

Excavations will be undertaken wherever they may appear necessary. It is hoped that large additions will be made to the Society's photographs. Periodical publications will be issued, giving the reports of the work in progress and the discoveries made, with, if possible, illustrations; as has been done for the last two years in the *Quarterly Statements*.

Estimates of the cost of this undertaking will be prepared for publication in the next *Quarterly*. The summer will be occupied in organising the expedition, and in collecting the funds necessary to begin it. Meantime, the Committee will be glad to receive promises from those who intend to support the work, and for that purpose wish to add their names to the list of annual subscribers. A public appeal will be made, and the readers of this preface, who are the present supporters of the Fund, will be able, by their own personal influence, if they will kindly exert it, very largely to increase the list.

The present number of the *Quarterly* contains Captain Warren's paper on Philistia, which has been kept back for some months for want of space. Mr. Palmer's concluding paper will be issued in the next number. The map of Moab supplements the map published in January, and embodies some of Captain Warren's work.

An expedition of great interest is contemplated by Reshid Pasha, Governor of Damascus, for the early summer. It will cross the desert, hitherto unvisited by Europeans, between Damascus and Petra, to the east of Moab. Mr. Tyrwhitt Drake will, if possible, accompany it on behalf of the Fund. Mr. Drake is now in Syria, engaged in getting copies and photographs of the Hamáh inscriptions, mentioned by Mr. Palmer in his "Preliminary Report."

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## THE PLAIN OF PHILISTIA.

BY CAPTAIN WARREN, R.E.

It is no idle dream to suppose that Palestine might, in a few years, become a land flowing with milk and honey; even with the present inhabitants, under an upright Government, the land would in a short time change its appearance, and, as it is, the country has changed in parts to a small extent, due to the alteration in the Government, brought about by the influence of public opinion of the West

asserting itself even in Syria. Look how those villages have begun to thrive which have been mortgaged to the Greek converts; and watch the cloud resting over the Christian village of Beitt Jala in the autumn sun, with its groves of olives, while all around is the brazen sky.

At present, however, Palestine—Philistia in particular—has not a tithe of the population that it would support; its fruit trees are left to take care of themselves, its waters allowed to run underground instead of on the surface.

Philistia consists of an undulating plain from 50 to 300ft. above the level of the sea, reaching thirty-two miles from Ekron to Gaza, with a breadth of from nine to sixteen miles. To the east of this the hills commence, not the hill country, but a series of low spurs and undulating ground, culminating in hogs' backs running nearly north and south, and rising in places to 1,200ft. above the ocean; to the east of these there is a steep descent of 500ft. or so to valleys which break through the barriers much in the same manner as we find the rivers forming passes through the chalk hills between Aldershot and Chatham. To the east of these again the hill country commences, and in two or three miles we rise to altitudes of 1,700 to 2,000ft.—the back bone of the country being at an elevation of 2,400 to 3,000ft.

In the hill country the spurs, not more than one mile or so apart, are often separated by narrow ravines 1,500 to 2,000ft. deep, at the bottom of which in the rainy season rapid torrents roll. Follow them into the plain and see what becomes of them; but first look at the existing maps. In one they appear to traverse the plains in a different direction to what they do in the next. The fact is, the bulk of the water reaches the ocean underground; on coming into the plain it forms marshes and pools, and quietly sinks away, while the bed of the stream itself in the plain is merely a narrow ditch some 6ft. wide and 4ft. deep. You may leave the water at the commencement of the wady mouth, ride over the plain without seeing anything of it, and meet it again welling out of the ground close to the sea shore, forming wide lagoons there. Now if proper precautions were taken, were the people industrious, and the country cultivated and clothed again with trees, the waters flowing in the ravines might be conducted over the plains in the early summer months and induce the rich soil to yield a second crop.

The encroachment of sand is one of the most serious evils now to be dreaded on the coast of Palestine. Already Gaza and Ashdod are threatened, and nothing is done to arrest the enemy, though there is little doubt but that the danger might be averted by obliging the landed proprietors to take common action against their silent foe.

On the coast near the mouth of Wady Semsim, which at this point flows north-west, the sand encroachment, proceeding N.E. by E., is evidently arrested by the waters of this stream, for on its left side are high sand banks dropping abruptly into the water, while to its right is low cultivated land.

The method of progression of the enemy here is plainly visible, for the

whole country consists of sand-banks sloping down at  $10^{\circ}$  towards the prevailing wind, and at  $30^{\circ}$  to  $35^{\circ}$  on the lee side. Thus the sand is gently rolled up the slope of  $10^{\circ}$  by the wind, and then falls down the other side by its own weight, so that it actually does quietly advance towards the object it intends to overwhelm in banks 30 to 50ft. in height.

