

they form the valleys amongst the dunes, and so are screened from the effects of the wind. Nor does it make any difference whether they are filled with water or with sand. No matter what the constituent content of the valleys may be, it is the windward flank of the western dunes which continues to be assailed by the wind and the sheltered flank of the eastern dunes which continues to advance before it. It should also be borne in mind, that the volume of the lake, and its other dimensions, are relatively insignificant as compared with the mass of the migrating dunes; for while the dunes tower up to 90 m. in altitude, the lake is at most only 11 m. deep (see below, for the maximum sounding). Although the proportion of its mass which the dune loses in its passage across a water-filled depression of this character is indeed high, still that fact does not in any way affect the dunes' movement *per se*. It is an irrefragable proof of the correctness of this assumption, that as the continuation of each lake we have a bajir which is destitute of water. For if the water really were a hindrance to the migration of the dunes, each bajir would advance at a more rapid rate than the dunes which overhang its associated lake on the east, and would not lie, as it actually does, in a straight line with the lake.

At the end of some centuries, when the dunes have travelled over the three or four kilometers which now make up the breadth of the lakes, and have filled up their basins with sand, the intervening space or valley between the dunes *a* and *b* will consist of flat arenaceous soil, that is, assuming there is no depression concealed under the dunes *b*. The ultimate result therefore of the operative agency of the dunes is to level the face of the country by filling up all its hollows and depressions. If we assume that the river will maintain its present position for a sufficient length of time, the lakes too will disappear, and if, as we have already seen, the Tarim is advancing irresistibly to the right, that is towards the south-west, their fate is even more certainly sealed. Hence the results which I conceive to have been established by the preceding investigations are these: — (1) the lakes are to all intents and purposes stationary; (2) the westward movement of the eastern lake-shore is conditioned by the corresponding migration of the dunes on that same shore; (3) it is the movement of these last which fills the lake-basins; (4) the dunes continue their movement independently of the lakes; (5) the lakes are relatively recent creations, and are supplied with water from the Tarim; (6) once the metamorphosis is successfully accomplished, the existing lakes will become converted into dune-valleys with a level bottom whereon vegetation will grow. Before proceeding to consider certain other problems connected with these lakes, I must first communicate the detail results of various other investigations which I carried out in this same region.

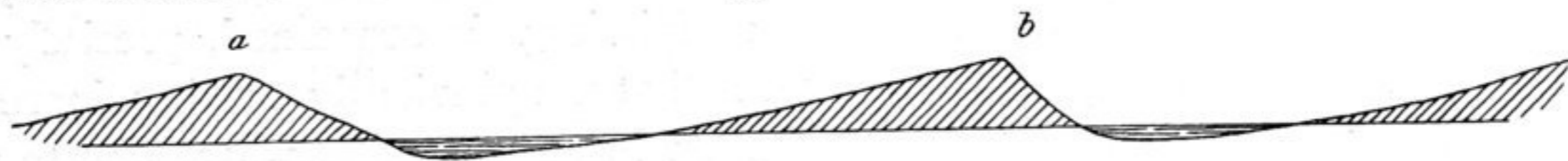


Fig. 215.

Returning to Gölme-käti-köl. To the east of its south-eastern part lies a small dry bajir, with a larger one to the north of it called Emin Achune-uktusu. Although not connected, they form as it were a continuation of one another, and as usual stretch from north-north-east to south-south-west, that is to say parallel to the