

the following altitudes — 4675 m. (De Rhins), 5479 (Littledale), 5246 (Hedin), and 5300 (Bonvalot), the mean being 5175 m. For the next latitudinal valley to the south the mean of five measurements is 4913 m. The range which I call Tschang III appears to be broken or to taper away towards the east, and nobody has crossed it except Littledale, by a pass at 5640 m., an altogether improbable figure. For the next latitudinal valley we have three altitudes, giving a mean of 4850 m. For Tschang IV we have 4785 (De Rhins), 5110 and 5396 (Bower), 5089 (Hedin), 5550 (Bonvalot), and 5113 m. (Hedin); thus the mean pass-altitude of this range is 5174 m. For the latitudinal valley south of it we have a great number of altitudes, principally due to the fact that a very considerable portion of Bower's route ran through it. Upon studying Bower's map, we get very clearly the impression that, with the view of avoiding tiring passes, he tried to keep as far as possible to the bottom of the valley intermediate between the two neighbouring ranges. His map shows therefore for this locality only one or two insignificant passes, which doubtless are to be regarded as cross-thresholds of the valley. Most of the twenty-four altitudes which we have for this valley are, then, Bower's, and their mean works out at 4873 m., a result that may be accepted as fairly trustworthy. Hence this valley lies 300 m. lower than Tschang IV.

In the range Tschang V we have the altitudes 5134 (De Rhins), 4988 (Bower), 5090 (Littledale), 5083 (Hedin), 5250 (Bonvalot), and 4945 m. (Hedin), giving a mean of 5081 m. The latitudinal valley to the south lies 280 m. lower, or at a mean altitude of 4801 m. The following pass-altitudes belong to Tschang VI — 5085 (Bower), 5722 (Bower), 5100 (Littledale), 4909 (Hedin), and 4837 m. (Hedin), the mean being 5131 m. For the latitudinal valley which lies next on the south the mean altitude is 4702 m., or more than 400 m. below the crest of the range.

Tschang VII is difficult to follow. In the localities where I show one range there are in reality several ranges, all of them small and very often broken; all the way from Camp LXV to Camp LXXII, for instance, I hardly crossed over a single pass; everywhere we were able to advance between the short, rounded ranges. It is along this stretch of country however that we have Bonvalot's pass of 5850 m., though, judging from the observations of other travellers in the same region, this figure is exaggerated to the extent of upwards of 1000 m. But putting this *datum* on one side, we have, without it, 5222 (Bower), 4949 (Littledale), and 4859 m. (Hedin); which gives a mean of 5010 m. This same system was crossed farther west by Bower and Dutreuil de Rhins, but both seem to have used gaps between the separate ranges. The altitudinal relations of the valley south of Tschang VII are fairly well known, and of twenty-three measurements the mean altitude is 4651 m.

Of the vast and imposing range which runs south of the valley last referred to I know nothing beyond the fact, that I had it on my left hand the whole of the way to the Panggong-tso. Probably it consists of a series of parallel ranges with a main range, which swells up here and there into higher elevations capped with perpetual snow and ice. Dutreuil de Rhins crossed north of the Tengri-nor over a pass called Redjen-la, with an altitude of 5094 m. Immediately west of that Littledale gives a swelling of 5005 m., and east of the same Bonvalot records an altitude of 5450 m. Practically nothing is known of the westward continuation of that