

make use of the brackish well which is marked by the badly decayed tower of stamped clay and brickwork known as Bējān-tura.³

Northern-
most range
of Kuruk-
tāgh.

On February 18th a long march carried us up the glaxis, first very gently sloping, then more pronounced, and across the crest of the northernmost hill range of the Kuruk-tāgh which bounds the Turfān basin in this direction (Map No. 28. B, c. 3). An outlier of it, almost completely covered with masses of fine detritus and sand, was crossed by a saddle appropriately known as Kum-dawān at an elevation of approximately 1,000 feet. A second saddle about 400 feet higher, rising beyond a small drainageless basin, gave access to a broad valley which we followed up to its head without meeting any vegetation. Thence a steep and narrow col had to be crossed at a height of about 2,700 feet, and finally a rapid descent in a winding gorge brought us in the darkness to the ice sheet marking the salt spring of Achchik-bulak, after a total march of 28 miles (Map No. 28. B. 4). It was a fitting introduction to the barren Kuruk-tāgh, and the skeletons of sheep left to die here on their journey from the Tārīm to Turfān showed the difficulties presented by this waterless march, even in the winter when ice from the salt spring can be used. During the summer this most direct route is practically impossible.

Crossing of
second
Kuruk-tāgh
range.

Next morning showed that the ice sheet, which with the abundant scrub around had allowed us to halt here in comfort, stretched down into a confined winding cañon between steep spurs furrowed by erosion. This would afford direct access to the Turfān basin from this side were it not that it is so narrow in places farther down as to be impassable for animals. The onward march that day led up a big and utterly bare peneplain, formed by the almost complete decay of a succession of small rocky ridges, and thus on to the crest of a second main range. It was crossed the same day by the saddle known as Āt-ölğan-dawān at an elevation of 4,300 feet. Patches of snow in sheltered spots beyond saved us recourse to the water-holes of Shegil-bulak, which were found dry. This second range of the Kuruk-tāgh, insignificant as it looked on the very gradual ascent from the north, is yet an important feature in the morphology of the western Kuruk-tāgh. As appears from the map (No. 28. A, B. 4), it joins up to the north-west with an outlier of the T'ien-shan which runs down to the south-west of Toksun and is crossed by the Turfān-Kara-shahr route near Üjme-dong. It forms the water-parting between the Turfān depression to the north and a huge drainageless basin to the south in the centre of the western Kuruk-tāgh. The deepest portion of this basin is occupied by an extensive dried-up salt marsh which, as the map shows, extends for a distance of at least thirty miles from north-west to south-east. In all probability this receives also what occasional drainage there is from the side of the plateaus eastwards, which the route followed by Grum-Grizhmailo and surveyed by Afrāz-gul crosses between Shaldrang-bulak and Bakri-changche.⁴

Routes
connecting
Lop with
Turfān.

It is only along the depression marked by the dried-up salt marsh that vegetation to any appreciable extent as well as water can be found within this large central basin. We reached the depression after a total march of 38 miles from Achchik-bulak, after crossing an outlying spur of the range in a gorge where rock layers with quartz were exposed amidst sandstone and slate. The narrow belt of loess that stretches along the northern shore of the dry salt marsh supports reed-beds and tamarisk scrub, and here lie in a line the springs of Ārpishme, Örkash, and Uzun-bulak, near which the routes from Bējān-tura and Deghar unite. No drinkable water is to be found between

³ Judging from the sketch-map appended to Klementz, *Expedition nach Turfan*, and compiled mainly from Roborovsky and Kozlov's surveys, it appears that the name *Bojanta* given in this and other Russian maps to the terminal salt marsh owes its origin to a mispronounced (or imperfectly recorded) form of the name *Bējān-tura*, 'the lonely tower', applied to the ruined tower. I did not hear the name in

the form *Bojanta* used for the marsh. But this is scarcely a sufficient critical reason for doubting the existence of the latter; see Herrmann, 'Zwei Osttürkische Manuskriptkarten', in Hedin, *Southern Tibet*, viii. p. 413, note 1.

⁴ See Map Nos. 28. A, B. 4 and 29. B-D. 1; below, Chap. xx. sec. iv.