

was coming into Egypt in the later centuries of the Roman occupation. Thus the way was paved for the Arab conquest, much as the Saxon conquest of England was preceded by the settlements on the "Saxon shore" of Roman Britain. Of the Arab age some houses were cleared at Belbeys, in course of a search for earlier remains. Thus every age of Egypt after the Old Kingdom has been touched this year; and in two periods results of the first importance have been ascertained.

In issuing the great number of plates needed to record such an extensive course of work, it was not practicable to publish the less important portions in so large an edition. Therefore the ordinary subscribers receive a complete work giving all the material of general interest, while the larger contributors will receive the extra plates with lettered numbers, IVA, VIIIA, VIIIB, etc., inserted in their volumes. Thus the requirements of a full record can be kept up without undue expense or troubling the general reader with less interesting details.

3. I have alluded above to previous work at Tell el Yehudiyeh. In 1886-7 Dr. Naville and Mr. Griffith found the cemetery with the Jewish tombstones, but did not otherwise clear up the history of the place. Dr. Naville revisited the site this year when we were at work, and was much interested with the great sloping face of the camp. At Tell er Retabeh the same explorer had made some trials in 1885-6, but left that site with the conclusion that it was only a Roman camp, and not of historic value. And at Saft el Henneh it is to Dr. Naville that we owe the first notice of the place in 1885-6, when he found monuments there. The cemetery was, however, not attempted at that time. After a lapse of twenty years passing without any further researches in this district, it seemed desirable to try to clear up its history, especially in continuing those researches bearing on the Israelite questions on which I touched last year in Sinai (see *Researches in Sinai*). The archaeological results now reached carry us in many respects much beyond the topographical work of the earlier explorers.

CHAPTER I

THE HYKSOS CAMP

4. ON first viewing Tell el Yehudiyeh there seemed hardly any possibility of recovering details of the ancient structures of the place. The accumulations

of brick ruins of the ancient town, some twenty miles north of Cairo, had almost entirely disappeared; the site of the palace of Ramessu III was high in air, and amid the heaps of potsherds strewn over the enclosure the bare desert floor appeared in many parts. The sandy masses of the great square camp, and of the mound on the north-east of it, were cut away on all sides, so that not a fragment of original face appeared to be left. The stone wall has vanished, leaving only a long trench to mark its site; the earth and bricks have all been elaborately cut away to put on the land around; the sand is being carted away every day to use in building; and even the very potsherds are collected to place in foundations of houses. Every fragment and product of the ancient site is being removed, so that before long no trace will be left of this great city.

5. Yet as a continual flow of scarabs of the age of the Hyksos had come from this region, and the supply had not ceased, it seemed needful to try to rescue some history if possible from this site. Our first venture was the turning over of an area marked "Chips" on the plan (Pl. II), where a large mass of limestone chips showed that a building had been there destroyed. From this part northward, along the nearer half of the "Sand Foundations," I opened a trench down to the native desert. In some parts four or five feet of black earth yet remained, in other parts there was none left. This trench from north to south was moved westward across the ground to beyond the "Granite Base," thus completely turning over about an acre of ground. Parts which had rubbish descending below the water level in December, were cleared to lower levels in March. That a temple had existed here is shown by the long line of sand foundation of the walls, by the column of the XIIth dynasty usurped by Merenptah, by the large black granite base for a statue, and by a life-size kneeling figure of which we found the lower part to the west of the chip ground. But it seems that the building, and all the other monuments which it formerly contained, had stood at higher levels which have been entirely swept away by the diggers of earth.

This clearance of ours was, however, fruitful in another way. Five graves were found, all containing scarabs of the Hyksos period, with pottery copied from the earlier Egyptian types, and imported pottery of the black incised ware (Pl. V). From graves which had been already dug over by the natives we found many other examples of this pottery left behind, and a gold-mounted scarab of King Khyan, with a plain

band of gold, perhaps a head fillet. That such graves of the Hyksos might well have been dug inside their camp, we see from the example of graves inside the town of Ehnasya under the later temple, and the graves of the 1st dynasty inside the town of Abydos.

