and found a good many inscriptions and the remains of one fine early
curch. The country is full of villages. I move to Kadesh the day
after to-morrow, and shall probably be at Banias before you get this."

"Talayebeh, May 25, 1877.—Since the declaration of war I have pushed
on the work as fast as possible, and even before that, for many reasons.
I had no time for any excavations such as at Khan Minyeh and some
other places. We are now at the northern boundary of our work, and
I hope to finish in the estimated time, but this will depend on the nature
of the ground near the coast, which I am afraid is rather difficult. We
may be a week or two later on this account. The total surveyed is now
550 square miles, and the triangulation is already finished from this
camp.

"I find the authorities in the country most active and obliging in
helping the work as far as they can. I have had no serious difficulty
with the natives. The health of the whole expedition has been excel­
lent."

LIEUTENANT KITCHENER'S REPORTS.

II.

CAMP AT TIBERIAS, 30th March, 1877.

HAVING completed the Survey of the Akka Plain, and finished the
levelling down to the Mediterranean, it was necessary to carry the
eastern portion of the Survey north, from a line about two miles south
of Tabor, and to run the line of levels down to the Sea of Tiberias.

Camp was struck at Haiffa on the 8th of March, and after passing
one night at Nazareth we arrived at Hattin, an important village on the
road from Nazareth to Tiberias, seven miles from the latter, and well
situated for the work we had to complete.

The triangulation was started next day by taking a series of observa­
tions from Jebel Toran. Our old trigonometrical stations were satisfac­
torily picked up, new cairns being erected at all the stations, and the
triangulation well advanced. This work occupied us nine days. The
detail was then started, and has been worked in for 100 square miles,
reaching as far north as the village of Yakuk. The levelling was also
begun at the same time. The difficulty of running the levels to the Sea
of Galilee was considerable, owing to the steep inclines and the narrow
and precipitous gorge of the Wady Hamam, down which it had to be
carried. The result, however, is very satisfactory. In the 16½ miles
levelled, the difference between the results obtained with the two instru­
ments used is 215 of a foot. Adopting the ten-inch level readings
throughout, and considering the theodolite readings merely as a check
on the more accurate instrument, we arrive at a depression for the Sea
Galilee of 682·554 feet. Thirty-five bench marks have been cut on the
line of levels and fixed on our map.
In this portion of the Survey we have mapped five extinct volcanoes from which the basalt has been thrown out over the surrounding country; and the plains, being covered by the ashes and boulders of basalt, are rendered extremely fertile. Other smaller outbreaks have also been noted. Two miles south of the Kurn Hattin occur two extinct volcanoes, one of which is called the Kal'at es Sanda, or “The Basalt Castle;” in both the black basalt rock is seen thrown up, forming a crater in the centre. The Kurn itself is, in my opinion, another; the basalt does not show itself so much, but the rocks forming the crater bear signs of the eruptions that took place, and the plains around are strewn with basalt rocks and débris. North-eastward of the latter are two more large outbreaks overhanging the Plain of Genesareth, one of which is called el Waret es Sanda, “The Rocky Plain of Basalt.”

Immediately above our camp at Hattin was the field of the last great fight of the Crusaders. The Kurn rises about 100 feet in rocky ridges above the plain on the south-west, whilst on the north and east there is a very steep descent of 800 feet to another plain, the Sahel Hattin, which again terminates abruptly over the Sea of Galilee. The Kurn Hattin, or “Horns of Hattin,” was the last place held by the king and his brave knights when surrounded by the forces of Saladin. The rocky top seems a very natural fortress, and well adapted to be defended against far superior numbers. The Crusaders were, however, worn out by their long marches and hard fighting, and after driving back the stormers three times the place was carried, the king surrendered with the remnant of his forces, and the Christian kingdom in Palestine ceased to exist. The name of the plain south-east of the Kurn is “‘Ard el Bürnus.” Bürnus is the Arabic form of “Prince.” In a history of Palestine by el Kadi Mujir ed Din, 1585 A.D., Count Renaud de Châtillon, Lord of Kerak, who was the cause of the war, is always called el Bürnus Irbat, or el Bürnus, Émir of Kerak. The story is told of the King of Jerusalem when in Saladin’s tent passing water to “el Bürnus” after the fight, which the Sultan does not admit as an act of hospitality to “el Bürnus;” afterwards the Sultan offers him his life if he will change his religion for that of Islam; but on the “Émir of Kerak” refusing to do so, he was slain by Saladin himself. No one else in the book receives the title of el Bürnus; we have therefore an historical name remaining attached to the site of the battle.

