

at Marissa : an ingenious interpretation if not entirely convincing. If a second edition is required¹ it is very much to be hoped that Prof. Macalister will insert a few references, for many of his readers will certainly desire to learn more of some of the places and objects he refers to.

Meanwhile the Religious Tract Society are warmly to be congratulated on having secured the services of so great an authority to introduce to the general public a subject of fascinating interest.²

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NOTES AND QUERIES.

Copper Mines in the Territory of Judah.

As far as I know, it is universally stated in books of reference on Palestine and in commentaries on Deuteronomy that there is no copper in Palestine, and that the assertion in Deut. viii. 9 is therefore erroneous unless we assume that the Deuteronomist regarded Canaan as including Lebanon, Edom, or Sinai. This statement requires to be corrected by the following letter from the United States Consul at Jerusalem :—

JERUSALEM, PALESTINE,
July 29, 1925.

SIR,—Your postal card of June 29, 1925, making inquiry about copper mines, which are reported by a German engineer (mining) to be in the vicinity of Khurbet Mird, directly between Jerusalem and the Dead Sea, has been received. You state that this news was reported in the *Living Age* of June 20, and was a reprint from the *Neues Wiener Tageblatt*.

It appears that before the war, the Sultan of Turkey sent a German engineer by the name of Prof. Blanckenhorn to make certain studies upon the Dead Sea, with a view to ascertaining what possibilities there were there. On his return to Jerusalem, he exhibited certain specimens of minerals found to the Mayor of Jerusalem, a certain Faigy Effendi. Among other things he mentioned the Byzantine copper mines which had been worked both horizontally and vertically, situated

¹ P. 155, for *possible* read *possibly*.

² Prof. Macalister's book is on sale at the P.E.F. Office; see advt. on back cover.

on the west side of the Dead Sea, near the southern end. There was slag, not mountains; there was ore, but not in profusion. The difficulties of transport, the heat, and the aridity of the region were the elements that militated most effectively against their being profitably employed. While it is true that the old copper mines exist, it is also true that ore is not found in abundance, and that the picture drawn by the German engineer in the *Living Age* is somewhat highly colored, to say the least.

Very respectfully yours,
OSCAR S. HEIZER, *American Consul.*

File No. 863.

This appears to reproduce the report of the official prospector, Prof. Blanckenhorn, to the authorities of Jerusalem before the war. The writer in the *Tagblatt*, Ernst Klarwill, says that he was employed late in 1917 as chief of the reopening of those mines on behalf of the German Government, but was interrupted by the British conquest of Palestine. We have, therefore, two apparently independent witnesses to these mines. As to the comparative reliability of these witnesses, Herr Klarwill is telling the story of his narrow escape from being captured by the British, and he may have thought it permissible to embroider his story with loose statements. But, on the other hand, he had little motive for varying from the facts as to the mines; and prospectors have been known to minimize the value of their finds and to exaggerate distances and difficulties when they wished to keep the find to themselves and their friends, and to discourage intruders. Blanckenhorn was acting for the Sultan, not for the authorities of Jerusalem, and had no occasion to tell them more than enough to satisfy their curiosity. Therefore it seems not superfluous to copy from the *Living Age* parts of Klarwill's account:—

On the west coast of the Dead Sea, near the Thirbet-Mird [so printed]¹, are the remains of the immense copper-mines of the Byzantine period. . . . [From Jerusalem] towards evening I drove off in a motor-car along a good new road to my destination. . . . A half-hour's journey brought me

¹ [Kh. el-Mird lies 2 miles north-east of Mar Saba, or the west side of the Bukeia plain.—*Ed.*]

to my post. . . . Next morning I looked over the ground. If I had had the requisite means of working, the proper furnaces and machinery, the gigantic heaps of slag would alone have sufficed to supply the copper needs of all Mitteleuropa. Along the mountains everywhere towered masses of ore, dark green in colour, covered with a thousand-year-old patina. The Byzantines, who had to pursue a wasteful system of exploitation, confined themselves to working only the most valuable deposits. . . . I managed at length to make an end of the preliminary work. Meantime winter was drawing on. . . . The artillery fire came nearer and nearer, not only from the south, but also from the east, and one fine morning in February all my labourers had disappeared. Thereupon I ordered my faithful few to march off to the nearest bridge-head of Jericho, while I myself hurried off by motor to Jerusalem to get new orders. As I left the Jordan plain I could hear the thunder of cannon very close.

Whether the mines are important or insignificant, whether they are west of the south end of the Dead Sea or of its north end; in any case both our accounts agree that in Palestine proper there are mines out of which the Byzantines got copper; mines which, by our least favourable account, might still be worth working if you could get water and protection from the climate. It is clear, therefore, that in this respect the Deuteronomist knew what he was writing about. It had always seemed to me very strange that he should not.

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