rested among the sandy wastes, whence, after forming a few pools, it finds egress by soaking through the sandy barrier.

The nature of the grains of sand depends on the character of the rocks from the destruction of which they are derived, and their form and size are largely regulated by the force of the wind and the relative share taken by subaerial and subaqueous action in their production. Quartz is the most frequent constituent, but the other minerals of rocks also occur, especially those which are most capable of resisting mechanical trituration. In some cases, organic remains, such as particles of shells, nullipores, etc., form the main mass of the sand (see p. 572).[25] The sand-grains liberated by

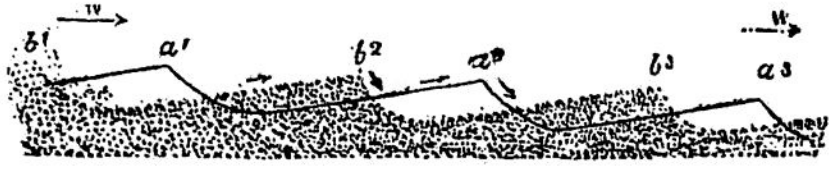

Fig. 91.—Diagram of Ripples in blown Sand. The ridges b^1, b^2, b^3, impelled in the direction of W W, successively come to occupy the hollows a^1, a^2, a^3 (*B.*).

inland subaerial disintegration are apt to be more angular than those brought within the influence of the wind along a shore-line.[26]

Perfect "ripple-marks" (p. 848) may often be observed on blown sand. The sand-grains, pushed along by the wind, travel up the long slopes and fall over the steep slopes. Not only do the particles travel, but the ridges also more slowly follow each other, as in Fig. 91.[27]

The western sea-board of Europe, exposed to prevalent westerly and southwesterly winds, affords many instructive

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[25] Mr. Russell (Geol. Mag. 1889) refers to some parts of the sands of the arid lands of North America as being composed mainly of the cases of cyprids, blown away from the beds of dried-up lakes.

[26] Engravings of some of the sand-grains from the Egyptian deserts are given by Walther in the essay already cited.

[27] On the origin of ripple-mark, see Book IV. Part I. p. 850.