

October 9th I was free to set out for my first winter's work in the desert. The region around the dried-up ancient Lop sea was its main goal, and for various reasons that eastern-most corner of the Tārīm basin had to be reached by me *via* Khotan and beyond it by the already familiar route skirting the southern edge of the Taklamakān. Opportunities for topographical work on new ground were thus confined to the journey from Kāshgar to Khotan, and the time available for it was limited.

I first moved due east to the oasis of Marāl-bāshi by an unsurveyed route which local tradition vaguely remembered as having been in use for traffic during earlier periods of Chinese domination, instead of following the present high 'road' along the lower Kāshgar river. The route led beyond the outlying oases of Āstin-ārtush and Kalta-yailak closely along the foot of the steep and barren hill chain which forms here the southernmost rampart of the T'ien-shan.⁴ The fact that most of the desert glacis of this hill chain is now wholly without water added to the geographical interest of the series of small ruined sites and dry river beds we succeeded in tracing near the old route. Considerable changes within historical times in the course of the terminal Kāshgar-daryā were indicated also by the survey made on a reconnaissance which took me from Marāl-bāshi to the detached hills of the Bēl-tāgh and Lāl-tāgh in the desert north-eastwards.⁵

Our surveys of 1908 seemed to justify the belief that the Mazār-tāgh hill chain traced then for about 20 miles from the west bank of the Khotan river bed in the Taklamakān was in geological structure but a remnant of an ancient range starting at an angle from the outermost T'ien-shan near Marāl-bāshi and once extending in a south-easterly direction across the Taklamakān.⁶ That the bold island-like hills which rise from the desert plain to the east and north-east of Marāl-bāshi and which mark the north-western end of that assumed ancient hill range, have been carved out and isolated by the action of wind-driven sand, a most potent physical factor throughout the Tārīm basin, was clearly proved by the observations made on the above reconnaissance. The same process prolonged through geological ages would obviously account for much bigger breaks in the continuity of the range in the great drift-sand desert further south. To test this hypothesis on the ground by a 'short cut' through the Taklamakān in the direction of the Mazār-tāgh on the Khotan river, I set out on October 25th after careful preparations at Marāl-bāshi.

Crossing the Yārkan river we reached by three marches the end of the last of those sand-scoured hills, known as Chok-tāgh.⁷ From a lake near it Dr. Hedin had started in May 1896 on that bold journey eastward which ended with the destruction of his caravan and his own narrow escape. Having taken water supply there we forced our way for three more trying marches into the sea of bare dunes.⁸ The ridges or 'Dawāns' into which they were heaped grew steadily higher and rose invariably in a line diagonal to our intended direction. This bearing and the almost total absence of level ground between the endless succession of 'Dawāns' made progress very slow and exhausting with heavily laden camels. By the evening of the third day the animals hired to form a 'supporting party' for our own had broken down. Assuming that our rate of progress could be maintained, there still remained some eleven marches to the nearest point of the Mazār-tāgh hill chain previously sighted. The same forbidding expanse of huge sand ridges spread before us on the fourth day, and I realized from previous experience the difficulty of steering a correct course or even of recognizing low eroded offshoots of that hill chain from a distance.

These considerations together with others concerning the work ahead forced me to turn back, however reluctantly. Compensation was afforded by two interesting discoveries which had already attended the effort. On the third march between the high dunes we had again and again come upon patches covered with minute but easily recognizable fragments of slaty rock flakes, the

⁴ See Sheets Nos. 5. A-D. 1; 8. A. 1.

⁵ See Sheets Nos. 8. A, B. 1; 7. A. B. 4.

⁶ Cf. *Desert Cathay*, ii. p. 419; above, p. 20.

⁷ See Sheet No. 8. B. 1, 2.

⁸ See Sheet No. 8. B. 2, C. 2.