

1913. Two triangulated points on either side confirm its position as here shown. The plane-table traverse along the route has been adjusted to the fixed position of Tāsh-kurghān and to the position of Toile-bulung (Sheet No. 2. D. 4). For this an astronomical value of latitude is available and a longitude value representing the mean between two values obtained by interpolation between (a) Kāshgar and Tāsh-kurghān, and (b) Yangi-hissār and Tāsh-kurghān.

An alternative route towards Kāshgar used chiefly during the winter months follows the narrow gorge which descends from the Chichiklik-maidān (Sheet No. 2. C. 4) to Shindī below the sharp eastern bend of the Tāsh-kurghān R. The portion of this route falling within this sheet has been shown from Rai Rām Singh's plane-table work of 1906 and from notes kept by myself when following it early in June of that year.

The snow-line on the high ranges which enclose the Sarīkol valley could be but approximately indicated, as it was actually approached only on the Wakhjir pass leading to the Oxus (Āb-i-Panja) source and on the Kilik and Ming-taka passes. From my observations when crossing the Wakhjir pass in July, 1900, and the Ming-taka pass early in September, 1913, I was led to take the elevation of about 16,500 feet as the approximate limit of permanent snow-beds on the range which forms the watershed be-

Astronomically observed latitudes.

1900-01. Dafdar, Camp 1 (C. 2)	...	...	...	37° 22' 26"
Tāghlak-gumbaz, Camp 2 (C. 1)	...	...	...	37° 34' 38"
Tāsh-kurghān, Camp 3 (near British Ak-sakāl's house; C. 1)	...	...	...	37° 46' 58"
1906-08. Chushmān, Camp 1 (C. 1)	...	...	...	37° 51' 28"
Udurghuk, Camp 5 (D. 1)	...	...	...	37° 50' 38"

NOTES ON SHEET No. 4 (YAI-DÖBE)

The area shown in this sheet was surveyed from two routes, both followed by R. B. Lāl Singh only. The one of 1907 led from Uch-Turfān and the Taushkan river along the foot of an outer range of the T'ien-shan to the Terek-dawān (Sheet No. 1. D. 4); the other, followed in 1915, lay over previously unexplored ground from Kelpin (Sheet No. 7. B. 4) *via* the Kirghiz grazing grounds of Yai-döbe and Chongkara-jol to Kalta-yailak (Sheet No. 5. B. 1). On the latter route the position of Tunguzluk had its latitude fixed by astronomical observation. No other fixed points being

tween the Hunza and Tāsh-kurghān rivers. The same snow-line was adopted also for the range to the east of the Sarīkol valley which divides the draināge areas of the Tāsh-kurghān and Raskam branches of the Yārkan river. On the range to the north and west which separates Sarīkol from the Pāmīrs proper the snow-line seemed to me to lie distinctly higher, a circumstance fully accounted for by the reduced amount of moisture which penetrates north of the Hindukush and Kara-koram ranges. It has been conjecturally shown on the 17,000 contour line, but may in reality be somewhat higher.

Grazing of the scanty sort usual on the Pāmīrs is to be found over most of the ground at the bottom of the main valley and in the lower portion of those joining it from the ranges on either side. This has not been specially indicated. But in a few areas (as at Rang; C. 2) yellow tint has been used to mark the presence of riverine loess soil allowing of more luxuriant vegetation.

Some account of the physical features of the ground shown in this sheet will be found in my *Ruins of Khotan*, pp. 57 sqq. and *Desert Cathay*, pp. 83 sqq. Its historical topography has been fully discussed in Chapter II of *Ancient Khotan* (i. pp. 22-40) and some additional information about its old sites furnished in Chapter III of *Serindia*, i. pp. 72-76.

available within the limits of this sheet, its delineation was determined by adjustment of the details to the fixed places of the adjoining sheets. The result was satisfactorily checked by comparison of the position thus obtained for the Bilōti-dawān (Sheet No. 4. D. 3) which was found to agree very closely in latitude with that observed by Colonel Trotter, viz. 40° 40' 20".

Though scarcely any of the streams coming from the outer T'ien-shan ranges shown in this sheet ordinarily carry water, yet springs found in various places at the foot of the northern one, combined with