CHAPTER XXXVIII.

HIGH-WATER PERIODS. — THE TARIM FROM KARAUL TO KARA-KOSCHUN.

The river begins to freeze right across from bank to bank about the beginning of December, although several weeks before that ice forms in the quiet corners and on the shallow marginal lagoons. During the course of the winter the ice increases in thickness, until under the severe continental cold that prevails in those regions it attains considerable dimensions. This ice melts in the spring after being congealed for three months, and when it melts it sets up the *mus-suji*, or »water from the melting of the ice», a spring flood, which in magnitude and volume falls but little short of the high water that comes down in the autumn. A comparison of these two flood periods gives this rule, that while the high-water proper is the bigger higher up nearer to the sources of the river, the spring flood (*mus-suji*) grows more powerful in proportion as the stream approaches its terminus, though it is only exceptionally, and in virtue of extraordinarily favourable conditions of weather, that it surpasses the autumn flood. If we consider for a moment one of the remotest feeders of the river, say a tiny affluent of the upper Jarkent-darja or the Raskan-darja, the volume of its thaw-flood from the melting of the ice is not great, partly because the thaw is only able to give rise to an inconsiderable and transient augmentation of the volume and partly because, when the ice forms in autumn, the stream has already shrunk to such an extent that but little water remains in its bed. Further, it may be observed, that in those lofty regions the mus-suji or thaw-flood coincides in point of time almost exactly with the spring flood proper, that is the flood which arises in consequence of the mountain snow-fields and glaciers beginning to melt in their turn. In some localities, especially in the deep shady glens, this last-mentioned flood may even arrive before the mus-suji starts. But even within the mountains, the two high-water periods begin to be distinguished with increasingly greater distinctness, and as a rule the rise of volume which is occasioned by the melting of the fluvial ice issues from the mountains considerably earlier than the spring flood proper; while in the highest regions the mus-suji betrays its presence rather as a fortuitous fluctuation in the oscillations of the spring flood, a fluctuation