It is curious in traversing these sand hills to come upon the site of some orchard which has been covered perhaps for hundreds of years. You suddenly come upon a sort of crater in the sand, 40ft. deep, at the bottom of which flourishes an apple tree; then you come upon a fig tree growing in the same manner, and lastly upon a little patch of ground, quite below the level of the sand, with a house attached; but even this patch of ground has several feet of sand over it. The husbandman's chief duty appears to consist in dragging up the sand in baskets from the bottom of the craters to the surface. The trees growing in these little hollows are very fruitful, and no wonder, for they have no wind, plenty of sun, and good moist earth to grow in; the superincumbent sand, being a non-conductor, prevents evaporation from the soil below, and keeps it moist through the summer.

During the time I was in Philistia, I examined and surveyed 800 square miles, and my time was so fully taken up with the work by day and night, that there was little time for any other examination; the latitude and longitude of more than 200 points on this plain are now fixed and published for the first time.

We were out from sunrise to sunset every day, but we did not suffer from the heat, though it was often up to  $100^{\circ}$  in the shade during the afternoon; in the night time it was comparatively cool, going down to near  $70^{\circ}$ , except during the siroccos.

May 24, 1867.—We left Jerusalem on a month's tour in the plains of Philistia, intending to try and photograph the monuments in the mosque at Hebron, and we were provided with letters from the Pacha of Jerusalem for that purpose. We travelled with much pomp and ceremony to Hebron, being accompanied by a lieutenant and four zaptis, who were to secure us admission to the mosque. The result of this expedition is described p. 39, *Recovery of Jerusalem*. I had had a sharp attack of fever on 22nd May, and only got out of bed to get on horseback. Corporal Phillips also caught the fever on our arrival at Hebron, but our ride down to Gaza, where we arrived May 29, brought us round again. Riding all day in a hot summer's sun is a queer remedy for fever, but I have tried it more than once with success.

On our way down we met women in the villages acting the part of mourners. The conscription was going on, their husbands were being taken away. Soldiers, they say, never return to their native villages, so they are mourned as dead men, and the widows marry again shortly.

May 30.—I had been requested to proceed a few miles S.E. of Gaza in search of the Tels Jema and Gerar, supposed to be the ruins of the city Gerar (Gen. xxvi.), and spoken of by several authors as having been

discovered by the Rev. J. Rowlands. In Van de Velde's Memoir (1858), p. 115, we have the following:—"Um el Jerar, the site of Gerar, at the foot of Tel Jema in Wády el-Adar, recognised by a few scattered stones in the vicinity of some fine springs, was therefore laid down in our maps according to the information of the natives."

On making inquiries I easily learnt the position of Tel Jema, and the only difficulty in the way was the permanently unsettled state of the country about this borderland, which being almost common ground appears to be constantly liable to raids from tribes from the south. Just now, the wheat having been recently gathered, there were many wandering bands of strange Bedouin about, who appeared to sniff our two zaptis from afar and long to punish them.

On making arrangements for passing a night at Tel Jema, our zaptis broke out in mutiny; so paying off the most blustering of the two, we set off with the remaining man, a black, ordering the muleteers to encamp beside the "fine springs" at Gerar or Tel Jema.

We soon left Gaza behind us and entered upon a rolling plain covered here and there with the stubble of the wheat. The natives of these parts are roving farmers—a turbulent lot of a nondescript race, who are constantly in trouble either with the local government or with their own allies the Bedouins; every now and then compelled to build themselves villages, they are again rendered homeless by raids from the south, and thus being constantly exposed to dangers from all sides, they are somewhat reckless in their behaviour, and it is not uncommon to hear that the soldiers of Gaza have been ordered out against them. Still they appear to thrive and to be well-to-do, no doubt partly on account of the richness of the soil, but partly by doing a little foraging on their own account and putting it down to the Bedouin, or else by acting as "jackals" in the raids which are sometimes made on the villages of the fat Philistian plains.

Their land may—must—be very productive, but as we wander on up and down the wády banks and over the swelling hills, it appears to be a series of semi or wholly barren wastes, interspersed with sand-hills on which linger a few solitary fir trees, though in the far west, on the sea coast, may be seen clusters of date palms around the villages, with the line of telegraph wires from Gaza to Alexandria, rudely preventing our losing ourselves in thoughts of the past.

I had always pictured to myself a peculiar region for the scene of Isaac's life, perhaps from its name of Goshen corresponding with the name of the fertile Egyptian tract (Gen. xlvii. 11), "the best of the land," something to compensate for the difficulty of his position. But there is nothing at the present day to bear out the idea, and it strengthens our opinion of his obedience to the divine command when we find how he gave up the pleasures of freedom, of a wandering life, or of settling in a country like the rich plains to the north of Gaza, in order to dwell in this tame and monotonous solitude. Perhaps to his gentle and peaceful nature there may have been something congenial in

the character of this country, but to a European it simply presents the disadvantages of a desert and settled life without the joys of either.

