

a long time. The sandy desert does not allow water to collect on its surface. Throughout the whole of the interior of the Takla-makan Desert there is not a single drop of water; the precipitation there is miserably small, far from sufficient to effect the slightest change in either the character of the desert or the movement of the dunes. And just as little does the running water permit the sand to retain the positions it has won, but it breaks it down with irresistible power. Here however sand and water are so intimately in contact that to find anything comparable to them we should have to go to the coasts of those continents where dunes are being built up of sea-sand. It is true, there are fluvial dunes elsewhere, for example, in several of the big rivers of Russia; yet, compared with those of the Tarim, they are mere trifles, and both their origin and the part they play in the local physical geography are of a quite different character. For while the intimate relation of sand and water is in their case the relation of cause and effect, the contiguity of the Tarim to the great desert of Central Asia is rather of the nature of an accident: the two elements have causally nothing whatever to do with each other, and it is for this very reason, because they are antagonistic and dissimilar powers, that they come into hostile collision. On *a priori* grounds it is clear that a country which possesses two such active powers as these must be the scene of great geographical changes, as indeed will be demonstrated lower down. Similar phenomena are no doubt to be found in other parts of the world, *e. g.* the Amu-darja and the Sir-darja, though their sand-dunes are quite insignificant when compared with those of the Central Asian desert. A river that flows for a distance of 200 km. close to the base of dunes 90 meters high, which rise along its bank like an unbroken mountain-wall, is assuredly altogether unique on the earth.

Another phenomenon which began to make its appearance during this day's drift, though under special circumstances, was the occurrence of a whole series of lakes along the right side of the Tarim. These are entirely surrounded on every side by sand-dunes; in fact, they are like sheets of plate-glass embedded in an ocean of sand. During the day we passed the canals which lead to the first of these lakes, namely Tus-alghutsch-köl, Sejt-köl, Dasch-köl, Tana-baghladi-köl, and Talei Kullutschapghan-köl. I omit purposely the Teis-köl, for it is formed in an altogether different way, and consequently belongs to another type of lake. It is fed by the Basch-tam high-water arm, and is thus similar to the marginal lagoons which we have already dealt with, and which do not lie embedded amongst the dunes. All the others, however, which I have just enumerated constitute a distinct family or group of lakes *per se*, which, whilst not difficult to describe, are on the other hand very difficult to account for. But that I may not interrupt this description of the course of the Tarim, which is now pretty nearly at an end, I will reserve the treatment of these lakes for a future chapter or two. This will also afford the advantage, that we shall be able to discuss them in common, especially as regards their origin, and be able to compare them together.

The spot at which we went into winter-quarters is known as Jangi-köl, from a little village of that name situated on the right bank. The lake of Jangi-köl lies a couple of kilometers lower down. Over against the camp was the lake of Basch-köl, making a gap in the immense wall of dunes. Our camp, which was formed