

the scarped bank $6\frac{1}{2}$ m.; in this latter datum there was little change. Indeed the uniformity in this respect is so great that you often fancy it is a specially dug canal intended for boats of deep draught. Seeing now that this river-bed is not more than one-fifth or one-fourth the breadth of the adjacent parts of the Tschertschen-darja, and that it is also more sinuous, and of a more uniform depth throughout, the suggestion naturally occurs, that it is merely that part of the old river in which the actual current flowed, and that all its accompanying low alluvia and convex angles have become choked with sand and rubbish and vegetation, and in consequence of this have become gradually merged with the adjacent country. Before leaving this bed to return to the Tschertschen-darja, I had a look round from the top of a high tamarisk-mound, and perceived that the old bed continued a good distance farther towards the north-east, winding along the foot of the high sand. It was especially easy to follow because of the large quantity of dead forest on its banks, distinctly marking them out. Here then there was once a poplar forest, and its grey, withered tree-trunks are still standing *in situ*. There is also a large quantity of drift-wood, half buried in the fine dust at the bottom of the river-bed. From this bifurcation onwards the poplar woods beside the Tschertschen-darja grow rarer and rarer. We only observed one small clump near the bank, but the trees were not more than 30 to 40 years old; there is a far more abundant forest beside the old river-bed. We did not succeed in discovering any continuation of this last, and as there is no breach in the dune-wall through which it could have found a passage, we must infer that its lower part is entirely buried under drift-sand, and that it does not rejoin the existing Tschertschen-darja anywhere, but that it used formerly to enter the lower Tarim or the Ettek-tarim. The older branches which we discovered on the left of the river indicate that the lower Tschertschen-darja really has moved towards the right, that is towards the south, the advancing sandy desert having forced it to recede step by step in that direction. Its arms too put one in mind of an inland delta like that of the Tarim.

The space between the river and the old watercourse we have been considering is occupied by steppe of the usual character, but it grows more withered and moribund the nearer it lies to the latter. On the way back to the river-bank we had to cross a kamisch steppe, where the reeds grew so extraordinarily close together that we very nearly got stuck fast in them. The ground underfoot was in fact a marsh, though it was then frozen. It was now a great rarity to come upon a patch of snow remaining on the ground. At length however we hit upon a little foot-path and traces of shepherds; and on the bank we found a satma, Takta-pere (pron. »peji»), beside an open freshwater lagoon, formed probably by overflowing ice-water. The low dunes, bearing vegetation, of the southern belt of sand advance here to the edge of the river.

On the 11th February we travelled for the most part in the bed of the river, which was still broad, with thick reeds next the bank. The limits of the river-valley and the range of its banks are indicated by hills of sand or dust, clothed with vegetation, and dotted with tamarisk-mounds. Poplars are still seen, though widely scattered; several of them appear to have reached a pretty good age, though most of them are young; indeed just here the forest seems to be spreading and gaining