

darja, as far down as Keng-lajka, an unperiodic oscillation of level, caused by alternate rain and drought in the mountains. Old Molla Chodscha was unable to give me any information about an old bed of the Tschertschen-darja, though on this side of the great barren sand there is, he knew, near its base, a strip of dead forest, which possibly may mark an older position of the river.

For my journey up the bed of the Ettek-tarim I was fortunate to obtain an excellent guide in old Toktasin Bek, who knew the road intimately, and who told me that in 1879, when he accompanied the fugitive Nias Hakim Bek along that route to Korla, the bed still contained pools of water, which, although salt, were still drinkable at a pinch. He assured me, that the bed was abandoned thirty years ago, but that previous to that it had carried about half the volume of the Tarim. The Ettek-tarim discharged a little west of the village of Lop, in the locality still called Basch-aghis, or the Principal Mouth, clearly in contradistinction to an Ajagh-aghis, or Lower Mouth, farther to the east, where the existing arm of the Tarim, then newly formed, discharged its waters. According to Toktasin Bek the Ettek-tarim was not, even thirty years ago, joined by any old arm from the Tschertschen-darja. Whence it is clear that the Tschertschen-darja has occupied its existing bed since the time when the water of the Tarim ceased to pour down the Ettek-tarim. Nevertheless I do not consider the eventual discovery of an old bed of the Tschertschen-darja to the north of the existing channel as altogether unlikely. We had ourselves seen two arms break away from it and get lost in the sand. The natives indeed assert that there exists no such bed between the existing river and the edge of the high sand, though they do admit that there is a strip of dead forest along the margin of the desert. Hence it is very likely that a bed, which penetrates into the sand, may eventually in its lowest parts disappear entirely under the dunes, and these in a period of thirty years may have had a sufficient length of time in which to bury it, leaving only the last remnant of its dead forest to project above the sand. In the actual delta of the Tschertschen-darja one may perceive dunes beginning to form. But the material for them does not come from the Desert of Lop; the distance is too great and the sand cannot get across the marsh. Consequently it is with deposited river-sand that they build themselves up, and the sand is derived from the deltaic arms which have dried up after being deserted by the water. It is true, as the natives of Keng-lajka indeed point out, that every year the Kara-buran decreases in area, and probably will eventually disappear altogether; but even on the east side of the Tarim the sand of the Desert of Lop does not get all the way to the river, as I shall subsequently describe. The name Kara-buran is unknown in the locality with which I am now dealing, and the lakes in question are called by the natives Lop-köli.

On 13th February we followed at first the right bank, then crossed the river, and so came to the *ajrilghan-jev* or »place of bifurcation». Below this point the country is called Tüschkün, because it is here that the Tscharklik road »goes down» to the river-bank. The dry branch of the river on the right continues to be accompanied by clumps of toghrak; the left branch, which we followed all day, was formed in 1898, and is excessively shallow; it is only in a few places that it has cut erosion terraces, and then on an extremely modest scale. Along the bottom of the