

changed to the west. The ascent was pretty steep and the drainage stream of the glen had to make its way amongst the precipitous terraces — a labyrinth of deeply cut gorges choked with masses of detritus and stones. The country on both sides, being greatly broken, was impassable. In the mouth of a wild side-glen coming down from the north, we found a sheet of ice just below a spring. Higher up in the main ravine we likewise found similar patches of ice. The stream formed there a narrow gorge through the granite; we made our way along the left-hand terrace. The pass, which is situated quite close to the Kum-köl side, and forms a very flat and easy arch, reaches an altitude of 4400 m. The descent towards the west-north-west, over on the other side of the pass, is incomparably more gentle and the glen itself wide, open, and easy. Camp LXXXVI was formed beside a spring (4348 m.), likewise surrounded by sheets of ice.



Fig. 181. WHERE THE GLEN OPENS OUT UPON THE BIG VALLEY BETWEEN THE TSHIMEN-TAGH AND THE KALTA-ALAGHAN.

The detached mountain I was composed of a very hard, finely crystalline, dark green rock, dipping  $86^{\circ}$  towards the S.  $50^{\circ}$  W., so that the strata stood almost vertical and most of the small offshoots of the mountain stretched towards the N.  $40^{\circ}$  W. As soon as we entered the Kalta-alaghan however the predominant rock was granite of every variety, first grey, then red, green, etc. The watercourses on both sides of the pass were cumbered with fragments of granite, mostly grey and rounded by the weather.

November 23rd. From our last camp the glen inclines slightly to the south. To the S.  $80^{\circ}$  W. we saw a huge pyramidal peak, which we had also beheld from the lake; while to the S.  $89^{\circ}$  W. there was a second peak similar to it and situated to the north of it. Apparently these both belong to the same meridional mountain range.