8}"$, with holes for the horn of a swinging door and a bolt, admits by three steps to the floor of the chamber. This measures $10' \times 9' 4\frac{3}{4}" \times 6' 2\frac{7}{8}"$. The design is quite unique among the Gezer tombs—consisting of two arcosolia, one above the other, in each wall. All have square tops except the upper arcosolium in the back wall, which has a round top. At the back of the lower arcosolium in the back wall there is an additional sunk grave.

A few trifles only were found in this tomb: the point of an iron knife, and the socket of some iron tool or weapon; four iron bracelets and two of bronze, all six being simply of the common form already illustrated more than once—a bar of metal unornamented, bent into a loop. A fragment of the bottom of a glass bottle like fig. 191, an iron nail, buckle (exx 21), and two finger-rings, a bronze signet with a simple pattern (exx 20), and a few beads, of which the finest was exx 22, a beautiful carnelian, and the most interesting a celt-shaped bead of crystal (exx 23). This completed the inventory.

Rasm Yerdeh

224. *Deposits*, PI. cxx 2-15. A chamber cut in very soft clunch, measuring $12' 9\frac{5}{8}" \times 13' 1\frac{1}{2}" \times 8' 3\frac{1}{8}"$. There are nine *kokim*, arranged as usual 3, 3, and 3, with a bench round the three inner walls. Two large Roman water-jars resembling fig. 194 stood one in each of the left-hand angles of this bench: they were broken and cracked and could not be preserved; they contained nothing but some splinters of bone and glass. As usual the tomb had already been pillaged: besides the broken jars the thieves left nothing but some fragments of ossuaries (cxx 14, 15), four lamps

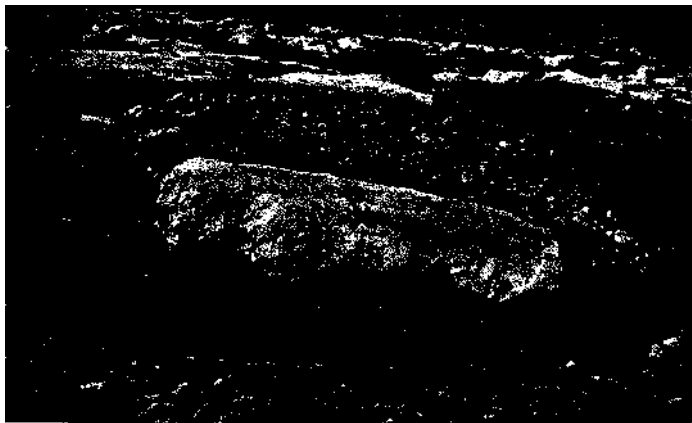


FIG. 200.—COVER-STONE OF TOMB 221

(figs. 2-5), some fragments of glass (figs. 9—11), a bronze spatula (fig. 12), a number of iron nails, and a glass bracelet. These were all on the floor of the chamber or in the earth that cumbered it: in *kok c* there were three bronze bracelets or rings (figs. 6-8), and two bronze pins of rather unusual pattern (fig. 13), as well as a splinter of blue glass, a fragment of a glass bracelet, and one iron nail.

225. *Plan*, PI. lix 16. A low irregular tomb, the outline of which can best be understood from the plan. Its maximum length is $8' 6\frac{3}{8}"$ and breadth $6' 6"$: it is but $3' 3"$ in height. The rock is soft, and it is not quite certain whether the recesses on the left-hand side are intentionally formed. At the end by a narrow

doorway the tomb opens into a *kok*, placed at right angles to the main axis of the chamber. The tomb was empty.

226. *Deposit*, Pl. cxx. A low dome-shaped cell, the floor measuring 6' 11⁷/₈" 6', the height only 2' 11¹/₂". Entrance is gained by a hole in the roof, which is at the bottom of a cylindrical depression in the rock. The tomb contained a very fine spearhead of bronze with ribs on the side, and two rivet-holes in the tang.

227. *Deposit*, Pl. cvii 20. A small single chamber, much broken and injured, cut in very soft rock, with two *kokim* in each of the inner sides. One small plain pottery saucer of Hellenistic type was all that was found within it (cvii 20).

228. *Deposits*, Pl. lxxvii 10-12, 15, 19. A chamber 10' 3⁵/₈" x 6' 10³/₄" x 6' 6³/₄" above the debris on the floor.* It contained three arcosolia disposed as usual, but that in the back wall had a masonry arch over it—the only example of the kind remaining in the Gezer cemeteries. This was afterwards totally destroyed by fellahin, who took the stones of the arch for building and did much other damage in the chamber. Some tine lamps were found in this tomb, which are represented on Pl. lxxvii.

