

ORIENTAL INSTITUTE COMMUNICATIONS, NO. 9

THE ORIENTAL INSTITUTE OF
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NEW LIGHT
FROM ARMAGEDDON

*Second Provisional Report (1927-29) on the
Excavations at Megiddo in Palestine*

BY P. L. O. GUY

WITH A CHAPTER ON
AN INSCRIBED SCARABOID

BY W. E. STAPLES



THE UNIVERSITY OF CHICAGO PRESS
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Edited by

JAMES HENRY BREASTED

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GENERAL VIEW OF MEGIDDO FROM NORTHWEST

The city gate lies at the lowest point on the near edge of the tell. The rubbish heaps seen above it, from Schumacher's excavations, have now been removed. To the left is the north terrace, with the Expedition house.

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AFTER MAY 1, 1927

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Sans doute les raisons scientifiques de préférer un témoignage à un autre sont parfois très fortes. Elles ne le sont jamais assez pour l'emporter sur nos passions, nos préjugés, nos intérêts, ni pour vaincre cette légèreté d'esprit commune à tous les hommes graves. En sorte que nous présentons constamment les faits d'une manière intéressée ou frivole.

—ANATOLE FRANCE

I

INTRODUCTION

BY P. L. O. GUY

The geographical position of the Holy Land needs only the briefest mention here, for it has many times been pointed out that the country is so placed as to receive cultural influences from all sides: from Egypt, from the desert, from Iraq, from Anatolia, and, by sea, from the West.

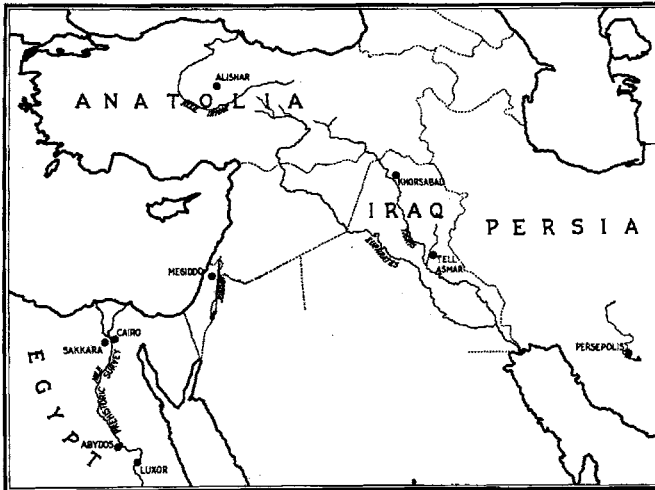


FIG. 1.—Outline map of the Near East, showing sites at which expeditions of the Oriental Institute are at work. At Abydos the Egypt Exploration Society and the Oriental Institute are co-operating in a joint project.

This will be evident from the map (Fig. 1), which has been prepared essentially to indicate the points at which expeditions of the Oriental Institute are at work upon a co-ordinated program of research.

Figure 2 represents the northern part of Palestine, in which the Plain of Esdraelon is a prominent feature. It is bounded on the west and south by the Carmel Ridge, on the north Nazareth looks down upon it from the hills of Lower Galilee, and on the east Mount Gilboa is separated from Little Hermon by the valley of Jezreel. Tabor rises in the northeast corner.

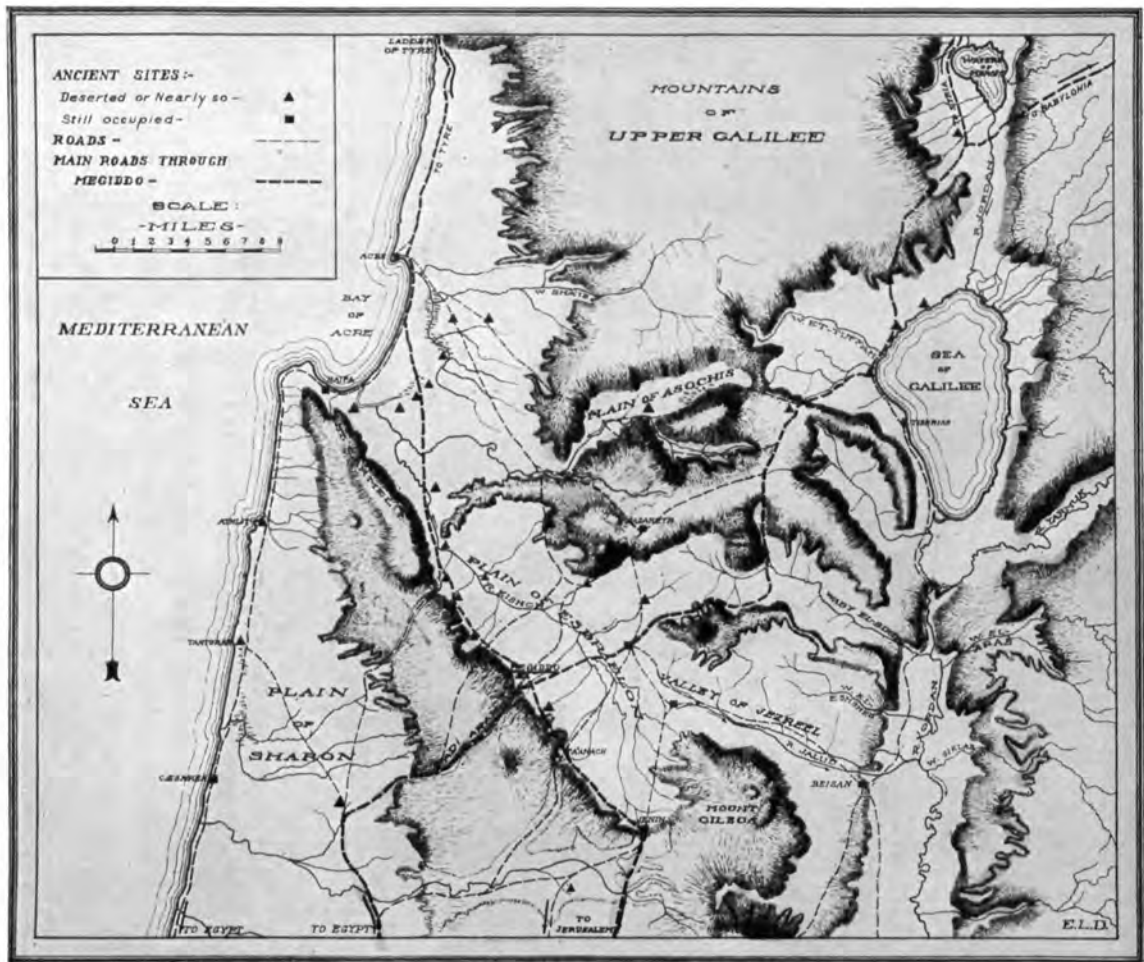


FIG. 2.—Map of the Plain of Esdraelon and its surroundings, showing communications and river systems

Most of the surrounding hills are composed of porous limestone. The rain which falls upon them is partly carried to the plain as surface drainage, but much of it soaks into the rock and emerges in perennial springs which occur all along the foothills. Such water as reaches the middle of the plain is carried toward the Mediterranean by the



FIG. 3.—Lower Paleolithic flints from the Plain of Esdraelon: left and center, from near Megiddo; right, from near Taanach. Scale, 1:3.

Kishon, a sluggish stream at the best, dry through much of its course in summer.

Traces of very early man have been found in the Esdraelon region.¹ We ourselves have collected specimens of the implements which he left behind him. The two shown at left in Figure 3 were picked up about half a mile east of Megiddo. They are typical of the Lower Paleolithic in Palestine and, if found in Europe, would be described as Acheulean. That on the right in the same figure, found near Taanach, is also Lower Paleolithic, but slightly later in date. The Megiddo

¹ See Leo Picard, "Zur Geologie der Kischon-Ebene," *Zeitschrift des Deutschen Palästina-Vereins*, LI (1928), esp. pp. 66-72, and for adjoining territory his "Zur Geologie der Bēsān-Ebene," *ibid.*, LII (1929), esp. pp. 87-90.

implements in particular are of the type usually found in open-air settlements and are to be associated with a temperate climate when man, a hunter, was able to live out of doors. As the climate became colder and wetter, at a time of intense glaciation in Europe, he betook himself to caves for shelter. Many such caves are known in Palestine, and a few have been excavated. For example, Miss Dorothy A. E. Garrod, working for the British School of Archaeology in Jerusalem, found at Mugharet el-Wad, less than nine miles from Megiddo, definite evidence of occupation right through Middle and Upper Paleolithic times to the period of transition from the Old Stone Age to the New, and even beyond it.¹

The New Stone or Neolithic age is, of course, marked by two important features: the chipping of flint implements is sometimes supplemented by polishing, and hunting first begins to be replaced by agriculture. The caves in which man had hitherto been living were, for the most part, in the rocky hill country where little grain could be grown, partly through lack of soil and partly through lack of water. These two essentials were to be found at the edge of the plain; and, when the climate became more temperate, it was to this zone that man resorted when he first became a farmer. The springs to which reference was lately made occur very frequently at the foot of the Carmel Ridge, which extends along the west and southwest sides of Esdraelon; and at almost every important one there lies an ancient mound. Jenin, Taanach, Megiddo; Abu Shusheh, 'Ain Abu Zereik, Keimun—at each of these there is a tell beside a spring (Fig. 2).

At Megiddo, at least, we know that man's occupation goes back to the Neolithic age; for polished flints characteristic of that age have been found in the lowest stratum and upon the slopes below the tell. It is probable that the same is true at other sites also. What is certainly to be remarked is that practically all of these ancient towns are now deserted, and I have tried to find a reasonable explanation of this fact.

Irrigation, commonly used both in Egypt and in Mesopotamia from time immemorial, was probably learned at an early date in Palestine and practiced at the settlements on Esdraelon. Below all the Esdraelon springs there is flattish ground which lends itself to this method of

¹ Palestine Exploration Fund, *Quarterly Statement*, 1929, pp. 220–22, and *Man*, Vol. XXX (1930), No. 63.

cultivation. So long as the water from the springs was used for irrigation, this flattish ground would remain comparatively dry; but as soon as the canals were neglected—because of war, for example—swamps would form at the very gates of the towns, and, if infected *Anopheles* mosquitoes were present, malaria would quickly cause the population to die out or to depart. We know that Megiddo was deserted about the middle of the fourth century B.C., and this is quite a probable date for the desertion of a number of other sites.

Now Mr. W. H. S. Jones, in his admirable little book on malaria, has shown what a devastating effect this disease had upon the culture of Greece; and it is to be remarked that he has been able to demonstrate with considerable certainty that this effect began to make itself felt toward the end of the fifth century B.C.¹ He recalls also the statement by Herodotus that, at the same time, the marsh-dwellers of Egypt were so afflicted by gnats which bit at night that every man wrapped himself up in the nets with which he fished during the day.² Is it not possible that it was about this time that malaria became prevalent throughout the Near East, not sparing Palestine, and that it was then that many cities fell upon evil days? Carriers of the disease would not be lacking; and it may be more than a coincidence that in the fourth century the Persians, who were in frequent contact with both Greeks and Egyptians, were moving up and down that country and Phoenicia.

At all events, whatever the date of their desertion, all the tells around Esdraelon, with the exception of Jenin, are practically deserted now; and I cannot help connecting this fact, to some extent at least, with malaria. The exception tends toward the proving of the rule, for at Jenin an elaborate irrigation system is maintained. Furthermore, the name of that town, going back as it does to the days of the Hebrew Kingdom, clearly shows that it has been a place of gardens, and presumably of irrigation, for the best part of three thousand years.

Elsewhere on the plain conditions have been most favorable to the breeding of mosquitoes; but the state of affairs has been greatly improved during the last few years, thanks to the energetic measures

¹ *Malaria: a Neglected Factor in the History of Greece and Rome* (Cambridge: Bowes & Bowes, 1920), *passim*.

² *Ibid.*, p. 38.

taken by the government Department of Public Health and by the new Jewish colonies. Almost all of the latter, however, lie in the northern and eastern parts of the plain. When the Oriental Institute Expedition started excavation at Megiddo, fever was rampant there, and all its members fell victims to the disease. Dr. Fisher began the fight against it, and my colleagues and I have continued this fight upon a broader front, until we now control the water over quite a large area. The result of this, and of careful screening, has been that none of us has gone down with malaria since 1927. We work under the advice of the Department of Public Health; and, thanks to the measures that have been taken, we can say that no *Anopheles* mosquitoes now breed in the area which we control.

We use paris green or oil in some places; but in the main we rely on keeping the water channels and their banks free from weeds, and on irrigation by means of two-way ditches, which we encourage among the *fellahin*. These ditches are kept dry for half a week in turn, in order that any larvae in them may die. There can be no doubt that if similar measures were taken at all the springs, and irrigation were more widely employed, not only would malaria be greatly lessened but the production of vegetables would be usefully increased. There is plenty of room for more of these on the growing market of Haifa; and they are taken thither daily by motor lorry, now that the road is being improved.

This road, which follows the line of tells along the southwest side of Esdraelon, marks a very ancient natural route along a strip of land which just avoids the difficulties of the hill country on the one hand and the streamlets and swamps of the plain on the other. It forms the best connection between the hills of Ephraim and Judea in the south, the coastal plain of Acre, and the Phoenician cities of Tyre, Sidon, and Beirut in the north (Fig. 2). It is a very old road, and has never ceased to be important. The Romans knew its military value, and the remains of their causeway along it (and of at least one bridge) can still be traced. Its military or police value has in no way diminished today, and it ought to form an important link in the country's system of public security. Its commercial importance too is once more becoming evident, because it very appreciably shortens the distance between Jerusalem and the new harbor at Haifa. I am glad to be able

to say that, under the present administration, its reconstruction has been undertaken; and although progress is lamentably slow I trust that, before many years have passed, it may once more be possible to travel direct from the capital to Haifa without making the long, hilly, and unnatural detour by Nazareth which is now obligatory.

Halfway along the southwest side of Esdraelon lies the northern end of the Wadi Arah, which cuts across the Carmel Ridge. This pass, likewise on a natural line of communication, carries another most



FIG. 4.—View from the northern end of the Wadi Arah (see Fig. 2), looking NE. over Lejjun village to the mound of Megiddo. The Plain of Esdraelon lies behind and to the right of the mound with the Nazareth hills in the distance.

ancient road even more important than that to which reference has just been made. It is not merely the road from the Plain of Sharon to the Plain of Esdraelon, nor from Jaffa to Damascus: it is the great highway between Egypt and Mesopotamia—between Africa and Asia. It is, I venture to say, the oldest intercontinental road in the world.

Travelers of all sorts have passed along it from time immemorial: Stone-Age man in his hunting days, and when he first came down from his hill caves to till the soil of the plain; Egyptians and Assyrians; Canaanites and Israelites; Persians and Greeks and Romans; Saracens and Crusaders; Turks and British—all have gone this way. And at the northern end of the pass, guarding the point where this great road

crosses the other, stands the mound of Megiddo—Har Mageddon, the Hill of Battles (Fig. 4).

It was not by chance that two great generals, Thutmose III in 1479 B.C. and, thirty-four centuries after him, Allenby, acquired renown under the walls of this fortress. Both pushed their troops through the pass to victory on the plain beyond; both knew that he who would guard Egypt must first hold Megiddo.

II

EXCAVATIONS AT MEGIDDO

(Spring, 1927—Autumn, 1929)

By P. L. O. GUY

A summary of the factors which combined to result in the dispatch of the Expedition to Tell el-Mutesellim, and a preliminary report on the discoveries made there by Fisher during 1925 and 1926, will be found in "Oriental Institute Communications," No. 4.¹ On April 19, 1927, when it had become impossible for Fisher to continue the work that he had begun some eighteen months before, and he had gone to recuperate at Ramallah, Professor Breasted invited me to take charge of the excavations. I was happy to have the opportunity of returning to research; so I withdrew my candidature for the directorship of the Department of Antiquities in Palestine, then vacant, accepted his invitation, and reached the site on the evening of April 30.