On the Southern Horn of the Kurn are the foundations of an ancient square tower and some small cisterns; the former was probably a watch-tower on the great road to Damascus. A copious spring of water flows out of the north-west base of the Kurn, where a short wādî breaks down from the plain above. In this wādî, immediately above the ‘ain, is the Kubbeh of Neby Shu’aeb (Prophet Jethro) still existing. Robinson, in Bib. Res. p. 239, in a footnote, mentions that, according to Boha ed Din, the Kubbeh stood upon the Tell in his day—i.e., at the close of the twelfth century (Vita. Salad. p. 69). The same is
mentioned in the Jewish Itinerary in Hottinger’s Cippi Hebraici, p. 74, ed. 2. Quaresmius supposes the remains on the top of the Kurn to be those of a chapel (ii. p. 856).

The top of the Kurn is called Medinot el Aikeh, perhaps from the large number of loose stones which resemble the ruins of an important place.

At the mouth of the gorge of the Wady Hamam on the southern side occur the ruins of Irbid, the ancient Arbela, in which there is a very good specimen of a ruined synagogue, which has been measured and described by Major Wilson, R.E. (Quarterly Statement, No. 2, p. 49). Two columns and one doorpost remain standing in situ; the lower part of the other doorpost also remains. They are all monolithic blocks of limestone. Among the ruins lie several fine capitals of different sizes and styles; black basalt and white limestone seem to have been mixed both inside and out; some of the capitals being of the latter material. The ground on which the synagogue stands slopes towards the north, the southern portion being cut away to receive it. In the centre of the southern wall is a mihrab or apse 6ft. 4in. in diameter and 4ft. 2in. deep. Among the ruins are several blocks of cut stone with semi-attached columns 9in. in diameter with Ionic capitals; these seem to have been portions of the exterior decorations. On one block were two semi-attached fluted columns 6in. in diameter, one with straight and the other with twisted flutings. Lying to the north of the synagogue there is a cut stone which appears to have been the top of a niche; it measures 5ft. long, 2ft. 8in. high, by 1ft. 8in. thick. In the centre of the length is a circular niche 2ft. 4in. in diameter, cut 16in. into the depth, with lines radiating from the centre. A moulding 3in. wide and raised 2in. above the face of the stone runs round the niche; enclosing this is a triangular moulding, its apex being above the centre of the niche at the top of the stone, and its two ends at the lower extremities of the stone. It is raised 4in. above the face of the block on the outside, and is 4in. wide; three slight mouldings are carried along it, and on the inside it is flush with the face of the stone; the bottom line of mouldings end at the moulding round the niche. Special plans and drawings have been taken of the building and details.

In the precipitous rocks of the Wady Hamam, east of Irbid, are situated the celebrated caves from whence Herod the Great dislodged the robbers by attacking them from above. Both sides of the wady are honeycombed by caves, but the principal ones, called Kal’at Ibn Ma’an, are situated on the southern side, where the cliffs are upwards of 1,000 feet above the bed of the wady. A steep slope on the debris fallen into the valley leads up about 600 feet to the foot of the cliffs, which then rise perpendicularly, and in some cases have crumbled away below till they are overhanging. The castle is situated opposite where the Wady Muhammed el Khalaf breaks into the valley, and immediately below is a fine spring, ‘Ain es Serar. The traces of well-made basalt stairs lead up to the foot of the castle. The entrance was flanked by small round
towers, besides loopholed galleries on the face of the rock. The castle consisted of natural and artificial caves in several tiers, walled in on the outside and connected by galleries and staircases along the face of the rock. The walls were built with great care and finely dressed; they are of crystalline limestone and black basalt in rows; they are loopholed. All the arches are pointed, and the building appears to be very good. Arabic work of probably the fifteenth century, when also well-built khans were constructed on the road from Damascus, such as Khan el Jujar, near Mount Tabor.

