

very much greater in the course of the last 1600 years. The lines by which these waterways are represented on the map are but fugitive and of temporary duration, as may be seen from a comparison of my map with Prschevalskij's. In the course of only 25 years material changes have taken place, not only in the volume, but also in the relative positions of the several arms one to another. How indeed can it well be otherwise, in such a flat and level country, with a soft, loose soil, consisting as it does of sand, clay, and dust, which is unable to offer any serious resistance to the masses of water and their powerful erosive energy?

At the moment of writing the rain is pattering on the roof of my villa, from which a sand-strewn path, two meters broad, leads down through the garden to the sea-shore. The path being slightly convex, the rain-water is forced to divide itself into two rivulets one on each side. At a bend in the path some diagonal runnels cross from the inner rivulet to the outer. Lower down these temporary currents gather into one, which forms a small pool or puddle close by the shore. During the course of the day I have watched with great interest the changes that have taken place in this miniature hydrographic system, which in many respects reminded me of the Tarim and its lakes. It was a striking laboratory experiment arranged for me by the rain out in the open air. Even the marginal lakes on each side of the rivulets were not wanting. In virtue of their erosive power, exercised in and upon the loose sand, the diagonal runnels between the two principal currents changed their positions several times during the course of the day. In one place one of the two rivulets shifted its own position in consequence of a ridge of mud which it had itself cast up. The last main artery, with its muddy water, continued to augment the sedimentary matter in the pool at the end of its course, and if only the rain continues long enough that little basin will be filled up, and when that happens a fresh pool will form beside it or a little way off.

Who is there who has not hundreds of times watched these tiny rivulets of rain-water making their restless way through the sand? Precisely what I have here briefly described in miniature is what takes place in the Tarim delta, only on an immeasurably greater scale. But the laws which govern the water and the effects of the slope upon it are the same in both cases alike.

On the 24th February, leaving the river on our left, we struck through a forest region, where there were dense kamisch and steppe, interrupted at intervals by small »insular» elevations of sand or dust. On the left we had the districts of Avul-päs and Tscharvalik, and on the right Dukan-tusu. At the second of these places there was a boldschemal, for the most part hidden amongst the reeds. The river is however not far distant, being easily traced by its accompanying forest, and beside it is the tract of Kuntschekan-köbrughu, a name indicating that there either has been or now is a bridge there. To the north of our route stretch *ala-kum*, that is »sporadic dunes», all the way to the Kontsche-darja. The next names are Satin-angesi and Köruk. To the north is the old mouth of the Toghoro-darja, though its immediate surroundings are masked by a belt of low sand. At Tschinagh-jatghan-tschol we again approached the river-arm at a sharp bend, whence three canals, spanned by bridges, go off to some cultivated fields that have been only recently given up. At the next succeeding bend, Tallik, we once again struck the great caravan road,