229. A chamber measuring 7' 6¹/₂" x 7' 4¹/₂" x 5' 10⁷/₈," with three arcosolia. No deposits were found in it.

Marah Yerdeh

230. A cave with a well-made round-headed doorway giving access to it, but all fallen in, and so broken and ruined that measurements would be useless. It has had an arcosolium in the left wall and probably in the others as well. The roof has long ago collapsed. Nothing was found in it.

231. An unfinished tomb, there being merely a square entrance sunk in the rock, with steps descending, but the cave itself is not even begun.

232. A small roughly cut cell, 7' 10¹/₂" x 3' 9³/₈" by about 3' 10", partly full of mud, with a fairly well-cut round-headed doorway approached by a vestibule, in the middle of one of the long sides.

233. A chamber 8' 0¹/₂ x 5' 2' x 5' 4⁵/₈""; all round is a bench, and in the two side walls three *kokim*. In the back wall is one *kok* about 10' deep, and another to the left of it, only just begun.

234. A square hollow in the rock, apparently the beginning of an unfinished tomb.

* Accumulated after the excavation but before the measurements were taken, owing to the wilful destruction of the chamber in the time intervening.

235. *Plan and Section*, PI. lix 11. A tomb unique at Gezer for the method of closing its door. There are three arcosolia: the chamber measures 8' x 7' x 6' $1\frac{1}{2}$ ". The door, the sill of which is raised 2' $8\frac{3}{4}$ " above the floor, is closed by a stone slab 4' $11\frac{3}{8}$ " high by 3' $3\frac{3}{8}$ " broad by 7" thick, slipping in side-grooves after the fashion of a portcullis. A circular depression in the upper part of the face is no doubt for inserting some object whereby the stone was raised. The tomb had been broken into by cutting away the rock at the side, leaving the stone undisturbed. A few lamps are said to have been found in it.

236. A sunk grave, 6' $8\frac{3}{4}$ " x 2' $5\frac{1}{2}$ x 6' $0\frac{1}{8}$ ", with one cover-stone still remaining. There is a subsidiary grave on each side of the central one.

237. A chamber 6' $2\frac{7}{8}$ " x 7' $10\frac{1}{2}$ x 5' 7", with an arcosolium in each wall: that in the door wall is on the right-hand side and projects beyond the left wall of the chamber.

238. An irregular cave, probably not a tomb, much ruined: its clearance was abandoned owing to the dangerous condition of the roof.

El-Kusah

239. A sunk open vestibule, 5' x 3' $0\frac{1}{4}$ ", with two *kokim*, one in each of two of the adjacent sides. One is a long and narrow shaft, about 10' long; the other is a small cell 7' $6\frac{1}{2}$ " x 5' 1' x 3' $10\frac{3}{8}$ ".

240. A cave with a round hole in the roof, not excavated.

241. A square chamber, 5' $8\frac{7}{8}$ " x 11' $1\frac{7}{8}$ " x 4' $7\frac{1}{8}$ ", well made, with three sunk bench graves, which, however, were afterwards completely destroyed by the fellahin. The entrance doorway is circular, well turned, with the lower side flat: the diameter is 2' $5\frac{1}{2}$ ". This was closed with a rolling stone. Over the doorway is a much battered cross pattee, in a circle. There has evidently, as in the case of some other tombs described at Gczer, been a mausoleum erected over the entrance: the cuttings from the foundations remain, but of course every stone has vanished.

242. *Deposits*, PI. cvii 21-24. A chamber 6' $8\frac{3}{4}$ " x 7' $3\frac{3}{8}$ x 6' $6\frac{3}{4}$ " with three arcosolia. There was a rolling stone at the entrance. Deposited within were a considerable number of bronze rings (mere loops of wire), an iron cross (cvii 21) 2" long, a bronze ring looped into a stoop of iron (cvii 22), and two glass vessels (cvii 23, 24). There were also a few lamps, a bronze buckle and a plain bronze finger-ring, some simple beads, and fragments of glass. But the most interesting object was the pottery pyx, for reception of a crumb of Eucharistic bread. This is a circular disc of pottery $3\frac{3}{4}$ " in diameter. Around the margin is a band of chevrons in relief, united by a faint line, and there is at one point a hole for suspension. A

raised collar surrounds the middle portion, which is closed with a disc of glass, held in place by a lime composition worked round the edges exactly like modern glazier's putty (fig. 201). There was also a small silver cross resembling lxxviii 25.

243. A rudely cut chamber, measuring $11' 7\frac{3}{4}" \times 8' 0\frac{1}{2}" \times 5' 2"$, with eight *kokim*, two in each wall—there being one on each side of the entrance at a lower level.

244. A sunk grave, $6' 6\frac{1}{2}" \times 2' 2" \times 4' 5\frac{1}{8}"$, with two subsidiary graves in the sides, the edge revealed for cover-slabs.