The four months that followed were somewhat strenuous, for it was only at the end of August that Richmond arrived to take charge of the Department, and during the interval I had to be responsible both for it and for the dig. This involved spending three days a week in Jerusalem and three at Megiddo, with the two remaining half-days occupied in traveling between the two.

One of the first things that Fisher had done was to have made a contoured plan of the site, which was marked off into 25-meter squares, each indicated by a letter and a number. This plan may be seen in Figure 11 of *OIC*, No. 4; it is given again, with later additions, in Figure 14 of the present number. In the course of 1925 and 1926 Fisher had distinguished four superposed strata, which he had numbered I, II, Sub-II, and III. Figure 5 shows the extent of his excavations and the stratum chiefly visible in each square on the summit of the tell, as well as the area cleared on the east slope for dumping on, and the ground covered by the dump itself, at the date of my taking over.

¹ Clarence S. Fisher, *The Excavation of Armageddon* (Chicago: University of Chicago Press, 1929).

As the excavated dumping-space was then filling up rather rapidly, I decided to enlarge it before doing any more digging on the tell itself. I therefore set out an additional area southwest of the existing dump and started work there. The results, while interesting, need not detain

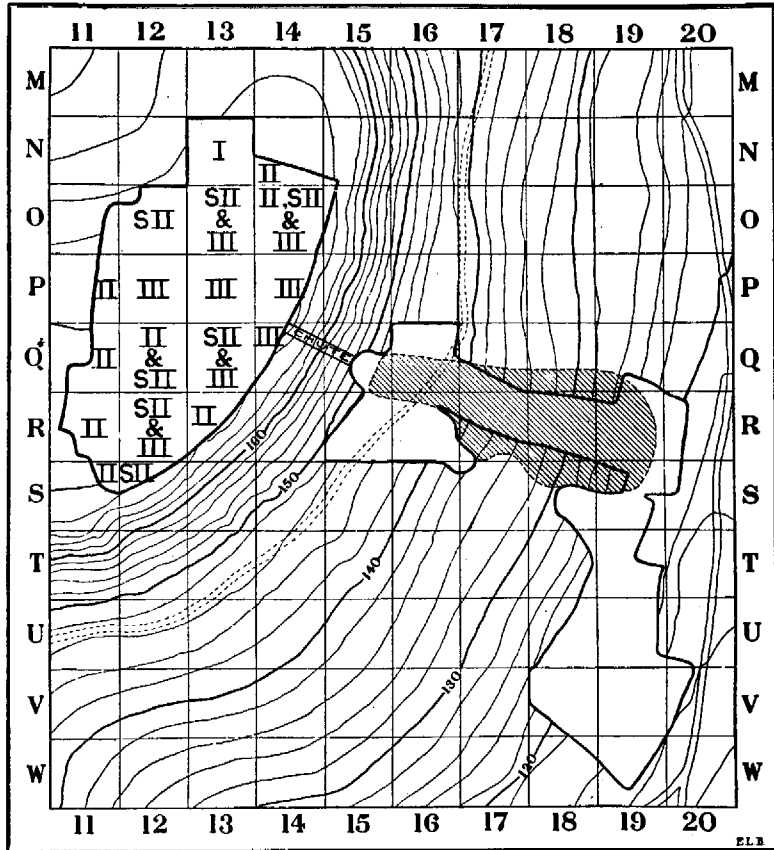


FIG. 5.—Contoured plan of the SE. corner of Megiddo (cf. Fig. 14), showing the chief strata exposed in each square on the summit of the tell; the area cleared for dumping on the east slope; and, shaded, the area covered by the rubbish dump on May 1, 1927. Squares, 25 meters; contour interval, 2 meters.

us for long. Fisher has given a summary of his finds in contiguous areas; mine were very similar to his, and both will be fully published in the series known as "Oriental Institute Publications."

The chief feature of the slopes below the tell is, of course, that,

owing to the washing-down of débris from higher up; the stratification is rarely reliable. Intrusion and disturbance are the rule, even in tombs and caves, though some good datable groups were discovered. These showed that the occupation of the site went back well into the third millennium B.C. at the least.

Altogether, in the new area, we added in 1927 forty-one tombs to the sixty previously excavated. They were of dates varying between the Early Bronze and Early Iron Ages, and below some later houses in square S 15 there was in particular a group of burials characteristic of the Middle Bronze. These were, for the most part, of women and children; and one is tempted to suspect an epidemic at the time of their interment.

Tomb 247 (Fig. 6) is the jar burial of an infant, of a type made familiar by similar finds elsewhere in Palestine and frequently described as a "child sacrifice."¹ While cases of such burials being sacrifices are not unknown, I doubt very much whether they all were. I am strongly inclined to think that they occur in houses often for no other reason than that parents in those days, as now, loved their children and when they died in infancy liked still to keep them in the family circle even after death; their point of view being not always that so readily attributed to them by some biblical scholars, but rather the more kindly one of the little girl in Wordsworth's "We Are Seven."

A second and similar jar burial of an infant occurred only a few paces from Tomb 247; while very definite and even touching evidence as to the family affection just mentioned was given by Tomb 251, no farther away (Fig. 7). Here a mother is buried with her two children. She is lying in a contracted position on her left side, with her head pointing northwest. In her arms is her youngest child, an infant, and by her feet is another, scarcely much more. A quantity of knuckle-bones—playthings then as now—a gold ear- or nose-ring, a bronze pin or needle, and a flake of flint had been buried with them; and mourners had brought the usual vessels of food and drink to serve them on their long journey. One friend, arriving apparently after the grave had been covered, and too late to place his offering within it, had left his jug just outside. The pottery is shown in Figure 8: good,

¹ This burial is illustrated in Figure 28 of *OIC*, No. 4, where it is described as "jar burial of an infant in Tomb 37."

well-made types characteristic of the Middle Bronze Age at the time of the Hyksos.

A few meters southeast of this burial there was a small group of shallow pit graves, dug about a meter into the soft rock, and also



FIG. 6.—Tomb 247 in square S 15. Jar burial of an infant

belonging to the Middle Bronze Age. A typical example (Tomb 234), with pottery *in situ*, may be seen in Figure 9. The basalt offering-bowl set in the edge of the rock beside it, and accessible after the grave had been filled in, is particularly to be remarked. No. 235 had a similar bowl set in the same relative position. At first it seemed, because of this bowl, that it was going to be a pit grave like the rest, but with the

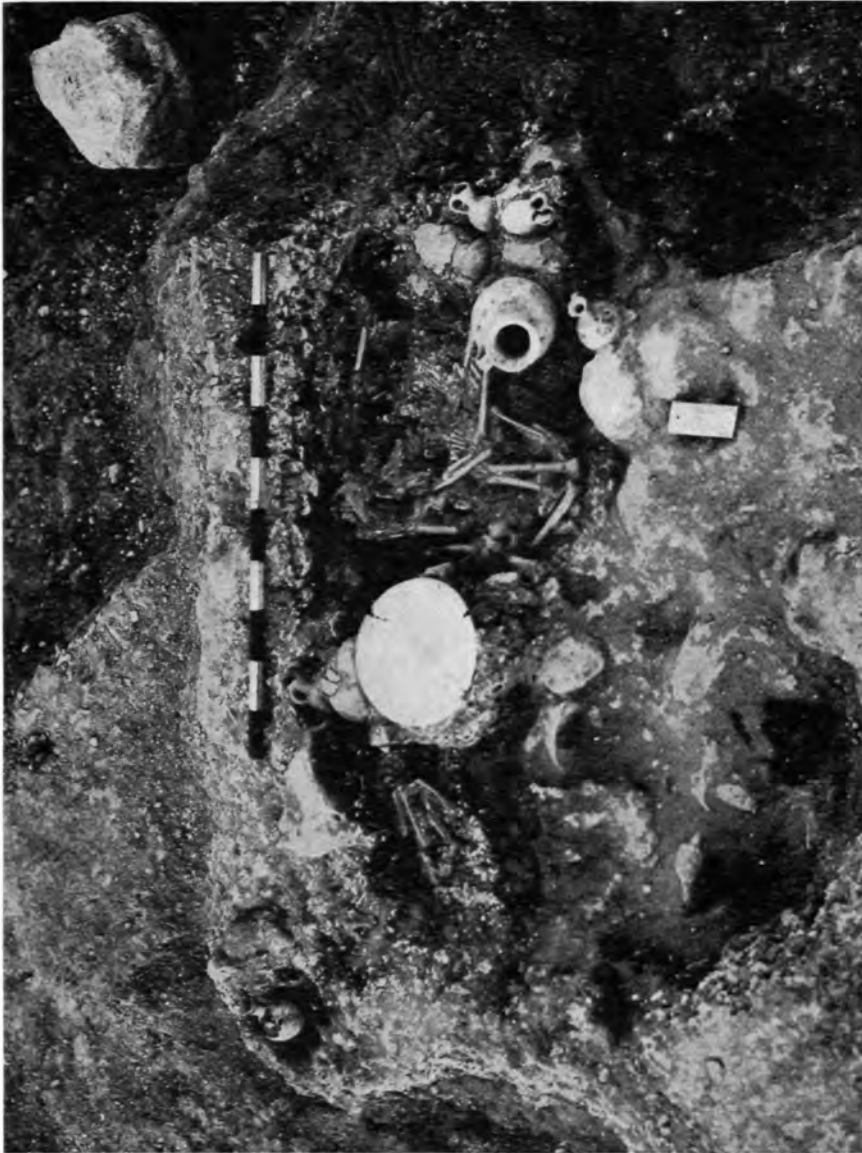


FIG. 7.—Tomb 251 in square S 15. A mother, buried with her two children

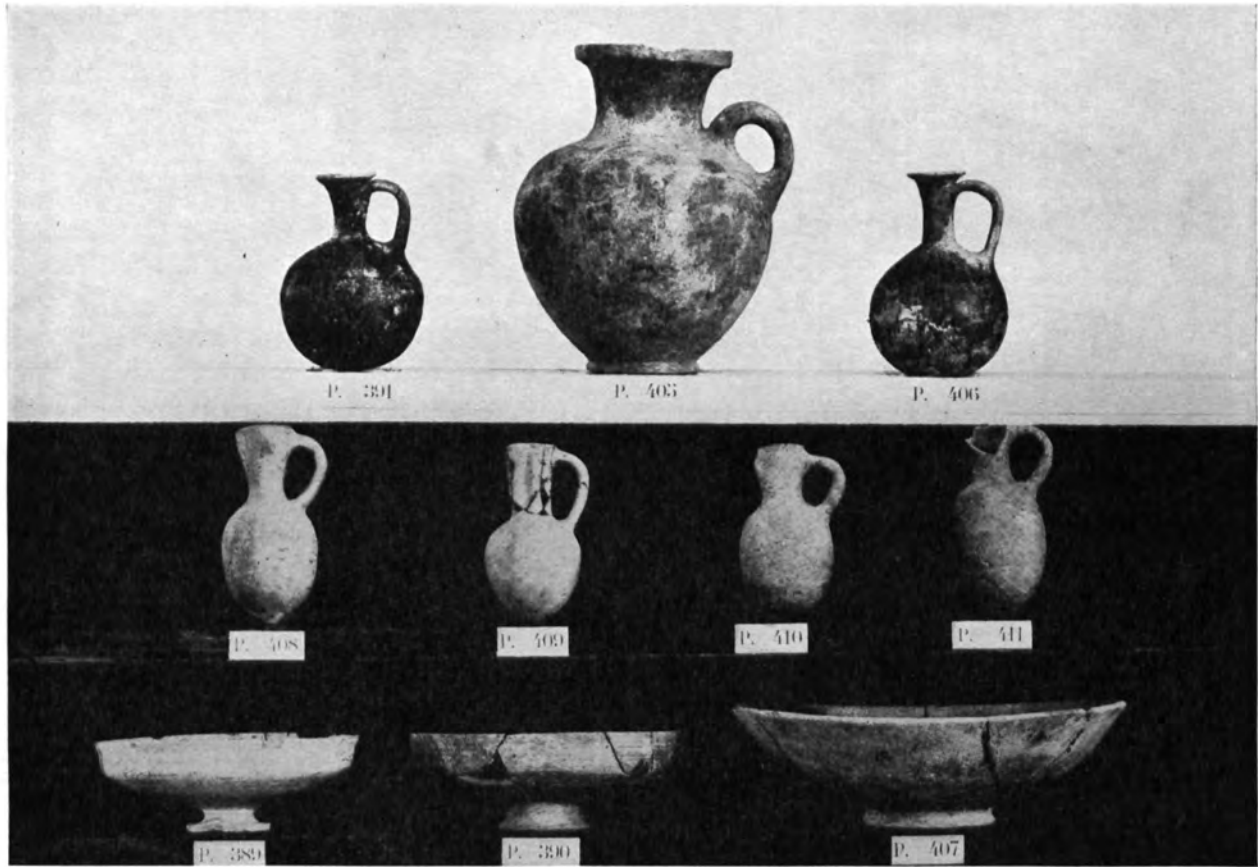


FIG. 8.—Pottery of Middle Bronze Age from Tomb 251 in square S 15. Scale, 1:5

addition of cover slabs which had been absent in the others. When, however, these slabs had been removed, there was found below them only 5 centimeters of earth, for bedding them in, and below that again solid rock. It was thus not a tomb, but an offering-place connected with tombs. That it was a cenotaph, which is the only possible alternative, is most unlikely.



FIG. 9.—Tomb 234 in foreground, with offering-place of stone slabs (No. 235) near farther end of meter stick. Note the basalt offering-bowls in the same relative position in both cases.

Only one other feature of the east slope need be mentioned here before passing to the summit of the tell proper; it is wall No. 222 (*K* in Figs. 10 and 14). Such evidence as has so far come to light points to the earlier, though not quite the earliest, part of the Iron Age as its date, and I am disposed to place it in the tenth century B.C. There is more of it underground, and more precise dating should be possible after further excavation. It is apparently the foundation of an outer



FIG. 10.—Part of the area on the east slope excavated to bed rock in 1927, looking SW. Wall *K* (cf. Fig. 14) runs diagonally across the photograph. The tell is on the right, just out of sight. In the left middle distance can be seen the road to Egypt.

city wall built when the city was at its largest, and its builder seems to have been laying out the town afresh.

Some 30 meters within this wall the ground rises abruptly in a bank outside of which no buildings remain, but in which the broken walls of earlier houses were found projecting as though they had once continued, but had been destroyed along this line. Between the bank and the wall was a clear space which produced no structures whatever. Underneath and outside the wall itself, débris had been thrown down to fill up the irregularities in the rock, and it was easy to distinguish the upward run and downward tilt so characteristic of earth tipped from baskets. The space outside the wall was also clear of buildings, and close against the outer face were some remains of a plaster pavement. Thus, inside the wall there was a clear zone for the movement of defenders; and outside, a second such zone to give a field of fire, and of view, free from holes in which attackers could take cover.

While the clearing of the new dumping-space on the east slope had been going on, new metal chutes had been installed to carry the débris to it from the summit of the tell. These chutes are illustrated in Figure 11, that on the left being for stones and that on the right, beside the older wooden chute which it replaced, for earth. That these chutes have greatly speeded up the work, and have paid for themselves over and over again, will readily be understood by reference to Figure 12, which shows how the dump had grown by July 8, 1929.

The installation of the chutes and the completion of the new dumping-area made digging possible on the summit. In preparation for this, I had, at such moments as could be taken from other work actually in hand, been trying to get to know the ruins there exposed.

