

Clementi's latitude of $39^{\circ} 46' 42''$ for Marāl-bāshi town and several latitudes observed by Dr. Hedin on the Yārkaṅd river were used. The longitude adopted for Marāl-bāshi ($78^{\circ} 15' 15''$) was obtained by fitting the several traverses passing through it to the accepted positions of Kāshgar and Ak-su and proportionately dividing the error in distances.⁶ Similarly the position of Tumshuk was adapted to that shown by Sheet No. 7 for Kelpin and Yaka-kuduk. It may be noted that the several isolated rocky heights of the Mazār-tāgh and other hills rising above the alluvial plains are of great help to the surveyor for the correct location of details in the vicinity of Marāl-bāshi.

For brief descriptive accounts of the routes followed in this area, see *Desert Cathay*, ii. p. 428; *Geogr. Journal*, xlvi. pp. 112 sq.; *Serindia*, iii. pp. 1309 sqq.

NOTES ON SHEET No. 9 (KHOTAN, SANJU)

This sheet shows almost the whole of the mountainous area which extends from the edge of the Taklamakān between Gūma and Khotan and southwards to the main K'un-lun range and the upper Kara-kāsh valley. The routes from which it was surveyed all belong, with a slight exception in the extreme north-east, to the first and second expeditions. For the southern portion of the sheet, the triangulation of 1900 supplied a considerable number of fixed points;⁷ in addition astronomically observed latitudes were available for numerous camps. For Khotan town a longitude of $79^{\circ} 55' 51''$ was adopted, this being the mean of the astronomical values obtained by several observers (Dutreuil de Rhins, Piewzoff, Deasy) and in close agreement also with the position which our triangulation of the hills due south of the oasis indicates for the town.⁸ The positions adopted for Khotan and Karghalik (see above under Sheet No. 6) were used in fitting the traverses between the two oases, both by

⁶ It deserves to be noted that Mr. Clementi's longitude for Marāl-bāshi is $78^{\circ} 6' 20''$, while that recorded as approximate in the *Yarkand Mission Report* is $78^{\circ} 11' 20''$. Dr. Hassenstein's map shows for Marāl-bāshi $78^{\circ} 35' 12''$.

⁷ See Appendix A, stations and points in 51L, 51M.

⁸ Owing to adverse atmospheric conditions no occasion offered for direct observation of any of the

The oasis of Marāl-bāshi is of interest on account of its irrigation system in which the inadequate water-supply received from the terminal Kāshgar river is supplemented by big reservoirs (A. 1) fed from the Yārkaṅd river. The dykes on the latter (Sheet No. 5. D. 2) securing water for the Zai canal and those around the reservoirs of Kölde and Anār-köl represent the largest irrigation work in the Tārīm basin. The geological interest presented by the Mazār-tāgh and the other isolated hills, as the remnants of an ancient range distinct from the T'ien-shan, has been touched upon above, p. 26, as well as the formidable character of the drift-sand desert which extends south of the Yārkaṅd river.

Correction 8. C. 1. Cultivation patches ought to have been shown around the habitation symbols of Kizil-ziārat-terelgha.

the main road and along the outer hill; on the former route available latitude observations were also utilized.

The approximate levels indicated for the snow-line in different portions of the main range are uncertain, most of the work having been done in the early summers of 1906 and 1908 and by different surveyors. In the mountains due south of Khotan my own observations of the autumn of 1900 and late summer of 1906 have led me tentatively to assume an average snow-line at 17,000 feet.

The routes followed by myself in the plains and mountains and the observations attending my repeated sojourns in the important Khotan oasis have been described in *Ruins of Khotan*, pp. 169 sqq., 462 sqq.; *Desert Cathay*, i. 155 sqq., ii. 416 sqq. The geography of the Khotan region, in its physical, economic and historical aspects, together with the route from Karghalik and the *topographia sacra* of the Khotan district, is fully discussed in Chapters V-VIII of my *Ancient*

triangulated peaks from Khotan town or its immediate vicinity, though the distance to the nearest two of them (D. 3) is less than 20 miles.

Our latitude value, $37^{\circ} 6' 45''$, relates to Ākhūn Bēg's garden, in Tūwen-Gujan, about a mile south-east of the centre of Khotan town, and about a quarter of a mile south of the position where Dutreuil de Rhins observed his latitude of $37^{\circ} 7'$.