245. A sunk surface, $11' 1\frac{7}{8}" \times 9' 6\frac{1}{4}"$, in which were found four shallow sunk graves: apparently a building was erected over it, which has disappeared; and the graves themselves have since the excavation been destroyed by fellahin.

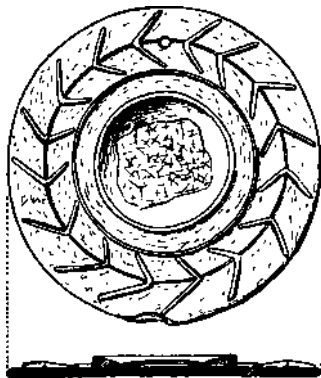


FIG. 201.—PvX OF POTTERY

arcosolia, measuring $5' 5" \times 1'$ cover-slabs.

246. A rather curious excavation, resembling on a very small scale the well-known cistern called "Sarah's Bath" at Hebron. An open passage $9' 8\frac{1}{2}"$ long and $3' 3\frac{3}{8}"$ broad leads down by six steps to a doorway that opens into a chamber $7' 10\frac{1}{4}" \times 9' 1\frac{1}{2}" \times 7' 2\frac{5}{8}"$; the staircase is continued into this chamber, as the plan shews. It is unlike a tomb, and not improbably was a small reservoir: the walls seem to have been cemented. Nothing was found in it.

247. A sunk grave, with side $6\frac{3}{8}"$. A wide reveal round the edge for

Nijmet el 'Adas

248. A chamber opening at the end of a rectangular sinking in the rock. Over the doorway is a small flat circular boss, without any trace of ornament or emblem upon it. The chamber measures $6' 10\frac{3}{4}" \times 12' 5\frac{5}{8}" \times 5' 6\frac{7}{8}"$: there are three sunk bench graves inside. The bones found in it represented two male skeletons, one of large size and past middle age, one smaller and senile. The tomb contained a rectangular disc of bronze with seven perforations in it, a few plain loop bronze finger-rings, and three lamps with crosses on the spout and radiating lines round

the reservoir. There was also a bronze finger-ring with a pendent bar of bronze hung upon it.

249. A chamber 7' $2\frac{5}{8}$ " x 12' $1\frac{5}{8}$ " by about 7' $2\frac{5}{8}$ " high, with a rectangular bay occupying the whole right wall, and another occupying the back. The former contains two, the latter four, sunk bench graves. The chamber is much ruined, but seems originally to have been well and carefully made. The angles between the side walls and roof of the bays are eased off by curves. This tomb contained the bones of (1) a large man; (2) a man of lower stature and slighter build; (3) a still smaller male; (4) a female probably about twenty years of age; (5) a child of about four years; (6) a child of about two years; (7) a badger.

250. An irregular and much broken chamber, 9' $10\frac{1}{4}$ " x 7' $2\frac{5}{8}$ " x 5' $8\frac{7}{8}$ ", with one *kok* under and to the right of the entrance, three (one unfinished) in the left wall, and one in the back. On the right side the narrow partition between this tomb and no. 249 is broken down.

251. A chamber 8' 11" x 11' $9\frac{3}{4}$ " x 7' $0\frac{5}{8}$ ". The door is a small and awkward opening in the middle of one of the long sides. There is one *kok* in the left wall, four in the back, and two in the right.

The tombs 224-251, with the exception of those whose contents have been specially noted in the foregoing pages, were not rich in antiquities. They had all been previously opened. All were of the Christian period; and the spoilers had left nothing behind but lamps, adding nothing new to the large series already illustrated, plain bracelets of bronze and iron, beads, and fragments of glass. Inspection of the odds and ends on Plates lxxviii and lxxxvi will give a sufficient idea of the general contents of these tombs.

252. *Plan and deposits*, Pis. cxxi, cxxii. One of the most remarkable peculiarities of this cave is its distance from the mound to which it certainly belongs—for no other contemporary settlement is known nearer. It is almost $1\frac{1}{3}$ mile distant from the *tell*, to the east, and is well outside the line of the boundary of Alkios. It is a cave with two entrances, the second being a (now blocked) hole in the roof. The floor, as is shewn in the section, slopes rapidly downward. About 3' of clay was in the cave when the interments were deposited. All the objects found were laid, without order or arrangement of any kind, on a pavement of large loose stones laid over the clay on the inner half of the chamber.

Just under the roof there is a shelf cut in the rock 2' $2\frac{3}{4}$ " broad. This served no function that could be discerned, nothing being found upon it. The total dimensions of the chamber (exclusive of this shelf) are, length 25' $1\frac{5}{8}$ ", breadth 16', height 9' 10". The bones were all broken, intermingled, and rotten: one fragment of a skull and part of a tibia were all that could be preserved.