Inserted in the lower wall is a large block of limestone bearing two lions facing each other, one front paw of each being placed on some indistinguishable object. It appears to me extremely probable that this stone, quite distinct from those around it in material and workmanship, was brought from the ruined synagogue at Irbid. It also greatly resembles the stone bearing two lions at the synagogue at Umm el Amud. Should it have been brought from Irbid, it would appear that both synagogues had similar lintels ornamented with lions. The first cave entered is a large natural cavern, which probably served as a stable for the horses of the garrison; from this a staircase leads up to smaller caves opening from a gallery along the face of the rock; stairs led up from either end of this gallery to similar caves in different tiers. Some are now quite inaccessible from below. The place is inhabited by immense flocks of pigeons, from which the valley takes its name, and a great number of vultures and eagles. Water was brought from Irbid by an aqueduct running along the face of the cliff above the castle, and then fell vertically into cisterns in the building. At one place the water was conducted through an earthenware pipe.

This fortress, rendered almost impregnable by nature and art, might afford accommodation for six hundred or seven hundred men, and commands the main highway from Damascus to Western Palestine, which leads up the Wady Hamam.

The ruins on Mount Tabor were also visited from this camp. They consist of a large enceinte defended by numerous towers built of drafted masonry and surrounded by a large rock-cut ditch. These works appear to date from the time of the Crusaders, and to have been built of the old materials of previous fortifications. The remains of three churches have been uncovered in the recent excavations by the Latins, besides numerous foundations. It is proposed to pay a further visit to this interesting place, and a fuller description will be given in a subsequent report.

The country is now very lovely, carpeted with flowers and green with the growing crops. The people complain of being short-handed owing to the large numbers that have been taken away for military service. The second ban and some of the third ban of redifs have been called out, and the people fear lest the Muharfez or Landwehr may be required. Old men and women have to take their places in the fields, and when the harvest time comes it will be very difficult to gather in the crops.

Owing to the good offices of Mr. Eldridge, H.B.M.'s Consul-General
at Beyrout, and the willing assistance rendered to me by the Mutteserif of Akka, I have not had the slightest difficulty in the prosecution of the work; still it would be an immense advantage to this part of the country if the British Consulate at Haiffa were re-established.

The influence of an Englishman at this port would be of the greatest benefit to all the Christians of the district, which contains a thriving English mission and schools at Nazareth, many English subjects among the Jews of Tiberias and Safed, besides a considerable amount of English shipping trade from Akka.

III.

MEIRON, April 30, 1877.

The work of this month includes the survey of the shores of the Sea of Galilee, where a great many points of interest occur.

The scenery of the lake is hardly what would be expected of a basin 685 feet below the sea level. The hills on the eastern side have an almost perfectly level outline, scarcely broken by any valley of importance, and decidedly monotonous in appearance; still the bright sunshine throws a rosy haze over the country, and the contrast with the bright blue water is very beautiful.

The best views of the lake are from a distance on the many heights from which it is visible, as thus seen in the evening it is particularly lovely. Deep blue shadows seem to increase the size of the hills, and there is always a rosy flush in the sky and over snow-clad Hermon.

The road at the southern end of the lake passes through Kerak, which appears to have been a fortified place of considerable strength. Two castles, one on either side of the road, with a wall joining them, seem to have guarded this entrance to the shores of the lake. On the west a spur runs down from the hills ending steeply close to the road—on this the western castle was placed. On the east there is a large partially artificial plateau which extends from the road to the exit of the Jordan; a broad water ditch from the Jordan and the river itself defends two sides, while the third is on the shore of the sea, thus leaving only a narrow entrance on the west from which it might be attacked. The remains of both castles are very slight, as the place has been ploughed up. There are ruins of modern dwellings on the north-west corner of the plateau, where probably the principal citadel stood, and traces of a wall round the plateau and joining the two castles. The only remains of the western castle are heaps of stones. The place must have been of great importance, as it closes the passage of the valley, and also that of the Jordan at its northern extremity, where it is now crossed by a ferry. It also must have required a large garrison owing to the great size of the plateau.

Josephus describes Vespasian as advancing to the attack of Tiberias from Scythopolis or Beisan: "He then came with three legions and
pitched his camp thirty furlongs off Tiberias, at a certain station easily seen; it is named Sennabris.”

Measuring 30 furlongs north from Kerak it brings us well within the ruins of the ancient town of Tiberias, though not up to the walls of the present city.