We had not advanced far into the plain before we came across Wády Sheriah, and I became aware that this portion of Van de Velde's map, put in on Bedouin authority, was hopelessly in error; but I found little chance of correcting it, for there are few prominent points, and one sand-hill is the veritable twin brother of the next, and so on; after travelling south from Gaza about eight miles, we came full in front of Tel Jema on the south side of Wády Gusseh, having to its west a little patch of cultivated ground on which melons were growing. But where are our tents, and where are the fine springs of Gerar? *Mafish, Mafish*; nothing but Tel Jema and its melon beds. The Tel itself is a mound similar to those of Jericho, the Jordan, and Arak Menshiyeh, artificial and covered with pottery and broken glass; and no doubt marks the site of some ancient stronghold or city. I now inquired from the natives for other ruins, but they denied there being any nearer than Sbeta, or any water either, except Tel Sheriah, where they say there are streams of water. Is not this latter likely to be the looked-for Gerar seen by Mr. Rowlands? At Tel Jema itself they said they obtained their water from Tel Ajur on the sea-coast, the mouth of the Wády Guzzeb, and there we were directed to proceed as being the only place where our tents could be pitched. There are here a lagoon and some springs of medicinal water, very nasty to the taste, but just the very stuff to carry off the ill effects of our fever, and we returned to Gaza next day nearly well. On our road through the sand-hills we came across a great lizard, looking like a small crocodile; we gave chase and ran it to bay under a little sand cleft. On going up to it it puffed itself out, and opened its mouth so wide that we stood around not venturing to touch the beast, and eventually stunned it by swinging a leaden plumb-bob on to his head; we then tied him hand and foot and fastened him on the rug behind the saddle of the dragoon, who was rather nervous about his companion coming suddenly to life again. We then rode on to Gaza and met a good many Bedouin on the road, who shouted out after us "Warren! Warren!" It did not strike me at first as odd, but when they all began shouting out my name we were a good deal puzzled. On getting into camp we tied the beast, now quite lively again, to a stake in the ground, and let him get in the shade under the lee of my tent. The townspeople soon began to flock around us, and I heard repeated exclamations of "Warren!" and on going out to see the reason, found them pointing to the lizard, and discovered that I had a namesake inhabitant of the desert. This animal is well-known on the banks of the Nile, but I am not aware that it has been seen in Syria before by Europeans, and as I was anxious to get him forwarded to England, I sent him in a cage to Dr. Chaplin at Jerusalem, who identified him as the Nile lizard; he was taken to be examined by some of the English residents, but after getting into a harmonium and refusing to be dislodged for some time,

it was considered desirable to return him to the care of Sergeant Birtles, who was encamped outside the town. He throve very well until a certain Sunday morning, when he was tied hand and foot and put into a pit so as to be very safe, and a Nubian guard was told to watch that he did not escape. On return from church he was not to be found, and nothing was heard of him for three years. When we were leaving Jerusalem in 1870, we learnt that this animal, when cooked, is a very favourite dish of the Nubians, and that some Nubian friends of our black guard having come to visit him, they had together regaled themselves on my unfortunate namesake.

At Gaza we were encamped under an aged tamarisk tree (see No. 255 photo.). I paid a visit to the governor, who gave me leave to visit the mosques, and served me with the best cup of coffee I have tasted in Syria. The old church, described by Porter, is well worth a visit. On one of the white marble columns in the nave is a Jewish seven-branched candlestick sculptured; it was out of our reach, but there is no doubt about its existence; it is on a square of about six inches. Some of the columns appear to be of granite. We could find no vestige of ancient Gaza outside the city. 3rd June, left for Askelon, thirteen miles in a straight line. At the present port to N.W. were bones and jars collected ready for exportation, and a few coasting-boats in the offing. Passing over the drift sand we came here and there to craters, thirty to forty feet deep, at the bottom of which would be growing a fig or an apple tree laden with fruit.

#### ASKEILON.

From our tents, pitched upon the brow of the cliffs overlooking the ocean, we commanded a splendid view of the ruined city; its walls thrown up in fantastic confusion half covered by the luxuriant growth of fruit trees or by heaps of drifted sand—strange contrast of fertility and desolation: useless it would be to attempt a more complete description than that given in Murray's guide, or the "Land and the Book." I shall content myself with touching on two or three points.

