

in his book ("Hist. Geo. of the Holy Land") is why was so deep a well ever made in the neighbourhood of so many springs? Might not the following be a simple explanation?

The springs have probably always belonged to the townsfolk (since they became settled), and in the case of any wandering tribes with considerable flocks among them it is exceedingly probable that the more settled inhabitants would first resent and then resist the new comers marching twice daily into their midst to water their flocks at their springs. Probably any experienced Nomad with such flocks, accustomed to such a country as this, would know pretty surely when he might, from the conformation of the hills, expect to find water. If then a quarrel arose, what more probable than that he should seek to make himself independent of these disagreeable neighbours. Further, if we can accept the tradition, we have in the story of Jacob two special facts connected with this, firstly, he bought a piece of ground on which he could make a well for himself, and then we gather from Genesis xxxiv that his family made themselves sufficiently obnoxious to the Shechemites to make it very necessary for Jacob to be independent of their permission to use their springs.

DAMASCUS, *January 30th*, 1897.

FLORA OF SYRIA, PALESTINE, AND SINAI,

By Rev. Canon TRISTRAM.

"Flora of Syria, Palestine, and Sinai: from the Taurus to Ras Muhammad, and from the Mediterranean Sea to the Syrian Desert." By Rev. G. E. Post, M.A., M.D., D.D., Syrian Protestant College, Beirut, Syria.

It is strange that in the flood of botanical literature which has poured from the Press for the last half-century there has not, so far as we are aware, been any attempt to provide a convenient and portable botanical handbook for any region of the world since the publication of Mr. Joseph Woods's "Tourists' Flora," in 1850. Floras there have been innumerable, of every region of the world, but none for the knapsack. Sumptuous quartos, and long serials with elaborate illustrations, are rarely accessible to the student, and are useless to the traveller. At length Dr. Post has enabled the traveller, and even the tourist with an eye for nature's jewellery, to carry with him a key amply sufficient to open every botanical mystery he may meet with on Syrian shores, mountains, or deserts. His work is more than merely a tourist's Flora for Syria and Sinai. In a thick but portable post 8vo volume, which may be carried in saddlebag or knapsack, he has filled 920 pages of small yet clear type, with the terse yet exhaustive and intelligible diagnosis of no less than 126 orders, 850 genera, and about 3,500 species of phænogams and acrogens. The lower forms of cryptogams he does not touch. His work adds over 1,000 species to those hitherto registered as indigenous to

the region of which he treats. Not only so, the volume is illustrated by 443 woodcuts, illustrative chiefly of the fructification of the plants treated of. The diagnosis of every class, family, and genus is given in its proper place, briefly, concisely, and intelligibly. Would that we had possessed such a handbook 30 years ago. Many an error and mistaken identification in my "Fauna and Flora of Palestine" might then have been avoided. Not unfrequently, in turning over the leaves of Dr. Post's manual, I came across the remark: "Stated by Tristram to be found at A"—and more than once I have found that it was a case of mistaken identity with some closely allied species, or a new species since described by Dr. Post, but undetected by me.

The region of which this work treats is one of no ordinary importance, not merely historically; but unique on the face of the globe, for the wonderful diversity of its Floras, unrivalled in any other district of the same limited extent. It is the meeting point of three continents, and its Flora exhibits the special characteristics of all three. It impinges on the great Taurid range on the north, is washed by the Mediterranean Sea on the west, and melts into the Syrian and Arabian deserts on the east and south. Its perpendicular range is from 10,220 feet above the sea level at Jebel Sunnin, to the Jordan depression 1,300 feet below the sea. The parallel mountain ranges between which that depression is furrowed—the Lebanon and the Anti-Lebanon and their prolongations northward and southward—present many contrasts in their respective Floras, as Dr. Post explains. We may quote his own words:—

