kāsh in the west to the high ice-peaks towering above the Yurung-kāsh headwaters in the south-east. Among these points I included also certain peaks in the much-eroded outer hills towards Khotan by which the longitude of the town itself might be accurately determined thereafter when a chance of exceptionally clear weather offered.

Two days later a second hill station was ascended on a high ridge above the Kunat pass (10,820 ft.), and the equally distant views there obtained rendered it possible to secure triangles to almost all those points before the veil of dust carried up by a rising wind finally hid all but the nearest ground from our horizon. Subsequent experience has shown how serious is the obstacle presented to survey operations by the fog-like haze of this region. All along the southern edge of the Tārīm basin and the adjoining mountains it rarely lifts except for short periods of the late autumn and winter.

After a short halt at Khotan necessitated by manifold preparations for our winter campaign I dispatched Rām Singh on November 23rd for supplement-ary triangulation work in the mountains and for a survey of the high range stretching east of 'Muz-tāgh'. This would fill the gap between and the tract explored by Captain Deasy about Polur and along the

our previous survey and the tract explored by Captain Deasy about Polur and along the K'un-lun further east. In accordance with my instructions Rām Singh returned to our former route towards Karanghu-tāgh and established triangulation stations first on a prominent peak (14,900 ft.) above the Ulūgh-dawān overlooking the Buya valley, <sup>22</sup> and subsequently on the edge of the high plateau above the Pisha valley (Tōpe station, 13,949 ft.) close to the point where the track to Karanghu-tāgh falls steeply into the deep-cut gorge of the Yurung-kāsh <sup>23</sup>.

He then made his way by the Igin-dawān, at the head of the Pisha valley, across the range running due north from 'Muz-tāgh'. Beyond, this culminates in the conspicuous snowy massif of the Tikelik-tāgh (Pk.3/60p) and finally loses itself on the broad piedmont gravel glacis south-east of the Khotan oasis. Further east he proceeded across the open plateau-like valleys in which rise the head-waters of the rivers irrigating the oases between Khotan and Keriya. Keeping there on high ground, notwithstanding the bitter cold of the season, he accurately mapped the northern slopes of the outer main K'un-lun range as far east as the valley above Tört-Imām (Imāmlar). From stations established on broad elevated spurs between the glacier-fed sources of the Yulung and Nūra rivers he triangulated a number of peaks on this part of the range rising to heights above 21,000 feet.

When the increasing winter cold stopped further work at high altitudes, Rām Singh descended to the narrow belt of oases which stretches east of Chīra. They lie along the line where the subsoil water absorbed on the gravel slopes to the south comes to light again in springs and renders cultivation possible here and there, before being finally lost in the drifting sands of the Taklamakān. From Keriya, the largest of the oases, he turned northwards and, following the Keriya river down a previously unsurveyed portion of its course, rejoined me on December 23rd at the desert site of Dandān-oilik. <sup>26</sup>

Since our separation I had myself been first occupied within the central portion of the Khotan oasis by surveys needed for clearing up manifold questions concerning its historical topography. 27 Subsequently I set out by December 7th into the desert north-eastwards for my main task, the exploration of sand-buried ancient sites. The plane-table traverse carried out by me along my route to the ruins of Dandān-oilik, the first of these, a distance of about 120 miles, had lain almost wholly through desert and for the last six marches over bare dunes, altogether very deceptive ground. Rām Singh's survey from Khotan to the same place had been brought

<sup>&</sup>lt;sup>22</sup> See Sheet No. 14. A. 4, where the triangulation station symbol and the route line leading to the position of this hill station have been omitted by an oversight.

<sup>23</sup> See Sheet No. 9. D. 4, and for portions of a photographic panorama here taken in 1906, Desert Cathay, i. Figs. 66, 67.

<sup>24</sup> See Sheet No. 14. A. 3, 4.

<sup>25</sup> See Sheet No. 14. C. 4.

<sup>&</sup>lt;sup>26</sup> Cf. Ruins of Khotan, pp. 282 sq.; Sheet No. 14. C. 1.

<sup>&</sup>lt;sup>27</sup> See inset map (Portions of Khotan oasis, scale 4 miles to 1 inch) in map of Ancient Khotan; for the location of historically known points, etc., cf. Ancient Khotan, i. Chap. VIII, sec. i-iii.