Archeological excavation requires caution at all times. This was most particularly necessary when I came to continue the digging on the summit; for there I found, already excavated, a large area in which the remains of strata belonging to four different periods were visible (Fig. 5). Directly to attack this area, with which I was quite unfamiliar, and upon which I had no field notes, might have involved mistakes. So I resolved to break fresh ground elsewhere, in order there to familiarize myself at first hand with the characteristics of the later remains, and then from this fresh ground to work back so as to tie up with the ruins already visible in the old area. To the north of the

latter there still remained available, within the boundary of our lease, untouched land amounting to some 4,000 square meters. From the

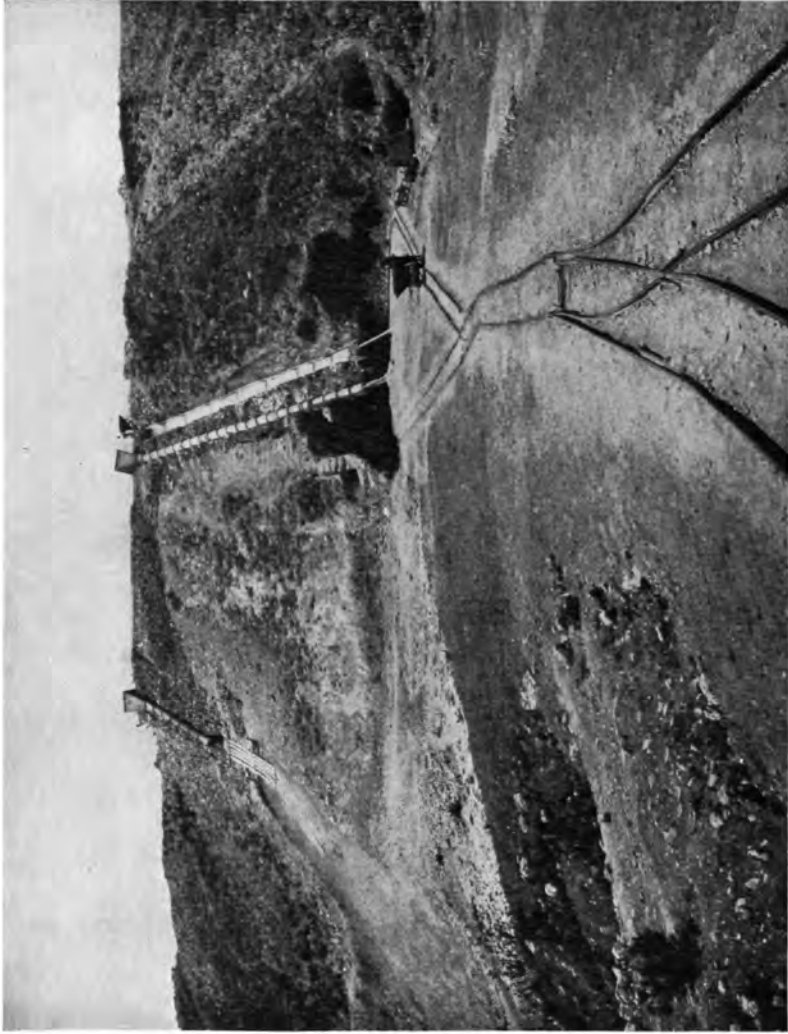


FIG. 11.—The chutes, looking WSW, from the rubbish dump. That on the left is for stones; that on the right, for earth. Close to the latter is the old wooden chute, now disused. Cf. *OIC*, No. 4, Fig. 37.

whole of this I began to move the surface soil; but a larger scheme was already germinating in my mind.

Excavation in the new area made one thing evident at once: that not all the strata of the tell were represented everywhere upon it.

Stratum I, which ceased to be occupied about the middle of the fourth century B.C., shows Greek influence; but practically no buildings be-



FIG. 12.—The rubbish dump, looking E. from between the tops of the chutes on July 8, 1929. Cf. *OIC*, No. 4, Fig. 36.

longing to it occurred in the new area, though a little pottery did. Stratum II had left some traces, and Stratum Sub-II was fairly well represented. These two strata fill the gap between I and III; but they are much interwoven, with numerous reconstructions, and occur often

so close to the surface that they have frequently been disturbed by plowing and stone-looting. For the time being, therefore, I do not attempt to date them more closely or to say more about them until more evidence is available. All I shall mention at present is that, after planning and recording, we proceeded to remove their remains in the new area, as well as in an additional couple of thousand square meters of the old area farther south, and reached Stratum III.

Here we are on rather more certain ground, and can say with a good deal of assurance that it belongs to the latter part of the Hebrew Kingdom. But though III was of interest and gave a clearer plan, it proved to be itself a reconstruction on the remains of IV, which preceded it by only a short interval of time when some at least of the earlier buildings suffered by fire. And this Stratum IV looked so promising, as I began to disentangle III from it in the area where we were working, that I decided to lay it bare in the whole of that area.

Quite unexpected types of building came to light; fortifications and other solid structures, some of which had persisted through later periods, were shown to have originally formed an integral part of it; and evidence was forthcoming which permitted a highly probable estimate of its date. Moreover, that portion of it which we then uncovered was so evidently part of a city laid out at one time as a whole, on a regular plan, that by 1928 I felt entirely justified in asking Professor Breasted if it would not be possible to put into execution the larger scheme which I have mentioned. This was the permanent acquisition of the whole tell, and the excavation over its entire area—some 53,000 square meters, or about thirteen acres—of each successive stratum of ruins as a complete whole.

I am happy to say that this scheme has been approved. Expropriation has been put in force by the Department of Lands to the extent that we have full entry to the ground; the purchase money is ready in the bank; and it is now only a matter of the completion of certain formalities by the Department for the site of Armageddon to become, thanks to Mr. John D. Rockefeller, Jr., the property of the Palestine government.

Already we have removed a layer of surface soil—very deep in places, though shallow in others—from the whole thirteen acres of the tell's summit, and ruins are visible over most of this area. It will thus

be readily understood that, with the certain prospect of getting the complete evidence about them before very long, it is better to abstain for the present from making any very definite statement about the later strata. It will also be plain that it is undoubtedly the best course not only to excavate each stratum as a whole, but to publish as a whole the results obtained from it, and that even Stratum I must wait until it has been entirely cleared before it can be fully dealt with in print.

My colleagues and I are pushing on with the excavation as fast as we can, but we are controlled by an axiom of mine that "the rate at which archeological excavation can properly be carried out is inevitably determined by the ability of the recording staff to keep abreast of the material discovered."

We have lately added air photography to our means of recording. By suspending a camera from a balloon about 3 meters in diameter, we are enabled to get vertical pictures at different ranges. At the time of writing we are still in the experimental stage, with a certain amount to do in the way of deciding upon suitable heights and scales, as well as upon the means for accurately arriving at these; but we have already obtained results which show clearly the great possibilities of this method. In particular, it is of value in disentangling remains of strata which, from the ground, look very much alike; and the quick determination which will result from a comparison of an air photograph with actual ruins will be most helpful in speeding up accurate work.

Figure 13 is the first of our air photographs, taken on November 5, 1929. It covers an area of about 8,500 square meters, and shows the first ruins to be laid bare by the removal of the surface soil at the northwest corner of the tell. Across the top, which is a little west of south, runs an old trench of Schumacher's, and in the right-hand bottom corner the side of the tell can be seen sloping sharply down to the plain. The pegs which mark the corners of the 25-meter squares have been joined up by a grid, and each square bears its distinguishing letter and number, placed where these will least interfere with the archeological features. Nothing but surface earth has been removed (the amount of this varied between almost nothing in some places and $1\frac{1}{2}$ meters in others), yet buildings belonging to several periods are to be seen.



FIG. 13.—Air photograph of the NW. corner of the tell after removing surface soil

Cut by the line between squares L 6 and M 6, there is a circular cesspit which is connected with the house just south of it by a well-made drain. Elsewhere, in buildings of a like age, we have found other drains. Indeed, at this period drainage at Megiddo received quite remarkable attention.

The large building in squares M 6, M 7, and N 6, only part of which is on the photograph, consists of a complex of chambers round a courtyard which can just be seen. This building clearly shows two periods of construction, in the second of which some of the earlier walls were re-used as they were and others were modified, while certain entirely new ones were built. Fragments of a pavement belonging to the later building-period are still *in situ* some 50 centimeters above that of the earlier. When these later fragments come to be removed, we may hope by a careful examination of such objects or pottery as may be found between them and the original floor to arrive at a more definite knowledge of their respective dates than can now be obtained. My present conjecture is that they belong to II and Sub-II.

A feature of the walls of this building, and indeed of most of the walls visible in Figure 13, is that their tops, as we have found them, have a finished appearance, as though they had never stood higher in masonry. I believe that all we find are foundations, and that the upper parts were composed of unbaked mud brick. In support of this I may mention the fact that, although we rarely find even fragments of such bricks, in spite of searching carefully for them, we find very little stone in the general débris. This débris, and there is much of it in places, is just earth; and that is what mud brick reverts to after being rained upon and plowed up and cultivated for a couple of thousand years and more.

Almost all the ruins to the west of the building referred to above (with the certain exception of the house with the drain in square M 6) belong to an earlier period, and apparently represent the poorer quarter of the city during III and IV. Along the edge of the tell, and clearly visible for some distance, are the remains of a great city wall about four meters thick, which belongs to IV. It probably persisted through III, but I am of the opinion that it was not thereafter kept in repair; for later drains run over the existing remains at several points, and some later house walls, now partly destroyed, seem to have ex-

tended onto it in places. We have traced this wall (*J* in Fig. 14) through a length of some 600 meters, and there is no doubt that it completely encircled the city on the tell. It is a remarkable piece of fortification, and forms an enduring tribute to the might of its constructor.

Its lower part was of stone, with dressing and bonding similar in places to examples found at Gezer¹ and exactly like what has been discovered elsewhere in our Stratum IV; and its upper part was no doubt of mud brick. Its thickness is less than that of some walls known in Palestine; but at Megiddo greater strength was hardly necessary, for it crowned the steep and high slope of the tell itself. The distance which attackers would have had to climb from the plain to the base of that part of the wall which is included in Figure 17 is well over 30 meters, and a wall of this thickness would have constituted a formidable obstacle to the reduced numbers who could survive such a climb under fire from the summit.

Moreover, there seems to have been, in places at least, an outer wall as well. It will be recalled that the tenth century B.C. was suggested as the date for the wall which was found while the new dumping-space was being excavated on the east slope. This is the same date which I attribute to the city wall on the tell. Figure 14 shows the lower wall (*K*) in solid black where it was actually exposed. Masonry visible on the surface, taken together with the general lie of the land, indicates that it more or less followed the dotted line (also *K*) so as to include the lower terrace (*B*) on which the Expedition house now stands and to carry the fortifications near to the spring (*C*) which supplied the city with water. The actual junction with the city wall *J* is doubtful, and it is possible that the wall *K* completely encircled the mound; but this can be proved by further excavation only. It is, however, extremely probable that the wall *K* formed part of a general scheme of defense, conceived and executed as a whole, in which the wall *J* was the principal feature.

The slope of the ground makes it clear that a road (*L*) led up in a curve from the plain to the city gate (*G*) in wall *J*. This gate we have excavated, though not yet completely. About a meter below a late

¹ R. A. S. Macalister, *The Excavation of Gezer* (London: Murray for the P.E.F., 1912), Vol. I, Fig. 129.

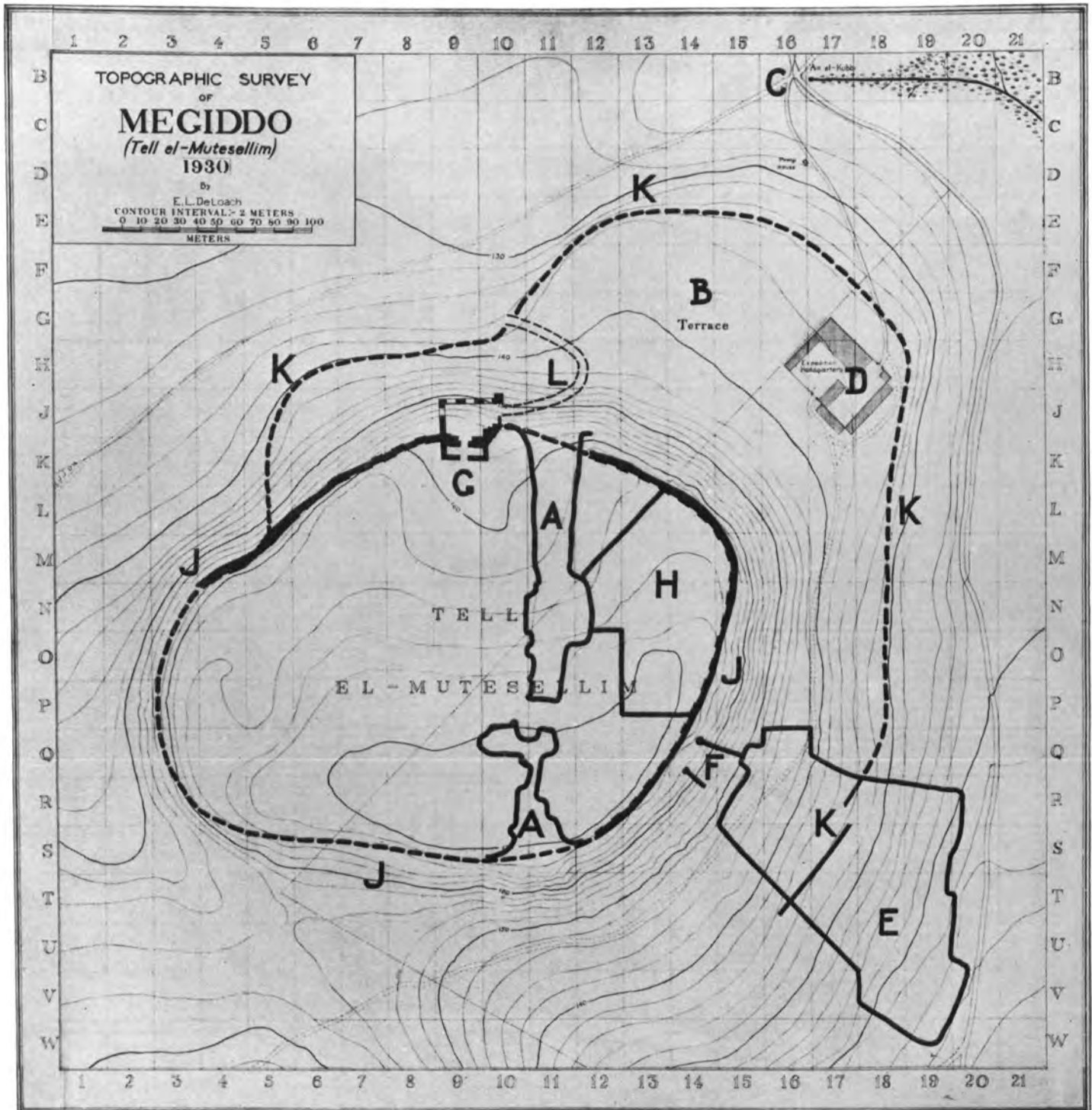


FIG. 14.—General plan of Megiddo. Each square, which measures 25 meters across, is distinguished by a letter and a number in the margins; thus the large letter C, which marks the spring, is in square B 16.

- A. Schumacher's main trenches.
- B. The northern terrace, an extension of the tell, at times of the city's greatness, in the direction of
- C. The spring which supplied the city with water.
- D. The Expedition house.
- E. The area excavated on the east slope to receive the débris of excavation. This débris is brought from the top of the mound by means of
- F. The iron chutes.
- H. The area in which Stratum IV has chiefly been exposed. See plan, Fig. 17. Fig. 18 is a view looking SSE. from the most northerly point of this area.
- G. The city gate, with its outer court, which belongs to Stratum IV, as also does
- J. The main city wall which surrounds the summit of the mound. It is shown solid where excavated.
- K. The outer city wall, probably of the same period. It is shown solid where excavated. The junction with wall J is doubtful.
- L. Probable line of road leading up to the city gate. For general view from NW., see frontispiece.

pavement of rough stone we found a well-laid pavement of better stone which belonged to a sloping court on the side of the tell. Along its outer edge could be traced the remains of a wall; and from the western end of this ran another wall, which joined the city wall at right angles. The eastern side was partly wall and partly the threshold of an outer gate, neither fully cleared as yet. An enemy who succeeded in breaking through this gate would find himself, not inside the city, but in a most uncomfortable sort of box into which a withering fire could be poured from the walls which formed its sides. In the south side, formed by the city wall, was the real city gate, of which the plan is clear in spite of later reconstructions (Fig. 15).

