

Lebug, on the source of the Kali Ganga, and the Taklakot pass on the source of the Gogra. But he did not reach the Taklakot pass itself, and the *Deba*, who received him kindly, said, under no conditions would he be allowed to go to the Manasarovar. The *Deba*, however, told him, that more than 100 rivers emptied their water into the Manasarovar, though the lake had only one affluent to the Rawanhrad, a channel, which, however, was often dry.<sup>1</sup>

This description by the *Deba* is of special value, as it gives the real and correct key to the whole problem and it proves that the characteristics of the channel were the same a hundred years ago as they are now, that is to say, that the function of the channel is simply a periodical phenomenon, and that a hundred years is much too short a time to prove the existence of a general postglacial desiccation.

The information of the *Deba* as given in 1816, should also be compared with Moorcroft's exploration in 1812, as it corroborates the latter's results and makes it still more superfluous to later geographers to explain the causes why he did not find any channel at all.

In his article: *Memoir relative to a survey of Kemaon*,<sup>2</sup> Captain Webb gives an approximation of the co-ordinates of the Manasarovar as follows: latitude:  $30^{\circ} 23' 7''$ , longitude:  $81^{\circ} 9' 10''$ , elevation 14,500. He finds it probable that his latitude and longitude will fall somewhere within the limits of the lake itself, especially if it be remembered, that the place where his information was obtained, was not so much as twenty miles distant from the Manasarovar. It is true that his approximation is not far from correct, but he could easily have dropped the seconds.

On the journey to the source of the Ganges, Captain F. V. Raper wrote a long and most interesting paper,<sup>3</sup> which gives a detailed description of their exploration up the Bhágiráthi and the Alacananda. The journey is of very great importance as showing the geographical and water-parting rank of the Himalayas and that there really was a tremendous »Range of Mountains» north of India and that the Ganges came from it. An excellent map, dated 1810, is joined to the paper. The supreme government of Bengal had given Webb special instructions in 8 §§, of which § 2 ran as follows: »To ascertain whether Gangotrí be the ultimate source of the Ganges; and in case it should prove otherwise, to trace the river, by survey, as far towards its genuine source as possible. To learn, in particular, whether, as stated by Major Rennell, it arises from the lake Manasarovar; and, should evidence be obtained confirming his account, to get, as nearly as practicable, the bearing and distance of that lake.»

Amongst other results of the expedition I will only mention that it obtained information about the trade routes used by the Nepalese with Tibet. Raper men-

<sup>1</sup> Ritter, *Erdkunde von Asien*, II, p. 529.

<sup>2</sup> *Asiatic Researches*, Vol. XIII, 1820.

<sup>3</sup> »Narrative of a Survey for the purpose of discovering the Sources of the Ganges.» *Asiatic Researches*, Vol. XI, 1812, p. 446 et seq.