This cave yielded a rich and varied assortment of deposited objects. The *bronzes* are displayed on Plate cxxi. They included a fine spearhead (fig. 1), with a short tang which we have already seen to be characteristic. There was also a knife,

rather corroded, and with the edges and point broken. The tang was evidently fitted into a wooden or horn haft, which has disappeared: its length can, however, be deduced from the bifurcation at the end of the tang, which obviously had the intention of keeping it in position. There were several pins with shank eyes, of which figs. 3, 4 represent the only perfect specimens found: it is noteworthy how low down on the shank the eye is placed. Two bracelets (fig. 5 and its duplicate) and two anklets (fig. 11 and its duplicate) probably belonged to one person: they were unfortunately disturbed before I saw them. Fig. 6 is a needle, with a split eye. Fig. 7 is one of several finger-rings consisting of a single loop of bronze wire pointed at each end. A fine bronze bowl (fig. 23) completes the series of objects in this metal.

There were a considerable number of beads, the types of which will also be found illustrated on Pl. exxi. Fig. 8 is a large spherical bead of whitish green paste. Fig. 10 is a double conical bead of a green stone resembling jade, with stamps of a punch impressed upon it (two concentric circles round a central dot). Fig. 10a represents a small spherical bead of carnelian, and a long cylindrical bead divided into segments by horizontal lines: a duplicate, broken into two, was also found. This excepted, of all the beads thus far described one specimen was found; but this is not the case of fig. 12, of which about twenty whole or imperfect specimens were recovered. It is a sphere of paste that has been enamelled green, though the colour has faded to white. Of fig. 14 seven specimens were found. It is the central part of a flat trochoid shell, perforated for stringing at the eye, and cut and polished to the square shape shewn in the drawing. The drawing shews the inner surface of the shell: the other side is a very slightly convex plane, polished smooth. The ring fig. 13 is also a whorl of a shell, cut and polished.

Pl. exxi likewise shews the scarabs contained in this cave. Fig. 15 (steatite) bears a representation of Thoth, walking, holding a sceptre: in front of him a uraeus. Fig. 16 (paste, enamelled green) has a lion, walking. Fig. 17 is of cyanus: it is a roughly executed scarab and is possibly of local manufacture; it bears a vulture and two indistinguishable objects behind it. Fig. 18 is of the same material. It is unfortunately much worn, and the material being soft and friable the device is very difficult to make out. It seems to represent a figure standing between two animals sitting back to back. In his right hand the figure holds what looks like 'nh, in his left hand another object which I cannot make out. Fig. 19 is the seal of a ring of green enamelled paste, such as was common in the time of Amenhotep IV. It bears a well-drawn representation of the wd;t eye.

Fig. 20 is a very fine scaraboid seal, a square disc of steatite inscribed on both faces and edges. The first face represents (?) a worshipper before two divinities: under it is the well-known ring of Thutmose III. On the other face is a sphinx with above it a winged disc: below it a spirited figure of an ibex suckling its young. The edges bear cartouches surrounded by many feathers: these contain the names and titles of Rarnessu III.

Fig. 21 represents a fragment of a haematite cylinder, bearing, apparently, a representation of four figures ranged about an altar. It is unfortunately too much broken to make it possible to determine the exact nature of the composition.

Fig. 22 commences the series of pottery, which is continued on Pl. cxxii. It was broken in pieces, but is a fine example of a rather rare type, also exemplified at Tell el-fesy, though by a much smaller specimen. In this the vessel consists of a flat lentoid body with more or less cylindrical neck : a handle of the characteristic flat section joins the neck with the body, the lower attachment being at or near the central point of one of the broad sides.

A considerable number of the small jugs with crooked neck was found. Pl. cxxii 1 represents one of these in which the neck is unusually straight. This vessel shews the ordinary grey slip, but does not bear the common white basket-work ornament. On the side of the vessel opposite the handle are two raised ribs running vertically. This form of ornamentation is occasionally found on vessels such as these. In fig. 3 will be found a variety which is rather uncommon, in which the curved body of the vessel gives place to one double-conical in shape, with a well-marked ridge. The handle and top of the neck are broken off. The ware is of a red colour: the surface is much disintegrated and nearly all of the slip has crumbled away. In fig. 4 another *nuance* is to be seen : the foot is much attenuated and the body of an ogee shape. The neck (which was, as usual, modelled separately and *thrust* into the body of the vessel, as also was the handle) has fallen crooked, as is generally the case ; but in this example it has fallen oblique in the plane *at right angles* to that of the handle, which is less common than a slip in the opposite direction.

Besides the examples of this type of vessel selected for illustration, there was another resembling fig. 1 in all respects save the absence of the ornamental ribs ; one like fig. 4, but with the base having slightly concave sides, so that it is of a trumpet rather than a conical shape. This example has a glossy black slip. Another (probably of local ware) with a red surface, resembling fig. 4 in shape, was found. There were also two examples of the normal shape, with "basket-work" ornamentation.

