

towards the N.  $38^{\circ}$  W., and on the pass itself the same formation dipping  $10^{\circ}$  towards the S.  $60^{\circ}$  E. Immediately north of the pass we saw no hard rock, but the débris was composed of the rock that I have last mentioned and of granite.

Thus we had at length crossed over the range that fences in the basin of the Atschik-köl on the north. In its broad features the architecture of this basin is the same as that of all the self-contained basins which we have lately visited in north-western Tibet; that is to say on the north and south it is bordered by parallel ranges and east and west by flat swellings, forming the water-divides in the latitudinal valley in which the salt lake is situated. Generally speaking, the basins on the Tibetan plateau are elongated from east to west; but the basin of the Atschik-köl appears to be on the whole more circular. According to Roborovskij's map, the lake itself is also round, and not drawn out to east and west like the lakes on the Tibetan highlands.

With the view of enlarging our survey of this region, it will be interesting to quote briefly Roborovskij's experiences. During the Pjevtsoff expedition in 1889—90 Roborovskij made an excursion from Mandarlik on the upper Tschertschen-darja eastwards to the Ajagh-kum-köl and in the course of it discovered the Atschik-köl. His description of this is very instructive, even though his orography is in some points not quite accurate. He started from Mandarlik on the 15/27th of August, so that he reached the Atschik-köl about a month earlier than I did, that is taking note of the year only.

Leaving the Tschertschen-darja immediately above Mandarlik, he proceeded up its tributary, the Musluk-su, in a south-eastern direction, until he reached a secondary pass, 15,500 feet high. The glen by which he ascended was narrow and filled with débris, and towards its head the ascent was very steep. On his map he gives to this pass the name of Musliknin-atasi-daban (the Pass of the Father of the Ice-Region), but in the text he calls it Musliknin-atasi. The latter is the more correct form, though it ought to be written Muslukning-ajtuse, that is the Pass of the Ice-Region. On the east side of the pass he descended to the Ullugh-su, the true head-stream of the Tschertschen-darja. This stream flows there at the bottom of a deep glen and, going northwards, pierces the range which Roborovskij calls the Muslik-tagh, and which is identical with the range that we crossed over between the peaks B<sub>3</sub> and C<sub>3</sub>.

The Ullugh-su is formed by the confluence of the Patkaklik-darja, from the south, and the Akka-taghning-su (= Arka-taghning-su), from the south-east, both streams originating in the Arka-tagh. He followed the latter up towards the south-east, having on the north the long and gentle slopes of the range through which these streams cut their way and on the right the Arka-tagh (Prschevalskij Chain), with its immense snow-fields. Leaving the Arka-taghning-su on the right, that is on the south, he continued his journey towards the east, across a plain that was soft and in places marshy. To the north-east rose the snowy mountains of Ajajalik-tagh.\* On the way he crossed over a number of brooks, flowing towards the north and entering the large river of Atschik-kölning-kojasi,\*\* which discharges into the

\* This name seems to be incorrectly spelled. It ought probably to be Ajaghlik-tagh, or the Lower Mountains, in contradistinction to Arka-tagh, mountains which are in reality higher.

\*\* Kojasi ought probably to be Kujuschi = Confluence.