

CHAPTER VI.

CROSSING THE KOKO-SHILI RANGES.

On *October 13th* we went 11.4 km. to cross the next mountain range which brought us chiefly in a south-eastern direction. The great flatness of this range will be realized from the following three absolute heights: at the northern foot 5,129 m., at the southern 5,207 m. and the water-parting saddle between them 5,306 m. The rise from *Camp XXXVII* to the saddle is, therefore, 177 m. or as 1:40, the distance being 7.1 km., and the fall from the saddle down to *Camp XXXVIII* is 99 m. or as 1:43, the distance being 4.3 km. For being in a mountain range, the gradients are, therefore, insignificant. From these figures one gets, however, a good conception of the flatness of the country. A difference of 177 m. between the crest and the base of a mountain range is not much. The system of small ranges we traversed in this region seems to be the western continuation of the *Koko-shili* Ranges or possibly the *Buka-mangna* in the east.

Still the march of *October 13th* was not easy, as it consisted of going up and down among hills the whole day. We followed the principal transverse valley to the S. E. From the S. W. a considerable tributary enters without a brook. A good deal of snow was still left on these altitudes. The red principal range was now partly visible on our right, and on our side of it, there is a small rugged rocky ridge. In the valley there is a little brook and some ice. Tributary brooks come from several of the side valleys. Our valley is now about 30 m. broad; its bed is full of fine gravel. Higher up there is no more water and the snow has disappeared. In the neighbourhood of the base of the pass there is again a little water; at places where it seems to disappear it only flows below the gravel. At one place a side brook had even formed a little waterfall now of solid ice and only 1.5 m. high — a very rare phenomenon on the Tibetan highlands. The rock is here a dark grey, dense limestone, very weathered and rotten. The view from the pass is not encouraging. To the S. E., south and S. W. a distant view is hidden by a labyrinth of near hills. To the E. S. E., east, N. E., north and N. W., everything is also hills situated in our vicinity. Only to N. 57° W. and N. 71° W. and generally in the