Fig. 2 represents the normal and universal one-handled jug, of light drab ware. In fig. 7 will be found an unusual variety, with a very faint concavity (which is slightly exaggerated in the drawing) surrounding the middle, and with a mouth much more firmly pinched into a spout than is usual. Fig. 12 is a miniature example of the same type in light drab ware.

Figs. 5, 6 are good examples of the larger Cypriote jugs, also characteristic of the tomb-deposits of this period. Both are decorated with white lines on a grey slip, but in one the lines are in basket-work, in the other they are vertical and arranged in groups. Besides these another fine example was found, resembling no. 6 but rather taller and narrower. It was decorated with the basket-work lines, which had, however, become very faint.

Fig. 8 represents a pyx of light brownish yellow ware. Another was found, slightly smaller, and imperfect, the neck and handles being broken off.

Fig. 9 is one of several lamps yielded by this tomb. The bowl of this specimen is unusually deep. Another, with a rather straighter spout, is shewn in fig. 16. Seven others were found all more or less similar to these two. One, a mere fragment, may have been of the earlier type, with a slightly pinched triangular spout but it was too much injured for this point to be certain.

Fig. 10 is a bowl of reddish brown ware. Other bowls are fig. 13 (light brown) and fig. 17 (ditto). Some fragments of others resembling fig. 13 were found: one of them seems to have had two button-handles (fig. 18). This is in light brownish yellow ware.

Fig. 11 is a large lentoid vessel of light brownish yellow ware.

Fig. 14 is an interesting jug. It is no doubt of local ware, and is of a common type; but it is provided with a flat-sectioned handle, evidently suggested by the similar handles of the Cypriote jugs. The ware is of a coffee-brown colour. Fig. 15 is a survival—a conical vessel on a flat disc base, with a burnished red wash. It certainly belongs to an archaeological stratum older than its associates, and may possibly have been taken from an earlier tomb-deposit.

Fig. 19 is a fragment of an upper millstone—an unusual tomb-deposit.

Besides these vessels and fragments of vessels there were also a very large number of broken sherds displaying no especial characteristic features.

The bones were all much decayed: the following notes refer to the only two that seemed worth preserving.

The fragment of calvaria belonged to a middle-aged man, and is of fairly thick bones. The head was broad, and flattish behind the parietal eminences, descending steeply from the obclion to the inion. The squama occipitis is narrow and convex downwards. From the prominence of the parietal eminence the sides drop steeply, receding a little to the large mastoid processes. This form of skull is not uncommon among Egyptians of the middle empire. Its breadth must have been about 140 mm.

Associated is a fragment of a platynecmic tibia (index 66). The size indicates a man rather below 5' 7".

253. A large wide rectangular vestibule scarped in the rock, but the excavation of the tomb itself is only just begun.

254. A small roughly cut chamber, $8' 2\frac{1}{2}" \times 8' 8\frac{3}{8}" \times 7' 2\frac{1}{4}"$, with two *kokim* in each inner wall.

§ 24.—A HISTORY OF BURIAL CUSTOMS IN PALESTINE AS INDICATED BY THE PARTICULARS IN THE FOREGOING SECTIONS

Space will not allow more than a bald statement of general principles.

(a) *Pre-Semitic Period*

The bodies are burnt and the ashes allowed to lie where they have fallen. Food-vessels are deposited with them in small numbers.

(6) First Semitic Period

The tombs are caves, in all cases adapted from one already existing. There is no prejudice against intramural interment.

The bodies are carelessly deposited on the floor. Nothing is put with them but a few small food-vessels, and occasionally beads, etc. The interments are of a most summary description.

(c) Second Semitic Period

The tombs are caves, either already existing or hewn specially. There is no prejudice against intramural interments. Caves already existing are adapted as they stand : specially hewn tombs consist of small chambers at the bottom of cylindrical shafts.

The bodies are carelessly deposited on the floor of the tomb, without coffin, generally in a crouching position (though sometimes at length), and stones are laid around, under, and over them irregularly.

Drink-offerings are always, and food-offerings generally, placed with the dead. The drink-offerings can of course be inferred from the indications furnished by the disposition of the vessels that presumably contained them. These are large jars, which are always either empty, or filled with the earth that has silted into the chamber and everything it contains. They have all pointed bottoms, and had they been for any reason deposited empty would naturally have been laid on their sides: as care has in most cases been taken to place them standing, we may assume that they were left in the tomb full of liquid. Moreover in nearly every jar so deposited a small jug is found. This can only be meant for a drinking cup, for dipping into the drink filling the heavy standing jar. The recognizable remains of food consist of cooked fragments of mutton-bones.

No religious deposits have been found, unless scarabs (which probably are to be considered as *seals*) be so reckoned. Ornaments of bronze, silver, and (rarely) gold, and beads were deposited with their owner, and the spear of the warrior was deposited with his body.

