

## CHAPTER VIII.

### THROUGH MERIDIONAL VALLEYS.

On *November 17th* we travelled 12.2 km. S. S. E. crossing the pass *Chakchom-la* at a height of 5,433 m. From *Camp LXIII* where the height is 5,211 m., we, therefore, rise 222 m. to the pass, which, in a distance of 7.2 km., is as 1:32. On the southern side we had 5 km. to *Camp LXIV*, where the height is 5,042 m. The fall is thus 391 m. and the rate of the slope as 1:13 which is unusually steep. The steepness is here nearly thrice as great as on the northern side.

On the night of the 17th of November the temperature went down to  $-30.4^{\circ}$ . During the day there was no wind, but at 7 o'clock p. m. a N. W. storm blew down with the greatest violence and continued until midnight, after which there was no wind at all. On this occasion again it was interesting to see how masses of sand and dust, tussock-grass and even small stones were blown against and into the tent, covering everything in its interior. And this is only one little point on the immense highlands! It is easy, then, to imagine how enormous the masses of solid material must be that are transported by one single storm. And the transport goes on, as in this case, uninterruptedly for 7 hours. But we had experienced storms continuing for several days and nights, and the next winter I had storms going on for weeks. The quantities of solid material that change place under such conditions must indeed be enormous. They are not carried away to form accumulations somewhere, as for example the loess of Northern China or the sand deserts of Eastern Turkestan. For at another season other winds are prevailing and moving them back again. A large percentage of the flying material gets bound on the way and contributes to fill up the lowest parts of basins and lakes. The mountains being most exposed to the winds become lower under the influence of this continual corrosion, whilst the depressions slowly get filled. In this way the relative altitude decreases constantly, and the character of a plateau-land becomes more and more pronounced. If one has lived a few years in the midst of these killing storms one finds their result, the present relief of the Tibetan plateau-land, the most natural in the world.