While this work was going on I observed, in walking round the great bank of sand, that on the eastern side a thin white line ran through the ground inclined at about 45°. I traced this again and again at other points, and at last found it on every side of the camp. I dug down the slope of it, and bared a wide plane of sloping white plaster or stucco (Pls: IV, IV A), extending as wide as the earth was left remaining, and as deep as the present water level below it. This was evidently a great sloping face to the sand bank, and therefore gave the position of the outer surface as originally finished. As the present outside of the sand bank had been cut back in many parts to as much as fifty feet inside this stucco slope, the recognition of the original face greatly restored our view of the site.

The outside being thus identified, the inside needed fixing. This was more difficult as there was no white stucco, and the brickwork lining wall had been systematically dug away. Traces of it were remaining against the sand face, mainly in the north-east corner. But only one piece of the north face, one piece of the east face, and the line of the south face could be recovered. These suffice to show the position and the thickness of the great sand bank, which even at the top was 80 to 140 feet wide.

The entrance to this camp was the next point to be studied. On the eastern side the sand bank is much lower in the middle, and it was natural to suppose that a gateway had been destroyed there. Also there was no trace of the stucco slope in the middle of the side. I cleared this part therefore to find the gateway. To my surprise the stucco slopes on both sides of the middle turned into walls running outwards to the east, and no trace of a gateway could be found. We dug on, but only uncovered a long slope of brickwork pointing up to the top of the sand bank (Pl. III), with lesser lines of sloping brick in the sand below. At last it was clear that there had never been any gateway, but that the entrance was by a long sloping roadway, leading over the top of the sand bank.

The western half of this region was occupied by walls of a different character, evidently associated with the remains of Ramessu III. Whether this part was ever included in the original camp was

for some time a problem. On the south side a sloping face of brickwork was found (Pl. II, see A) cutting across the main bank, and at first it seemed as if this were an original corner. But it was traced outward to a sharp bend with the outer stucco face of the bank, and it became clear that it was only a revetment to hold up the end of the bank, when cut through and replaced by the walls of Ramessu. The later discovery of the stucco slope, complete on the west side, proved that the camp was almost equilateral. Having now described the order of examination of the site, we may proceed to the details that were discovered.

6. FOUNDATIONS. The first question in dealing with a sloping structure is the position of its original base level. Any building that was founded within a few yards of water-level in Egypt, is now submerged at its base by the steady rise of the Nile deposits, and of the general water-level of the country. This rise amounts to about 4 inches in a century: therefore since the Hyksos times, over 4,000 years ago, the rise of level must have been about 160 inches or more. As even now much of the inside of the camp shows the desert ground almost up to high Nile level, it seems that the highest part of the ground was about 12 or 13 feet over high Nile. Naturally the site fell away on most sides, but we cannot suppose that the earthwork extended below old Nile level, as the general plain was covered with Nile deposits up to that. I have sounded the face of the wall down to 20 inches below the present level of water in March; and the level of that season is marked on the sections, both for the present time and for the period of construction.

The best guide as to the starting point of the slope is given by the stone wall which was added around it, as shown in the sections on Pl. III. It is not likely that in adding such a wall any large amount of the slope would be cut away; the base breadth of the wall might very likely be removed; but more than that is not so probable. Therefore the slope is not likely to have continued lower than the level marked "old ground?" Indeed it cannot have gone more than a couple of feet lower, as the general level of the alluvial plain (even if there were no desert footing here) would be about two or three feet over the "old water" level of the spring-time. Nor is it likely that the slope ended higher than we have marked it, as the stone wall would naturally be cut a little into the foot of it. We have therefore adopted the level marked as "old ground," as an approxima-

tion. It happens to be the theoretical zero of all my levelling, which was started by taking a signal on the top of the bank as 500 inches level. Hence all levels named here are in inches above the probable original ground.

