

On the 31st January the wind blew from the south-east in the morning, but soon veered round to the east and north-north-east; but it was too feeble to move the sand. In that part of the desert the dunes presented generally the following profile (fig. 211), that is to say, during the spring and summer the north-east wind disposes the dunes in the same way as in the Desert of Tschertschen and the Desert of Lop, with their leeward faces towards the south-west, but during the autumn and winter the prevailing wind blows from the west, so that the steep leeward faces look towards the east and north-east. But the latter wind is less powerful than the former, the consequence being that the latter leeward slopes are shorter than the former. Owing to the effects of the south-west wind the eastward-facing slopes have lost a good deal of their sharpness of outline, and their steep flanks are more rounded and »lumpy».

In the parts of the Kum-tagh which still remained to be traversed the distribution of the sand was extremely peculiar and unusual. It formed a passage-way like a river-bed 600 to 1000 meters broad, and situated between huge ridges of sand, which, like the »bed» itself, stretched towards the north-north-east. In fact it reminded me of a bajir completely choked up with sand, although that was the only feature in which it had anything in common with such a formation. (See the upper photograph on Pl. 49). Especially interesting were the transverse dunes which ran across this »bed» or gully. They were on the whole drawn out between the west-north-west and east-south-east, and formed tiny crests about 2 dm. high; and although they were exceedingly easy to cross, yet by reason of their vast numbers they somewhat retarded our march. As a rule it was impossible to determine which slope was the steeper; perhaps the superiority in this respect lay with that which faced north-north-east, the south-west and west winds having been the last to blow. The distance between the separate crests amounted generally to between 3 and 4 meters. In some places along this gully the wave formation was less distinctly marked, or entirely distorted owing to the irregular winds. It was therefore no longer possible to determine whether the wave-lengths increased or decreased in the direction in which we were travelling. One thing however appeared to me to admit of no doubt whatever, and that was that these small transverse dunes were nothing but ripple-marks, which from an insignificant and minimal beginning had grown up into small dunes, so that they thus constituted an intermediate form between ripple-marks proper and completely developed individual dunes. The gully measured about 4 km. in length, so that there was ample room for ripple-marks to grow to even bigger dimensions than actually is the case even in the largest dunes. This would undoubtedly be the very place in which to study the development and growth of ripple-marks, for with the wind blowing hard from the north-north-east or the south-south-west the circumstances and the lie of the ground would be especially favourable. Their delicate patterns are however soon destroyed by winds from other directions.

Meanwhile the projecting offshoots from both sides decreased in height, until finally they ceased almost entirely. A little to the west of our route the sandy desert continued northwards for the rest of the day's march, and although the dunes decreased in altitude, and at the same time grew more irregular and uneven, still lofty pyramidal summits continued to show themselves at wide intervals. I feel pretty