The city is four-and-twenty miles, as the crow flies, from the present ruin of Timnath, whence Samson came to plunder the thirty change of garments for the payment of those who had expounded his riddle; though this is the only incident with regard to the whole city, recorded in the Bible, yet it is impossible to visit these ruins at the present day without realising, perhaps more than in any other ancient city west of Jordan, the utter overthrow of power that has taken place, the desolation which reigns supreme; the walls of indurated sandstone, though now of small-sized stones, were once formed of massive blocks, as is seen by the remains here and there that have not been cut down for other purposes or carried away to Acca or Saidon; great columns of granite seventeen to eighteen feet in length, and two to two and a half feet in diameter, project from the faces of the existing walls, used as thorough bonds, though hardly necessary, it seems, for the intensely

hard mortar has united the stones into one solid mass, which has only again been broken by some great force, probably gunpowder. Examine these walls (photos. Nos. 257—259), great discs of masonry overlapping each other in confusion, and it is apparent that they have been overturned at no very remote period. Some of these walls may have been built by the ladies of England as an offering to their country and lion-hearted king ("Chronicles of the Crusades") during the Crusades.

The view (No. 256) shows us the sycamore fig tree, now loaded with its burden of fruit, the hollow fig, which, though refreshing when picked from the tree, is considered too inferior a fruit to be eaten by any but the poorest of the people. See how the trunk of the tree, acted upon in its early growth by the prevailing wind, the sea breeze has bent over the narrow pathway for nearly thirty feet, at a distance of eight to ten feet from the ground, offering a secure seat to any who, like the lowly Zacchæus, wish to have a view of all that pass that way.

In No. 256 we have a picture of the sea coast with the surf breaking on the shore. Just outside that surf, as we were coming up from Gaza, we observed a large shark moving about, and on going down to the beach at Askelon at sunrise to have a swim, I saw two sharks loitering about within a few yards, apparently waiting for me, and not wishing to gratify their appetites I dabbled in shallow water. These sharks are larger than any I have seen in these latitudes, and their appearance reminds us that this is the coast on which the prophet Jonah was disgorged by the great fish that had swallowed him up. A few miles further up the shore to the north is the Neby Yunas, the monument of Jonah's, which vies in tradition with another point near Saidon as his landing-place. The booths used in the gardens by the watchmen of the fruit trees also remind us of his history, for they are similar in construction to that gourd-covered booth he rested in outside of Nineveh.

Mentioning booths, I would draw attention to 1 Kings iv. 25. *And Judah and Israel dwelt safely, every man under his vine and under his fig tree.* This, of course, is a poetical expression, but as at the present day, during a portion of the year, the natives actually do live under trees or in booths, it is reasonable to suppose that the same custom obtained among the Jews, and, in fact, we know it did obtain, Lev. xxiii. 42; Neh. viii. 14; 1 Sam. xxii. 6. And such being the case it is probable that the names of trees giving the necessary shelter would be used in the poetical expression.

To live in booths shaded by the vine, by creepers, by dry bushes, is very common at the present day, but I am not aware that the fig tree is ever used as a shelter for man. On the contrary its rank leaves have a most repulsive odour, the juice is supposed, when it touches the eye, to produce ophthalmia, and to sleep under its shade is said to be a certain receipt for the production of fever. In Spain, also, there is the same opinion; a fig tree near a house is said to be unwholesome, and to keep an animal under it for any length of time is supposed to produce madness or death.

About Askelon there are the most delicious apples, which were just now ripe, fully equal in flavour to any I have tasted elsewhere, but, in keeping with so many of the Palestine fruits, they are sadly in want of proper treatment; they have dwindled down to one-half the bulk of an ordinary English eating apple. Dr. Thomson speaks of these apples of Askelon, but Dr. Tristram ("The Land of Israel," p. 604) suggests that he mistook the quince for the apple, and doubts whether apples grow in Palestine at the present day.

Although so little remains of ancient Askelon *in situ*, coins and bronzes are constantly being turned up by the plough and by the crumbling of earth during the heavy rains; at this time agents come down from Jerusalem and buy up all that they can lay hands on, and sell at immense prices to pilgrims in the Holy City. I was able to secure on the spot some small bronzes of the Egyptian gods, Osiris and Isis, and also a very elegant mutilated figure of Hercules, and the remains of a fish god; the greater portion, however, of the bronzes are distinctly Egyptian, and similar to those in the British Museum; the coins found are generally Roman, or of the Crusaders, or Cufic.

5th June, 1867.—Askelon is ten miles from Ashdod in a straight line. We left the former at 8 a.m., and passing Abu Mushad, an eminence and tomb from whence the minarets of Gaza can be seen, we passed in a few minutes remains of buildings of Ibrahim Pacha, and among other objects a well 120 feet deep, with a staircase running down around the side. Leaving Mejdal with its minaret to our right, we came on Hamâmeh at four miles, situate on the edge of the sand-drift, the next village to be submerged. A Greek Christian came out to meet us and insisted on our coming into his courtyard and feeding on watermelon, and then produced several articles for sale, among the rest a pot of well-preserved bronze Roman coins. We had not time, then, to strike a bargain, and on inquiring for them a few weeks after I learnt that a commissioner for a collector at Beyrout had carried them off. On leaving this village we kept the drift sand close to our left, and shortly passed a small masonry erection in which water is daily deposited by the people, from the neighbouring villages, for the benefit of passers-by—a very kindly arrangement in a dry land if they would only take the trouble to keep it clean. Passing now over a country tame and uninteresting, we arrived at Esdud (Ashdod) shortly after mid-day. I went from here to the sea beach, a distance of three miles, in search of any remains of the ancient city, but nothing could I see but endless mounds of drift sand, over which we stumbled ankle deep; on the shore itself are the ruins of a rectangular barrack of sandstone, similar to the walls of Askelon, and at about a third of the distance on the road to Jaffa. It probably was a station connecting the two cities; it measures about 120 feet by 50 feet, with semi-circular flanking towers at each angle, and two on either side. No ancient pottery or glass was observed about, but there were a few broken bottles of modern construction, which looked as if they had once held beer.

