

In another four days they intended to wander down to *Keng-shvär*, and later on to *Kara-kul* and *Sari-kol*. Sometimes they visit the regions south of *Tur-bulung-davan*. There is no direct road from *Tur-bulung* to the upper part of *Tegerman-su* at the S. E. side of *Mus-tagh-ata*. Between the two valleys is a very high and ice-covered pass and some small glaciers. Between *Kok-sel* and *Sar-agil*, a glacier on the southern side of *Mus-tagh-ata*, everything was ice and snow. Obviously a mighty ridge stretches to the east from the *Mus-tagh-ata* group. I was told that travellers from *Tur-bulung* to *Chicheklik* had no other practicable road than *via* the *Merke* valley, *Yam-bulak-davan* and *Yam-bulak-jilga*. The *Yam-bulak-davan* was said to be flat, but gravelly.

At *Tur-bulung* the winter is very cold and there is much snow and hard wind. Bears, wolves and foxes live in the mountains; there are *Ovis Poli*, wild goats and snow pheasants.

From *Tur-bulung* I made an excursion of 9 km. to the south up through the *Kara-jilga*. At its right or eastern side are two small hanging glaciers. The valley is comparatively broad and easy. In its upper parts two flocks of wild sheep were grazing; they fled southwards in the direction of *Chicheklik*. In the midst of the valley flows the brook from the *Kara-jilga Glacier*, which is fed from two sources. Above it and at the sides are snow and ice-covered peaks and ridges, and probably the »Firmulde» from which it comes is in connection with the great snow and ice-masses of the *Mus-tagh-ata*. The surface of the *Kara-jilga Glacier* is quite black with moraines.

At the point where we turned back to *Tur-bulung*, the altitude was 4,645 m. The ascent was, therefore, 328 m. and the rate as 1:27.

October 12th we travelled S. E., east and N. E. across the *Merke-bel* to *Merke*. From *Tur-bulung* we had 16 km. to the pass where the altitude is 5,198 m.; the ascent is therefore 881 m. at a rate of 1:18.2; from the pass we had 18 km. to *Merke*, where the altitude is 3,593 m., or a descent of no less than 1,605 m. in a few hours, and at a rate of 1:11.2.

In the upper region of the *Tur-bulung* valley there are very good grazing-grounds to which the Kirgiz of *Merke* and *Keng-shvär* drive their sheep in summer. The uppermost part of the valley is troughshaped and here the brooks have cut down their furrows deep in the ground. Before reaching so far we had left to the south the left tributaries *Teke-yeilak* (pron. *yeilau*), *Kara-jilga*, described above and the little valley leading to *Tur-bulung-davan*.

On gravelly slopes we rode eastwards up through the trough which at an earlier period had been filled by ice and where now only gigantic old moraines were left. The whole pass of *Merke-bel* and both its western and eastern slopes consist of enormous moraines. Of the old glacier which has brought down the material, only a small rest is left on the southern side of the pass.