On the plan the outline of the slope was fixed by taking as high a portion as could be found in each part, and measuring the angle of it, or angles if it varied. This angle was then carried upward to 500 inches level and downward to zero, or old ground. The horizontal distances from the point fixed were plotted on the plan, and so the outline of the top and foot of the bank were determined at each part, as shown in the plan. Each point which was thus fixed is marked by a short cross stroke on the outline. Where the top and bottom of the bank come closest together, as at the north-east corner, the slope is at its steepest.

The width of the bank as laid out varies from 1580 inches on the south side to 2360 on the east, at its base, roughly 130 to 200 feet. This irregularity is similar to the want of parallelism and of squareness between the sides. The whole outside varied—

N. to S. . 17600 to 18430 inches, 1467 to 1536 feet.
E. „ W. . 17650 „ 18750 „ 1471 „ 1562 „

Hence it was more nearly equal in length and breadth than the skewness of the sides would lead us to expect.

The inside dimensions are less certain, as I have not uncovered the original inner face of the west side. It is here restored from the north side. But a piece of wall just within the remaining heap of sand at the north-west may be part of the lining wall; and, if so, the bank was thicker than it is marked. The inside was about 400 yards square. We may perhaps allow two square yards of house room for each man in a closely packed camp; and the roads and walls might occupy as much as the floor space. The whole camp might then hold 40,000 men; or if they were put together as closely as English soldiers in tenting, there might be 80,000 men.

7. BANK AND STUCCO SLOPE. The great bank is in most parts pure sand (see views, Pl. IV). Along the eastern side it consists largely of marly lumps; and on the south-east corner much of it is of yellow lumps of decomposed basalt, collected from the surface of the basalt flow, which is now found a mile or two to the east on the desert. In most parts there are embedded in the bank scattered bricks, and irregular short walls of loosely piled bricks. Such seem to have been marks for limits of working gangs, or

possibly shelters for the men employed. These bricks are 14.0 to 15.4 inches long, 6.5 to 7.8 wide, 3.2 to 3.8 thick; the details of sizes of bricks will be given in Section 8.

The angle of the stucco slope outside of the bank is by no means constant, as is shown in the base of Pl. III. The variations of it are from 27° to 55°, and these limits are found in a single slope on the south-east. But four-fifths of the cases fall between 36° and 43°, the mid example being 41°. From this amount of variation it does not seem that any measurement was followed in setting out the face, any more than there was in laying out the direction of the sides. The height of the slope was from 50 to 70 feet, according to the varying angle. The stucco face is plastered over with hard white plaster, about $\frac{1}{8}$ to $\frac{1}{4}$ inch thick. This was spread by the hands, as may be seen by the finger-sweeps showing upon it, where well preserved at the south side of the sloping ascent. It is laid on in bands about 30 inches high, leaving a slight ledge at the top of each band (see view, Plate IV A). This evidently marks the breadth which was covered at once in the plastering, the ledge being the slight foothold left by the workmen as they went round the plasterings. Such slight ledges greatly detract from the inaccessibility of the slope, and they are another mark of the untrained and badly organized character of the whole work.

Behind the stucco slope there is a steeper retaining wall, seen on the north and the south-east, as shown in the sectional view of variations of slope, Pl. III, base. This wall is in ledges, each course stepped back, and the appearance of it where bared on the south-east is shown in the photograph, Pl. IV. This wall has been nearly all removed, as it was a source of brick-earth to the modern diggers; and in some parts a deep trench runs between the stucco slope and the sand bank core. Where preserved, this wall has an angle of 58°, and is built of bricks 14.5 to 14.8 ins. long. Why the face of this wall itself was not smoothed and stuccoed we cannot understand. To add more earth to the lower part, and so make a flatter slope for the final face, seems to throw away the defensibility of the bank. Perhaps this wall was originally intended for the face; but, if so, it may not have proved strong enough, and have bulged with the pressure behind it, as it was fifty feet in height. This would account for the lower part being banked over, and a flatter slope substituted. Such seems to be the only explanation of this inner sloping wall.

The inside wall of the bank towards the town was almost vertical, as seen along the south side, where it is best preserved. The traces of the backs of the bricks can be seen all round the north-east corner. The inner face was traced for some way inside the north side, and on the east it was identified at one spot where it is preserved.