Ashdod itself is a mean Mahometan village, situated on a gentle eminence, surrounded with beautiful gardens and palm trees, but with no signs whatever of its ancient grandeur visible, if we may except the sarcophagus shown on photograph No. 263, supposed to be of an early type. The view of the Persian wheel (N'aura) driven by a camel, and of a palm tree, Nos. 264 and 262, were also taken in this village. To the west the sand rises high above the gardens, and each year swallows up a portion. In the centre of the village is the usual elevated mound of rubbish, here of a considerable height, ending in a conical peak—a good theodolite station, and there we proceeded at sunset, just the worst time for observing, as then the fellahin are returning from their daily labour. We were soon surrounded by the entire village, who in a half defiant, half good-humoured manner advanced to the attack, determined to capture our instrument, which they considered to be exerting some sinister influence over the country; luckily the mound was steep, and as they came up we pushed over the foremost upon those behind and managed to keep our position until the pole star was observed. I was obliged, however, to complete the observations next day when the men had left the village. The sheikh came in the evening and made his apologies for the uproar, and affected great penitence.

On June 6th and 7th the country to north and east was surveyed. About one mile N.E. of Ashdod the wady from the Valley of Elah (now Wady es Sumt) effects its junction with another from the south which runs by Kuratiyeh. They are here the merest ditches, about 6ft. wide and 4ft. deep, and just now are quite dry. Their course was followed to the sea coast at a point four miles north of Ashdod, where they form lagoons of shallow water supplied by the oozing up of water from the soil, and separated from the ocean by a bar of sand. Neby Yunas is built on an eminence at this point.

The villages on the flat plain about Ashdod are as like each other as so many peas, and there is very little of interest to be seen in them, but they had nearly all to be visited, if it was only for making sure of their names, as the people were not at all inclined to give information. Many of them had been down south working on the Suez Canal, and seeing our surveying instruments, they concluded that the English were going to cut a rival canal through Philistia and the Judean mountains to the Dead Sea, and to this they strongly objected, as they considered it would be the signal for our retaking possession of our inheritance; for they told me over and over again that they had taken the land from us, and that we should wrest it back from them again, but then many of them added "You will have to fight for it, we will not give it up without a struggle."

At el Juseir we saw a white marble column and effaced capital, and at Summeil, a few bevelled stones. The ruins of the ancient towns about here are probably buried only a few feet below the soil.

On the evening of 7th June we were camped at the foot of Tel es Safiyet, the *Alba Specula*, or Blanche garde of the Crusaders, probably

Gath of the Philistines. It is fifteen miles due south of Ramleh, and twelve miles to S.E. of Ashdod; the meaning of its name, *Alba Specula*, will be understood on reference to the photograph (No. 265), where the glittering white chalk cliff at S.W. angle is shown, a conspicuous object which can be seen for many miles to west.

To the east the country was surveyed, the first range of the hill country; the only villages of interest visited were Kudna, where there are remains of a castle, ancient walls, and large stones about; much of it appears older than the time of the crusades, but there are also pointed arches, casemates, and plenty of modern ruins. It is five miles S.E. of Tel es Safiyeh, and to its north by two miles is the village of Deir Dubân, where are enormous caves similar to those described by Dr. Robinson at Beit Jebrin. In one several inscriptions were found cut on the rock and on plaster, apparently over a passage which has been built up. The Syrian Bishop of Jerusalem pronounces them to be Syriac, and to be the work of Christians who emigrated here from the Holy City at the time of the Persian invasion. There is a Byzantine cross over one of the inscriptions.

On June 10th we left Tel es Safiyeh for Yebneh Port, a distance of seventeen miles in a straight line N.W.; passed along the Wâdy Sumt by Tel et Turmus (a village with no hill) and Kurtineh, and then turning off to al Mesmiyeh went due north over undulating hills past Emazmah (ruin) to Shahmeh on the north bank of Wâdy Surah. This latter wâdy runs N.W. through a gap in the hills of el Mughâr and Kutrah, passing to the east of Yebneh town, and approaches the ocean about one mile to the north of the ancient port of Jamnia (Yebneh). There are at the mouth of the wâdy lagoons and fresh water springs; but no water in the wâdy during the summer months.

