

CHAPTER V.

JOURNEY IN SARIKOL, 1895.

On July 23rd our road went S. E., south and S. S. E. 22 km. to *Usun-tal*, where the height is 3,359 m. The rise is 40 m. or as 1:550. At first, however, the ground sinks until we reach the neighbourhood of *Gez-darya*, where the rise begins, and is, therefore, considerably steeper than the rate mentioned above. The lake had risen a little as the sun had been working the last two days, and the effluent carried 0.135 cub. m. per second. The sand dunes continued along the base of the southern mountains, even covering the lower part of the slopes. The sandy plain is perfectly barren; only along the base of the eastern mountains was grass seen.

The *Gez-darya*, which we reach just opposite the little fort *Tar-bashi*, was here very broad and formed pools and swamps. A hard eastern wind was blowing carrying much sand with it. Along the base of the hills there are many fresh springs with crystal-clear water and much algæ. Near *Bulung-kul* mica-schist in 49° S. 35° W. cropped out. Here the sand gives place to meadows surrounding the springs. The largest spring had at 1 o'clock a temperature of 7.6°, whilst the river had 14.5° and the air 18.9°.

Some small brooks from the *Sarikol* mountains, *Chugutai*, *Kum-jilga*, and others, form an extensive swamp, with treacherous, muddy ground. The lake *Bulung-kul* was more like a swamp containing a number of pools. At its eastern shore is the fort of the same name, commanded by a certain Jan Darin. Our road then turns S. S. E. along the left bank of the *Gez-darya*, and the valley is called *Usun-tal*. The crystalline schist lay in 66° S. The mountains bounding the valley on the east are called *Ak-tau*. There is a glacier opposite *Bulung-kul*, and east of it the brook from this glacier has formed a large fan falling 6° towards the valley. South of it are two other, larger glaciers with moraines and brooks piercing the considerable terraces at the base of the mountains. Finally we crossed the *Gez-darya*, which carried no great volume of grey, muddy water and easily could be crossed. The floor of the valley then partly consists of gravel and partly of meadows. In a heavy rain we pitched our camp at the base of the eastern mountains.