

fig. 236. That is to say, the floor of the desert is grooved by long furrows or trenches, which run parallel to one another from north-north-east to south-south-west.

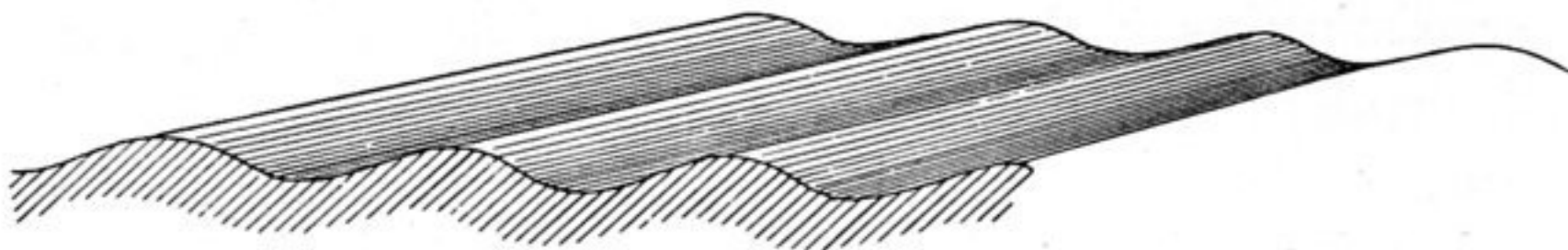


Fig. 236.

Each such furrow or groove contains a series of bajirs or depressions separated from one another by projecting ridges of sand. The depressions which lie nearest to the river are filled with water; but the water-filled basins in the different parallel trenches are unable to communicate with one another, and a proof of this is that, whereas some contain fresh water, others contain salt. Hence they are effectually bounded east and west, and in those directions are sharply separated the one from the other. The positions which the dunes occupy with regard to these underlying undulations are indicated in fig. 237. I have already pointed to the fact, that this regular grooving of the face of the desert is caused by the wind; but to this we shall return again in another connection.



Fig. 237.

Here it would perhaps be desirable to say something about the properties of the water contained in these lakes. It is self-evident, that in a lake which has no discharge, and which fills an impermeable basin, so that it diminishes, not through absorption, but through evaporation alone, the water must in time become salt, and that the salinity must increase with the age of the lake. But we find that the water in these lakes is perfectly fresh, at any rate to the taste; consequently this must be due for the most part to the percolation of their water through the soil. And in fact they are refilled every year, and may indeed be considered to possess underground drainage. Now it is perfectly obvious that a lake which has a cubic capacity of 32,800,000 cub.m., and yet receives annually 70 million, of which probably one-half is lost in the ground, will increase in salinity at an exceedingly slow rate. And seeing that these lakes are relatively recent creations, as also that their levels are in great part regulated by human agency, it is clear that their salinity will augment with extreme slowness. And yet they do grow saltier, as is proved by the Baschköl. Richthofen, starting from Prschevalskij's statement, that the Kara-koschun is a freshwater lake, concluded that it must therefore be of recent origin. This reasoning is also applicable to the lakes we are discussing, for they are of even more recent origin than the Kara-koschun. Indeed both these circumstances serve to explain the freshness of the water in them. But of the two factors their comparative newness is by no means so important as the factor just alluded to above, for no matter how old they are, so long as they continue to receive the same