I may here make a suggestion with regard to the position of the cave of Makkedah where the five kings took refuge when pursued by Joshua from Gibeon. Joshua x. 5.

We have, Joshua xv. 41, the towns "Gedereth, Bethdagon, and Naameh, and Makkedah" placed together, and we have at the present day, Kutrah and Mughâr close together, Naameh six miles N.E., and Beit Dejan about twelve miles to north. I have to suggest that the village of el Mughâr (the cave) is the modern name of the ancient Makkedah, and the desirability of making further researches at this place. It is true that several authorities place Makkedah further to the south of this point by several miles, but the writer of the article "Makkedah," Smith's "Dictionary of the Bible," appears to establish the fact that it must have been situate at no great distance from Ramleh, and el Mughâr is less than eight miles from that city.

There was little to be seen at Yebneh town except the church now used as a mosque, but excavations would probably uncover the old fortifications; it is admirably situated as a fenced city. The ancient port is some four miles distant; a large plan of it is given on one of the Admiralty charts of the Syriac seas. The photograph No. 267

gives a view of the southern end of the port, where are many confused ruins.

From this point we rode up to Jaffa, ten miles, to obtain our letters, the weather extremely oppressive in spite of the sea breeze. —“As cold water to a thirsty soul, so is good news from a far country.”

June 12th. We left Jaffa for the little village of Surah, twenty-three miles in a straight line. For the first ten miles to Neby Ghundeh, we passed remains of walls and terraces on the hills which have now a coating of drift sand over them. We passed next through olive groves and gardens past Zernuka, until crossing over some undulating hills we came across the village of Akir, the ancient Ekron, with no remains of its fallen greatness. The people were very civil, and one old man came out and babbled forth a story about the villagers being descended from Jews. As it is five miles from Yebneh town, the great seat of learning in the time of the Maccabees, there may be some foundation for the story. Ekron is on a swelling mound only about two miles to the north of the Wady Surah, the valley up which the milch kine probably conducted the ark to Bethshemesh, and during harvest time there is a good road all the way. From here we gradually ascended the hills by Mansurah and Kuldah, and passing the ruins of Beit F'ar to our right, arrived at the 'Ain of Surah by night-fall, 870ft. above the sea. We had now a chapter of accidents; the dragoman, who had heard of his father's death that morning, forgot what he was about, and losing sight of us, wandered over the country, leaving us to find our own way. He did not arrive at camp till some time after us, and when he saw me he exploded in sobs, declaring that to have lost us on the road was a far greater grief to him than to have lost his father; he forgot to tie up his horse or give it drink, and so the poor beast tried to satisfy himself and tumbled into the well, whose waters were nearly 4ft. from the surface. On our way in the dark the observation book had been dropped, and add to this our head muleteer was taken ill with strong fever, and Musa, his second, was stung by a scorpion on the big toe. The poor fellow was brought into my tent in a very exhausted state, and on finding that the application of strong liquid ammonia to his toe had no effect, I applied it to his nostrils, saying, “Musa, smell this.” He sniffed, but it had no effect. “Try again, Musa.” Again he sniffed, but his agonised writhings prevented his nose touching the bottle. “Sniff as strong as you can, Musa,” and this time he regularly inhaled the blistering vapour, and fell back motionless as though shot. We had hardly time to think what to do next or to listen to the growing plaint that Musa had been killed, when a loud splash was heard, and a cry that the dragoman's horse had tumbled into the well. The poor beast was swimming, but had no chance of getting out by himself. The guy ropes of the tents were quickly on the spot, one we tied round his head and shoulders, and the other tight to his hock, and soon we were all lugging away at the

animal. By some desperate efforts we at last got him on dry land somewhat worried by the ropes, but not permanently the worse for his rough usage. Among the most energetic of the party I thought I perceived Musa working away, and sure enough it was he, come to life again. After it was all over I asked him how his toe was, but he had forgotten all about it; either the ammonia or the excitement of getting out the horse, had effectually cured him.

In the morning our observation book was found; the head muleteer was, however, very ill with fever, so we had to make this spot our headquarters until 15th June, when he recovered sufficiently to move: it was astonishing how he would swallow strong doses down without their affecting him in the least. A sirocco wind was blowing at this time, when the heat was between 80° and 90° during the nights, and made us all very uncomfortable. In the survey of the country to the north of our camp nothing of importance was observed.

