

reliable an observer that one gets the impression from his description that there must be a secondary range south of the main range. He calls it the Kiang-lah chain, or Chain of the Wild asses pass, transferring the name of a pass to a whole range, as I have done in some cases further west. So far as I have been able to make out this is all that is known of this problematic range. It may have been touched by Bogle and it has been crossed by the Pundit of 1872, by LITTLEDALE and by Count DE LESDAIN. It cannot be seen from the road near Shigatse, for from the valley of the Tsangpo every possibility of a distant view is excluded, as everything further north is hidden by a labyrinth of high ramifications and steep mountain-shoulders. Only a step further west, on the line from Ngangtse-tso to Ye, am I able to describe the orography and the great lines of the geological building. East of my route and to Khamba-la the country is absolutely unknown, although Brian Hodgson has entered a range on his map.

Hooker continues his panoramic view: <sup>1</sup> »But the mountains which appeared both the highest and the most distant on the northern landscape, were those I described when at Donkia, as being north of Nepal and beyond the Arun river, and the culminant peak of which bore N 55° W. Both Dr. Campbell and I made repeated estimates of its height and distance by the eye; comparing its size and snow-level with those of the mountains near us; and assuming 4 000 to 5 000 feet as the minimum height of its snowy cap; this would give it an elevation of 23 000 to 25 000 feet. An excellent telescope brought out no features on its flanks not visible to the naked eye, and by the most careful levellings with the theodolite, it was depressed more than 0° 7' below the horizon of Bhomtso, whence the distance must be about 100 miles.»

With all his conscientiousness, Hooker is not and cannot be able to furnish us with sufficient details to enable us determine where the mountains he saw are really situated. Could it be the Chomo-uchong or any part of the Kanchung-gangri? For later on he says that from Khasia mountains he could clearly see at a distance of 200 and 210 miles and: »I feel sure that I underrated the estimates made at Bhomtso.» But in the case of the mountains just mentioned the distance should be nearly 250 miles and it is probable that the snow-covered summits he saw were situated much nearer his station, especially as he estimates the distance at only »above 100 miles». At any rate Hooker understood that the watershed of the »Yarrow» Tsangpo, was »the lofty range which he saw in the distance». <sup>2</sup>

Hooker continues: »This broad belt of lofty country, north of the snowy Himalaya, is the Dingcham province of Tibet, and runs along the frontier of Sikkim, Bhotan, and Nepal. It gives rise to all the Himalayan rivers, and its mean elevation is probably 15 000 to 15 500 feet: its general appearance, as seen from greater heights, is that of a much less mountainous country than the snowy and wet Hima-

<sup>1</sup> Op. cit., Vol. II, p. 168.

<sup>2</sup> Journal Royal Geographical Society, Vol. 20, 1851, p. 49.