

its course from the east to the west (!). Then Chûshér, Chabná and the city Chang», »south of which flows the river Yékó-Chángó, before mentioned. Two *cos* from Changé »is a mountain over which you pass». At its base is the village of Nám. The 34th stage goes to a mountain, Láchain-Lachún. »In this stage you again see the Yékó-Chángó river. Then Nitáng, and Thi-sambar. The 36th stage: Lahassa, first passing Bírbum, situated at the base of a mountain called Kimbú.»

At the time when it was published, 1832, this itinerary was no doubt of great interest. The traveller seems not to have had any gift for understanding rivers and their directions.

The following description of the general orography of the Himalaya may serve as a contribution to Hodgson's characteristics as a student of physical geography.¹ His map of 1857 (Pl. XV) gives a good idea of the subject. Already the introduction is interesting: »The details of Geography, ordinarily so called, are wearisomely insignificant; but the grand features of physical geography have a pregnant value, as being alike suggestive of new knowledge, and facilitative of the orderly distribution and ready retention of old. — I had been for several years a traveller in the Himalaya before I could get rid of that tyranny of the senses which so strongly impresses almost all beholders of this stupendous scenery with the conviction that the mighty maze is quite without a plan. My first step towards freedom from the overpowering obtrusiveness of impressions of sense was obtained by steady attention to the fact that the vast volume of the Himalayan waters, flows more or less at right angles to the general direction of the Himalaya, but so that the numberless streams of the mountains are directed into a few grand rivers of the plains, either at or near the confines of the two regions.» He shows »that the great peaks bound instead of intersecting the alpine river basins, and that, in truth, the peaks by so bounding create the basins, whereas their intersection would destroy them.» On these principles he represents a series of well defined basins on his map. There, he says, it will be seen »that the lateral barriers of the river basins are crowned by the pre-eminent Himalayan peaks, that the peaks themselves have a forward position in respect to the ghát line or great longitudinal watershed between Tibet and India, and that from these stupendous peaks, ridges are sent forth southwards proportionally immense». He describes the different ridges sent forth from different peaks and separating the waters of the Kosi, Tista, Gandak, Karnali, Ganges and Jumna from their neighbours. The general conclusion is: »It is inconsistent with all we know of the action of those hypogene forces which raise mountains, to suppose that the points of greatest intensity in the pristine action of such forces, as marked by the loftiest peaks, should not be surrounded by a proportionate circumjacent intumescence of the general mass; and if there *be* such an intumescence of the general surface around each pre-eminent Himálayan peak, it will follow, as clearly in logical sequence as in

¹ »On the Physical Geography of the Himalaya.» Journal Asiatic Society Bengal, Vol. XVIII, Part II, 1850, p. 759 et seq.