"The very large number of species found in a country so limited is to be accounted for by its microcosmic character. Within an area of 50,000 square miles is found a strip of sea-coast sharing the climatic conditions of the Mediterranean littoral. The western range of hills and mountains, receiving the air from the sea, saturated with moisture, precipitates it in a rainfall of about 36 inches on the coast, and perhaps 50 on the upper zones of Lebanon. These mountains are channelled into deep valleys, some with a general east and west tread, and others north and south, each having a different exposure, an arrangement eminently favourable to the growth of a great variety of species. The air, from which so much moisture has been precipitated, passes over to the parallel chains, which abstract from it a large part of its remaining moisture. The rainfall of the second range is probably not much more than half that of the first, while that of the eastern plateau is much less, probably not more than from 10 to 12 inches. As a natural result of this physical conformation, the Flora of the maritime watershed of the coast range differs considerably from that of the inland range, which again differs strikingly from that of the eastern plateau. The deep chasm of the Jordan and the Dead Sea, with its tropical climate, adds to the variety and numbers of species. The deserts, although useless for agriculture, have a large and most interesting Flora, differing almost totally from that of all the other regions."

Our author takes Gaion Dagh (Amanus), opening just east of Scanderoon, as the northern limit of his region. The Flora of this district, though generally resembling that of Taurus, as might have been expected, yet contains many peculiar species. Lebanon, and the Nusairy chain which links it with Amanus, may again be looked on as a distinct district. Though the Arctic plants, which might have been expected here close to the snow-line, are wanting, the warm period which succeeded the glacial epoch having

exterminated them, yet their place has been taken by a vast number of peculiar forms: in fact, we have a highly specialised local Flora. In the lower ground of central Western Palestine we find the Germanic Flora such as prevails in Greece and the coasts of Asia Minor, while from Beersheba southward it becomes rapidly assimilated to the desert Flora of Egypt and Arabia. But very different is the Flora of the eastern desert, east of Aleppo, which contains many peculiar species, and which, when properly worked, Dr. Post expects will produce many botanical novelties. He points to the poverty of the Anti-Lebanon in comparison with the Lebanon, as doubtless to be explained by the comparative want of moisture. The species are fewer, and there are not many distinctive plants. Much richer are the hills of Gilead and Moab, and most markedly different in their Flora from the hills of Western Palestine. But no botanical feature of the region can surpass in interest that of the Jordan and Dead Sea chasm, abounding in species identical with those of India, Arabia, and Ethiopia, either, as Dr. Post suggests, immigrants; or, as seems to us more probable, survivals, buried in this sheltered nook, from the warm period which succeeded the glacial epoch. In 1863-64 we collected, I think, about 120 such species, making it, in fact, a tropical outlier.

We can only again repeat our thanks for the invaluable aid Dr. Post has afforded, not only to the traveller in the land, but to every student of botanical distribution. The work consists of over 900 pages of small clear type, printed on thin strong paper, and produced, not with all the resources of metropolitan typography, but on the spot, at the Mission Press of the American Protestant Mission at Beirut, not the least remarkable feature being the admirable woodcuts drawn by the author, and engraved under his eye.

THE SWASTICA.

By Rev. THEODORE F. WRIGHT, Ph.D.

IN a paper on "The Jerusalem Cross" (*Quarterly Statement*, 1894, p. 187) Herr Schick figured the Swastica  but did not state the places in which he had found it. Professor Hayter Lewis, in a footnote on the same page, spoke of it as "an Eastern symbol of the sun, but used also in early times by Christians."

Commenting upon Herr Schick's paper, Colonel Conder (*Quarterly Statement*, 1894, p. 206) remarks that the Swastica "is found in the catacombs very early," but gives no reference.

In the same volume (*Quarterly Statement*, 1894, p. 300) I mentioned the fact that it is found in American mounds.

Commenting on this (*Quarterly Statement*, 1895, p. 84), Mr. William Simpson drew from his abundant information, since given forth at length in his admirable work on "The Prayer Wheel"; but in neither writing does he especially refer to Palestine.