and often confluent ridges, their general direction being transverse to the prevalent course of the wind. Local windeddies cause many irregularities of form. In humid climates, rain-water or the drainage of small brooks is sometimes arrested between the ridges to form pools (étangs of the French coasts), where formations of peat occasionally take place. On the coast of Gascony, the sea for 100 miles is so barred by sand-dunes that in all that distance only two outlets exist for the discharge of the grainage of the interior. As fast as one ridge is driven away from a beach another forms

in its place, so that a series of huge sandy billows, as it were, is continually on the move from the sea-margin toward the interior. A stream or river may temporarily arrest their progress, but eventually they push the obstacle aside or in front of them. In this way the river Adour, on the west coast of France, has had its mouth shifted two or

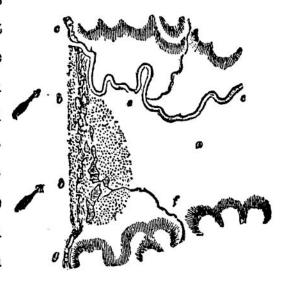


Fig. 90.—Sand-dunes affecting land-drainage (B.).

three miles. Occasionally, as at the mouths of estuaries, the sand is blown across, so as gradually to exclude the sea, and thus to aid the fluviatile deposits in adding to the breadth of the land. In Fig. 90 a stream (e e) is represented as crossing a plain (a) at the margin of the sea or of a large inland sheet of water, bounded by a range of sand-dunes $(b \ b)$ extending between the two lines of cliff $(c \ g)$. The stream has been turned to its right bank by the advance of the dunes driven by a prevalent wind blowing in the direction of the arrows. A brook (f) has been ar-