Lamps begin to be deposited in this period, but in small numbers.

(d) Third Semitic Period

Cave tombs are used, either adapted or hewn out. Shaft tombs are not used, and there is no art displayed in the design of the chamber.

Sometimes a rude pillar is left to support the roof. There is also an opening cut in the roof, possibly merely to expedite the process of quarrying: it is difficult to see what use it could be in the interment. The cave is entered by (a) a simple drop, the height of the roof being here intentionally reduced; (b) a sloping gradient down which it is easy to walk; or (c) three or four roughly cut steps (sometimes mere "toe-holds") made in the side of the chamber under the doorway. In the few cases where the doorway is cut in the wall, there is always a drop to the floor, the entrance being high up in the side of the chamber. This indeed will be found to be also the case in the subsequent periods.

The doorway was closed by a pile of large rough stones wedged into it, with earth covering all. There is no indication that moveable doors, whether of wood or of stone, were ever used.

In the majority there is but one chamber, but some contain two, and a few three. In the last-named case the three rooms are either *en suite*, or else the two inner rooms open independently from the entrance chamber.

Formal graves cut inside the chambers are rare. In some rude shelves are cut in the sides, but they are not necessarily used for the deposition of bodies. In others pits are cut in the floor, seemingly for the reception of bones from old interments: the latter are also sometimes cast into subsidiary chambers.

The bodies are, as before, deposited carelessly, with no regard to orientation in position. The food-vessels are all of smaller size and deposited in much greater numbers than before. Lamps also are common in every tomb, but there is a marked decrease in the quantity and value of ornamental objects. In tombs that have been in use a long time the dead are often found in layers, one above the other.

Religious emblems appear, but rarely.

Many of the deposited vessels are broken—a much larger proportion than in the earlier period: whether it be the manifestation of a spirit of economy, which puts off the unconscious dead with damaged goods, or from the more recondite idea of liberating the spirit of the object that it may serve the spirit of the deceased. Against the latter hypothesis is the fact that it does *not certainly* seem to be, in Palestine, a survival from earlier times, when we should expect a notion so crude to be more generally held.

(e) Fourth Semitic Period

The caves are distinctly smaller than in the previous periods. In the later caves of the period there are always shelves round the walls for the tombs.

The interments and deposits are of the same general type as in the preceding examples, from which they can be distinguished only by the character of the pottery and other datable objects.

(f) Hellenistic Period

The caves are for the first time well-cut, square chambers. Receptacles are provided for the bodies, consisting of *kokim*, i.e. shafts cut in the rock, vertical to the sides of the tomb-chamber, into which the body is run head-foremost.

The doorways are well cut, square (though sometimes underneath an arched recess), and rebated for stone covers. The cover is almost invariably a moveable flat slab, sometimes itself rebated, so that it fits the doorway as a glass stopper fits the neck of a bottle. Only in one tomb of this period was a swinging stone door found: circular rolling stones seem to be unknown in this period, though two or three examples were found belonging to the next.

The plans of Gezer tombs are invariably simple. The maximum number of chambers is three, and even this is very exceptional: the great majority consist of one room only. False doors, passages imitating *kokim*, concealed cover-slabs, and all the other ingenious devices for misleading thieves which are so conspicuous a feature of the Jerusalem tombs, are never found here.

The *Mokim* are round, or (more commonly) square-headed: triangular heads, as in the tombs at Beit Jibrin, are unknown. Moreover the Beit Jibrin *Mokim* are nearly always rebated at the entrance for closing-slabs, which is not the case at Gezer. The *kokim* in the latter district do not appear to have been closed.

Kokim, as a rule, are only adapted for one body each, though sometimes they are wide enough for two. At Gezer they are often singularly short, and can only have partially received the body, which must have projected into the chamber. In one case pairs of adjacent *kokim* are,

as it were, extended into the tomb-chamber by a prolongation of the partition between them in the form of a dwarf wall. I have never seen anything analogous elsewhere in Palestine.

In all the best executed tombs, as at Jerusalem, the *kokim* are not on the level of the floor, but of that of a bench that runs round the wall, about 1' high and 2' across.

The normal number of *kokim* in a chamber is nine, three in each wall except the door wall. There are sometimes six only, two in each wall. In one there are eight, four on each of the side walls, the back wall being occupied by two doors leading to subsidiary chambers. In one or two there are additional *kokim* in the door wall, on each side of and below the level of the entrance : occasionally there are *kokim* running diagonally from the angles of the chamber. Only one case exists with five *kokim* in one wall.

As the tombs are excavated in the sides of gently sloping hills, it follows that some device had to be adopted in order to obtain a rock-scarp high enough to contain the outer face of the doorway. This is effected in one of two ways. In the small tombs that form the majority of the series a stairway is sunk in the rock in front of the place chosen for the door, from about 5' to about 8' deep, rectangular, and containing from one to eight steps. On the level of the lowest step the doorway is cut. By filling the stairway shaft with earth the tomb can be concealed. This stairway differs from the shafts of Second Semitic tombs in being always rectangular, always provided with steps, and as a general rule shallower, longer, and narrower : the skill displayed is also much superior in the later graves.