I think it is possible that the large artificially levelled plateau, surrounded by traces of a wall on the east of the road, may be the remains of that camp of the Roman army here described, and that this was the station on the road named Sennabris. 1½ miles north of Kerak, and ¾ of a mile west of the road, is Khurbet Kadesh; below it runs the aqueduct which brought water from Wādī el Fajjās to Tiberias.

The next place of interest is the hot springs, with their baths, much frequented by the Jews of Tiberias. The three principal springs had a temperature of 132, 143, and 144 degrees respectively, commencing with the southern one. Above the Hammam, or baths, is the tomb of Rabbi Mair Ramban, the celebrated Maimonides. Two schools are now built over his tomb, one for the Ashkenazim and the other for the Sephardim Jews.

A quarter of a mile farther north commence the ruins of the ancient town of Tiberias—they have been largely excavated for cut stone for modern buildings. A great number of fine granite columns are lying about, in one place as many as nine close together; there are also remains of the sea-wall, with towers, along the coast. These ruins are of considerable size, extending a mile south of the present town, and it seems probable that the latter is entirely or partially on a new site. Immediately behind the ruins the cliffs rise steeply, with traces of former fortifications on them.

Two miles north of the southern wall of the present Tiberias (which may be on the site of the northern wall of the ancient city), a spur runs down from the hills ending in a rounded hill, the eastern slope of which descends steeply to the water. On this top are ruins called Khurbet Kuneitriyeh, consisting of heaps of cut stones, with foundations of walls. Near the seashore is a spring called 'Ain Fuliyeh; to the north is an open space where Wādī Abu el 'Amis runs down to the sea, now occupied by some gardens; beyond are the high rocky hills called Burj Neiāt, which again run down steeply to the seashore.

This must have been a very strong position on the road, and I think fulfils the requirements of Taricheae, which was besieged after Tiberias by Vespasian, his camp being placed between the two towns (B. J. iii. x.).

The road north leads along the slope of the hills to el Mejdel, a small village with a few ruins, which has been identified with Magdala; it is situated on the southern extremity of the plain of Gennesaret or el Ghueir. The hills here fall back from the sea, leaving the plain, which extends 3½ miles along the coast, and is 1½ miles wide at its greatest part. Beyond the Wādī Hamam the hills are topped with black basalt as far as Wādī Amud, and there are two small outbreaks on the plain itself. The coast line is nearly straight, broken by small bays.
The land is extremely rich, but is now only partially cultivated by a few Bedawin and the people of Mejdel. It is wonderfully well watered, no less than five streams of water running to the sea through it, commencing from the south. First, the Wâdy Hamam brings down a good stream through a narrow precipitous gorge. The water is supplied from two springs, 'Ain es Serar, near which is Khurbet Ureidât, situated two miles from the sea in the gorge, and 'Ain Wâdy Hamam farther up.

The water is used for irrigation purposes directly it reaches the plain.

The second supply is from 'Ain el Mudawwreh (the round fountain), so named because it rises in a round basin formed by a low masonry wall 32 yards in diameter. The water in the basin is very clear, and there were numbers of coracinus and other fish swimming in it. The supply of water is rather less than half that of Wâdy Hamam.

The next stream is Wâdy Rabâdiyeh, the largest of any, descending through an open valley, and used to turn a number of mills. On reaching the plain it is at once diverted for irrigation purposes. The supply of water is about twice or three times that of Wâdy Hamam.

Immediately north of Wâdy Rabâdiyeh is Khurbet Abu Shusheh, situated on the slope of the hills, where there are no remains of importance to be seen; only a few basalt huts and some scattered stones, round a white well called Sheikh Hassan Abu Shusheh.

The fourth supply of water comes from Wâdy Amtûd, a winter torrent which, I was told, dries up in summer; it was probably on this account that water had to be brought by an aqueduct to fertilise this northern portion of the plain.

'Ain et Tineh is the most northern running water on the plain; it bubbles out by several heads under the rocks which close the north-east of the plain; it forms a clear stream of good water with many fish; slightly warm around it, there is most luxuriant vegetation and papyrus; it runs into the sea after forming several pools.

