

## JOURNAL OF THE SURVEY.

THE following extracts from Lieut. Kitchener's letters give a rough current history of the progress of the party from Lieut. Kitchener's arrival in Palestine:—

“*Beyrout*, Feb. 6, 1877.—You will be glad to find that the country is not in so bad a condition as you think. I have seen Consul Eldridge to-day, and he thinks there is no reason against my taking the field. The Moslems are quiet, and the Government has a strong wish to put down any rising or disturbance, and is keeping the people in capital order.”

“*Damascus*, Feb. 14, 1877.—The new Wali of Syria arrived at Beyrout on the 8th, and next day Eldridge very kindly took me with him when he was making his official visit. Of course no business could be done. Next day the Wali returned Eldridge's call, and I saw him again and showed him some of our work. Both times Eldridge spoke very highly of it, and the Wali agreed that it was of great importance. I came here the next day with Jago in order to collect the servants and horses. Eldridge said if possible he would get the letters I want from the Wali. He has written to say that I had better wait for him here, as he cannot do business out of his government. . . . Since I have been here I have seen Abd-el-Kader, who was very civil indeed. We spoke of the Safed affair, and he expressed his deep sorrow that his followers should have behaved so badly. I asked him for a letter to his people in the country, which he promised me.”

“*Beyrout*, Feb. 29, 1877.—The men have arrived here safely. They were not able to land at Haiffa owing to bad weather. All the luggage is safe. The new Wali has not yet gone to Damascus, and Eldridge has written officially asking for an answer about my letters. I have no doubt I shall receive them in a day or two. I got letters from Abd-el-Kader to his people at Tiberias and Safed, so that I shall have no difficulty in that part of the country from our old assailants. The delays of this country are most annoying. Eldridge recommends my waiting still for the Wali's letters. . . . My time has been fully taken up bargaining for horses and getting the party together. I intend sending Corporal Brophy with the heavy luggage down to Haiffa on Friday morning, the 23rd, by steamer. I dare not risk being carried on to Port Said myself, so with Sergeant Malings, Corporal Sutherland, and all the necessaries for finishing the levelling, I mean to ride down the coast, starting from here on Saturday morning. I think this is the best way, though it is rather difficult, owing to all our loose things being at Haiffa. I hope to be at Haiffa on Monday, and to start work on Tuesday, the 27th. The rains are very late this year, so it is perhaps as well that we have not been in tents up to now. On last Saturday there was a tremendous storm all along the coast. The authorities have all been very polite, and I have on every occasion found the scientific posi-

tion of the Society much thought of. I have seen a great many Pashas and officials. Nothing could be kinder than Mr. Eldridge and Mr. Jago, who have greatly helped me since I have been here. I am sure you will understand how anxious I am to begin work, and that it is only a series of insurmountable delays that keeps me here. However, you may be sure that work will be started on the 27th, unless something new turns up."

"*P. E. Fund Camp, Haiffa*, March 6, 1877.—You will see by my report how we have been getting on, and I hope you will be satisfied. . . . Next time I shall have a more attractive country to describe. All is going quietly; the country is quiet, and I hope to do well. Colonel Fremantle, of the Coldstreams, is now with me for a short visit."

"*Tiberias*, March 30, 1877.—We are getting on all right with the work, and I hope in another fortnight to have finished the shores of the Sea of Galilee, and be on the road to Safed again. My servants rather dread going back, so I shall have to keep a look-out on the rearguard as well as in front going up the hill. Eldridge has gone to a good deal of trouble to make things go well. . . . If the Fund could get a consul established at Haiffa it would be a very good thing. If I am well received at Safed and report satisfactorily, would the Committee give up their claim to the rest of the fine imposed? It would smooth matters. . . . The Druses are giving a good deal of trouble, cutting people's throats on the road to Damascus. Also there is a report of war between the Druses and Arabs in the Jebel Druse, and Mohammed Said Pasha is to be sent with a large force to put it down. This is merely an *on dit*, and not very reliable. In the south, near Hebron, the Arab tribes Tarabin and Teyyaha have had a fight. The latter lost 101 men killed, the former only 12. This is reliable. Consul Moore has telegraphed and sent out people to stop all travellers from going that way. It is lucky I am doing the north after all."

