

or small grave-towers, and several tombs. At this place the road goes down from the terrace to the bottom of the valley.

Now the living rock makes its appearance at both sides, though here and there hidden by fragments of the old terraces. It is green crystalline schist, sometimes pierced by quartzite veins. The dip and fall is first 38° N. 10° E., then 28° N. 10° E. The valley is fairly broad and rises regularly without undulations. It is full of round stones. There is some vegetation, amongst other things wild roses. At the right or southern side is the *karaul* called *Urugumá*, where the whole year round two watchtents were pitched, inhabited by Kirgizes of the Tavor tribe. The tents had a beautiful situation, surrounded by a grove of poplar trees (*terek*) and willows (*suget*). On the hills in the vicinity, the *artcha* or juniperus, and the *kara-gai* or spruce of Tian-shan were growing. Bear, wolf, wild goat and partridges were common. The winter is cold; the snow at the most reaches to the knees of a wanderer. The rainy season had begun a few days ago. The brook of the valley loses itself in *patik-yer* or swampy ground, and only one *arik* reaches *Upal*. The valley is windy, and the wind comes both from the plains in the east and from *Sarikol* in the west.

From *Urugumá* a road goes south to *Buru-kös-davan*, a high, steep and difficult pass which rarely is used. Our road, westwards, goes to *Ulug-art*, which is easier and is chiefly used by Kirgiz and Chinese who travel to and from *Muchi*; in the summer the natives of *Bulun-kul* and *Chaker-agil* travel this way if the *Gez-darya* road is impassable by reason of much water in the river. As a rule the *Ulug-art* may be traversed only during two months in the year; from June 15th to August 15th. In the winter it is quite buried in snow, and it is snow-covered also during a great part of the summer. A little *jilga* or side valley near *Urugumá* was called *Bustan-archa*.

The next day, July 14th, we continued up through the valley of *Ulug-art* to an *aul* or tent-camp at an altitude of 3,614 m., and July 16th only 40 minutes to another *aul* a little higher up and at an altitude of 3,762 m. The distance in all was 27 km., the rise 1,090 m. and the rate of the ascent as 1:25.

At the camp of *Urugumá* the living rock was green schist in 23° S. 60° E. at the right side of the valley. A little higher up at a *yeilak* or summer grazing ground with a few *terek* trees, the same rock lay in 31° S. 40° E. Still higher up the rock was black schist with quartzitic veins, and the dip was 73° S. 60° W. Where we left the *Ayag-art* valley the green schist lay 29° S. The valley is fairly broad, partly between wild rocky mountains; and its bottom is covered with round gravel. The brook is split into several branches, now with perfectly clear water. Sometimes it is bounded by steep terraces of pebbles and shingle.

At a few places there are *terek* trees and *archas*. The Kirgiz were complaining that the Chinese spoiled the rare wood by using it for fuel in *Upal*. The valley