A passage 4 meters wide, paved with stone, leads from the outer court into the city. Down the center of this passage runs a main drain covered by broad slabs. The city wall is thickened so as to form a massive tower at each side of the passage, and at the inner angle of each tower a basalt door socket 40 centimeters in diameter is still *in situ*. The door was in two halves, which folded back into a pair of recesses large enough to have served also as guardrooms. These recesses are actually the spaces between the pair of towers just mentioned and an inner pair of towers which constitute a second gateway similar to the first. The foregoing description applies to the original plan of the Stratum IV gate so far as it was excavated at the end of last season. There had, however, been a later reconstruction, associated with the pavement previously mentioned as having been found about a meter above that of the outer court. In this reconstruction, walls had been built resting upon the original floors of the guardrooms, reducing the width of these rooms by 110 centimeters, but thickening the outer towers by the same amount. One of these later walls can be clearly seen in Figure 16.

While parts of the gate have been damaged, the appearance of the better preserved portions suggests that here, as elsewhere, the upper part of the building was of mud brick and only the lower part was in masonry. So far as I can see, this masonry consisted of no more than "three rows of hewn stone"—a feature of some of Solomon's buildings in Jerusalem which is referred to in I Kings 7:12. Our facing-stones are carefully dressed ashlar, without bosses or drafting, and are well and truly laid. The structure is no work of

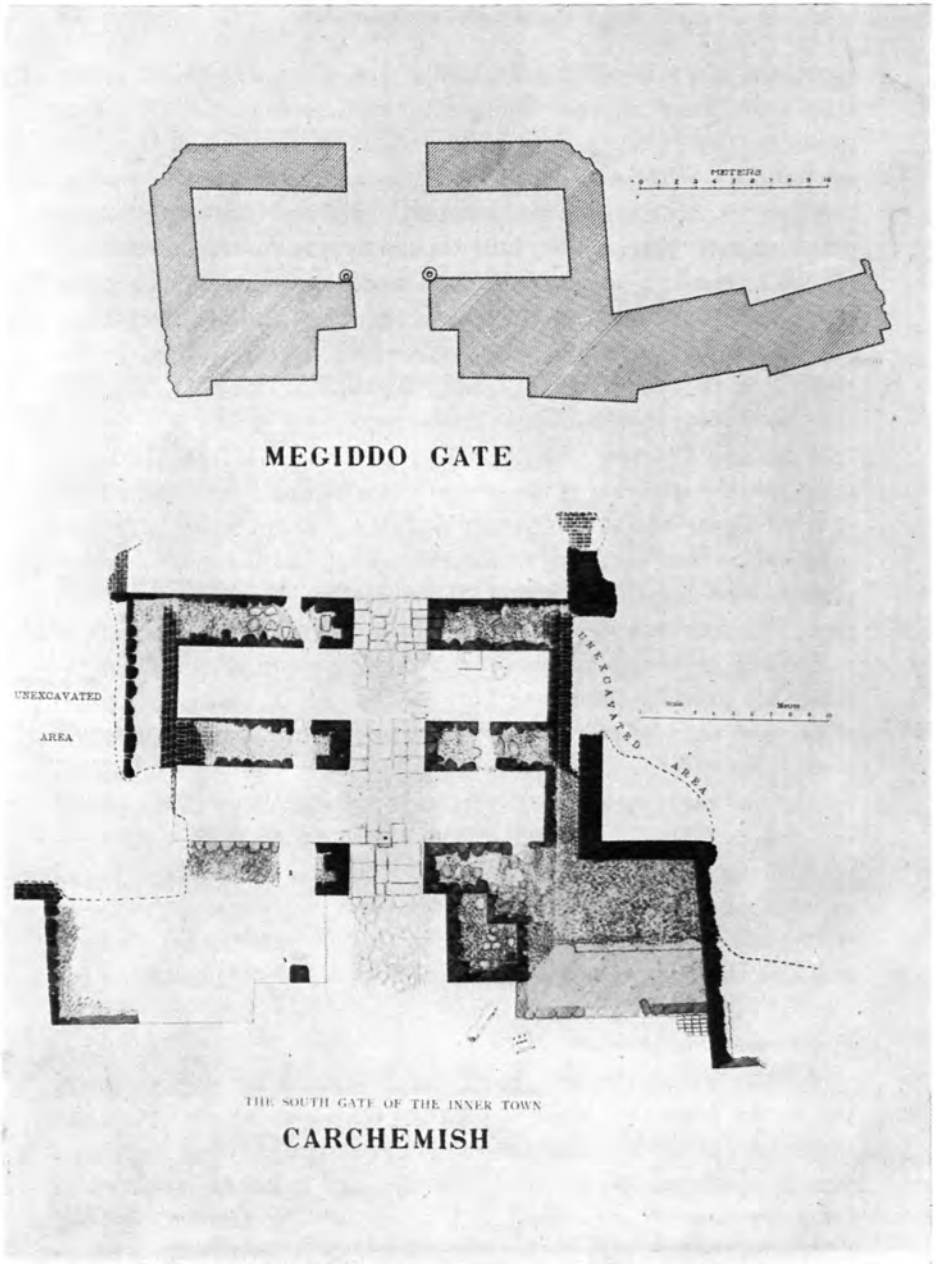


FIG. 15.—Outline plan of the city gate in Stratum IV at Megiddo, compared with the plan of the south gate at Carchemish. The latter is reproduced by kind permission of the Trustees of the British Museum. Scale, 1:400.

peasants, nor is the plan; and the similarity of this plan to that of the south gate at Carchemish will be at once apparent from Figure 15, where both are shown together on the same scale and in the same position.¹ At Carchemish there is an additional pair of guardrooms and towers. Further excavation may possibly show that such exist at Megiddo also, but I do not think so. In the former case the gate had



FIG. 16.—The east guardroom of the city gate, looking east from the central passage. Not fully excavated. In the left foreground is one of the basalt gate sockets. The outer tower (original) can be seen immediately above the socket, with a later wall built against its inner face. On the right is the outer face of the inner tower.

to be stronger in itself, because it was low down; at Megiddo it is high on the tell and, moreover, it has outside it the fortified courtyard, the equivalent of which was not found at Carchemish.

¹ The plan of the south gate at Carchemish is reproduced here, by kind permission of the Trustees of the British Museum, from C. L. Woolley, *Carchemish* (London, 1921), Part II, Plate 12. The plan of the Megiddo gate is not shown in detail, because excavation is not yet complete. It may appropriately be mentioned that though the Carchemish gate cannot yet be given a precise date, it is most probable that it was erected during a period of considerable building activity which occurred very shortly after the great 1200 invasion. That it was still standing in the middle of the ninth century B.C. is certain, for it or one of its fellows is depicted on the bronze gates of Balawat.



FIG. 18.—General view of Stratum IV, looking SSE. from the most northerly point in area *H* (Fig. 14). The city wall is on the left; the stables (Fig. 27) are in the right foreground and middle distance with the large house (Fig. 21) behind.

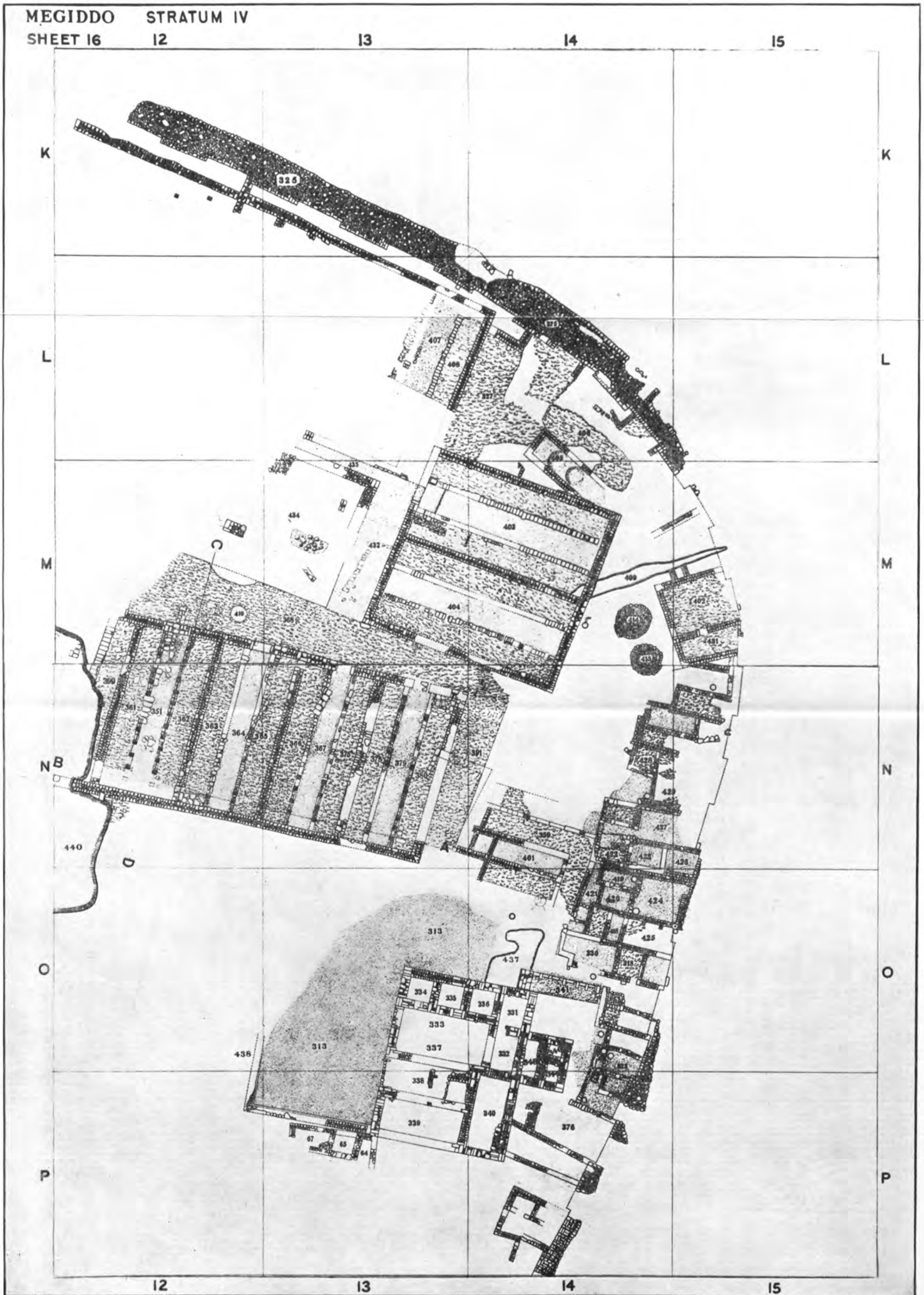


FIG. 17.—Plan of the excavated portion of Stratum IV (area H in Fig. 14). Scale, 1:500

The city wall at Megiddo has been found on both sides of the gate (cf. Fig. 14). Eastward, with a break at Schumacher's trench (A), it can be traced into that part of Stratum IV (H) which we have fully cleared (plan, Fig. 17; photograph, Fig. 18). There, on the eastern side of the city, the small houses built against the inner side of the wall are noteworthy. I am inclined to think that they were quarters



FIG. 19.—Looking through the city gate from the north into the city. The slabs covering the city drain are visible in the center foreground, with the remains of the outer towers at each side. At the inner corners of these are the two basalt door sockets. The walls beyond the gate are later. Note the quantity of washed-down earth which covers these. On top of the earth, just below the workers, are still later remains.

for troops, and that their flat roofs formed a kind of *chemin de ronde* for the defenders.

Within the city gate there must have been a street. We may look forward to finding it, when later débris has been removed (Fig. 19), running straight across to the high ground at the south of the tell. I hope that in this high ground we may find important buildings, for

it was there that Schumacher discovered his palace, the partial remains of which, still to be seen, appear to belong to our Stratum IV.

Streets in ancient Palestinian towns are usually anything but straight; in Stratum IV, however, no street so far laid bare is crooked. Numbers 368, 391, 432, and 433 in Figure 17 are all well laid out; and the broadening of No. 368 (Fig. 20) toward the gate, where there



FIG. 20.—Looking ESE. along street No. 368 (see Fig. 17)

would naturally be thicker traffic, shows remarkable forethought in town-planning.

The destination of street No. 391 is a lime-paved courtyard (No. 313). Along this lie the north and west sides of a large building which includes room No. 337, etc. Figure 21 gives a view of this house from the north, street No. 391 reaching the courtyard at a point just out of the picture on the right. The part of the house¹ nearest to the observer is staircase No. 341. Though this no doubt gave access to the doorway, the length and direction of its platform indicate that it served another purpose also by leading straight up to the flat roofs of the small houses against the city wall. Megiddo was essentially a

¹ [In *OIC*, No. 4, pp. 68 ff., Dr. Fisher assumed this structure to be a temple of Astarte.—EDITOR.]



FIG. 21.—The large house in Stratum IV, from NNW. The staircase platform runs from the center toward the city wall on the left. Beyond the ruins to the left can be seen the Babylonia-Egypt road, which disappears southward into the Wadi Arah.

fortress city; and I cannot help picturing the occupant of the big house as the officer commanding the eastern sector, who would, in time of alarm, assemble his troops in the courtyard and march them up the staircase to man the ramparts (Fig. 22). The excrescence on the eastern side of the house, with massive partition walls, its chambers (Nos. 344, 346, 348 in Fig. 17) too small to be habitable rooms, is apparently all that is now left of a tower high enough to permit this officer to see over the city wall to the plain and roads beneath. The breadth of the view he must have had may be gathered from Figures 18 and 21.

My own digging in and about this house has been confined to general cleaning up. The credit for its excavation belongs chiefly to Fisher, who continued what Schumacher had begun. Any conclusions here drawn are thus based on things as I found them or as they have been observed by other archeologists who have visited the dig.

Figure 23 gives a view of the southern part of the house from the east, with rather more than half of the tower showing on the right, and the southeast corner on the left. This corner is built of fine, dressed ashlar without bosses or drafting (though certain bossed stones with drafted margins, to be seen elsewhere in the building, are unquestionably contemporary). The bonding, in which two headers in one course alternate with one stretcher in the next, is characteristic of Stratum IV, while the jointing is excellent.

