

During this stage I took the following specimens of rock: a hard black crystalline schist, dipping 81° towards the S. 15° E., and forming dark bands and cornices, which stood out in an especially conspicuous way against the disintegrated gravel, the usual material of the slopes; a dark green schist, dipping 62° towards the S. 45° W.; and finally the same predominant dark schists with a dip of 57° towards the N. 22° W. The schists are however interrupted at intervals by swellings of grey granite and in one or two places by red coarse-grained granite. The gravel and rocky fragments that litter the bottom of the glen consisted as hitherto almost exclusively of grey granite.

May 23rd. During the night the thermometer dropped as low as -6° , decidedly cold considering the time of year; the altitude was however as much as 2922 m. At that altitude the fresh grass had not yet made its appearance; what did exist was a survival from the preceding autumn.

Leaving Tölkölik we travelled south-east up to a little pass near by, which is however of considerable orographical importance as a water-divide between Tölkölik and the next glen. Its altitude is only a score or so of meters above Camp V, and it is situated amongst exclusively earthy formations. The glen that descends over on the other side goes down so gently as to be imperceptible to the eye. It was dry and stony, and makes some rather sharp turns. Here and there were patches of scanty grass and scrub. We again saw the summit of the Lower Astin-tagh at the head of a northern side-glen. The spurs which embrace this new glen are relatively low, and gradually decrease still farther in height, until at last they consist simply of disintegrated material and yellow earth; the only place where we detected hard rock was high up close under the summit of the main crest and at the foot of the mountains, where the torrent has eaten its way in at the windings of the glen. While the glen inclines to the east-south-east, south-south-east, and finally to the south-south-west, making a wide arc, the mountains dwindle into the rather low hills, which recede more and more from one another, until at last the glen terminates in an extensive open arena, paved with soft soil and grass of the previous year, on which kulan droppings were abundant. Indeed we saw some kulans there. Here the track was distinct. On our right we had, close at hand, a pretty low range of mountains, consisting for the most part of earthy material. The opposite range, on the left, that is the east, was a good distance away; this was bigger, of a black colour, and touched in places with snow. Here and there were other snow-capped mountain-masses, the arrangement of which it was difficult to make out at that distance. The open steppe stretching between those ranges is called Lajdang, or the Clayey, because sediment and clay are washed down, especially off the range on the right, and so form level expanses. There was no running water visible anywhere in this locality. The arena of Lajdang does not however form a closed basin; it is only a valley expansion, upon which several other glens debouch farther east. It contracts towards the south and gradually merges into a rather narrow glen, with a gentle slope. On our right we still had the same curving range as hitherto, and on the left rather low hills, while beyond them appeared a main crest at about 8 km. distance. In point of dimensions the descending glen is rather insignificant; hard rock shows here and there in its watercourse. Instead of following this glen down