examine ruined sites near Ara-tam and Lapchuk was utilized by Lāl Singh for a rapid survey of the southern slopes of the Karlik-tāgh, the easternmost portion of the Tien-shan range, rising to snowy peaks between 13,000 and 14,000 feet. 50

The same plan was followed during the three weeks spent in the Turfān depression.

While visits to its numerous and important ruins and excavations at an unexplored desert site in its south-eastern corner kept me busy, Lāl Singh rapidly surveyed the ground over which the principal oases of the district are scattered. He also mapped portions of the southern slopes of the snowy Tien-shan which overlooks this basin, so interesting to the geographer. 51 On resuming my journey to Kara-shahr on December 1st, I sent Lāl Singh southwards for independent survey work among the low desert ranges of the Kuruk-tāgh. He accomplished his task successfully by first reaching Singer, the only permanently occupied spot in a vast region of crumbling rock, bare gravel or salt-encrusted ground, and thence carried his survey westwards through wholly unexplored hills to Korla at the extreme north-east corner of the Tārīm basin proper. 52 The local experience gained on this journey proved of very great help to Lāl Singh on his far more extensive explorations in the Kuruk-tāgh during 1914-15.

I myself after gaining the Kara-shahr valley by rapid marches on the caravan route from Turfān was busily occupied by excavations at the large site of ruined Buddhist temples north of Shōrchuk. 53 Lāl Singh having rejoined me by Christmas, we moved up the valley to the ruins of Khōra whence we reached Korla by New Year's day, 1908. Reports received there about sand-buried 'old towns' drew me then into the unsurveyed desert belt between the Inchike and Charchak river beds to the south-west. 54 When our surveys there had proved these reports to be based on mere folklore beliefs, current all along the Taklamakān, we took separate routes to Kuchā. I struck across the scrubby desert to the north of those river beds and after reaching Bugur followed the ancient road along the foot of the T'ien-shan westwards, while Lāl Singh mapped the unsurveyed course of the Inchike-daryā to Shahyār, rejoining me at Kuchā. 55

After rapid visits to ancient remains on the outskirts of this large and important oasis I started towards the close of January, 1908, to the south of the great desert for the exploration of ruined sites in the Taklamakan. Crossing of Taklamakan. In order to reach them by a 'short cut' we followed the line indicated by Dr. Hedin's pioneer journey of 1896 and leading from Shahyar due south through the desert of large dunes to where the Keriya river loses itself in the sands. This desert tramp of fifteen days from the Tarim to the point where we first reached the water, or rather ice, of the dying Keriya river proved beset with serious difficulties and risks. 56 Yet it also was attended by plenty of interesting topographical observations regarding the ancient dead delta of the river; the high ridges of dunes (dawān) which here as in the Lop desert usually keep parallel to ancient river beds, however long ago they may have been dried up and smothered, and other typical features. 57 When at last we had reached the ever errant river it was found to have formed a new bed at a considerable distance to the west of the one where Hedin had seen it.

After fresh excavations at the Kara-dong site (Sheet No. 13. D. 3) we moved by a new route to the desert belt north of the Domoko oasis. While I was engaged there in exploring an extensive but much scattered series of ruins, Lal Singh carried out useful supplementary surveys both to the

<sup>50</sup> See Sheet Nos. 34. D. 2, 3; 37. A. 2, 3; Desert Cathay, ii. pp. 345 sqq.

<sup>51</sup> See Sheet No. 28, C. 2, 3, D. 3; Desert Cathay, ii. pp. 353 sqq.

<sup>52</sup> See Sheets Nos. 28, B. 4; 29. B. 1, 2; 25. A. 1,

B. 2, C. 1, 2, D. 1; 21. D. 1.

53 See Sheet No. 25. A. 1; Desert Cathay, ii.

pp. 364 sqq. For the route from Turfan, see Sheet

No. 28. A. 3, 4, B-C. 3; 24. A-D. 4.

<sup>54</sup> See Sheet No. 21. C. 1, 2, D. 2; Desert Cathay, ii. pp. 374 sqq.

<sup>55</sup> See Sheets Nos. 21. A, B. 1, 2; 17. B-D. 1, 2.

<sup>56</sup> See Sheets Nos. 17. A. 3, 4; 18. A. 1-3; cf Desert Cathay, ii. pp. 382 sqq.

<sup>57</sup> Cf. Serindia, pp. 1239 sq.