

## CHAPTER XXXII.

### JOURNEYS OF BONVALOT, DUTREUIL DE RHINS AND GRENARD.

I now pass to a consideration of the journeys of those travellers who have crossed the central highlands of Tibet from north to south before me, namely Bonvalot and Prince Henri d'Orléans, Littledale, and Dutreuil de Rhins and Grenard. Beginning with the first of these, I would observe that Bonvalot's journey, as a piece of exploring work, takes a very high place. He was the first who travelled right across the whole of Tibet from north to south, surpassing in this respect all his Russian predecessors. He travelled during the winter (1889—90) and so had the intense cold to contend against; but on the other hand the ground was everywhere frozen, and, according to my experience, this advantage is so great as to outweigh both the discomfort of the cold and the absence of grazing. Geographically his account of his travels is poor, Grenard's account being immensely superior, and even Wellby's is in some ways better. Bonvalot's book was written for the general public, who are not interested in geographical matters, but only care for picturesque and exciting incident. Bonvalot's altitudes are not always completely reliable; they strike me as being generally much too high, and in one or two places in northern Tibet errors of close upon 1000 m. can be proved. For the country south of Kum-köl Bonvalot's altitudes must however be accepted in the meantime. His map conveys a fairly good general idea of the orographical structure, the prevailing east-west direction of the mountain-ranges and of the broad latitudinal valleys between them standing out with especial distinctness, though he calls the latter mistakenly »plaines». With regard to the directions of two or three of the ranges one may however entertain a certain amount of doubt. His caravan started from Tscharklik on the 17th November, and on the 17th February it approached the point to the south-east of the Tengri-nor where his farther advance towards Lhasa was prevented. Thus it took him three months to traverse the Tibetan highlands. I may pass over the first part of his journey, having already touched upon it in vol. III. In what follows I will quote a few specimens of Bonvalot's manner of describing that part of Tibet which he visited, and will begin with the 12th December and the country immediately south of the Kum-köl-darja. The thermometer was then down