

lost sight of the Bogtsang-tsangpo, so that it is impossible to determine whether these two branches originate in different regions or whether they are the result of the division higher up the river's course. Littledale, with whose route we again came into contact at this point, appears to entertain the former opinion, for he inserts them on his map as rising, the eastern branch in the south-east and the western branch in the south. This strikes me as being improbable. It is indeed possible that the two streams come from different directions, but their original source must be sought, I opine, on the northern flank of the great mountain-range which towers up beyond the moderately high and less compact ranges that border the plain on the south. That range is, I believe, the westward continuation of the highest of the crests that bound the basin of the lower Bogtsang-tsangpo on the south. In the south-south-west and south-west three snowy peaks were also visible, evidently belonging to the same principal range. I take it, that it is on its northern slopes that the sources of the Bogtsang-tsangpo must be looked for, the river no doubt owing its real origin to headstreams that meet from different directions. Otherwise the view presented in the south-west consisted of a perfect chaos of mountain-ranges and crests, in which the same parallelism as heretofore may be supposed to exist; but their spurs running out in different directions tend to render the whole rather confused. Even from a distance it was easy to see that it would be no easy task to force a way through that country with a camel caravan; though I have no doubt it would not be difficult to penetrate to the forbidden parts of Tibet with a mule caravan. We shall find subsequently that this mountain-system of southern Tibet, which runs on the whole parallel with the Himalaya and the Kwen-lun, continues all the way to Ladak. When I come to the general account of the orography of Tibet, I shall consider the orographical significance of this system as compared with that of the two systems which I have just mentioned, as also with that of the Kara-korum. This vast range, or more correctly speaking this system of parallel ranges, with a dominating main chain in the middle, constitutes a natural bulwark, protecting those parts of southern Tibet and the Brahmaputra valley from which the Tibetans have with such wonderful persistency hitherto excluded Europeans. Here again I had to abstain from carrying out my desire to make an excursion towards the south, partly because of the inaccessible character of the country, partly because of the wretched condition of my caravan. In consequence of this I was again brought into contact with Littledale's route; indeed for a couple of days I actually trod in his footsteps.

We now definitively left the Bogtsang-tsangpo behind us to the south. At the last glance that we obtained of the river its volume was considerably less than it had been before, which points to its receiving a good many spring-fed rivulets in its lower course. After a good long march across the arid, barren plain, we encamped in the district of Rinak-sumdo, at an altitude of 4778 m. There springs bubbled up, giving rise to frozen marshes.

In the narrow valley dense yellowish red limestone cropped out with a dip of  $22^{\circ}$  towards the S.  $30^{\circ}$  W., and at the point where we quitted the river the same variety of rock appeared at  $64^{\circ}$  S. In the latter locality a small range rises a short distance from the left bank of the Bogtsang-tsangpo, the surface sloping gently down from its base