Besides those ruins at Mejdel and Abu Shusheh, the only remains found on the plain were those at Khurbet Minyeh, where there are extensive ruins, though nothing but remains of walls are now visible. I was informed * by two authorities that hewn stones and good walls existed below the present surface, and are excavated for building purposes; unfortunately, I had no time to test the truth of this assertion. The Khurbet is situated near the north-east extremity of the plain, and about 100 yards from the shore of the sea.

The Damascus road traverses the ruin, and a little farther on it passes the now ruined Khan Minyeh, which is still occupied by a few Arabs; it then passes up on the western slope of the steep hill which here ends the plain. On the top of this hill is an artificially levelled square plateau,

* Peasants were observed by Dr. Merrill digging at this spot in April, 1876, and unmasked a wall, at a depth of five or six feet, of fine squared stones in superior workmanship. See Fourth Statement, p. 67, American Exploration Society.
Ain et Tabighah

From a Sketch by Capt. A.C. Hamilton, R.E.
with traces of walls and buildings; there are also traces of steps leading up to it. It is called Khurbet 'Aureimeh. Round the southern brow of this hill, where the rock runs steeply down to the lake, is the rock-cut aqueduct now used as a road, and described by Major Wilson. It is 52 ft. 4 in. above the sea, which is almost perpendicularly beneath it at one part, and has a fall of 7 feet in the mile; the water would not have been carried far on to the plain, but would have watered the gardens round Khurbet Minyeh. Half a mile farther along the coast is the pleasant bay of Tábighah, where there are several small and one very large spring which turns several mills. The water is brackish. The 'Ain is enclosed by walls of masonry forming an octagon 26 feet side; by this means the water was raised to the required height, and carried by the aqueduct to the plain. Considerable remains of the masonry of the aqueduct leading to the rock-cut portion, and a small piece beyond, with the watercourse coated with thick cement, still remain.

The height of the top of the reservoir is 51 feet above the sea, thus it would require very little more to carry the water over the rock-cut portion of the aqueduct. I was informed by the people that this reservoir was built by Dhâher el'Anor, and it is now called Birket 'Aly edh Dhâher. It was probably repaired by him when building the mills around it; the lower portion appears to be older, and is built of better dressed stone coated with cement. The whole structure is of basalt.

The coast between Tábighah and the Jordan is still indented with small bays; the country is entirely basalt, and slopes gradually down to the sea. The ruins at Tel-Hum, 13½ miles from Tábighah, are along the water's edge, and are of considerable extent, and contain the famous synagogue excavated and measured by Major Wilson. A little beyond Tel-Hum are the ruins of a few basalt hovels called Khurbet 'Eyshsheh. At the mouth of the Jordan there is a small plain, in which are two small collections of huts without any traces of antiquity; they are called Khurbet Abu Zeiny and Khurbet esh Shemaliyeh. There is a small lagoon at the mouth of the Jordan, and the ground in wet weather is deep.

The site of Capernaum is the most interesting of all the places around the lake. I cannot help thinking, with Dr. Robinson, that it was at Khurbet Minyeh. The guard-house, where the Centurion resided, was probably on the great Damascus road at Khurbet el 'Aureimeh, which seems to be the ruin of such a station.

Josephus describes the fountain called Capharnaum as watering the plain, and that some thought it to be a vein of the Nile, owing to its containing the fish called coracinus. This description evidently alluded to the 'Ain et Tabighah, the water from which was brought in an aqueduct past Khurbet Minyeh to water the plain, and was naturally called after that place. The source is only ¾ of a mile away, whereas it is 1¾ miles from Tel-Hum, and all the water was carried in exactly the oppo-
site direction, so that it could hardly be called after the latter place had it been Capharnaum. The coracinus was not observed in the 'Ain. The reservoir is nearly full of reeds, and the water is not clear, so that it is impossible to see the bottom where these fish occur; other fish were seen, and I was convinced there was no reason why the coracinus should not be there.

Our next camp was at Khán Jubūb Yusuf, where we arrived on the 4th of April. The Khán is a large building falling into ruins on the main road to Damascus. There was no village near, the country being occupied by Bedawín of the Semakiyeh and Zenghariyeh tribes. To the east the country was entirely composed of broken basalt, while to the west all was limestone, much contorted, and forming north-west the Jebel Kauan range. From the camp we visited Khurbet Kerazeh, generally allowed to be the remains of Chorazin. The ruins are extensive, and contained a synagogue, measured and described by Major Wilson. The highly ornamented niches of this building, entirely cut in basalt, remain as sharp and clear as when new.

