

and this is likewise thrust farther south by the power of the water. These materials spread out at the foot of the mountain in a countless number of dry deltas, arranged fan-like, which merge into one another until they form a single detritus slope or base; while the finer material is carried farther in the same direction by the wind. The result of all these operations is to force the river-bed towards the south. In proportion as the contours are raised at the foot of the mountain-chain, in that same proportion the desert tracts south of the river-course are lowered through the erosive power of the wind, until eventually the difference of elevation is so great that the river is unable to maintain its position. And as a matter of fact we do know that the Kuruk-darja at the foot of the Kuruk-tagh actually has deserted its ancient bed, and has shifted its course to the south and south-west. I do not mean to assert that the circumstance of the Kuruk-tagh's crumbling to pieces, and its tendency to form at some time in the future a chain of detritus with a gentle descent towards the Desert of Lop, are the sole causes of the river's migration; I merely throw out the suggestion, that these circumstances have undoubtedly to a certain degree contributed to produce the hydrographical changes which have actually taken place in the face of the country. The real cause of the river's migration is its own activity, in that it goes on accumulating mud unceasingly, thus raising the level of its own bed, though in this work it is assisted by the vegetation. And even though the elevation of the detritus-scrub had no effect upon these metamorphoses, it would at any rate prove an insurmountable hindrance to the river, once it had raised its bed sufficiently high, and prevented it from shifting its course towards the north. In this way therefore the growth of the detritus-slope acts as one of the causes of the river's constant movement towards the south, that is during the period of its history of which we have any knowledge. Yet other circumstances, as well as mechanical changes of level, might under other conditions contribute to force the actual Tarim back towards the north-east, as we shall subsequently see.

On 10th March we left Budschentubulak and steered our course towards the south-south-east; though once across the brook our direction was south and south-south-west, across desolate saj steppe, with scanty vegetation and an imperceptible slope towards the south. The amount of detritus gradually decreased. In the far distance to the south-south-west we could now make out, against the background of the desert-haze, the ruins of the *kona-schahr*, or »old town» of Jing-pen, of which Kosloff has given the following brief account. — »Five versts north-west of our bivouac were the ruins of the old town of Empen (i. e. Jing-pen). The walls of a fort and of several *fansas* still remain. The natives, in their eager search for buried treasure, have recently carried on excavations there, though without success. What epoch this ancient town belonged to, as well as who were its inhabitants, is not known to the natives».*

Just before we reached these ruins we again came across, on our right hand, the eroded trench of Budschentubulak, of course perfectly dry and almost without any gravel, yet far more distinctly marked than it was higher up, possibly owing to the fact that the material which it has here cut its way through is especially soft, namely fine-grained yellow clay. In this we have a proof of the fact that the torrential rains of the mountains do sometimes get thus far down; indeed the distance

* *Trudij Ekspeditsij Imp. Russ. Geo. Ob. po Tsentralnoj Asij, 1893—94, p. 74.*