The second method of obtaining a high rock-scarp consists in cutting a large open level court into the side of the hill, the depth of which, of course, gradually increases from front to back. This is the usual course adopted in the Jerusalem tombs, but at Gezer it is followed only in some of the largest and most costly excavations. Above this forecourt or vestibule there was erected a monumental structure resembling in general character the familiar memorials in the Kedron Valley at Jerusalem. These, it is hardly necessary to say, have long since been pilfered, stone by stone, by the fellahin. Only one was found that still preserved any of the masonry—the two foundation courses on one side. It is interesting, though tantalizing, to endeavour mentally to reconstruct these little shrines, which must have been quaint and curious structures. The data for such a

reconstruction are the fragment of masonry just alluded to, and the sinkings cut along the edge of the rock to receive the foundation stones.* These give us at least an idea of the outlines of the walls. Some conception can thus be gained of the plans of these buildings, as the study of the indents of lost brasses in mediaeval churches gives some idea of the design of the missing memorial.

There is one unique chamber in which the walls are cut back into a series of apses, from each of which *kokim* radiate.

Kokim in more than one row, as in the unusual case of the "Tombs of the Judges" at Jerusalem, are never found at Gezer. At Jerusalem there are countless examples of tomb-chambers containing both *kokim* and arcosolia, but of this there are scarcely any examples at Gezer.

Where there is more than one chamber the subsidiary apartment *may* contain *kokim*, but as a general rule it is merely a small, plain store-room designed for the reception of the ossuaries.

Lamps are the most important deposit in this period, large numbers and many varieties being found in almost every tomb.

When the body decayed the bones were collected into a box or ossuary of limestone (fig. 202), which was preserved in the tomb-chamber, and the tomb was thus vacated for a new-comer.

At a very early stage in the examination of the Gezer tombs an observation was made, which subsequent developments proved to be an absolutely invariable rule, namely, that ossuaries are *never* found in tomb-chambers that have no *kokim*, and are found in *all* unrifled chambers that display those receptacles. There is what appears to be an ossuary in tomb 205; but it happens that in this tomb there is a single *kok* which saves the rule. This rule is not of universal application in Palestine: at Jerusalem ossuaries have been found in tombs with arcosolia. It was, however, striking that if at Gezer the least scrap of an ossuary made its appearance in clearing out a tomb-chamber full of earth, it was quite safe to prophesy that *kokim* would be discovered when the wall-surface was exposed.

Only two of a large number of ossuaries could possibly have been intended for the bones of more than one person. These measured 3' 4" x 1' 2" x 1. The average measurements were, at Gezer, about 2' x 9" X 8".

* It is just to remark that my attention was first attracted to these sinkings by a remark of Dr. J. P. Peters of New York.

On the whole they are rather shallower than ossuaries from Jerusalem. Some measuring about 1 in length are so small that they must have been intended for the bones of children.

In filling the ossuaries the long bones were ranged at the bottom, and the other bones placed over them. In one a small bottle of blue glass had been placed with the bones, and an occasional worthless bronze bracelet was found, but otherwise nothing but the bones were deposited within them. In many no care seems to have been taken to arrange the bones neatly, or even to avoid breaking them. About half of the ossuaries

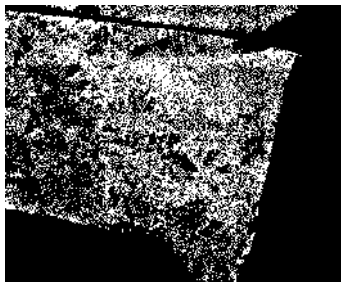


FIG. 202.—OSSUARY OF ORDINARY TYPE

found had no lids : the others had flat, hog-backed, or roof-shaped covers. Sometimes a mark was made on the end of the box, and a corresponding mark on the end of the lid, to shew how the latter should be turned when closing the box. Such a mark will be seen in fig. 203, no. 1.

The sides of the ossuaries are either plain, as fig. 202 (the majority), or ornamented with painted or incised lines. The paint used is invariably a dull brick-red, and the coloured decoration consists of very roughly drawn frets, zigzags, and other simple geometrical patterns, or else of a uniform wash over the surface of the box. The incised decoration is almost completely confined to that dullest of patterns, a sexfoil in a circle, made

by stepping round a compass with fixed radius. Even this uninspired decoration is confined to one side and one end of the case. Sometimes the foils were picked out in red: fig. 203, no. 1 is an example of this. In roof-shaped lids there is sometimes a rosette on one pediment, but otherwise the lid never displays much ornament except occasional painted lines.