There is no trace of any brick wall on the top of the sand bank; and though in other positions brickwork has been diligently cut away, yet in all such places some fragments have been casually left. The top where best preserved is flat, and strewn with weather-stained flints and potsherds, while there is no trace of any trench or space where a brick wall has been dug away from the top. Mr. Griffith, who saw the place when it was much less disturbed, also considered that there was no trace of a defensive wall on the top. It seems therefore that at first the earthwork alone was the defence; and later, when walls were valued, the great stone wall outside rendered any brick wall needless.

8. ENTRANCE. There does not seem originally to have been any gateway through the bank into the camp. Certainly there was none on the east; on the south the bank is continuous beyond the middle; on the west the line of the stone wall continued across the middle; and it is only on the north that the destruction leaves us in doubt as to the continuity of the bank, though the sand is certainly continuous to ten or fifteen feet above the old ground level, and therefore probably no opening existed. The only original entrance that we can trace is the sloping ascent on the east side. This was a gentle slope about 225 feet long; but the lower part of it became covered with a great mound of town rubbish in the Ptolemaic time, and hence I have not cleared or planned it further out than the upper half. Near the bank it has been entirely cut away in removing the inner retaining wall of the bank, hence only a part of the upper half can be seen. The outline of the entrance given on the plan, Pl. II, is certain in the upper part; but the lower end is conjectural, as it is still deeply buried. At first there was only a continuous ascent 35 feet wide, as shown on the plan, Pl. III; this ran up over the slope of the bank, pointing towards the top. The actual breadth of this ascent is still well preserved, with vertical walls on each side of it. The stucco slope outside of the bank bends irregularly to meet this, and turns round in the corner where the wall joins it. The foot of this ascent would perhaps not be as wide as the

upper part, as there was good reason to limit the rush of an enemy at the beginning. The fact that the stucco slope turns out to join this ascent proves that this approach is the original roadway, and not a siege-work or an alteration of later times.

After this raised sloping ascent was thus made, a remodelling of the defensive system was soon adopted. The plaster on the stucco slope on either side of the roadway was perfectly fresh, and had not been exposed for even a few years, when it was covered over with new works. It seems to have been perceived that the ascent was too far from the archery defence. The long slope withdrew the bowmen from the beginning of the ascent, so that the flank attack was at 300 to 400 feet distance. This led to a change in which the Egyptian system of vertical walls began to be utilised. A flanking wall was thrown forward, out to the edge of the great slope, for more than 200 feet along (see the model, Pl. IV). This shortened the diagonal attack on the approach by 80 feet. Then the flank wall was continued along the sides of the approach itself (see "Outer retaining wall" in the plan, Pl. III), the inner retaining wall being that at the sides of the road. This gave standing room of over forty feet on either side of the actual gangway; and this fresh space could hold a large body of archers commanding the gangway from above. The defence then consisted of not only distant flank attack on the approach, but a sunk causeway leading through a body of archers, and so forming a complete trap; thus the defence was far superior to the attack on the vulnerable point.

The place of this flanking wall on the north of the ascent was later occupied by the stone wall shown on Pl. III, in "Section north of sloping ascent." On the south side of the ascent, in the next section, the flank wall of brick occupies the same alignment as on the north, but it was raised on a bank of sand. Where the later flank wall of stone joined the ascent on the north (Pl. III, plan), it fell into just the same place over the foot of the slope; but it has all been removed for stone, leaving only the brick flank wall along the side of the ascent, marked "Outer retaining wall." On the south side the flank wall was not only based on a sand heap, but it curved round irregularly to the side of the ascent. The whole of it has been removed, and only the lumps of marl in the backing show where it stood. The sizes of the bricks vary a good deal. They may be summed up as follows:

In the sand bank :

14'0—15'4 × 6'5—7'7 × 3'2—3'8 inches.

In the gangway :

14'3—16'1 × 7'3—8'2 × 3'4—4'7.