The curious succession of dressed stone to rubble which can be followed in the photograph is a feature of the original construction, and indicates not two periods of building, but one. It is likely that the rubble was plastered over and the ashlar left to show as ornament. I am indebted to C. L. Woolley, of Ur, for pointing out the consistent alternation in the coursing of the dressed stones in the ashlar sections. It will be enough to draw attention to the middle course in each of these sections for the reader to see what happens in the courses above and below it. Starting at the left, we have the two headers of the corner followed immediately by a stretcher; in the next ashlar section, instead of a stretcher there are two headers, and in the next a stretcher. At the angle there is a single header in the house wall, while a stretcher can be distinguished as the first stone of the tower. This is followed by two headers, and at the nearest corner

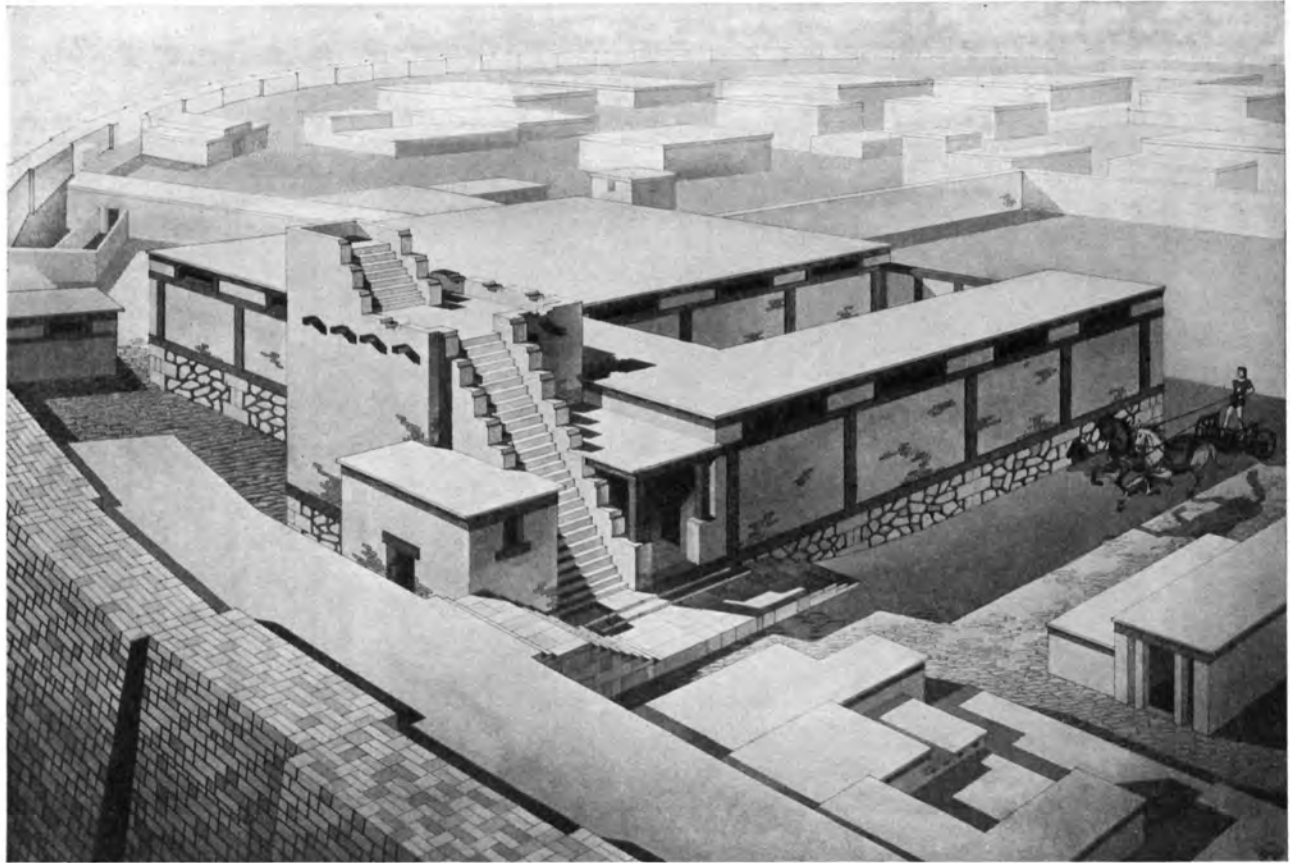


FIG. 22.—The large house in Stratum IV, from ENE. Reconstructive drawing by L. C. Woolman

there is a stretcher. Turning the corner, this stretcher and its fellow are seen as two headers; then comes a stretcher; and the series continues right round the building. And everywhere, except in an inner wall of the tower, we find, as in the city gate, "three rows of hewn stone" above the buried foundation course, and no more; for the construction was carried no higher in masonry.



FIG. 23.—The east side of the large house in Stratum IV, from E. (cf. *OIC*, No. 4, Fig. 43), with the tower on the right. Note the alternation of ashlar with rubble, and of headers with stretchers, in the former.

Wherever the third course is preserved, the upper surface of its stones has been burned black by the fire of a conflagration, though on other parts of the masonry traces of burning are not noticeable. There must have been some combustible material overlying the stones, and the natural assumption is that this was wood. Now on the floor of courtyard No. 313 there was a good deal of ash lying close to the west wall of the house. Among this, at a point within a meter of the northwest corner we found a sizable chunk of charred wood. This I

submitted for analysis to the Palestine Department of Agriculture, which in turn submitted it to the Royal Botanic Gardens at Kew, where it was pronounced to be cedar.

Apart from these suggestions of timber above the stonework, there are still to be seen, lying on top of the third course, sufficient remains of mud brick to show that this material entered into the composition of the superstructure. Now at Carchemish there is a building whose base is composed not of "three rows of hewn stone" but of orthostatic slabs, of almost identical height, which bear the well-known processional sculptures.¹ On top of these slabs is a mud-brick superstructure. Associated with this was found a quantity of wood ash which on analysis proved to be cedar.

It will here be apposite to quote the whole of I Kings 7:12, which reads as follows: "And the great court round about had three rows of hewn stone and a row of cedar beams, like as the inner court of the house of the Lord and the porch of the house."

We have thus some slight grounds for a comparison with Hittite constructional methods on the one hand, and with the methods employed in the Solomonic buildings in Jerusalem on the other. I do not suggest that our building is pure Hittite, although its plan may be compared, for some details, with that of the much later House D at Carchemish;² but it has to my mind a certain Hittite, or at least North Syrian, feeling. It would be permissible to suggest that still another influence was to be detected, if it could be proved that the extremely interesting capitals which were found in its immediate vicinity belonged to it; but this can be no more than a conjecture, although I personally think it a most likely one. In all, five of these capitals were found. Fisher illustrates one of them in Figure 50 of *OIC*, No. 4. He dates them to between 800 and 600 B.C., but this is by analogy to Cypriote examples. They were found both in débris which could be contemporary with the house, and also re-used as building-stones in walls of Stratum II or Sub-II. While a lower limit for their age can thus be fixed fairly closely, a higher limit remains uncertain. For the present they may be left with the statement that, although it is impossible to assign them to definite positions in the house, no other

¹ Woolley, *op. cit.*, Plate B.17, a.

² *Ibid.*, Plate 19.

building has so far been discovered to which they are likely to have belonged.

I cannot believe that our building is Palestinian; but, according to well-founded biblical tradition, the Solomonic buildings in Jerusalem were not Palestinian. It is true that it presents points of similarity to the buildings of Omri and Ahab at Samaria, and with these Fisher has rightly compared it; but I incline to the view that this similarity is due to community of origin rather than to direct copying, and I re-



FIG. 24.—The SE. corner of the large house in Stratum IV, from S., with the tower farther back on the right. The stone marked by an arrow has the "shield of David" cut upon it (see Fig. 25).

gard the Megiddo structure as being earlier by some decades than the Samaritan.

Whatever greater light may be thrown upon the former by the further study which it will receive, and by further excavation of the stratum to which it belongs, we can say even now that, like the city gate, which is of the same period, it is the work not of peasants but of skilled craftsmen.

It can be seen in Figure 23 that the nearest corner of the tower has its highest remaining stone cut exactly on the square in order that the next stone above may be accurately positioned. This is done at other points in the same building, and at corners of other buildings in the same stratum (cf. Fig. 31). Again, across the stones of the lowest course of ashlar Alan Rowe, of Beisan, detected in red paint the datum line of the master masons. And there is another noteworthy thing: cut in double lines on one of the ashlars of the southeast corner, faint



FIG. 25.—Stone in the SE. corner of the large house in Stratum IV, with the “shield of David” cut upon it (see Fig. 24).

but indubitable, interlaced triangles form what is known as the “shield of David” or as “Solomon’s seal” (Figs. 24 and 25).

The most remarkable buildings in that part of Stratum IV which has so far been excavated are stables, all composed of units built on a standard plan. Figure 26 shows the entry from street No. 368 to the unit 361, 351, 362 (Fig. 17). This entry could be closed by double doors turning in small stone sockets at right and left. It gave access to a central passage paved with fine lime plaster, much destroyed in this example but very well preserved elsewhere. This central passage

served as a gangway for grooms, and may very well have been a chariot garage also, though there is no evidence on this point.

On either side of the central passage was a horse-standing, paved with rough stones to prevent hoofs from slipping; and between each standing and the central passage stood a row of more or less square stone pillars alternating with mangers, also of stone. One of the



FIG. 26.—Stable 362, 351, 361, looking SSW. from street No. 368. Part of Schumacher's main trench is visible on the right. Cf. Fig. 27.

mangers visible in Figure 27 was found where it appears, but turned on its side; the two others, which were found near by, were put in place for the purpose of illustration. In stable No. 404 (Fig. 17), however, a manger remained definitely *in situ*; and there is no doubt at all about their having been general.

The pillars served partly to support the flat mud roofs, of which fallen remains were found in several places; partly to separate the horses from one another; and partly as hitching-posts. The holes in the corners, for the shanks of the halters, are characteristic.



Printed in Great Britain.

FIG. 27.—The great stables (including Nos. 362, 351, 361, etc.), looking SE. Cf. Fig. 26

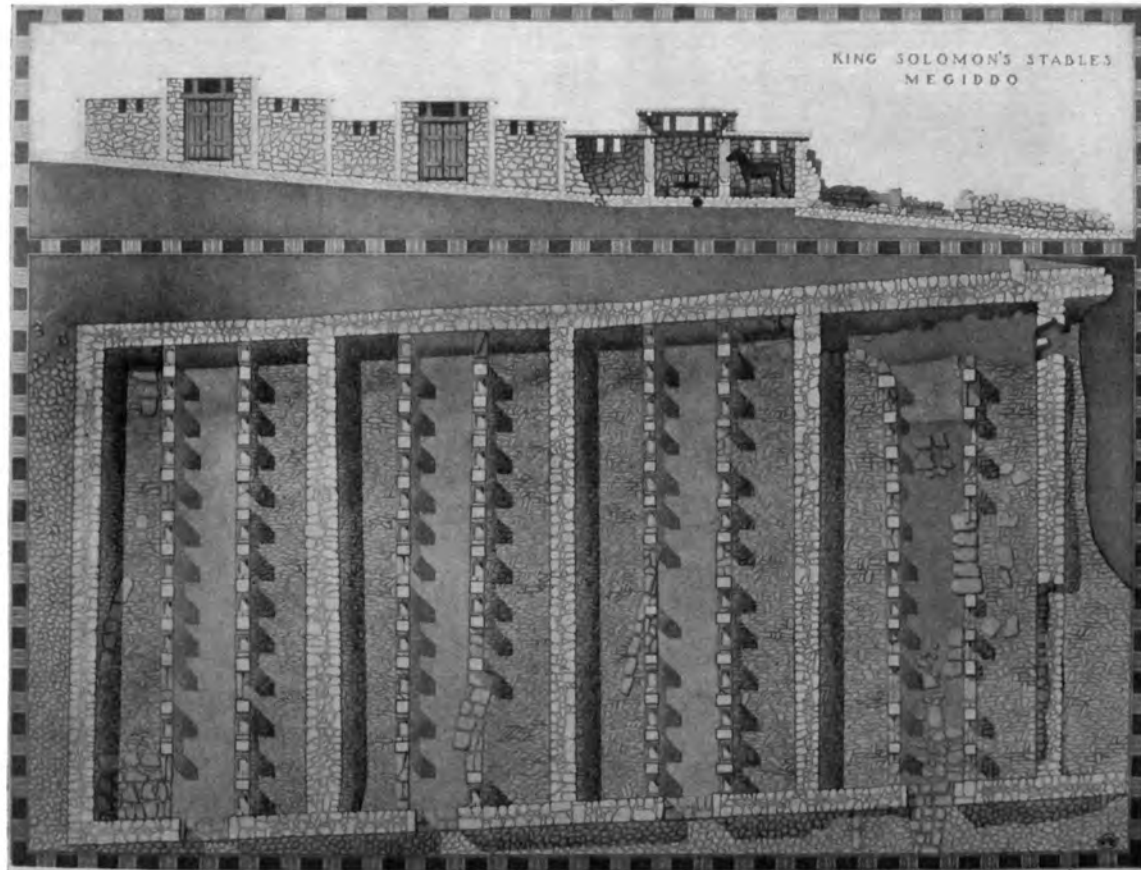


FIG. 28.—The great stables. Plan and reconstructive elevation by L. C. Woolman

There were, in the particular series of stables illustrated in Figures 27-29, twelve pillars on each side of every central passage, giving thirteen spaces in each standing. As the space next the door in each case would probably be the way in, and not a stall, there were thus twenty-four stalls per unit. Since this building, some 55 meters long by $22\frac{1}{2}$ meters broad, comprised originally five such units, there was room for 120 horses under one roof.

It may be that we have here a clue to the size of the units in which chariotry or cavalry was organized at the time when the stables were in use, and that this particular building was the stable for a squadron composed of five troops. It is an established fact that the maximum strength of the mounted unit which an officer can personally command, whether in peace or in war, is 150, while the optimum is nearer 120. Such a unit functions most efficiently when it is divided into subunits, which may vary between three and five in number. Fundamental military principles change but little, and I consider it quite probable that this one had already imposed itself upon commanders at this early date. It is, however, too soon to draw definite conclusions; and it is to be noted that the stables we have so far found, though uniform in plan, are not so in size. Stables 403 and 404, for example, had space for thirty horses each; and there are only two units together—not five. Yet stable No. 407-8, which was half destroyed in antiquity, probably had room for twenty-four; and though the area northwest of it is still covered by later ruins, its back wall is visible for a distance sufficient to allow for four more similar units. The small stable No. 359, in square N 14, was probably connected with the large house which has already been discussed. Altogether, in this one corner of the city, we have accommodation for some three hundred horses.

There are interesting structural details about these buildings. In Figure 30 appears the plaster floor of the central passage in stable No. 403, very well preserved. The pillars and mangers which once stood on either side of it are gone, but their very absence reveals a feature which is common to all the stables—a foundation of large stones placed by the builders between the central passage and the horse-standings to take the downward thrust of the pillars, showing that weights were taken into consideration before building was begun.

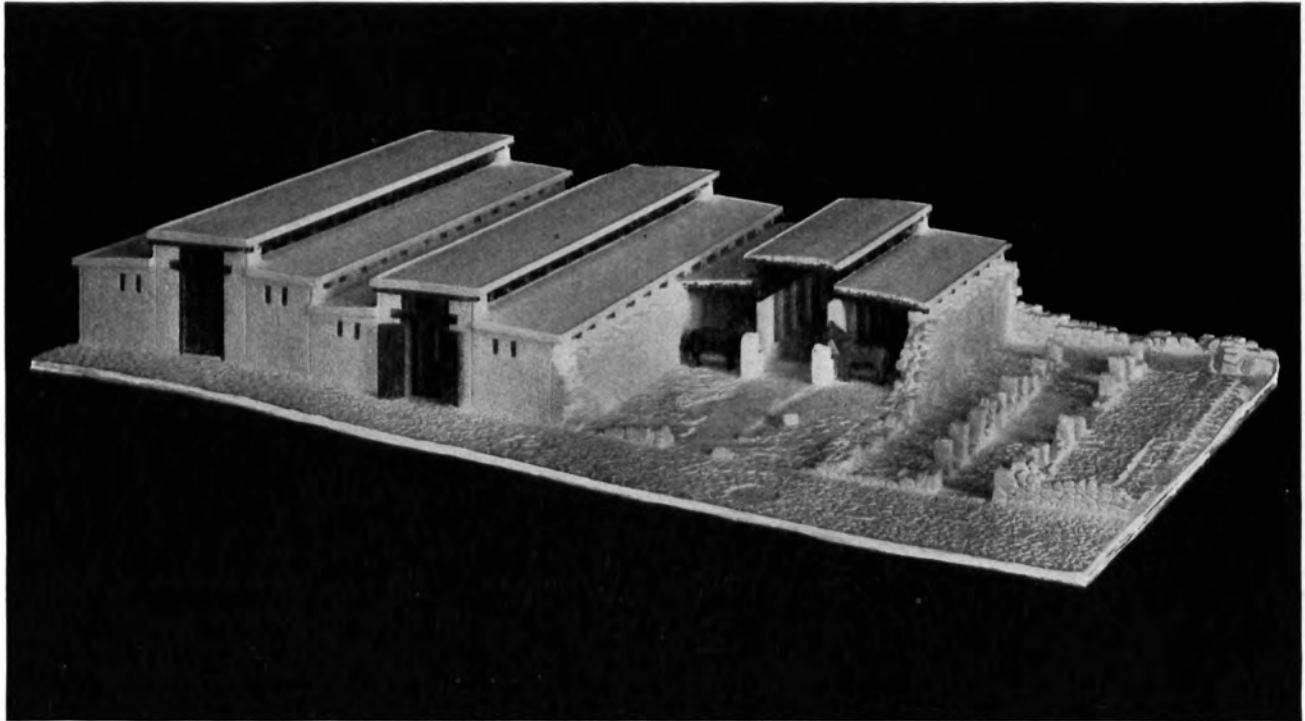


FIG. 29.—The great stables as modeled by O. E. Lind after Woolman's drawings. The unit at right (see Fig. 26) and part of the next unit are shown as found. The rest of the group is reconstructed. Farther to the right there was originally a fifth unit also.

