

prevails a long distance upwards; a nameless valley with a well developed fan cut through by its brook; as a rule the mouth of every side valley is filled with and sends out a fan of gravel and shingle, deposited at an earlier period, and cut through at the present time; the front of every fan is generally steep as it has been eroded by the main river. Shugutsar, Kita and Lungmar are small valleys in a region where the living rock consists of diabas. Then follows the Samo valley.

The tributaries from the right or west side are, on this section of the road; Jamo, of considerable dimensions, although short, and with a ridge of black mountains in its background; Gumbu, a small valley; Panchung and Panchen, both coming from a mountain covered with some snow; and finally Kating, where the height, at Camp 141, is 4 229 m.

On this section the Mü-chu runs from N.W. to S.E.; from Sirchung to a little beyond Ghe it flows south, and then again S.E. to the junction with the Raga-tsangpo. As a rule the Mü-chu here follows close to the left side of the valley, where the mountains are steep and the side valleys short and insignificant and generally without names. The terraces have the same characteristics as before, 30 to 40 m high, and best visible near the mouths of the tributaries. The road often goes on the top of this terrace, which is cut through by many ravines. The main valley is very narrow. Sand is common, but only on the leaside of such objects as *manis* or edges of ravines, fragmentary dunes are formed, or rather accumulations of sand.

On the next section, up to Linga, the mouths of the following left tributaries are passed: Ngalung, a small valley, but with a considerable fan pressing the main river over to the right side. This alternating of left side and right side fans pressing the main river over to the other side, is a characteristic feature which becomes more and more developed. Opposite every fan the side of the valley along which the main river flows, is generally bounded by steep mountains. After a series of quite small valleys follows the Tongyang which is considerable and has a brook cutting a deep furrow through the fan; the upper part of this valley is bounded by high, rounded hills. Then follows from the east the valley Gok-shung, and finally the greatest of all the tributaries to the Mü-chu, perhaps with the only exception of the Raga-tsangpo, namely, the Bup-chu, here also known under the name of Sha-chu. The valley of Bup is broader and more open than the valley of Mü, which is not surprising, as the Bup-chu is, undoubtedly, situated between and parallel with two ranges, whereas the Mü-chu cuts its valley at right angles across the ranges. Therefore the Bup-chu is chiefly a tectonic valley, whereas the Mü-chu is erosive.

Comparing the two rivers we find that the one comes from the N.W., the other from the N.E., both having their sources on the continental water-parting of the Pabla range and joining at Linga. Therefore it is hard to tell which of them should be regarded as the main river. At the confluence the Bup-chu had, April 15, a volume of 6.09 cub.m a second, and Mü-chu 6.29 cub.m. Thus the Mü-chu was