In the flanking walls are three different classes :

14'5—15'1 × 7'1—7'4 × 3'2—3'5 ; also

15'4—16'2 × 7'2—7'4 × 4'4—4'5 ; also

17'5—18'1 × 6'5—8'5 × 4'2—4'4.

9. STONE WALL. On all sides of the camp may be seen a deep trench in the ground, which is filled with water early in the season, and the natives all agree that they have in recent years removed from that ground a great stone wall, three blocks in width. In 1887 the remains of the wall were in course of rapid destruction ; but now none could be reached except at low water in March, and even then only a few stones were found in the less-disturbed parts. I was anxious to examine this wall, owing to the previous description of it (*Mound of the Jew*, p. 49) as a stone-lined ditch 32 feet wide. Mr. Griffith informs me that he intended by this a dry ditch—that is, two walls at 32 feet apart over all. This appearance which he saw was doubtless due to the relation of the wall around the camp, to the wall facing the western side of the hill of Onias, as these would be about that distant apart where running parallel at the north-east. And I could not hear, or see any traces, of a second wall around the camp. The position of the stone wall in relation to the stucco slope of the bank, depends upon the original ground level ; but it seems that the most likely arrangement, already discussed (that is, the slope being cut away three or four feet for it), accords very well with the probabilities of the levels. On the north of the ascent (Pl. III) there was no stone remaining as low as we could reach in March. But the sand and marl backing came to a vertical edge ; and against that there was only recent loose earth, which had evidently fallen into a hollow dug during the last few years. This was then the position of the wall. Farther north of this, at the north-east corner, I made a large excavation down the slope, and also advancing from outside ; we found much broken stone in large flakes, evidently from the destruction of great blocks of fine white limestone. This destruction seemed to be ancient, and was doubtless due to the removal of materials by Onias.

To the south of the ascent I carried down a pit at the place marked "Wall," and found two blocks in place above water-level. A second pit north of this was dug, outward from the lower courses of the

flanking wall, and again two blocks were found, one on the other. One block was 56 inches wide, 33 high, the length not seen ; another was over 56 long and 45 wide. Both were of the finest white limestone. Their relation to the retaining wall is shown in the section "South of the Ascent." On the north of the ascent the stone wall replaced the brick flanking wall ; on the south it was about nine feet in advance of the flanking wall. This difference will be seen in the plan, Pl. II. I had selected the above places as having apparently not been dug out recently ; most of the circuit has only a deep modern ditch in the line of the wall.

On the west a long trench appeared, cutting through higher ground on the edge of the Arab cemetery. This trench ended in high ground, so there again I tried for the wall, and found two stones of the outer face in position. The upper of these blocks was 81 inches long, 40 high, and 25 thick. An excellent section was bared here, showing the relation of the stone wall to the stucco slope, and the nature of the filling between them. The slope had lost all its stucco in some parts, and in others it was weathered and rotted, before the stone wall was added. This points to the slope having been used for two or three generations before the system of defence was altered. On looking at this section, the lowest on Pl. III., "On west face," it will be seen that the filling is mainly of sand in layers, sometimes with potsherds, and one stratum is of yellow lumps of decomposed basalt, such as is usual in the filling behind the slope on the south-east. The upper bed of sand sloped steeply back at 120 inches over the water ; and I was told that the stones that were removed had been found up to this higher level. The history of the place then was that the upper part of the stone wall had been anciently removed, and the sand backing had run out over the lower part. Then it was entirely buried with earth of decomposed bricks, from the great Ramesside wall inside it. Recently the lower courses had been also removed, and when I went there I found only two stones left.

This great stone wall was about 6 feet thick, as shown by the bed on the west side. It must have been somewhat higher than the sand bank, which was 41 feet high, so we cannot reckon it at less than 45 to 50 feet in height. The length was 5,450 feet, or over a mile. It contained therefore about 80,000 tons of stone. The quality of the stone where seen in building or chips was of the finest white Mokattam limestone, which has no grain, and which flakes

evenly in all directions. It was equal in quality to the best casing stone of the pyramids.

