as follows:---"The fact of the newly found aqueduct being nearly in a line with the first 50 feet of the old one, gives the idea that this may originally have been the means of providing Ophel with water, and that the remainder of the duct to the present Pool of Siloan may have been an afterthought."

He also holds to the same opinion in "Underground Jerusalem" (p. 333). Thus Professor Sayce's second objection fails.

His third objection I propose, if time permit, to answer fully when I have exposed in detail the fallacies of the arguments urged for placing the City of David in any other position than on Ophel (so-called). It will suffice now to say that the evidence proving that the gutter was an aqueduct, and that Araunah betrayed Zion, is given in *Quarterly Statement*, 1878, p. 184; 1879, p. 104.

W. F. BIRCH.

THE ROUTE OF THE EXODUS.

I.

PERMIT me to reply to the views of Mr. Baker Greene, as given in the October number of the *Quarterly Statement* of the Palestine Exploration Fund, and which have been made the subject of a leading article in the *Morning Post* of the 22nd October, regarding the identity of Mount Hor with Mount Sinai. I regret not having seen Mr. Greene's book, but as his views are very fully set forth in the *Quarterly Statement* I will deal with a few points on which he lays stress in that publication ; and I hope to be able to show, by the aid of a few crucial tests, that his views are altogether untenable.

I may be allowed to point out that this is pre-eminently a question which requires some personal knowledge of the countries referred to; and it does not appear from Mr. Baker Greene's statement that, like the venerable Dr. Beke, he has made a pilgrimage to the East in order to verify his views by personal observation. On the other hand, I may remind the reader that the identification of Mount Sinai (Jebel Mûsa) in the peninsula of Arabia Petræa with the "Mount of the Law" has been maintained by eminent men who have personally examined the district, such as Dr. Robinson, Burkhardt, the late Professor Palmer, and Col. Sir Charles W. Wilson, formerly of the Ordnance Survey of Sinai. After this consensus of opinion it might have been supposed that nothing more was to be said.

Mr. Baker Greene asserts that after the passage of the Red Sea the Israelites followed the old caravan road across the Tih tableland to Akabah, which he identifies with Elim, where there were "twelve wells and threescore and ten palm-trees" (Exod. xv, 27). As Elim merely means "a grove of palms," the name might doubtless have been applied to Akabah, or to several other spots where groves of palms happened to grow; so that little value can be attached to this point of identification.

But taking the sacred narrative as it stands, let us see how it fits in with Mr. Greene's views. The Israelites are stated to have gone three days in the wilderness, and to have found no water (verse 22). Mr. Greene then draws the probable inference that on the fourth day they found water, and he identifies the spot where the water was found with Kala'at Nakhl, which is situated about half-way between Suez and Akabah on the caravan road, and is considered a fourth day's stage for caravans. Of this place Professor Palmer says :-- "The country is nearly waterless. except a few springs, situated in the larger wadies : but even here water can only be obtained by scraping small holes in the ground and baling it out with the hand. All that is obtained by the process is a vellowish solution, which baffles all attempts at filtering" ("Desert of the Exodus." p. 287). Such was the water with which, according to Mr. Baker Greene's views, the thousands of Israel, with their flocks and herds, were fain to slake their thirst after a march of three days under a broiling sun, and over one of the most desolate and forbidding tracts in that part of the world !

But, even supposing the water to have been at that period more plentiful, another question remains to be answered: Has Mr. Baker Greene ascertained the distance from Suez to Nakhl, which was reached, as he supposes, on the fourth day? If he will measure the distance on a good map he will find that it is about seventy English miles in a straight line, and in addition the march involves the ascent of the ridge of Jebel er Râhah of about 2,000 feet. To suppose that the Israelitish host, consisting of men, women, and children, together with their flocks and herds, could have marched seventy miles and crossed a ridge of 2,000 feet in three days is a demand on our credulity which he can scarcely hope to be granted. That it can be done on camels or horses is doubtless true; but to accomplish the journey on foot would tax the powers of a skilled pedestrian, and would be impossible for women and children.

Having disposed of this point, which lies at the threshold of Mr. Baker Greene's argument, I will take up another. It is stated that the Israelites on reaching Elim found twelve wells, and that they "encamped there by the waters," evidently referring to the waters of the wells; but surely, if Elim means Akabah, as Mr. Greene supposes, we might have expected to find some reference to the waters of the Red Sea (or Gulf of Akabah) as being in the vicinity of the camping ground.

But another objection to Mr. Greene's views meets us at the commencement of Exodus xvi, where it is stated that on leaving Elim the Israelites "took their journey and came unto the wilderness of Sin, which is between Elim and Sinai." In his statement Mr. Greene seems to make a confusion between the "wilderness of Sin" and the "wilderness of Zin," which latter lay along the Arabah, and probably included Elim and Akabah. The wilderness of Sin, according to the best authorities, lay to the west of the Sinaitic peninsula. In any case the two names refer to two different districts. That spelt with *samech* being referred to in Exodus xvi and xvii; that spelt with *tsade* in Deuteronomy xxxii, 57; Numbers xiii, 21; xxvii, 14; and Joshua xv, 3, these being connected with Kadesh-Barnea.¹

In reference to the statement of St. Paul, it is not difficult to understand why he places Mount Sinai in "Arabia." The term was doubtless used by the Apostle in a general sense to include the vast region of desert-land lying to the south and east of Judæa. Mr. Greene himself sees the difficulty of accounting for the fact that Mount Hor should be associated with the lesser event of the death of Aaron rather than with those stupendous manifestations of Divine power which were connected with the giving of the Law.

Again, if Elim be Akabah, how can this be reconciled with the statement of Numbers xxxiii, 10, that the Israelites "removed from Elim and encamped by the Red Sea," inasmuch as Akabah is actually by the Red Sea? Other difficulties might be cited, but the above are probably sufficient to show that Mr. Baker Greene's identification cannot be admitted.

Nor can I admit that Kadesh-Barnea is Petra. From personal experience of the difficulties of the mountain pass leading from the Arabah Valley to Petra, I may safely affirm that it would have been impracticable for the Children of Israel when on their way to the Promised Land.

EDWARD HULL.

Dublin, November 18, 1884.

II.

PROFESSOR HULL having been good enough to place at my disposal a proof-sheet of his objections to my view of the Exodus, I gladly avail myself of the opportunity of replying to them forthwith. Negatively it is a source of satisfaction to me that, with this exception, no one of the many members of the Palestine Exploration Fund has challenged the soundness of my arguments.

I must confess, however, that I find considerable difficulty in knowing how to deal with Professor Hull's criticisms. I have no right to complain that he has not read my book before entering the lists, but not having done so, I think I may justly complain that he should have assumed that I did not take the trouble of studying with ordinary attention the subject of which I treated. He tells me how to ascertain the distance from Suez to Nakhl; quotes Professor Palmer as to the waterless character of the country around the last-named place;² he attributes to me "a

¹ The Rev. Dr. Stubbs, of Trinity College, Dublin, has kindly verified the originals for me.

² Kalaat el Nakhl, with its fort and wells, has been frequently mentioned and described by travellers for centuries past. See Thevenot's account, quoted

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