

The Russian map above mentioned still shows two routes directly connecting Shona-nōr with Turfān; but an examination of the ground has revealed a great change in the conditions affecting their use. The northern one, which Colonel Kozloff followed, apparently in 1895, leads to Chiktam, and was accurately surveyed in the autumn of 1915 under my instructions by Surveyor Muḥammad Yāqūb. It proved, for a distance of close on 100 miles, to be wholly devoid of water, and thus impracticable now for caravan traffic. The same was found to be the case with the southern track, which Rai Bahādur Lāl Singh, on his difficult journey across previously unexplored portions of the central Kuruk-tāgh in the winter of 1915, succeeded in striking from the south and then followed through to Dēgar, in the south-east corner of the Turfān depression.⁷ He found that the salt springs along it, the ice of which, as local tradition at Dēgar remembered, once made the use of the track practicable in the winter for hardy hunters of wild camels from Hāmi, had completely dried up. Here, too, caravan traffic must have been impossible for a long time past.

Routes from Shona-nōr to Turfān now impracticable.

The change of physical conditions which, in the case of the two routes just mentioned, may be considered as proved for relatively recent times, appears to me to offer an adequate reason for believing that the southern and still more difficult portion of the 'new route of the north', I mean the one intervening between the Yü-mên barrier and the vicinity of the Shona-nōr, must have already become impossible at a far earlier period. The total distance in a straight line between these two points amounts, according to the Russian map mentioned above, to close upon 190 miles. Of the ground traversed by such a line only about one-fourth, near its southern end, has so far become partially known to us through a reconnaissance which carried Captain Roborovsky in February, 1894, from below Khara-nōr into the desert hills north-westward.⁸ Having crossed the Su-lo Ho bed at a point which a comparison of his Map I with my own, No. 78. A. 3 or Plate 33, proves to have been near T. XIX, he traversed a succession of absolutely barren hill chains and valleys till he was about 46 miles in direct distance from that crossing-place. There want of water for his horses forced him to return by the same route. It is of interest to note that in a valley 'with a flat granite threshold', which from his description appears to have been met at about 26 miles' direct distance from the river bed, the Russian traveller found 'shallow rounded troughs in the rock or small basins filled with water from the melting snow'. Further on, at the top of a pass, 6,640 feet above sea-level and about half a dozen miles from the extreme point reached, he came upon a decayed *obo*, or cairn, and traces of an old road running from south-west to north-east.⁹

Roborovsky's reconnaissance north of Su-lo Ho.

The discovery of those rock-troughs holding water at the time of Captain Roborovsky's journey is of special interest, as it suggests the possibility that the unexplored ground beyond, along the line which the ancient 'new route of the north' is likely to have crossed towards the Shona-nōr, may even now contain a few places where water, at least during certain seasons, might be obtained either in wells or in natural rock-cisterns, such as I found in the western Kuruk-tāgh during

Ancient route closed through desiccation.

⁷ Cf. my *Third Journey*, etc., *Geogr. Journal*, 1916, xlvi. p. 206. See also Maps 31, 34 of my 1 : 500,000 atlas.

⁸ Extracts from Captain Roborovsky's account of this excursion are translated by Hedin, *Central Asia*, ii. pp. 100 sqq., where reference is made to Roborovsky, *Trudij Expeditsij*, etc., i. pp. 164-69. These extracts, which alone are accessible to me, do not indicate the object aimed at by this excursion. But from the fact that the Russian Trans-frontier Map reproduced in the report on the expedition makes Captain Roborovsky's route coincide partly with the westernmost of the tracks which the compilers of that map took from

'native information', as mentioned above, I conjecture that the purpose was to test the existence of this alleged route towards 'Lake Toli'.

The cartographical risks resulting from a combination of actual survey work with itineraries gathered from native reports are illustrated *inter alia* in the map referred to by the fact that a well is marked in a position where Captain Roborovsky's survey and description show a rugged rocky range, of course waterless, crossed by a difficult pass 6,640 feet above sea level.

⁹ Cf. Hedin, *Central Asia*, ii. p. 101.