NOTES ON SHEET No. 18 (KERIYA RIVER END)

With the exception of small areas, near Tonguz-baste on the dying Keriya river (A.4) and at the northern end of the 'Niya Site' (B.4), the surveys shown in this sheet are confined to the route followed on my Taklamakān crossing of February, 1908. Apart from three positions of which the latitudes were observed astronomically, the plane-table traverse has been adjusted to the longitudes of Kochkar-öghil and Kuchā, determined as explained in the Notes on Sheets No. 14 and 17.

A fairly detailed account of the physical features observed in crossing the Taklamakān from the Tārīm to the terminal delta of the Keriya River has been given in *Desert Cathay*, ii. pp. 386 sqq. The use of this difficult desert route as an old 'robbers' track' and the probable shrinkage of the terminal course of the Keriya river within historical times have been discussed in *Serindia*, iii. pp. 1240 sq. For the exploration of the ruins at the northern extremity of the 'Niya Site', the ancient *Ching-chüeh* of the Chinese, abandoned in the third century A. D., see *Ancient Khotan*, i. pp. 376 sqq.; *Serindia*, i. pp. 215 sqq.

The surveyed portion of the sheet shows in section (A. 1) the northernmost traceable extension of the dried-up Keriya river delta. The presence here of high 'Dawāns', running transversely to the direction of the dying river (Camps 320, 321), suggests the possibility of the latter having once formed terminal marshes on this ground. Further south an old bed of the river, overrun by dunes and passing through a confusing dead delta, was followed with breaks to a point (Camp 327)where the recently formed new terminal course of the river was encountered.

The bed seen near the shepherd-hut of Tonguz-baste (A. 4), which in 1901 still carried water, had been abandoned some three years later owing to a change at the head of the delta at Yoghan-kum (Sheet No. 13. D. 4).

Correction. A. 3. To figure *300* above Camp 327 add *r*.

Astronomically observed latitudes.

1906-08.	Dead tamarisk-cone 3¼ miles N. of Camp 323 (A. 2)	...	39° 18′ 19″
	Position 1 mile N. N. W. of Camp 327 (A. 3) ...	...	38° 42′ 7″
	Camp 327 (on new Keriya River bed; A. 3) ...	...	38° 41′ 43″
	Tonguz-baste, Camp 330 (near shepherd's hut; A. 4)	...	38° 23′ 13″

NOTES ON SHEET No. 19 (NIYA)

The northern half of this sheet shows surveys made on all three expeditions, the presence of two important ancient sites having induced me to pay repeated visits to this ground. The mountain area in the south was surveyed in the autumn of 1906 in connection with the triangulation then carried along the northern main range of the K'un-lun by Rai Rām Singh.

The numerous positions trigonometrically fixed in the course of this work have furnished a safe base for the construction of this portion of the sheet. In addition it was possible to use for it in the S. W. a series of high peaks on the main range (A, B. 4) which Captain Deasy had fixed by triangulation, and the positions of which were plotted on the plane-table at the time of surveying (see Appendix *A*, Sheets 60L, P). Besides the latitude observations shown below, several more taken by Captain Deasy and other explorers were also utilized.

For the adjustment of the numerous route-traverses shown in the northern portion of the sheet, a sound basis was fortunately available in the position of Niya-bāzār, fixed as a triangulation station in 1906 with the value of lat. 37° 3′ 34″, long. 82° 45′ 32″. The caravan route leading thence north-eastwards to Endere and Charchan could also be checked by the position of Kalasti (Camps 116 a, LXXIV; Sheet No. 22. C. 4). In 1913 this was fixed on the plane-table by intersection with a Reeves telescopic alidade from several previously triangulated peaks above Charchan; it then proved to agree very closely with that laid down in Sheet No. 46 of the 1906-08 map. For several points north of the caravan route latitude observations were available. The triangulation attempted in October, 1906, from the ruins of the Niya Site failed to give a reliable result owing to the narrow angle observed and the excessive distances.

Owing to the lateness of the season