

with a boiling point thermometer and three aneroids, can never be sufficient to give a correct absolute height. The atmospheric pressure changes constantly, and the difference may be great from one day to another. The heights obtained are, therefore, only approximate, which, to a great extent, explains the discrepancies between the altitudes given by different travellers for the same place. But as long as we do not possess absolutely reliable means of determining the heights, we must be satisfied with approximate values. When travelling along a river we have a means of checking the altitudes given by the barometric instruments. Going down the river every camp must be lower than the previous one. Therefore either the 4,652 m. of *Camp LXXXIII* are too low, or the 4,664 m. of *Camp LXXXV* too high. But *Camp XCIII* of 1901 which we found to coincide approximately with *LXXXV* of 1906, was only 4,644 m., which certainly comes nearer the truth than the 4,664 m. of 1906. As to the fall of the river, it can only be fixed by levelling with instruments of precision. The same is, of course, true regarding every undulation of the ground. Like all other rivers, the *Bogtsang-tsangpo* has a very changing current. At some stretches of its course the current is very slow, at others it even forms small rapids. As in all rivers, the velocity of the current and the rate of fall diminishes towards the mouth. The greatest fall is in the upper reaches of the river. Such is also the case with the *Bogtsang-tsangpo*. On the 7.5 km. march between *Camps LXXXII* and *LXXXIII*, the fall was as 1:136. But if we take the whole distance from *Camp LXXXII* (or *XCIV* of 1901) down to *Dagtse-tso* a distance of some 115 km. we get a slope of 1:661, which may indeed be regarded as extremely gradual. This fact is also in accordance with the whole structure of the country. The river is, as it were, searching for its way. The small hills and ridges cropping up in detached and isolated groups, are the highest parts of whole mountain ranges and systems which have in the course of ages been buried to the greater part by the deposits of débris and detritus. On the surface of these beds filling the intermediate spaces, and between the remains of mountains still fighting against destruction, the *Bogtsang-tsangpo* is still, in its old age and with constantly diminishing energy, working its way down to *Dagtse-tso*. At places where it flows over nearly horizontal ground, as just below *Camp LXXXV*, it describes the most fantastic bends and windings. Such is indeed also the case at and just below *Camp LXXXII*, though here the slope is comparatively steep as may be seen by the current; it even appears very distinctly on the photograph on Pl. 17, Vol. IV of *Scientific Results* mentioned above.

On the night of *December 9th*, the temperature fell to -29.0° . By such cold weather, most of the river was frozen solid. We continue down the valley to the E. N. E. and finally N. E. with partly rocky, desolate and barren mountain ridges of reddish, pink and yellow tints at both sides. To begin with, the ground is