

Survey towards Kāshgar R. headwaters. for the mountains westwards. But the summer floods in the K'un-lun valleys would not allow the valuable convoy of antiques to be started at once towards the Kara-koram and Leh. I was therefore able to let Lāl Singh to whose care I had to entrust it, set out meanwhile with me for a survey of the high snowy mountain chain which continues the Muz-tāgh-atā range to the headwaters of the Kāshgar river south-east of the Alai. We separated at Ōpal whence Lāl Singh made his way round the northern end of that chain to the great Pāmīr-like valley of Mōji bordering the watershed towards the Great Kara-kul and Rang-kul Lakes on the Russian Pāmīrs.⁸⁹ By descending this valley to below Kun-tigmaz he connected his survey with the work effected in 1900 from the Muz-tāgh-atā side and thus practically completed our mapping along the Chinese portion of the Pāmīrs. Crossing thence the high Ulūgh-art pass, flanked by a magnificent glacier, he rejoined me for final instructions at the mountain camp of Bostān-arche⁹⁰ where much urgent writing work had detained me before my start from Chinese soil.

Return of surveyors to Ladāk. The short journey which carried me thence to the Russian Pāmīr frontier below the Kizil-art pass, lay mostly along Lāl Singh's recent route and offered no opportunity for fresh topographical work. Lāl Singh himself after taking charge of the big convoy of antiques at Kāshgar, was obliged to proceed with it to Yārkanḍ and thence to follow the usual caravan route which leads to Ladāk *via* Kōk-yār. Beyond the latter place the ground had remained outside the area of our previous surveys. Plane-table work was therefore resumed here by Lāl Singh and carried across the Tiznaf river headwaters and the Yangi-dawān to the uppermost Yārkanḍ river and finally to the Indian frontier on the Kara-koram pass.⁹¹

His constant personal supervision was needed to assure safe transit for the many loads of precious and often very fragile antiques on these marches, with their frequent river crossings and other risks, and the complete success with which this difficult task was carried through sufficiently explains why the survey work was here necessarily limited to what could be accomplished while keeping to the route line.

Extent of survey operations. The survey operations of my third expedition thus completed had extended, as far as work in Chinese territory was concerned, over a period of exactly two years. Though their duration was thus about four months shorter than the corresponding period of my second journey yet the area covered by our surveys of 1913-15 was if anything even more extensive than before. This result was very largely due to the indefatigable energy displayed by R.B. Lāl Singh.

Recognition of surveyors' services. It was hence a special satisfaction to me to see his services to geography on this expedition duly recognized by the award of the Cuthbert Peek Grant of the Royal Geographical Society in 1916, and those he had rendered to the Survey of India during 37 years of work in fields as widely apart as Arabia, Persia, the Indian N.W. Frontier, Tibet and China, by the grant of a valuable Jāgīr which the Government of India bestowed upon him on his retirement in 1919. The equally zealous help I had received from Afrāz-gul Khān and the special aptitude for topographical work which he had proved on this journey, led to his appointment in 1918 as Sub-Assistant Superintendent in the Survey of India and received due acknowledgment also by the bestowal in 1917 of the Macgregor Silver Medal for Military Surveyors.

⁸⁹ See Sheet No. 2, A-C. 2.

⁹⁰ See Sheet No. 2, B, C. 2 3.

⁹¹ For the route from Kōk-yār, see Sheet No. 6. C. 1-3, D. 4; 9. A. 4; 10. A. 1.