As a matter of fact, the weights in this case were somewhat underestimated, for the foundation-stones have been pushed a little into the ground wherever a heavy pillar stood, but have remained at their original level where they had to support a comparatively light manger only. By counting the depressions, which occur at quite regular intervals, one can arrive at the exact number (fifteen) of pillars, even though not one of them remains in place.



FIG. 30.—Stable 403, from WNW. For detail of the farther left-hand corner, see Fig. 31. The street on which a man is kneeling is a III reconstruction a few centimeters above the original IV roadway No. 432.

At the farther left-hand corner of this same stable (Fig. 31) the bonding of the stones is the same as that found in the big house, and there is the same cutting on the square, to insure correct positioning of the next course.

Now stables such as those which are here described have been found elsewhere in Palestine, but the fact that they were stables seems somehow to have escaped their discoverers.

Bliss, digging in the early nineties, found a building with similar rows of pillars, giving a remarkably similar plan, in his fifth city at

Tell el-Hasi,¹ which he dates to about 1000 B.C.² He was frankly puzzled as to its use and therefore sensibly refrained from making any definite statement about it, confining himself to the tentative suggestion that it might have been a public building of some sort—perhaps a barracks, or a bazaar of small shops.

At Gezer, Macalister found stone pillars like those at Megiddo, set out in a row about 44 feet long. He connects them with a temple,



FIG. 31.—The NE. corner of stable No. 403 (cf. Fig. 30). Note the right angle cut in the foundation course, at the near end of the meter stick, to insure the correct positioning of the next stone above.

and shows them in the plans of both his third and his fourth Semitic strata, the boundary between which he places at 1,000 B.C. They were standing in "a long narrow courtyard," and this appears to be of just the right dimensions for a horse-standing. Both his photograph and his drawing show notches in the corners of one pillar which may well be broken tie holes.³

¹ F. J. Bliss, *A Mound of Many Cities* (2d ed.; London: P.E.F., 1898), pp. 90 ff. (plan on p. 91).

² *Ibid.*, p. 138.

³ Macalister, *op. cit.*, II, 406 ff.; and III, Plate CCXXIII.

Sellin laid bare at Taanach a double row of standing stones which he describes as *massēbhōth* and dates to between 1000 and 800 B.C.¹ His photograph showed such a striking resemblance to our hitching-posts that I went over one day to see if I could find the originals. The floor which had belonged to them had been removed, as his illustration shows, during excavation, and the effects of weather, as well as some damage, made it impossible to make much of what was left; but I made a very pertinent discovery elsewhere. In a building which appears to be of late construction, on the north slope of the tell, I found, re-used, three long stones just like those at Megiddo, all with tie holes through their corners. One of these is illustrated in Figure 32. I submit that their presence here, coupled with the finding of other, not dissimilar, standing stones *in situ*, tends to show that there was at Taanach stabling like that at Megiddo.

As to the internal archeological evidence for the dating of our Stratum IV, one does not expect to find a great deal of pottery in stables, but what we did find in them, and elsewhere in the stratum, belonged to Early Iron I, though not to the earliest, or Philistine, part of it. Philistine suggestions were, however, met with at places where we penetrated to Stratum V, immediately below IV.

From somewhere in a minor trench of Schumacher's (No. 409 in square M 14 on our plan, Fig. 17) which penetrates barely below Stratum IV came the stela fragment of Shishak which was found by Fisher's foreman in the rubbish heap beside it and is illustrated in *OIC*, No. 4, Fig. 7A. This is hardly evidence, but cannot be neglected, particularly when taken with the following.

In some of the rooms against the city wall, and in other places which can only belong to IV or to III, which, it will be remembered, is a reconstruction of IV, we obtained several specimens of the Egyptian amulet known as the "aegis of Bastet." Petrie has dated a stratum at Tell Jemmeh to the time of Shishak on the strength of such amulets.²

So far, we have found nothing archeologically inconsistent with an immediately post-Philistine date for Stratum IV. As to the buildings, we get well-planned structures, with much dressed stone well laid and

¹ E. Sellin, *Tell Taannek* (Vienna, 1904), pp. 18 (Fig. 10) and 104.

² Sir Flinders Petrie, *Gerar* (London, 1928), p. 4.

well bonded by evidently skilled craftsmen. We have the use of datum lines by the masons, and proof that weights were carefully allowed for by the architects before building was begun. And we get all these things occurring suddenly, in a city apparently planned and built as a whole, with its walls, its gate, its streets, and a remarkable number of stables strangely similar to buildings discovered elsewhere which have been independently dated to the ninth or tenth century B.C.



FIG. 32.—Stone pillar with tie hole through corner, re-used in the wall of a late tower at Taanach.

Our buildings do not appear to develop from those of Stratum V, which, wherever we have exposed them, are of kilned mud brick; nor are the buildings of later strata evolved from those of Stratum IV, except in so far as those of III are reconstructions of them. Altogether one feels, as I have said, that there is something scarcely Palestinian about Stratum IV, something which suggests rather the Hittite work of North Syria, yet not precisely the same—at any rate something foreign.

And if we ask ourselves the question: Who, at Megiddo, shortly after the defeat of the Philistines by King David, built with the help

of skilled foreign masons a city with many stables? I believe that we shall find our answer in the Bible. For in I Kings 9:15-19 is written:

And this is the reason of the levy which King Solomon raised, for to build the house of the Lord 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 in the wilderness, in the land, and all the store cities that Solomon had, and the cities for his chariots, and the cities for his horsemen

The story of Solomon's agreement with Hiram, king of Tyre, and of the employment of Phoenician masons on the building of the Temple is one whose authenticity has been universally accepted. Megiddo lies, as we have seen, on the direct road between Jerusalem and Phoenicia; and it would be perfectly natural that these same masons, after the completion of their work in the capital, should be given the task of building such an important city. I am unable to avoid the conclusion that Stratum IV is their work.

The reader will have remarked the mention of cities for chariots and for horsemen in the passage just quoted. It does not by any means stand alone. Indeed, if one reads the history of Solomon, whether in Kings or in Chronicles, one is struck by the frequency with which chariots and horses crop up. We are told of the accommodation provided for them, and of the grain which the horses consumed; and we are informed that the children of Israel were "rulers of his chariots and horsemen." Then there is the much discussed passage in I Kings 10:26-29 (substantially the same as II Chron. 1:14-17):

And Solomon gathered together chariots and horsemen; and he had a thousand and four hundred chariots and twelve thousand horsemen, whom he bestowed in the chariot cities and with the king at Jerusalem. And the king made silver to be in Jerusalem as stones; and cedars made he to be as the sycamore trees that are in the lowland, for a abundance. And the horses which Solomon had were brought out of Egypt; and the king's merchants received them in droves, each drove at a price. And a chariot came up and went out of Egypt for six hundred shekels of silver, and an horse for an hundred and fifty; and so for all the kings of the Hittites and for the kings of Syria did they bring them out by their means.

Leaving altogether apart the vexed question of variant readings and interpretations—a question that I am not competent to discuss—and

assuming that Miṣr means neither a district in Asia Minor or Media, nor a place in Arabia which is not there, but simply Egypt—this passage seems to show that Solomon engaged in an extensive and organized trade in horses and chariots between the north and the south; and the silver-and-stones phrase, coming where it does, gives the impression that he made a pretty good thing out of it. I suggest that the “affinity” which we are told he made with the Pharaoh was, in part at least, a commercial treaty to regulate this trade.

It looks very much as though Solomon, with his characteristic acumen, had picked upon a commodity which, while it enabled him to strengthen and modernize his own army, at the same time permitted him to dispose profitably of his surplus stock which would naturally accumulate, so far as the horses were concerned, by breeding.

Megiddo, placed just where the great road from Egypt to the land of “the kings of the Hittites and the kings of Syria” debouched from the pass across the Carmel Ridge onto the pastures and grain lands of Esdraelon, could not but be a center for this trade; and Taanach, hardly an hour’s ride away, would form a convenient overflow dépôt.

It is perhaps not without significance that the other sites at which indications of stabling have been found—Gezer and Tell el-Hasi—also lie close to this great trade route; and a more northerly station upon it (also built by Solomon) may well have been Hazor (Ḥaṣor) in the Huleh basin.¹ It is permissible, in connection with this Ḥaṣor, to recall the fact that somewhere on the southern section of this route, and associated in I Chronicles 4:31 with Beth Merkabhoth, “the house of chariots,” was a place called Ḥaṣar Susim, “the inclosure for horses.” The place-name Ḥaṣor is connected with the word *ḥaṣer*, and the appearance of the Huleh site certainly suggests an inclosure.

Whether it was that, by bringing both horses and chariots from Egypt, Solomon so increased the armaments of the Asiatics that very shortly after his death Shishak found it necessary to go out and reduce them by fire and sword, or, on the other hand, that the Pharaoh was himself enabled so to increase his mobile troops by means of horses imported from the north that he felt strong enough to make an aggressive expedition into Palestine, and probably beyond it, I have a sus-

¹ See J. Garstang, “The Site of Hazor,” in the *Liverpool Annals of Archaeology and Anthropology*, XIV (1927), 35-42.

picion that Solomon's trade in horses had some bearing on the Egyptian invasion in the fifth year of Rehoboam. The discoveries of the Shishak stela and of the Bastet amulets seem to show that it was during this invasion that the burning of Stratum IV took place, but we can only wait until further digging confirms or rebuts this suggestion.

Here I close the summary of our excavations down to the end of 1929, together with my case for the dating of Stratum IV. The telling of the story, and its illustration by the figures in this booklet, would have been impossible without the ready help given me by my assistants throughout the last three years. For this help I would here express my sincere gratitude: I feel, however, that I must at the same time exonerate them from responsibility for the theories I have put forward, which are my own.

III

AN INSCRIBED SCARABOID FROM MEGIDDO

By W. E. STAPLES

This scaraboid (our No. M 1710, Fig. 33) was discovered during the summer of 1929 on the surface in square N 9, about 30 meters west of the main trench excavated by Schumacher in 1905, and had



FIG. 33.—Scaraboid M 1710, twice actual size

probably been washed down from his dump. It is of serpentine, 15.75 by 11 by 5.25 mm. in size. Since it is not pierced, it was possibly used as a ring bezel.

The seal surface (Fig. 34) is divided into two fields by a horizontal line. The upper field occupies about two-thirds and the lower about one-third of the whole surface. The motif of the upper field is that of a winged griffin wearing the double crown of Upper and Lower Egypt on

its head and a kilt between its forelegs, and standing before an ankh or *crux ansata* (the Egyptian hieroglyph for ʕnh , "life"). In the lower part of the upper register is the word ḥmn (*ḥmn*, "Ḥammān"), excellent-



FIG. 34.—An impression of M 1710, greatly enlarged, inked and bleached
ly engraved in letters resembling those of the Siloam inscription.¹ In
the impression ḥ is between the right foreleg and the left hind leg,

¹ Gesenius, *Hebrew Grammar* (2d English ed., Oxford, 1910), table of alphabets; again in René Dussaud's table, *Syria*, VI (1925), 329.

∩ is between the hind legs, and † is behind the right hind leg. In the lower field is a locust, facing in the same direction as the griffin. The whole is of exquisite workmanship and worthy of the closest study.

The combination of motifs described above is most provocative of speculation. One is bound to ask whether it is merely a device composed by the fancy of an individual living in Megiddo, much as a personal bookplate is designed today; whether it has any significance as a whole or in its separate and several parts; or whether the various parts have any relation to the whole. Has the locust any relation to the griffin? Why does the griffin wear the crown of Upper and Lower Egypt? Has the kilt any significance? What has the griffin to do with the ankh? These casual meanderings of the curious mind engender further questions: Whence came the idea of the griffin? What significance did it have in the various civilizations in which it played a part? From which of these civilizations has the motif of the present griffin come? Where was its probable place of manufacture? At what age in the world's history did it come into being? It is not the hope of the present article to answer all these questions. If in the course of its remarks suggestions are presented which may point the way to a solution of some of them, its purpose has been served.¹

Besides its form, which is distinctly Egyptian, our seal offers in its design at least three main features—the griffin, the locust, and the inscription—which require individual discussion.

A number of seals on which the griffin² is depicted have been found in Palestine to date. Schumacher found at Megiddo one which was

¹ The writer's thanks are due to Dr. A. T. Olmstead, Dr. Edward Chiera, and Dr. T. George Allen for many of the materials and results presented in this discussion.

² Ziegler in Pauly-Wissowa, *Real-Encyclopädie der classischen Altertumswissenschaft*, Vol. VII (Stuttgart, 1912), cols. 1902-29, and before him A. Furtwängler in W. H. Roscher, *Ausführliches Lexikon der griechischen und römischen Mythologie*, Band I, 2. Abt. (Leipzig, 1886-90), cols. 1742-77, give the most comprehensive discussions of the griffin yet published. Ziegler uses *gryps* in a broad sense to include both winged and wingless lion-bodied creatures with bird, snake, or lion head and with varied modifications of limbs and tail; but we shall limit the term to his winged, bird-headed griffin only. This type seems implied in the generic name, the Greek form of which is evidently related to *grypos*, "hook-nosed." Back

inscribed as "(belonging) to Asaph" (Fig. 35).¹ It is inferior in workmanship to the present seal; but, like it, the griffin wears the crown of Upper and Lower Egypt on its head and a kilt on its forelegs. It stands before a *cartouche* in which the main device is the ankh, above two horizontal lines, just possibly intended for a sign meaning "loved." From the stratum in which this seal was found, Watzinger believes it to be a product of the eighth century B.C. A third seal,² discovered at Ashkelon, was inscribed "to Rama^c." The griffin wears the crown of Upper and Lower Egypt and a kilt, but the ankh is not represented. Pilcher³ describes a fourth seal, in the upper register of which is a winged griffin before a debased *crux ansata* (Fig. 36). On a seal

of the Greek may lie the Semitic root *krb*, well known in its biblical derivative, the "cherub." See Ziegler and also Leroy Waterman, "Bull-Worship in Israel," *AJSL*, XXXI (1915), 229-55, esp. 249 ff. The latter suggests that "cherub" may have come via Phoenicia from Babylonia, where it may have been one term for the winged bull colossi with human heads. Such bull figures (commonly called *lamassu* and *šēdu*) appear as guardians at city and palace gates. Dhorme and Vincent, "Les cherubins," *Revue biblique*, XXXV (1926), 328-58 and 481-95, develop a connection between "cherub" and Assyrian *kāribu*, to which they give the basic idea of "orant." Such intercessors, appearing in various forms, they would associate with but distinguish from the winged bulls.

From the griffin we should distinguish the sphinx. This creature has in classical archeology the body of a lion, wings of a bird, and head and bust of a woman. In Egyptian art, however, the sphinx is wingless and consists of a lion's body plus a king's, a falcon's, or a ram's head. The griffin usually appears ready for action, whereas the Egyptian sphinx is commonly recumbent and the classical sphinx is often seated.

Our griffin's opposite, a lion-headed eagle, is well known as the coat-of-arms of Lagash in Babylonia. See references in Hugo Prinz, *Allorientalische Symbolik*, I (Berlin, 1915), 132.

¹ Erman and Kautzsch, "Ein Siegelstein mit hebräischer Unterschrift von Tell el-Mutesellim," *Mitteilungen und Nachrichten des Deutschen Palaestina-Vereins*, 1906, pp. 33-35; Deutscher Verein zur Erforschung Palästinas, *Tell el-Mutesellim*, II (by Carl Watzinger; Leipzig, 1929), 64-67.

² First described by Clermont-Ganneau in the *Comptes rendus* of the Paris Académie des inscriptions et belles-lettres, 1892, p. 281; then published by Pilcher (see next note); but best reproduced by C. C. Torrey in the *Annual of the American School of Oriental Research in Jerusalem*, II-III (1921-22), No. 11 on plate and p. 108.