The village of Surah (the ancient Zorah) stands about 1150ft. above the sea, and is situated on the southern end of the hill crest overlooking the valley of the same name. On the opposite side of the valley low down is the ruin of 'Ain Shems (the ancient Bethshemesh), and from our stand-point it is easy to see the line which the milch kine would have taken in coming up from Ekron, and also the valley which the men would have ascended in carrying the ark up to Kirjath-jearim. Looking across the valley to the opposite crest we can see the ruin of Tibneh (the ancient Timnath), where dwelt Samson's betrothed; it is 740ft. above the sea, and therefore not in the plains, as some writers have stated. Samson in going down to it would descend 700ft. into the valley and then ascend again 350ft. to Timnath. It is apparent from the sacred narrative, Judges xv., that the corn was growing in the valley, as it does at present, with the vineyards and olives lining the side of the hills; for we are told that the Philistines *came up* to Timnath and burnt Samson's wife and her father with fire. Tibneh lies between El Bureij and Ammûrieh.

The hills about bear witness of there having been once an industrious race inhabiting these parts, but the words of King Solomon may apply to the present owners, "I went by the field of the slothful and by the vineyard of the man void of understanding: And, lo, it was all grown over with thorns, and nettles had covered the face thereof, and the stone wall thereof was broken down. Then I saw and considered it well; yet a little sleep, a little slumber, a little folding of the hands to sleep: so shall thy poverty come as one that travelleth, and thy want as an armed man."

Photograph No. 271 gives a view of the valley of Zorah, and No. 272 of a curious monument placed upon a hill one mile to the west of the village; the top stone is 6ft. long and 3ft. by 2ft., and has a groove 2ins. deep and 3 broad down the centre of each side—it appears to have been for a mill of some sort, probably for olives. The hill country commences to the east of 'Ain Shems, and the valley of Surah is seen no

longer, being broken up into the steep defiles of W. Ismail, Muttúk, al Balút, and others coming down from the hills; there are many ruins about the broken ground formed by the junction of these wádies, and no doubt it was once densely populated. Many cut stones were found about of large size, which had been used as mills. In W. Muttúk, near Teshua, we found running water and a spring hard by, but it is soon absorbed by the thirsty soil.

Near Tantúrah there are the remains of a tower 30ft. square, of large squared stones. The ruins of 'Ain Shems extends many hundred yards east and west. The points were fixed independently by Lieut. Anderson and myself; in our longitude we differ somewhat, and in our latitude one-quarter of a minute (in my letter, 22nd Nov., 1867, printed in the *Times* and in the "Quarterly Report," this difference was given as four minutes, the one-quarter being turned into four.)

June 15.—We left 'Ain Shems 2.5 p.m., and arrived at a spring, Ben el Lemún, at 2.45, and keeping to south arrived at Tibneh at 3.30. There are few vestiges here except caves in the rocks. Close to is El Bureij, where we arrived at 3.43. Passing from here west we were at Am-múrieh at 4.20 p.m., where there are the remains of a castle, and progressing to west, at 4.57 we came on Khubel Ferrad, where there are extensive ruins; keeping to west several observations were taken, until it became quite dark, and our guide brought us back over the hills to Beit Kalif, 1200ft. This is a village of some importance at the present day, but is not mentioned in Scripture. We here experienced the difficulties of Eastern hospitalities; we had run out of bread, but were too numerous a party to sponge upon our neighbours, and the people absolutely refused to sell, as they considered it too degrading; our dragoman had to go from house to house and beg a loaf from each, which we found means to repay afterwards.

June 17.—Leaving Beit Kalif at 6.45 a.m., we passed Neby Bulus and Telu Alia and Yarmuth (Jarmuch), where there are extensive ruins, and passing through wádies and marshes we ascended the hill of Keishúm (1150 feet), and leaving El Gína to our right we traversed a range of hills bounding Wády Sumt to the north. On our way we met two old men, who assured us that the country belonged to the Christians—the constant repetition of this maxim sometimes appeared to be satirical.

11.5 a.m we passed Moghullis, and passing a quarry to the left arrived at Shukh Dand at noon; here we were (600ft.) on a projecting spur,  $1\frac{1}{2}$  miles due north of Tel es Safiyeh. From this, proceeding down to the plain due north, we came upon a very extensive ruin in the valley, called K. er Rassim (foundations), and after examining the country arrived at Tel Takariyeh by sunset.

We were now in the valley of Elah, and from this point I surveyed the country to east and south. On 19th June examined the country about Um Burj, and found extensive Christian remains on the brows of hills, large lintels 6ft. long and 2ft. thick, with crosses, &c., sculptured

on them; the stone has a bell-like sound when struck, and is of soft mezzeh.

Near Um Burj is a cave or columbarium. On getting on the hog's-back, on which is the ruin Jedeideh, we appeared to be among ancient remains, but before this everything to-day seemed to be of the Christian period; arrived in evening at Tel Bulnard, two miles N.W. of Beil Jebrin.

