

new position that the river has assumed, and the pretty broad belt of vegetation, by its binding and retarding effect, no doubt check the supply of sand, so that the dune-crests in the extreme north-east must tend to be lowered rather than raised. Suppose the river to maintain its position at some given point A (fig. 180), then the ranges of dunes should advance away from it and the sand-free belt $A-A_1$ should increase in breadth. Nevertheless the height of the dunes is not likely to decrease to any very appreciable extent, because the sand that belongs to each dune-accumulation can never get away from it by blowing over to the nearest neighbouring range to the leeward. On the other hand we have seen that the river travels in the same direction at an even faster rate than the dunes do.

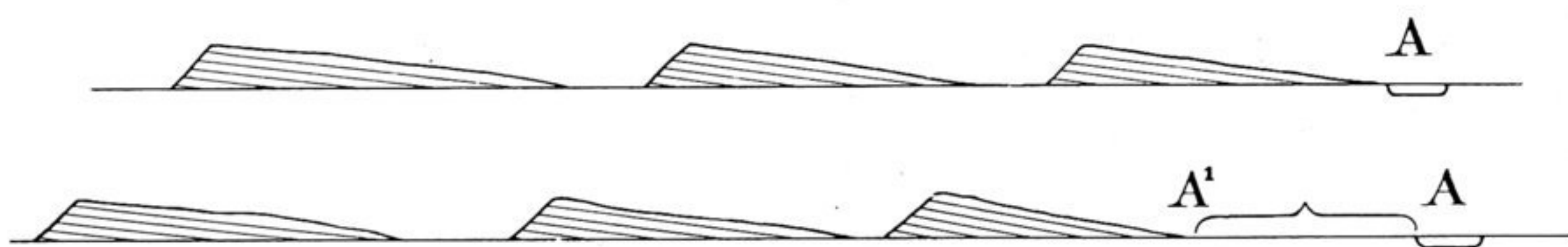


Fig. 180.

These relations could however only prevail in a desert like the eastern Taklamakan, where a constant wind prevails, where the surface is level and barren, where the supply of sand has been, at least up to the present time, uninterrupted, and where, finally, all these factors unite to produce a regular and stereotyped effect. In the Kum-tagh the result must be quite different. There the altitude of the dunes is relatively independent of the wind; in fact the limits of their altitude can hardly be determined by anything else except the laws of gravity. And in the course of time their height will no doubt be increased by the supplies of sand which the winds are continually bringing from different directions.

When I wrote the chapter in vol. I of this work, that treats of the marginal lakes of the Tarim and of the Desert of Tschertschen, I had had neither time nor opportunity to make myself *au fait* with the existing phase of the study of dunes, or even to master the results arrived at by other investigators who have visited sandy deserts in other parts of the world. If that was a defect and an omission on my part, I have herewith endeavoured to remedy it by devoting further attention to the question now, although I have not of course been able to do more than refer to a few out of the many studies and examples that exist. From one point of view, I do not consider that it was a defect in my description of the Desert of Tschertschen, that I confined myself entirely to my own observations and disregarded the results arrived at by other investigators. By so doing my discussion may claim to be entirely original and unaffected by the views of others, and above all my conceptions cannot be said to be biassed by any overgreat deference to mere authority.

Upon comparing my observations with those of other investigators, I am the more rejoiced to find upon most points a close agreement between us. It is only in respect of two or three factors of minor significance that I have reached results of variance with those of other inquirers. I need hardly say, that no unconditional comparison can be made between the eastern Takla-makan and the sandy expanses of the Sahara, because the wind-relations in the two deserts are palpably very