

descending sand would disappear beneath the surface of the lake, and the sectional area would assume the appearance shown in *b—b*. This is what happens on every rock-bound coast, though on a larger scale and at an immensely slower rate. No matter, then, whether the dune travels fast or travels slowly towards the west, there must always be an abrasion terrace accompanying it and sharing in its movement. On the whole its

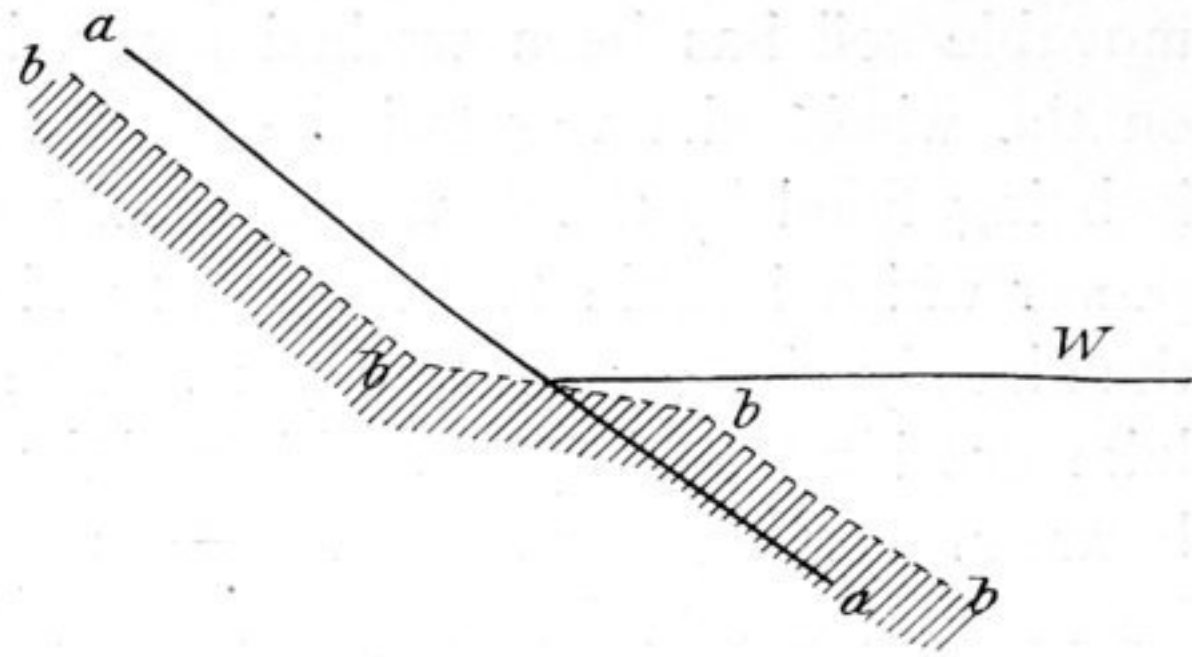


Fig. 212.

breadth will be pretty uniformly the same, for the selfsame force which causes the dune-wall to encroach upon the shore-line is also instrumental in widening the abrasion terrace and »preserving» it, that is to say the wind. So long as the atmosphere is at rest and in equipoise, no change takes place, but as soon as the wind blows, the waves, both of the lake and of the desert sand, are set in motion. But while the lake waves widen the abrasion terrace by their beating, the sand-waves continue their movement towards the west.

Every impartial and unprejudiced observer who should approach the east shore of the Gölme-käti, when the wind is perfectly still, would at once say, without a moment's hesitation: Here the prevailing wind blows from the east. Of course the wind does sometimes blow from other quarters as well, for example in the end of December 1899 and beginning of January 1900 it blew from the south-west, but these winds are relatively feeble and of no account as compared with the violent easterly tempests. If the winds from any other quarter except this last were possessed of any real power, the abrasion terrace on the eastern shore of the lake would not, and could not, exhibit the uniform breadth it does. Under the impulse of a south-westerly or westerly wind the waves of the lake would increase the breadth of the abrasion terrace, and the dune, if it were not prevented altogether from advancing westwards, would at any rate have its advance retarded. The surface modelling would be entirely different, irregular, wanting in definiteness of outline. As it is, however, the relief is so sharp-cut and so distinct that there is no possible room for doubt. What we have before our eyes suggests instantly the power which has been instrumental in shaping the features of the landscape. The reason the eastern abrasion terrace is so narrow is that it lies under the shelter of the dunes, and consequently the lake there is relatively tranquil, while the east wind compels the dunes to travel on over it. Nevertheless there is always a certain degree of undulatory movement of the surface of the lake, which, cooperating with the disturbance caused by winds other than the east wind, is sufficient to maintain the terrace. The most energetic wave-action in a lake like the Gölme-käti is exercised however on the west shore, where the effects produced by a spring storm are very conspicuous, especially in the crumbling away of the shore under its attacks. All the loose material which lines the shore is sucked back into the lake by the receding waves, though the opposition offered by the vegetation and its roots prevents the destruction from being so complete as it otherwise would be. It is true, detached pieces of the reed-beds are occasionally rent away, and a solitary tamarisk or two, after the circumjacent