10. LATER HISTORY. Of the XVIIIth dynasty we find no trace. Ramessu II appears to have favoured a temple here. A group of two seated figures in red granite shows the king and a god, doubtless Ra according to the references on the back. The back of the group, as it lies on its side, is photographed on Pl. XIV B, and copied on Pl. XV. The inscription has been translated by Dr. Naville thus: "(1) I am thy venerable father, the lord of thy beauties; (2) . . . Rameses thou art prosperous like Tum in the great hall; (3) . . . like Khepra every morning crowned on the throne of Ra in the vestibule of Tum. (4) I am protecting thy limbs every day: thy might and the power of thy sword is above all lands. (5) Thy head is never opposed in all countries, Rameses, friend of Harmachis, the great god." The position is shown as "Granite Dyad" on Pl. II. Another block probably of the same reign is the large black granite base for a statue. It did not belong to the dyad, as the front of it was the narrower dimension. Though the granite is much weathered I could still trace the symmetrical inscription on either side of the axis, *Ankh Hor Ka nekht*. The block is 37 inches wide and 69 long. The position is marked on the plan.

The next piece that can be dated here is the red granite column with the names of Merenptah. The original work is doubtless older than this king, probably of the XIIth dynasty. It may have been brought by him from another site, and is not therefore an evidence of a temple being here before the Hyksos. The photograph is on Pl. XIV B, and the copy on Pl. XV. The two pieces of column are 76 and 96 inches long; the whole height therefore was 172 inches, or a sixth less than the granite columns of Ehnasya. This shows that a temple with a portico had existed here.

The great work of later times was the rearrangement of the place by Ramessu III. He cut away the great bank of the camp over the western half, and built a new town, with thick brick walls, and a long front facing the old town. In the middle of this front was a portico, of which the square basement of brickwork remains, with the red granite base of a column lying upon it. The mass of brick is 605 E. to W., by 590 inches N. to S. The granite base is 63 inches across; its inscription is given in Pl. XV. West of this are the blocks of alabaster pavement of the great hall; this was long since dug away, thus

letting down the blocks to a level far lower than the original pavement. The present view is given on Pl. XIV B. To the west and north-west of the portico were found most of the remaining fragments of the celebrated glazed tiles with figures, shown in Pl. XIV B. The sad history of the destruction of this place may be seen in the *Transactions of the Society of Biblical Archaeology*, vii, 177. The remaining pieces of the wreckage are in the Cairo and British Museums.

On digging deeper in this ground we found at a little above the water-level, a thin drinking cup of the form usual in the XIIth dynasty; this type may very probably have continued rather later, so it does not prove any occupation before the Hyksos time.

The removal of the bank of the camp was not completed on the western half. One block of the sand and marl was left outside of the Ramesside wall, near the north-west corner. It is shown on the plan, Pl. II, and also appears at the left hand of the view of the great bank on Pl. IV. And on digging for the western wall we uncovered the stucco slope to ten feet above water-level, outside the line of the Ramesside wall; and a further portion near by was bared by the *sebakh* diggers. Probably most of the stucco slope could be yet found along this side. It seems then that Ramessu III cut down the upper part of the bank, and doubtless used the sand to mix with Nile mud in making the bricks, for all his great constructions here. Where he cut off the bank at the south side a sloping wall was built across it to hold up the sand, at A, Pl. II.

In the XXVIth dynasty some temple existed here, as otherwise the life-size figure of the admiral Hor (Pl. XIX) would not have been placed in the town. And at that time the worship seems to have been directed to the lion-headed goddess, the *Bubastis Agria* named by Josephus.

In Ptolemaic times also there was a temple, as is shown by many fragments of Greek architectural features found near the other sculptures. The house ruins of the town had so much increased that the ground had risen to the top of the great bank. The remains of this condition were seen in 1871 and 1887, but now only a few high walls are left in the south-east corner.

11. ORIGIN OF THE CAMP. Having now described the actual remains, and what can be gathered from them, we may sum up the results of the facts, and consider the origin and meaning of the camp.