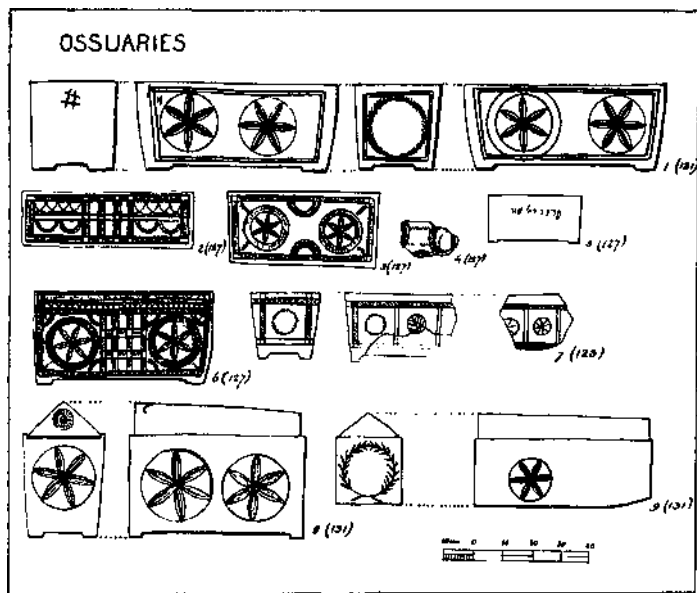


FIG. 203.—ORNAMENTATION ON OSSUARIES

Inscribed ossuaries, bearing the name of the person whose bones are placed in the tomb, were very rare. One of the inscribed boxes belonged to a child, as its small size shewed.

When filled with the bones the ossuaries were deposited either in a special ossuary chamber, or, when such a place was not provided, on the floor of the tomb-chamber. Sometimes they were piled up, to their destruction; for the stone, already soft, is ruined in the damp, and the

box is cracked and crushed even by the weight of its own lid, to say nothing of other objects placed upon it. A few lidless ossuaries were found standing on end against the wall, which offered a rough-and-ready substitute for a cover. In one or two tombs the very purpose for which ossuaries were provided was defeated by placing them in the *kokim*.

Ornaments (generally of a cheap description) are deposited with the dead. Deposits of food completely disappear: on the other hand, a fashion for depositing cosmetics begins to make its appearance.

(g) *Byzantine Period*

The caves are as a rule well and carefully cut. Receptacles are provided for the bodies consisting of *arcosolia*—shelves something resembling the berths of a steamer's cabin: of these there are several varieties.

The main distinction between Hellenistic and Byzantine tomb-chambers lies in this substitution of *arcosolia* for *kokim*. A few interments associated with Byzantine objects were found in tombs with *kokim*, but the distinction is usually so sharply maintained that in every case the Christian burials are probably secondary adaptations of Hellenistic tombs, the previous occupants having been unceremoniously cleared out.

The *arcosolia* are on the whole wider than at Jerusalem, being as a rule adapted for more than one person. The normal plan allows three graves, one in each wall except the door wall. Usually the *arcosolia* are single" benches ranged in a row round the chamber; but they are often grouped in threes around a small rectangular bay with vaulted roof running at right angles to the chamber.

At Jerusalem the Christian tombs often display a cross, but only very few of the Gezer Christian tombs bore that symbol. Two tombs had a rude linear representation of the seven-branched candlestick, and another a fish and two marks resembling Ordnance Survey bench marks, possibly meant for inverted torches. Inscriptions seem never to have been cut on the walls or doorways.

The doorway being always raised so as to be just under the roof of the chamber, there are three or four steps inside leading down from it to the floor.

In the absence of a roof entrance the Gezer tombs resemble the

contemporary tombs at Jerusalem. Those at Beit Jibrin are, however, quite different. There a square shaft, opening in the roof of the chamber, is the normal type: it is covered by long slabs, which are practically unknown at Gezer.

The body, carefully shrouded, was deposited stretched out upon the shelf. Ossuaries were not used: when the tomb was full more bodies were piled up on those below, or else one arcosolium was put aside for the reception of all the dry bones from the others. No attention was paid to orientation, and even when a head-rest was provided for the body the feet were sometimes placed leaning on it.

The deposits are as a whole similar to those in the Hellenistic tombs, but with greater variety. Glass now assumes a prominent position, though few fine specimens were found at Gezer. The best are shewn in Pl. cxxiii. Christian emblems and small copper coins are common.

NOTE ADDED IN THE PRESS

The copy of the Hebrew inscription (p. 39, fig. 9, no. 1) in *ARP* shews the third letter looped (like the *Beth* of the Old Hebrew alphabet). The oblique line completing the loop is, however, a crack in the stone, which in Plate xi, fig. 3, can be traced beyond the limits of the letter on each side.

'END OF VOL. I

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