June 20.—Musa, who had gone up to Jerusalem for bread, arrived in an exhausted state, having been pursued by two mounted and four foot Bedouins; he had turned down Wády es Sumt and come over the hills, leaving his pursuers behind. We were engaged the whole day in examining the country up to Arak Menshiyeh, where we encamped. Here there is a strange mound of earth (see photograph No. 274), called the Arak, while the village is distant some 400 yards or so. This mound is triangular in plan, and appears to be of Assyrian origin: it would be very desirable to cut a hole through it and examine its contents.

June 21.—We passed down by Falagy, past the ruins of Eglon and Lakis, and villages of Bureir and Simsim to Nigid. Nothing remains to be described here after the account of Dr. Robinson. At Eglon we found Bedouins from the south, but one of them got his ears boxed by Capt. Phillips for venturing too close to his horse, and they did not bother us further.

June 22.—From Nigid I wished to take a straight cut east to Dwaimé through the deserted hills south of Wády Hessy. A villager volunteered to accompany us, our baggage going round by the royal road, the distance in a straight line 18 miles. Leaving at 7.10 a.m. we saw from the top of the first eminence the ruins of Zeil, Bableyeh, Aran, and Beit Duas, on the hills above Simsim. Leaving this point at 7.45 a.m. we passed to east through hills of indurated shells, and leaving caves to our right arrived at K. Kuns at 8.7 a.m.; left 8.10. Viewed Neby Hûd on W. Mehoreh 8.11, and at 8.22 came on K. Jelameh, a ruined site, 130 yards by 40 yards, with cisterns. At 9.10 a.m. we got down into W. Husy; a fantasia was here enacted for our benefit. Two Bedouins came up and robbed a camel driver, but we did not see the joke in the way it was intended. At 11.5 a.m. we arrived at Tel Hessy, an artificial mound to S.W. of Wády, elliptical N.W. to S.E.; water running in Wády; left 11.23. We now found a beautiful stream of brackish water in Wády Hessy, and turned south to Tel Nargily. At 12.30 passed a hard clay threshing floor, and at 12.40 p.m. arrived at the Tel. Here there is a spring of fresh water welling out of the rocks in the midst of a salt and barren land. The Tel is artificial; a great deal of cut stone and concrete about, and graves on top; extensive ruins on all sides, but of no decided character. Left 1.10 p.m.; passed Arab camp, where they wished us to stop the night, and passing by some ruins and caves arrived at Dawaimé at sunset.

June 24th.—From the wely near this town observations could be taken to many of the most important points to the north. We left at

7.45 A.M. for Beit Ulla; and at 9.50 A.M. passed Tel ed Dewar, an oblong mound 50ft. high, close to the village of Lukbeibeh, one of those villages which the government have caused the Bedouins to establish. At 11.5 passed a crusaders' ruin, and at 11.45 arrived at Santa Hannah, close to Beit Jibrin, an artificial mound. I here broke the glass of my prismatic compass, and found the instrument useless for the remainder of the day. With the aid of a ruby, however, which I had purchased at Askalon, one of the photographic plates was cut down in the evening to the required size, and made to replace the broken glass.

June 25th.—Several ruins were examined, but nothing of importance. We encamped in the Wády es Sumt (the valley of Elah) under a large Butm tree, probably the largest in Palestine. See photograph No. 275. To give an instance of the adroitness of the Arabs I may mention a scene which took place here. On arriving at our tree, we found the cook and a fellah struggling violently, and each with a stone in his hand cracking into the other's head. After separating them I inquired the cause of the disturbance, and the cook said the fellah had kicked dust into the soup, but the man asserted that the wind had blown it in. They were both very violent in their movements, and the fellah accused the cook of having pulled his beard, and after several absurd gesticulations, he picked up a tuft of hair from the ground and showed us the place where it had been plucked from his chin. This of course was a very serious offence, only the cook denied having touched the man's beard. The dragoman at last came up, who soon settled the matter, for he recollected that the cook had just cut off some huge locks from his head, which the fellah had made use of by declaring they were part of his beard. On looking at him closely we found that his beard had never been touched, but it was one of those which do not grow luxuriantly just under the chin. The man had been rather badly cut about the head by the stone the cook had wielded, and was bleeding profusely, but he would not allow his wounds to be dressed, as then he said the sheikh of his village would not see how he had been treated, and he marched off indignantly to call on his friends to attack us during the night. We were just now in the track which the Bedouins use on their marauding expeditions, so we found ourselves threatened from two points; all we could do was to keep strict watch all night, and hope that the villagers would cross the Bedouins and keep clear of us. We awoke in the morning without any mishap, but not by any means due to our watchers, for on waking once near dawn, I found all snoring fast, and could not disturb them by sticks or stones.

Near this tree probably took place the combat between David and Goliath. Suwaikeh (the ancient Sokoh) is on the hills to the west by one mile. From here we made our way surveying to Beit Atab and Deir al Howa, both prominent points in the hills of Judea, 1790 and 1780ft. above the level of the sea. From here we observed to the points where we had observed from in the plains. June 28th we arrived in Jerusalem.