points of the horns. The whole of the dunes in a given desert area such as is here assumed travel in the direction of the wind, that is parallel to one another. If the process of »sanding down» continues, that is if the volume of sand in the area con-

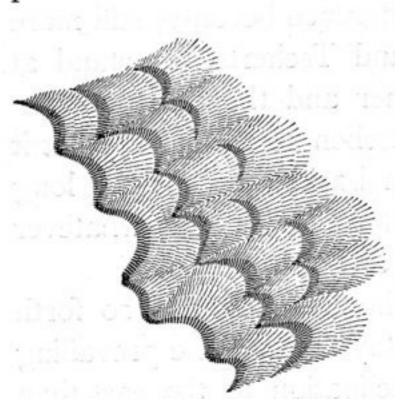
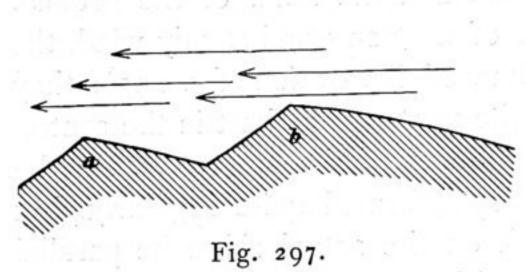


Fig. 296. ACCUMULATING DUNES.

tinues to increase, the individual dunes partly increase in size and partly become pressed closer together. Even though the surface is uniformly level, the different individual dunes are differently affected by one and the same wind. At all events this is bound to be the case wherever a higher dune acts as a partial wind-screen to a lower one situated on its leeward side. In fig. 297 b must travel faster than a. At this stage the separate dunes seem to attract each other, that is they manifest a certain tendency to approach nearer together and agglutinate into bigger accumulations; in fact, the dune-accumulations of which I have spoken are only so many

inextricable agglomerations of once discrete individual dunes. The larger dunes seem as if they tried to swallow up and absorb into themselves the smaller dunes, until they form continuous ridges or accumulations. The process is a quite natural



one. Suppose in the accompanying cut (fig. 298) that B and C are individual dunes which have successfully climbed up over the dune A, then in the position which they assume, B will move faster than A, because of the latter being relatively sheltered from the wind. In the second cut the dune B has overtaken A, and in consequence the new dune A + B is twice as big as the original dune; but

on the other hand the rate at which A + B moves is only half as great as that at which B moved. The dune C may be assumed to possess the same dimensions as B; consequently it too will travel twice as fast as A + B. Hence it will overtake it,

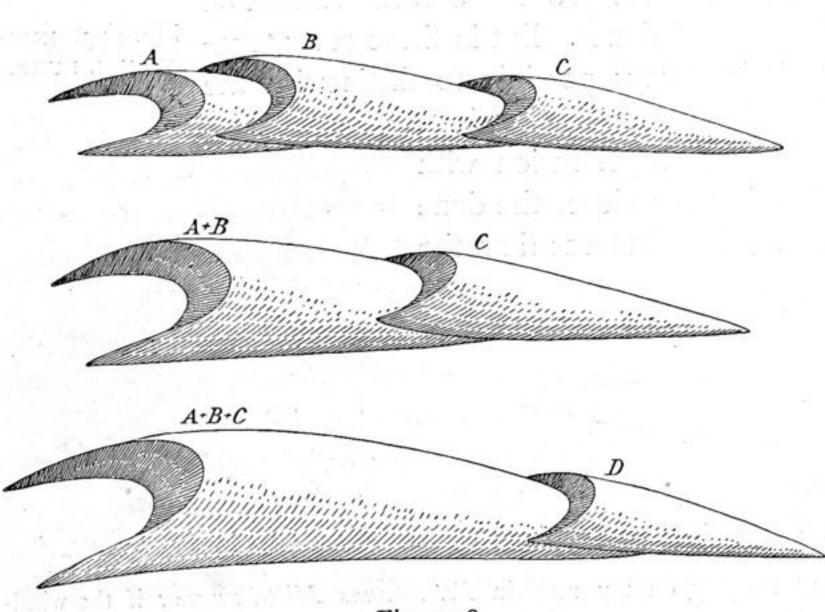


Fig. 298.

raising still higher its steep leeward face, though this will, it is true, decrease in proportion as the compound dune increases in breadth. Thus, whilst the mass and the altitude of the compound dune-accumulation increase, so too does the relatively greater velocity of movement of the advancing individual dunes, that is as compared with the compound So that the more dune. dunes there are which go to make up a dune-accu-