"*Safed*, April 11, 1877.—You will be glad to hear that we have made a most successful entry into Safed. The Governor, Kadi, and H.B.M. Consular Agent, with twenty-two followers, came out about an hour and a half on the road to meet me. We rode into the town in quite a triumphal procession. I at once went to the Serail and was saluted by the guard. After coffee with the Governor, I pitched camp, and then the Governor came and called. After him the British Agent, and then the Kadi, with all the members of the Mejlis. Nothing could be more civil and obliging than everybody was. To-day I have had the Governor, the British Consul, and our old enemy Ali Agha Alan, the cause of the row; the latter expressed deep sorrow for what he had done, as well he may, as I hear he and the Mogrebbins are all but ruined. I called on the Consul and the Kadi and measured up the castle. . . . On Monday I shall move to Meiron, where we shall have rather a long camp, working up to date and carrying the triangulation north. Of course without Sergeant Armstrong I shall not get done so soon as I said in my estimate, though I do not think we shall be much behind time. . . . Captain

Hamilton, R.E., who has been staying with me, takes this. He will be in town on May 5th, and will give you all the latest news."

"*Meiron*, April 17, 1877.—Yesterday I left Safed for this place, having had a most successful camp there. Everybody was very polite. The Governor came here yesterday, and has impressed upon the people the necessity of doing all we want. In the evening he dined with me. H.M.S. *Torch* has been at Akka. I was informed by a telegram from Eldridge when he would come, and was thus able to make considerable impression on the minds of the natives. I do not know what to think about war or peace, I get such contradictory telegrams, but I suppose every one is in the same case. In case of war breaking out, I hope to finish up to Baniyas before marching to the coast; but it is a very difficult thing to see what effect it would have on the country. I might be able to go on without interruption, or I might have to march to Beyrout and wait a little."

"*Meiron*, April 25, 1877.—I may not be able to send a report per next post—*i.e.*, the one this will go by—as I shall be on the move north. We have been getting on very well, and I have found two new synagogues and four dolmens. They are small, but very distinct, and two have names. I have been obliged, on account of the triangulation, to modify my plan of moving direct on Baniyas, and shall go to Dibl, or near there, and thence to Kodesh, and so on to Baniyas. I hear on all sides that war has been declared, but have not yet received any telegram to that effect from Eldridge. I shall continue the work until I see a good cause for shutting up, and then shall probably move to Beyrout and wait. I see no reason as yet why I should not finish the north, but of course any day may change this view of the matter. I am in constant correspondence with Eldridge, who is most kind, and sends me all the news. I wish you could get the matter of the consuls in North Palestine looked into by the Foreign Office, as it is really wanted. An Englishman at Haiffa or Akka, and an advance to some of the consular agents, such as at Safed, who have neither seals of office nor any status in the country, though French, Austrians, and others have, is much wanted. When we have finished this camp, in four days we shall have surveyed 400 square miles, judged roughly. It is very close country just about here, full of names, and takes time.

"I shall send you a report next mail on the Sea of Galilee. We have been kept in camp two days here by wet weather."

"*Dibl*, May 4.—Yesterday I saw our northern boundary and took trigonometrical shots into what will be our most northern station. Our triangulation has been very satisfactory, 17ft. difference in check lines of from 10 to 12 miles. . . . Health of party has been exceptionally good."

"*Dibl*, May 13.—Correction for the Tiberias Report. The aqueduct above Ain et Tineh is 52 feet instead of 57, which makes it and the top of the reservoir nearly on a level. The reservoir was levelled down to the sea, and the aqueduct computed by the theodolite. . . . I have very little additional news to tell you. We have surveyed 490 square miles

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

"*Taiyebeh*, 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 excellent."

## 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 observations from Jebel Toran. Our old trigonometrical stations were satisfactorily 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  $16\frac{1}{2}$  miles levelled, the difference between the results obtained with the two instruments used is  $\cdot 215$  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.