

## CHAPTER XXXI.

### THE THIRD CROSSING.

This line, which starts from Camp 150 on the plain south of Dangra-yum-tso and ends at Camp 168 at the junction of Chaktak-tsangpo and the great Tsangpo, is also a complete crossing of the whole Transhimalayan system. The starting point, on the Targo-tsangpo, is at 4 708 m; the end point, Camp 168, on the Tsangpo is at 4 524 m. As the southern end point of the second crossing is at 4 012 m, where the Dok-chu enters the Tsangpo, this means a fall of more than 500 m of the Tsangpo between the two points, whereas the northern terminals of the two lines are one and the same, Camp 150. The highest point, or the continental water-parting on this line, is Angden-la at 5 643 m. Therefore the rise from Camp 150 to the highest point is 935 m, at a distance of 62,<sub>1</sub> km in a straight line, or 71,<sub>2</sub> km along my road. From the highest point to Camp 168 the fall is 1 119 m at a distance of 121,<sub>2</sub> km in a straight line and 166,<sub>7</sub> km along my road.

The season during which this crossing was undertaken was the month of May.

The scree of detritus at the southern foot of Targo-gangri slopes down direct to the left side of the broad and open valley of the Targo-tsangpo; the blocks and gravel of the scree consist of black phyllite, weathered granite, phyllitic quartz-schist, and, most of all, quartz-porphyry. The scree is pierced by several ravines and watercourses from small glaciers. One ravine was 12 m deep, with vertical sides in gravel and shingle beds. Otherwise the road is good and hard in fine packed gravel, and sometimes crosses grazing-grounds. As one proceeds south-westwards, the panorama of the western side of the Targo massive opens up gradually with its snow-covered peaks and its small glaciers between them; the *nevées* are small, and some of the glaciers should rather be regarded as apophyses from a mantle-ice, covering the crest. The southern glaciers seem to extend lower down than the northern. The valley Karmuk carries down a little brook from a glacier front; its left side terrace is double, 3 and 2 m high resp.; the right terrace is single. From the right side the Targo-tsangpo receives here only one small tributary, Gulung.

Näven is a little round depression with a spring and good grass, and surrounded by rolling hills; in their eastern front two lacustrine terraces may be seen; a third terrace which is 7 or 8 m high is fluvial, and bounds the valley of Targo-tsangpo.