³ "Old Hebrew Signets from Gezer," Palestine Exploration Fund, *Quarterly Statement*, 1913, pp. 143-46.

reproduced by Gressmann¹ appears a recumbent griffin with similar wings and again wearing the double Egyptian crown (Fig. 37). No ankh is present. The griffin's recurved tail is a characteristic found in some late figures.² A comparison of the scripts found on these Palestinian seals leads us to assume that they are all from the same period in the history of that country.³

Our griffin does not seem to appear in Babylonian art. The winged lions and other creatures with which Gilgamesh is seen struggling on



FIG. 35.—Seal of Asaph, with crowned griffin and ankh. After Deutscher Palaestina-Verein.



FIG. 36.—A Gezer seal with griffin and ankh. After Pilcher.



FIG. 37.—An inscribed seal with crowned griffin. After Gressmann.

Babylonian seals apparently were not modified into our griffin until the Assyrian Empire (cf. Fig. 38). We find him, however, on "Syro-Hittite" seals of around 1500 B.C. Ward's No. 988⁴ shows a winged

¹ *Allorientalische Texte und Bilder zum Alten Testamente* (Tübingen, 1909), Band II, Abb. 214.

² Though originally distinct, the griffin appears intimately related to the Egyptian sphinxes on such late Egyptian scarabs as Petrie, *Buttons and Design Scarabs* (London, 1925), Pl. XIII, Nos. 826 and 835-37, described on his p. 23. No. 826 is a falcon-headed sphinx of perhaps the Twenty-fifth Dynasty. No. 835 is a royal sphinx of the Twenty-sixth Dynasty, with wings added; No. 836 is a winged female sphinx of Greek type and date; and No. 837 is a winged royal sphinx wearing the kilt and double crown. Tails recurved like that in our Fig. 37 appear on the Greek sphinx of No. 836 and on a kindred griffin or winged dragon of the Persian age, No. 290 (see Petrie's Pl. IV and p. 7), engraved on the base of a conical seal. Cf. the late Assyrian griffin in our Fig. 42.

³ On the dating, see, besides the tables previously mentioned, Dussaud's table, *op. cit.*, p. 335, where he has arranged chronologically the forms of letters found on many early Israelite seals (listed in his notes). His results would suggest the eighth or seventh century.

⁴ In his *Seal Cylinders of Western Asia* (Washington, D.C., 1910).

disk over a column guarded by winged animals. His No. 1015a shows two griffins facing each other with a sacred tree above (Fig. 39). Again, Teshub and a griffin are associated.¹

Later the griffin appears in Phoenicia. Ward's No. 1155 is a Phoenician seal showing under the winged disk a sacred tree with a rampant ibex on one side and on the other a human-headed sphinx with a



FIG. 38.—Gilgamesh with griffins. Assyrian adaptation. Ward, No. 586.



FIG. 39.—Griffins by tree of life. Ward, No. 1015a.



FIG. 40.—Ibex and griffin-like sphinx by tree of life. Ward, No. 1155.



FIG. 41.—A Cypric seal showing griffin in attitude of worship before tree of life. Ward, No. 1171.



FIG. 42.—Griffin and sphinx with tree of life. Ward, No. 711.

griffin-like body (Fig. 40). His No. 1171 is a Cypric seal having a griffin with both hands uplifted on one side of a tree (Fig. 41). Myres² notes further Cypric seals: No. 4168, a griffin with the ankh; No. 4401, a sacred tree between griffins; No. 4139, two seated sphinxes adoring a sacred tree; Nos. 4188 and 4189, hawk-headed sphinx with an ankh.

In late Assyrian times the griffin is found in Assyria, as in Ward's No. 711, which shows a sacred tree flanked by a griffin and a sphinx

¹ University Museum of the University of Pennsylvania, "Publications of the Babylonian Section," Vol. XIV: *The Culture of the Babylonians from Their Seals in the Collections of the Museum*, by Leon Legrain (Philadelphia, 1925), No. 500.

² *Handbook of the Cesnola Collection of Antiquities from Cyprus* (New York: Metropolitan Museum of Art, 1914).

(Fig. 42). I would compare the griffins of these seals with those of a bronze Phoenician bowl discovered at Nimrud (Fig. 43), published



FIG. 43.—Crowned griffins on a bronze bowl from Nimrud. Scale, 1:2. Detail from Layard, *Monuments of Nineveh*, 2d ser. (London, 1853), Pl. 63.

by Layard, Perrot, and Jastrow. Jastrow¹ places its date in the eighth century, which agrees with the estimated period of the Palestinian seals first described. The griffin figures, each wearing the double crown of Upper and Lower Egypt, occur in pairs, facing each other with a small column bearing a sun symbol under a canopy between them. In front of each beast is a small enemy supplicating. Between each two groups is a winged scarab above a second column. Egyptian ideas are evident in these latter features. Layard² publishes another bronze bowl from Nimrud on which is depicted a horrible battle of animals, among them the griffin. The motif occurs in Persia also, in the combat between king and griffin (Fig. 44).³



FIG. 44.—Persian king in combat with griffin. After Perrot and Chipiez.

¹ *The Civilization of Babylonia and Assyria* (Philadelphia, 1915), p. 414 and Pl. LXX.

² *Monuments of Nineveh*, 2d ser., Pl. 67.

³ Perrot and Chipiez, *History of Art in Persia* (London, 1892), p. 435 and Fig. 71 (Persepolis).

Our present knowledge permits tracing the griffin to an earlier stage in Egypt than we have yet found him elsewhere. As carved in an animal battle scene on a slate palette dated before the First Egyptian Dynasty, the diverging wings are archaically represented like an inverted comb (Fig. 45).¹ Wings diverging but curved are given another



FIG. 45.—Predynastic slate palette from Hierakonpolis, Egypt, showing griffin among animals in combat. After Quibell and Green.

sort of animal on the gold-leaf handle of a predynastic flint knife.² But associated characteristics of the palettes and knife handles of this period in Egypt involve both groups in problems of relationship with

¹ Quibell and Green, *Hierakonpolis*, II (London, 1902), Pl. XXVIII.

² Cairo 14265; see Quibell, *Archaic Objects* (Le Caire, 1905), p. 237.

Asia.¹ A Fifth Dynasty griffin (twenty-seventh century B.C.), however, now headless, which represents the Pharaoh Sahure trampling his enemies with a fine contempt (Fig. 46),² seems without foreign connections. This type, falcon-headed, continues through the Middle Kingdom into the Empire.³ When without wings, he becomes the hiera-



FIG. 46.—King Sahure of Egypt trampling his enemies as a griffin. After Borchardt.

cosphinx seen, e.g., on an Eighteenth Dynasty scarab of Thutmose III (Fig. 47).⁴

The griffin with diverging wings is found in Egypt again in the Middle Kingdom, about 2000 B.C. Together with other fabulous

¹ Cf. W. M. F. Petrie, "Egypt and Mesopotamia," *Ancient Egypt*, 1917, pp. 26-36.

² L. Borchardt, *Das Grabdenkmal des Königs Ša'hu-re*, Band II: *Die Wandbilder* (Leipzig, 1913), Bl. 8.

³ *Ibid.*, Text, pp. 21-23.

⁴ British Museum, *Catalogue of Egyptian Scarabs, etc.*, . . . by H. R. Hall, I (1913), No. 1020. Cf. the recumbent sphinxes on Nos. 415-16.

creatures he mingles with real animals in scenes of hunting in the desert.¹ Such figures seem to find an echo in Crete.² There, however, the falcon head became modified into that of an eagle, often crested.³ This change, in turn, is reflected in Egypt in a recumbent griffin on the end of an ax blade of King Ahmose I, early sixteenth century B.C. (Fig. 48).⁴ By this time, too, the wings are brought together.



FIG. 47.—Thutmose III of Egypt as hieracosphinx trampling enemy. British Museum scarab No. 1020.



FIG. 48.—Crested griffin on ax blade of the Pharaoh Ahmose I. After von Bissing.

Later in the Empire period Ramses II at the Battle of Kadesh⁵ and Ramses III in the accounts of his first and second Libyan wars⁶ are each likened to a griffin (*ḥḥ*).⁷ It seems to have represented all the characteristics of the warlike hero: it stood for youth, for a roaring monster, for swiftness, in fact for the real warrior who tramples down his enemies. The griffin may have appealed to the Egyptians as an-

¹ P. E. Newberry, *Beni Hasan*, II (London, 1894), Pls. IV and XIII. The animal is here called *šfr*, not *seref* as given by Sir Arthur Evans, *The Palace of Minos*, I (London, 1921), 709 (illustrated in his Fig. 533, A). Cf. the similar *tšš* in Griffith and Newberry, *El Bersheh*, II (London, 1894?), Pl. XVI.

² Evans, *op. cit.*, pp. 709-19.

³ *Ibid.*, p. 712.

⁴ Detail from F. W. von Bissing, *Ein thebanischer Grabfund aus dem Anfang des Neuen Reichs* (Berlin, 1900), Pl. I. Cf. Evans, *op. cit.*, pp. 549-51.

⁵ John A. Wilson, *The Texts of the Battle of Kadesh* (Ph.D. thesis, Chicago, 1926), Poem, l. 43.

⁶ J. H. Breasted, *Ancient Records of Egypt*, IV (Chicago, 1906), §§ 40, 43, 46, 90. For careful facsimiles of the hieroglyphs themselves see "Oriental Institute Publications," Vol. VIII, Pl. 27, l. 22, and Pl. 28, ll. 46 and 61, and *ibid.*, Vol. IX (to be published in 1931), Pl. 82, l. 20.

⁷ The word here used occurs in the Empire only. Its determinative is sometimes falcon-, sometimes apparently jackal-headed. May we possibly connect the "jackal" form with the crested bird's head as variously illustrated in Figs. 48-50 and 52-53?

other form of their great warrior-god Montu.¹ The griffin, especially in Egyptian art of the late Empire, is dealt with at some length by Pierre Montet,² who finds him especially frequent on objects which he considers to have been imported from or influenced by Syria (cf., e.g., our Figs. 49 and 50). The crest already mentioned is now present on the griffin's head. In Figure 50 a modified ankh³ stands before him.

As to Empire connections between Syria and Egypt, it is natural that even objects of Syrian manufacture,

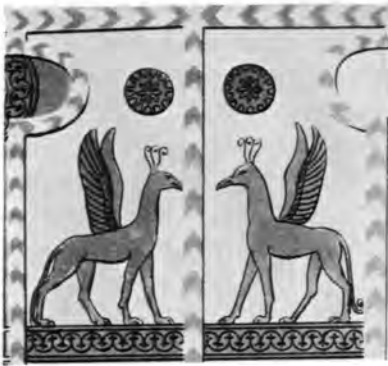


FIG. 49.—Griffins adorning a cuirass painted on a storeroom wall in the tomb of King Ramses III at Thebes, Egypt. From J. F. Champollion, *Monuments de l'Égypte et de la Nubie*, III (Paris, 1845), Pl. CCLXIV.



FIG. 50.—Harp decorated with Bes, lotus, griffin, ankh, and falcon plumage designs. Painted in the Twentieth Dynasty tomb (No. 65) of Imisibe at Thebes, Egypt. From Prisse d'Avennes, *L'histoire de l'art égyptien*, II (Paris, 1879), Pl. 86.

when destined for Egypt, should utilize Egyptian motifs. Such are the Bes, lotus, and falcon plumage elements associated with the

¹ Cf. Fig. 48, where the inscription "Beloved of Montu" surely applies to the royal owner of the ax and its position above the griffin implies identification of the latter with the god (*contra* Montet, cited below).

² *Byblos et l'Égypte: Quatre campagnes de fouilles à Gebeil, 1921-1922-1923-1924* (Paris, 1928-29), Texte, pp. 220-24 and 135-36.

³ Montet (*op. cit.*, pp. 168-69) calls it a plant.

griffin in Figure 50.¹ A griffin with Egyptian connections may even occur in Syria as early as the Twelfth Egyptian Dynasty, engraved on the base of a bronze figure of the Egyptian god Harpocrates² from Byblos.³ The creature, sketchily drawn, attacks an antelope. The figurine was one of a cache of objects, many others of which were

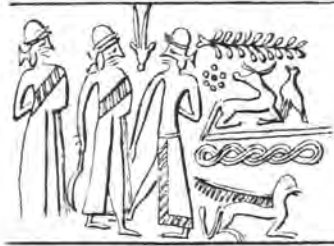


FIG. 51

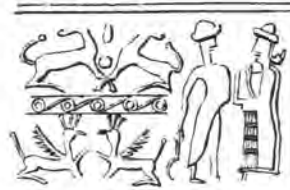


FIG. 52



FIG. 53



FIG. 54

FIGS. 51-54.—Seal impressions from Nuzi. The first three show griffins; the last, an ankh. From drawings by Mrs. Edward Chiera, utilized here with her kind permission.

likewise of Egyptian source or inspiration, dating from the Old to the Middle Kingdom.

A new approach to the griffin is furnished by recent excavations at

¹ N. de G. Davies in the *Bulletin of the Metropolitan Museum of Art*, New York, Dec., 1930, Sec. II, p. 40, states this same idea. The thought expressed, *ibid.*, p. 33, that so-called "Syrian" tribute did not necessarily consist of native Syrian products, should also be borne in mind.

² The form is certainly that of "Horus the young child with his finger in his mouth," as described in the *Egyptian Pyramid Texts* (ed. Sethe), §§ 663-64.

³ Montet, *op. cit.*, No. 401, Pl. LXII and pp. 115-16. There called Old Kingdom. Borchardt in *Orientalistische Literaturzeitung*, XXIV (1931), 29, considers this "griffin" a greyhound with a hare placed at an angle above him.

Nuzi near Kirkuk, southeast of Mosul in Iraq. Designs on cylinder seals from there of about 1500 B.C., contemporary with the early part of the Egyptian Empire and with the "Syro-Hittite" seals previously mentioned, include not only numerous varieties of human and animal combinations, among them the griffin (Figs. 51-53), but also ankhs (e.g., Fig. 54) closely resembling the Egyptian symbol. In both the "Syro-Hittite" and the Nuzi seals the griffin occurs with the "tree of life" (cf. Figs. 39 and 53), and we have just seen that the ankh too occurs at Nuzi. We have found the griffin with the ankh in the twelfth century B.C. in Egypt (Fig. 50). Otherwise, however, he seems nowhere to have any particular connection with either of these symbols of life until late Assyrian times, roughly contemporary with our Megiddo scaraboid. Perrot makes concerning Phoenician art a pertinent and commonly accepted statement which has a direct bearing on our study. He suggests that the Phoenician workman, although a careful artisan, was most imitative and lacked imagination.¹ That he was careful is shown repeatedly by the excellent seals he produced. The fact that he was imitative rather than creative gives us some assurance at least of the foreign origin of the motifs and designs on the present seal.

If our examination of the characteristics of the bird-headed griffin as it appears in the various countries of the East is reasonably complete, we might conclude² that the Nile rather than the Euphrates was its source. Or are the Nuzi designs and the predynastic Egyptian figures both ultimately derived from some civilization yet to be discovered nearer the heart of Asia? We cannot be dogmatic.³

Since representations of the locust in art are very few, and since suggestions as to its significance are quite unsatisfactory, it would be well to examine ideas expressed about the creature in literature. It is a striking commentary on the psychological reaction of the Egyptian

¹ Perrot and Chipiez, *History of Art in Phoenicia*, II, 41.

² With Ziegler in Pauly-Wissowa.

³ The volumes of the *Délégation en Perse* seem not to contribute to our quest. Of the ninth-seventh-century North Syrian sculptures of Senjirli, only two griffins, both dissimilar to ours, are available. See Orient-Comité zu Berlin, *Ausgrabungen in Sindschirli*, III (Berlin, 1902), 206 and Pl. XXXIV and 222 and Pls. XXXVIII and XLIII, respectively. No griffins from Sakje Gözü or Carchemish have been published.

monarchs to the locust that they declare their enemies to be like locusts, both because of their large numbers and because of their comparative weakness on the field of battle.¹ In its laudation of the Pharaoh on his success against the Libyan invaders, the court says to Merneptah: "Thou has made them to be like grasshoppers, for every road is strewed with their [bodies]."² Ramses III, in his might, "sees the thick of the multitude" of his enemies "like grasshoppers, smitten, ground down."³ In describing the vast numbers of the allies of the prince of Kheta at Kadesh, Ramses II says that "they covered the mountains and the valleys; they were like grasshoppers with their multitudes."⁴ In the examples mentioned, the idea of the locust as a dangerous foe, despoiling the country, is not considered.

