

along the steep slope. The luggage had therefore again to be carried by Kirgizes some 400 m.

Occasionally small peaks of crystalline rock cropped up from the gravel, dipping  $10^{\circ}$  and  $15^{\circ}$  S. S. E. We march along the right side of the large glacier, the magnificent curve of which is seen coming out from between two rocks and fills the whole upper part of the main valley. Our path sticks to the right side of the valley, where we sometimes have to enter small gorges and often cross the brooks from rudimentary glaciers to our right. The largest ice formations of the valley are situated at its southern side, where obviously the highest mountains are situated and which is the shady side.

A second little glacier lake is of the same form and size as the first. Its water had a tint of green though it was very muddy, probably from the fine material brought thither from the ground moraine. The clear ice of the glacier falls perpendicularly down into the lake on the surface of which ice blocks were swimming. The right lateral moraine is clearly to be seen, though it is narrow and small. The middle moraine is well developed. The glacier tongue seems to slope  $4^{\circ}$  towards the valley. Our path goes up and down over the screes sloping from the mountains at the right side of the valley.

A third lake was larger than the two first ones, about 2 km. in length, and it had also a nearly triangular shape. Leaving this lake and the snout of the glacier behind us, we continue on the floor of the valley where the descent becomes more and more gradual. The front moraine of the glacier was pierced by a brook from the surface and sides of the glacier, though it did not contain much water on account of the cold and cloudy weather.

At the left side of the valley we have now four small glaciers. The second one is the largest, and its snout reaches down to the bottom of the valley. It has a small frontal moraine and brook, and its perpendicular front has dark stripes of solid material. The higher regions of the mountains south of our valley are covered with ice, and their slopes are snow-covered the whole way down. The mountains to the right have no glaciers, and only their highest parts are snow-covered. On both sides the rocks are high and wild, and mighty screes slope down to the bottom of the valley covering the living rock. The bottom of the valley is full of gravel, and the joined brook has cut down its erosion bed through the deposits of detritus. The right terrace is mightier than the left one. Only at one place was some grass seen. We had to continue until the valley became broader. The mountains at the sides diminished in height, and finally snow patches were seen only on the highest peaks and ridges.

From the right or north a tributary joined the *Ulug-art* valley. Its name is *Tuyuk-dur*. It is uninhabited and has neither vegetation nor fuel; only a brook