North-east of our camp we found the first perfect dolmen I have seen in the country; it is called Hajr ed Dūm, "the stone of blood." From the camp at Mejron we found four others. They are small, the covering stone measuring $11 \times 7 \times 1\frac{1}{6}$, and no traces of signs on them were observed.

On the 10th, camp was moved to Safed, where previously we had some difficulty with the natives. By the kind offices of Mr. Eldridge, Consul-General for Syria, the Governor was warned of our coming, and prepared to give us a good reception. We were met half way by the Governor, the Consular Agent, and the Kadi, surrounded by a score of followers, and conducted to the town, where I was received with every civility.

Unfortunately, on the road the standard barometer got broken, and had to be replaced by our duplicate one from the store at Haiўfa.

From this camp the ruined synagogue at Nebartein was visited. The principal remains are prostrate columns, and the fine lintel with Hebrew inscription. A squeeze and photographs were take of the latter. On the pedestal of a column there is an engraved hare. The occurrence of animals figured in these synagogues seems to be common. At Umm el Amud there are two lions; at Irbid there were probably the same. The stone is now in Kal'at Ibn Ma'an. At Nebantein a hare; at Kefr Bir'im, on two synagogues, lambs. At Sefsaf the remains of a synagogue were found by us; the lintel bears two sheep's heads. At el Jish, in a ruined synagogue discovered by us, an eagle resembling the top of a Roman standard, which seems to show that though the Jews objected to the Roman standards in the Holy City, they were put up in the country synagogues without trouble. I hope in my next month's report to give a fuller description of these very interesting buildings.

I also visited at Safed the Mukam Benat Yakub, where I was told the seven daughters of Jacob lay embalmed. The place is only a collection of caves walled up and made into a holy place. There are no mummies.
On the 18th, camp was moved to Meiron, a Jewish holy place. There are the remains of a fine synagogue and a great number of rock-cut tombs. One has sarcophagi for thirty-seven bodies, covered with stone lids; this is said to be the tomb of Rabbi Hillel and his thirty-six companions. The tombs of Rabbis Shamai and Hillel, and several other great Rabbis, occur here. Over the tomb of Rabbi Simeon Ben Jochai there is a large modern building, where the Jews come from all parts of Palestine on his fête day, the 30th April, to hold a sort of revel, lasting two or three days and nights. They dance and pray and light fires over the tomb. It is very extraordinary to see them in their long dressing-gowns and large hats dancing round in a circle.

The country to the north of this camp is thickly covered with villages, Christian, Druse, Mahommedan, and Mettawaleh. Grapes are extensively cultivated, and a number of young trees have been planted, principally figs and olives.

El Jish, the ancient Giscala, is situated on the south slope of a hill three miles north of Meiron. It is a thriving village of approximately 300 Christians and 400 Mahommedans. On the top of the hill there is a small church, which is probably built nearly on the site of an old synagogue, the remains of which are strewed about and built into the walls of the church. Several large stone sarcophagi, with ornamental garlands and bands, have been turned up round the village. There are also a large number of cut stones scattered about, which probably composed the walls Josephus built round this place. On the western slope of the descent to Wady el Jish are the remains of another synagogue. Three pedestals are in situ, and the doorposts, with traces of the walls. A badly preserved square Hebrew inscription has been found on one of the pillars, and an eagle, resembling a Roman standard, on a detached stone. We also discovered the remains of a hitherto undescribed synagogue at Sefsaf. The lintel of one of the small doors is built in over the door of the mosque, and the niche, with ornamental voussoirs belonging to the principal entrance, are arranged above. A few portions of columns are all that remain above ground. From the highly ornamental character of the lintel of the side door, the principal lintel would probably be very fine if discovered. The two synagogues at Kefr Bir'im were also visited and planned from this camp. Close round Meiron, in the rocky hills, four dolmens have been discovered.

The amount of country surveyed up to the end of this month is 350 square miles.

On the 28th I received a telegram to the effect that war had been declared between Turkey and Russia. I hope this sad news will not interfere with the successful completion of the survey of Galilee.

H. H. Kitchener, Lieut. R.E.,
Commanding Palestine Survey.