The most obvious point is the entirely un-Egyptian

nature of the camp, and of the mode of defence which it implies. Instead of the high massive brick walls which were used from the IIInd dynasty onward, as at the Abydos forts and city, at Semneh and Kummeh, at El Kab, and every other Egyptian town that has been preserved, we have here a very thick bank of sand with a slope sixty feet long, and no trace of a wall on the top of it. Instead of the elaborate gateway traps that the Egyptian reckoned on for his defence, there is here no gateway but the exposed sloping ascent over two hundred feet in length.

It is evident therefore that the people who made the fort were not accustomed to the hand-to-hand fighting, such as the Egyptian found profitable owing to his superior weapons; for a fine illustration of early Egyptian fighting we may refer to the spirited siege of Nedaa, sculptured at Deshashah (*Deshashah*, Pl. V). On the contrary, by trusting their defence to a protracted approach of the enemy these people must have depended on projectiles. A barbed wire tangle in the present day, or a long glacis, is expressly for use with gun fire; and a slope sixty feet long, with an entrance approach two hundred feet long, would be useless without good archery. It is clear therefore that the type of fighting of the settlers was archery, combined with a long exposure of the enemy.

In describing the entrance, and the changes in its form (Section 8), I have explained them as adapted for archery. At first it was solely made to agree with plain earth-bank defences. Then after a year or two it was modified by the use of walls for flanking defences. And when, after two or three generations, the old system of fighting was abandoned, then a stone wall was substituted for the sloping bank.

That the camp is older than the XXth dynasty is certain, from its having been cut down and altered at that age. What people before that age were using a defensive system entirely different to that of the Egyptians? We can only look to the foreign invasions which broke up the XIVth, the VIth, and the IIInd dynasties. Among these the choice is absolutely decided by the profusion of scarabs of the Hyksos age in the camp and the region around it, while there is no trace of the earlier periods. No conclusion is possible but that the camp was due to invaders between the XIVth and XVIIIth dynasties.

The position of the camp is excellent. It lies between Memphis and the Wady Tumilat, by which any eastern people must advance into Egypt. It is on a low rise of desert which here projects into the

cultivation. Probably this was connected with the eastern desert in the earlier history, and it has since been separated by the rise of Nile mud, which now occupies about a mile width between the desert and the camp. The desert edge at present projects into the Delta, this region having been largely protected from denudation by a flow of basalt which covers the soft marls and limestone. Hence the position of the camp was surrounded on three sides with cultivation, while yet belonging to the desert. It commands a fine view into the desert for many miles; and an invader would need to make a wide detour to avoid touch with a fortress so placed. The distance from Memphis rendered this position the key to the capital, in the days of foot-marching or small horses. Thirty miles was then, what the fifty miles from Tell el Kebir to Cairo is now with large horses. This camp was the limit of striking distance from the capital, the point which must be secured before any advance from the east into Egypt was possible.

That such fortified camps were made by the Hyksos is shown by the passages of Manetho quoted by Josephus. He states that the invaders after a barbaric period, equivalent to the age of the earthwork camp here, became more civilised, and that their first king, Salatis, made the city of Avaris "very strong by the walls he built about it," and that they "built a wall round all this place, which was a large and strong wall." Thus the history that we have traced here of an earthwork camp constructed by nomads, who later placed a great wall around it, exactly accords with the account of the Hyksos.

12. POSITION OF AVARIS. A further question indeed arises as to whether this camp was itself the celebrated stronghold Avaris, which has been generally supposed to have been down by the coast in the north-east of the Delta. In favour of such a site as Tell el Yehudiyeh there are the following connections:

(1) Avaris was built to defend Egypt against eastern invaders (*Josephus c. Ap. i, 14*). This implies that it was on the eastern road which went by the Wady Tumilat; for it would be absurd to put a fortress for this purpose near the coast and far to the north of that road.

(2) Avaris was upon the Bubastite channel (*Jos. c. Ap. i, 14*). This implies that it was between Memphis and Bubastis; were it near the coast it would be referred to the Pelusiac, Tanitic, Mendesian, or Pathmetic channels, and not to Bubastis, north of which the channel branched in two.