The Assyrian monarchs use the locust in similes of an entirely different character. Adadnirari III asks that Adad, "foremost in heaven and earth," destroy the name of any prince who may remove or deface his stela and "come on like a locust swarm and bring low his land."⁵ Sargon II states that he overran the lands of the Mannaeans and their associates "like [a swarm] of locusts."⁶ The same monarch likens his attack on the lands about Mounts Arzabia and Irtia to that of a swarm of locusts.⁷ Sennacherib describes how his warriors, attacking the enemy along the river Ulai, swarmed from their ships to the shore like locusts.⁸ The Assyrians, however, also used the locust or grasshopper to suggest multitudes, but without any idea of weakness. Sennacherib speaks of the Elamites attacking him "like the onset of the locust swarms of the springtime."⁹ Ashurbanipal's messengers brought back word to him that the Elamites were "overrunning Akkad like a dense(?) swarm of grasshoppers."¹⁰ The same king describes the people and animals which he carried off from Elam as being "more numerous than grasshoppers."¹¹

¹ Cf. H. Grapow, *Die bildlichen Ausdrücke des Aegyptischen* (Leipzig, 1924), p. 98.

² Breasted, *Ancient Records of Egypt*, III, § 592.

³ *Ibid.*, IV, § 46, cf. § 91. ⁴ *Ibid.*, III, § 309, cf. § 455.

⁵ D. D. Luckenbill, *Ancient Records of Assyria and Babylonia*, I (Chicago, 1926), § 737.

⁶ *Ibid.*, II (Chicago, 1927), § 10. ⁷ *Ibid.*, § 163.

⁸ *Ibid.*, § 321. ⁹ *Ibid.*, § 252. ¹⁰ *Ibid.*, § 855. ¹¹ *Ibid.*, § 920.

The authors of the Old Testament, for the most part, speak of locusts literally. They are mentioned as food¹ and as a destroying multitude, frequently as agents of God's vengeance.² The idea of the locust as a type of weakness occurred very early to the Hebrews. JE has represented the messengers whose duty it was to spy out the Promised Land as on their return comparing themselves to the Nephilim in the following terms: "We were in our own sight as grasshoppers, and so we were in their sight."³ The same imagery is expressed in Deutero-Isaiah: "It is He that sitteth above the circle of the earth, and the inhabitants thereof are as grasshoppers."⁴ Again, in the Psalms, we find: "I am gone like the shadow when it declineth; I am tossed up and down as the locust."⁵ Ecclesiastes even likens the gait of the decrepit old man to the ungainly motion of a crawling grasshopper.⁶ Nahum compares to grasshoppers the rulers and generals of Nineveh; but he emphasizes the transitory character of their power, rather than the power itself.⁷ On the other hand, we do find the grasshopper used to symbolize destructiveness. D, who wrote at a time when the Assyrian influence had long been felt in the land, speaks of the Midianites as "grasshoppers for multitude; . . . and they entered into the land to destroy it."⁸ Jeremiah, who lived at about the same time, prophesies of the armies of the north that "they shall cut down the forest (of Egypt), though it cannot be searched; because they are more than the grasshoppers, and are innumerable."⁹ The last two examples seem to combine the ideas of "multitude" and of "destruction"; but Nahum uses the word once with the sole force of "multitude": "Make thyself many as the locusts."¹⁰

If we take into consideration the locust similes of these three countries, which, as presented here, include all the examples available to the writer, we find the idea of "multitude" common to all three countries, that of "weakness" common to Egypt and Palestine, and that of

¹ Lev. 11:21-22.

² Exod. 10:4-19; Deut. 28:38; I Kings 8:37; II Chron. 7:13; Ps. 78:46 and 105:34; Joel 1:4 and 2:25; Amos 7:1.

³ Num. 13:33.

⁷ Nah. 3:17.

⁴ Isa. 40:22.

⁸ Judg. 6:5.

⁵ Ps. 109:23.

⁹ Jer. 46:23.

⁶ Eccles. 12:5.

¹⁰ Nah. 3:15.

“a destroying multitude” common to Assyria and Palestine. These examples of the use of the locust in similes show a marked contrast in the psychological viewpoints of Assyria and Egypt, and it is not mere chance that they seem to meet in Palestine.

One might naturally expect something of the ideas of the locust, as current among the various peoples and as represented in literature, to be depicted in art. To all the peoples named, the locust was a pest which at times robbed their children of their daily bread. One of the most potent means of restraining this dread creature from invading the land was the charm. This probably took the form of a locust, which would in some mysterious way act as a deterrent to the ravages of the pest itself. Thus we have an adequate reason for the images of



FIGS. 55 and 56.—Egyptian scarabs bearing locust designs. After Petrie

locusts on charms. That such an idea was held in Egypt is deduced from the few amulets in locust form published by Petrie.¹ A similar motive may be ascribed to two locust seals, also published by him (Figs. 55 and 56).² The first of these is peculiar, however, in that the locust is pictured facing a *nfr* sign. Does this mean, “Good is the grasshopper”? If so, we can compare the Egyptian idea with that of the Greeks, who, in order to propitiate the grasshopper, probably even went so far as to call it by the name of Apollo,³ whose special duty it was to rid the land of locusts. The Tanis stela shows us that the Egyptians also looked to their gods to protect their fields from the ravages of this pest.⁴ From the literature of Egypt we have discovered that locusts were used to symbolize “weakness” and “multitudes” as

¹ *Amulets* (London, 1914), No. 26. Petrie’s text (p. 14) dates Egyptian locust amulets as “prehistoric, XVIII, Roman.” Those illustrated are of the Eighteenth Dynasty.

² *Buttons and Design Scarabs* (London, 1925), Nos. 935–36. On his p. 25 Petrie dates them “probably about the time of Hatshepsut,” i.e., Eighteenth Dynasty, ca. 1500 B.C.

³ J. G. Frazer, *The Golden Bough*³, VIII, 282.

⁴ Breasted, *op. cit.*, IV, § 893.

exemplified in the despised enemy. Something of this idea may have been in the mind of the designer of a scarab (Fig. 57) pictured by Hall, inscribed: "Menkheperre, beloved of the gods, multitudes of grasshoppers"¹ or "numerous(ly possessed of) grasshoppers." The "grasshoppers" may stand for soldiers (so Hall) or, better, for conquered enemies.

In Assyrian art, too, images of the locust may frequently represent a charm to drive it away. Often, however, their purpose is not un-



FIG. 57.—Inscribed scarab of Thutmose III mentioning grasshoppers. British Museum scarab No. 673.



FIG. 58. Locusts by a shrub. Ward, No. 770.



FIG. 59.—Grasshopper erect beside palm tree. Ward, No. 1091.

equivocal. Ward publishes but two seals having a locust as an integral part of their complex. In his No. 770, which includes Ishtar and her dog, two locusts are resting, one on either side of a shrub, with a star and two crosses² above (Fig. 58). In his No. 1091 a palm tree is flanked by a grasshopper standing erect in human fashion and a dog (Fig. 59). Locusts as food are clearly pictured in a procession carved on a wall of Sennacherib's palace (Fig. 60).³ Spitted on long sticks, they are seen with other viands—rabbits, birds, and pomegranates—being provided for a banquet.⁴

The University of Pennsylvania⁵ has published one sealing and one seal on which appear representations of the locust. The former, No.

¹ So Hall, *Catalogue of Egyptian Scarabs, etc., in the British Museum*, I, No. 673.

² Or daggers or ankhs?

³ A. Paterson, *Assyrian Sculptures: Palace of Sennacherib* (The Hague, 1912-13), Pl. 89.

⁴ This scene in itself clearly indicates that the Assyrians did not think of the locust as divine.

⁵ University Museum, "Publications of the Babylonian Section," Vol. XIV: *The Culture of the Babylonians from Their Seals in the Collections of the Museum*, by Leon Legrain.

562,¹ excavated at Nippur and dating back to 2500 B.C. or before, pictures a locust beside a bearded god. The latter, No. 1024,² bought at Baghdad, shows by its style and its Aramaic inscription that the locust was used on Babylonian seals of the latest centuries B.C.

Other locust representations found outside of Egypt appear on a Kassite seal, No. A 599, and on two "Syro-Cappadocian" seals, Nos. A 1082 and A 1115, published by Delaporte.³ Though the find-spots

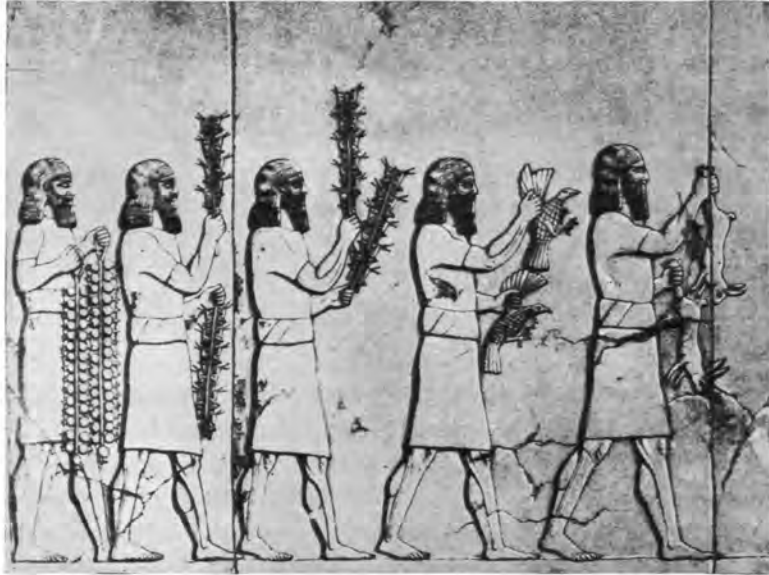


FIG. 60.—Locusts and other viands for Sennacherib's table. After Paterson

of the last two are unknown, their dates are evidently around 2000 B.C. Delaporte's grouping includes with them many Egyptian or Egyptianized scarabs and scaraboids, some of which came from Byblos. These two "Syro-Cappadocian" objects interest us especially, since No. A 1082 is itself in scarab form and part of its design consists of what may be two Egyptian Hathor heads misunderstood by a native craftsman, while No. A 1115 is a scaraboid which pictures a

¹ Described *ibid.*, p. 294.

² Described *ibid.*, pp. 357 and 50.

³ Paris, Musée du Louvre, *Catalogue des cylindres, cachets et pierres gravées de style oriental*, T. II (Paris, 1923).

locust above a winged scarab beetle (Fig. 61). These Asiatic seals or amulets, then, give evidence of connections with Middle Kingdom Egypt in both form and subject matter.

In interpreting our Megiddo seal we see that the influence of Egypt clearly predominates not only in its form but in the griffin himself, his accouterments, the ankh symbol before him, and, if we may judge by the company he keeps elsewhere, the locust beneath him. Now in Egypt itself scarabs which include the names, titles, or figures of kings or deities had long been in use as amulets. It was apparently felt that by sympathetic magic the king's or deity's beneficence would be aroused in behalf of the owner or wearer of such a charm.¹ So the combination on our seal may be considered as wishing (long) life to the king or asking it of the god, victorious over hordes of enemies helpless beneath his feet.² Was the apparent dislocation of our locust's leg intentional?



FIG. 61.—A "Syro-Cappadocian" seal showing locust above winged beetle. Louvre seal No. A 1115.

Egyptian custom would suggest that the third division of our seal, the inscription, might be the name of a deity, if such be represented here by the griffin. Unlike the lettering seen in Figure 35 on the "Asaph" seal (likewise discovered at Megiddo), which, being of markedly inferior workmanship when compared with the rest of the seal, has been supposed to be the work of another engraver, the lettering of *Hmn* ("Ḥammān") marks the same careful workmanship as the rest of the gem. The position of the word is peculiar, in that the letters occur in the spaces between the griffin's legs, instead of below the scene (cf. Figs. 35 and 37). This may be another indication that the inscription should be applied to the griffin. That it is not the owner's name, such as we have in Figures 35 and 37, is implied by the lack of the preposition of possession $\dot{\text{b}}$ (*l'*). Personal names not preceded by this preposition have been found very rarely on seals.³ As a personal

¹ On Egyptian wish scarabs see Art Institute of Chicago, *Handbook of the Egyptian Collection*, by T. G. Allen (Chicago, 1923), pp. 146-48.

² Cf. our remarks on Fig. 57.

³ One instance, noted by Dr. Olmstead, is on the seal of Gehazi, published by E. J. Pilcher in *Proceedings of the Society of Biblical Archaeology*, XXIII (1901), 362.

name, too, *Hmn* is rare. In one Aramaic docket, reproduced by Cowley,¹ a certain *Ḥammān* is said to have written the text of an affidavit. The affidavit itself was written in Egyptian demotic in Egypt.

As applied to a deity, the word *Hmn* is on the one hand frequent as an epithet of Ba'al in inscriptions from Phoenician colonies, especially fourth-second-century Carthage.² It seems related to the root *hmm*, "to be or become warm." A derivative of the latter, *hammah*, is used in Isaiah 24:23 as a poetic term for "sun," paired with *l'bhānah* for "moon." *Ḥammān*, therefore, a word the plural of which (*ḥammānīm*) is frequent in the Old Testament, may well indicate a sun image,³ and Phoenician sun-worship would seem not unknown in Palestine. *Ba'al-Ḥammān* would then mean "lord of the sun image," i.e., the sun itself.⁴

On the other hand, *Hmn* is the name of an Egyptian god also. Determined with the squat archaic image of a falcon, he appears already in the Old Kingdom⁵ and is still known in Ptolemaic times.⁶ Sir E. A. Wallis Budge years ago suggested comparison of this god's name with Hebrew *hammān*.⁷

Since our Megiddo seal is inscribed in Phoenician, it appears probable that it was of local manufacture and that the Phoenician rather than the Egyptian deity (if they were unrelated) is the one indirectly appealed to through its Egyptianized design.

¹ *Aramaic Papyri of the Fifth Century B.C.* (Oxford, 1923), p. 163, No. 59.

² Cf. G. A. Cooke, *A Text-Book of North-Semitic Inscriptions* (Oxford, 1903), pp. 104, 132, and 154. Ba'al-Ḥammān is here regularly associated with the goddess Tanith (*ibid.*, p. 132).

³ Gesenius, *A Hebrew and English Lexicon of the Old Testament* Ed. by F. Brown S. R. Driver and C. A. Briggs (Boston, 1906).

⁴ Cooke, however, prefers (*op. cit.*, p. 104) to translate as "the glowing Ba'al" and to make him "the god of fertilizing warmth" but not necessarily a sun-god.

⁵ Pyramid Texts (ed. Sethe), §§ 235 and 1013.

⁶ Erman und Grapow, *Wörterbuch der ägyptischen Sprache*, III (Leipzig, 1929), 95. In *Urkunden des äg. Altertums*, V, 156, l. 12, and 158, l. 10, a Middle Kingdom Coffin Text and its later, infrequently found, Empire version known as chap. 99, Introduction, in the Book of the Dead mention "the *nw*-serpent in the hand of *Hmn*." An inscription on a Thirteenth Dynasty statue (A 17) in the Louvre localizes him in *Hf't*. H. Gauthier, *Dict. des noms géogr.*, IV (Le Caire, 1927), 27-28, follows Daressy in placing *Hf't* at modern "Mo'allah" north of Esna, near Gebelein but east of the Nile. See Baedeker, *Egypt and the Sūdān* (8th ed.; Leipzig, 1929), p. 356 (El-Mir'alla) and map at p. 232 (El-Ma'alla).

⁷ *Egyptian Hieroglyphic Dictionary* (London, 1920), p. 485, with additional references. See also his variant, "Humen," on p. 471.

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