In 1828, CARL RITTER presented to the Royal Academy of Sciences in Berlin a short monograph on the Himalaya. His material he gets from Tieffenthaler, Turner, Elphinstone, Crawfurd, Hamilton, Herbert, Hodgson, Gerard, Webb, Fraser, Moorcroft, Forster, and others. All this material he discusses critically and a map is added, drawn by J. L. GRIMM from all English maps in existence<sup>2</sup>. In the region of the lakes we easily recognise Moorcroft's and Hearsay's map.

In 1833, Ritter regards most of the country north of the western Himalaya as an absolute terra incognita. To this belong, amongst other parts, the country north of the upper Satadru or Satlej from Shipki up to the sacred lakes, and the whole valley of the upper Indus between Gartok and Leh and beyond.

Ritter shows that the travellers proceeded on four different ways from the south: Andrade and Moorcroft by the Mana- and Niti-Ghat, Herbert and Alex. Gerard along the upper Satlej by Shipki and along its tributaries, Moorcroft and J. G. Gerard by way of the source of the Jinab and the Paralasa range, and Desideri by way of Kashmir and Ladak. From all their accounts he concludes that north of the snowy ranges of the Himalayas a new land begins, a land without any deep eroded valleys and which the British explorers call a table-land, because here the high mountain-plains (Hochflächen) begin.<sup>3</sup> Ritter supposes that the sources of the "northern Indus branch", by which he erroneously means the Garchung, must be situated at some thousand feet higher than the "source lake of Satadru". In his special chapter on the sources of the Indus, Ritter does not and cannot follow any other authority than Moorcroft. Therefore he places the real source of the river west of the point where the Misar-branch begins, which, as we know, is only a tributary. For the Garchung or Gartang branch he also quotes Fraser, Herbert and Gerard.

From Moorcroft's account, Ritter gives the Satlej three source branches. The southernmost of these issues from the western end of the lake Rakas-tal.<sup>4</sup> As to the two other branches of the Satadru he considers the one to come from Misar and the other from Tirtapuri. Only after the junction of the three branches, a little above Kyunglung, does the river get the name Satadru. Of course he makes the same mistake as Moorcroft, for the third main branch, the one issuing from Rakas-tal, is in reality the same as the Tirtapuri branch, and the Misar branch can never be called one of the three main branches.

<sup>&</sup>lt;sup>1</sup> Entwurf zu einer Karte vom ganzen Gebirgssysteme des Himálaja nach den Quellenangaben. Berlin 1832.

<sup>&</sup>lt;sup>2</sup> This map is entered in Ritter and O'Etzel: Atlas von Asien, and has the title: Karte von Hoch-Asien, zu C. Ritter's Erdkunde, Buch II, Asien, Th. 1 & 2. Bearbeitet von J. L. Grimm, Herausgegeben von C. Ritter und F. A. O'Etzel. Berlin 1832. Scale circa 1:6,400,000. A reproduction will be found in Vol. III of this work.

<sup>&</sup>lt;sup>3</sup> Asien, Band II, p. 588 etc.

<sup>4</sup> Ibidem, p. 665.