

is proportional to the mass, it follows that the heavier and bulkier dunes of the north will travel more slowly than their less massive prolongations towards the south. Thus, instead of presenting itself in a straight line at right angles to the direction of the prevailing wind, the dune-concatenation becomes curved, so that, whilst in the north it lies at an acute angle to the direction of the wind, in the south it approximates more and more towards a right angle. The table on p. 349—350 shows plainly the course of the curve, both in the case of the dune-concatenations and of the chains of bajirs which lie between them. Bajirs 3 and 4 lie almost north-east and south-west; after that the southern direction becomes more and more pronounced, although there are of course at the same time several deviations from a curve proper. Throughout the whole of the northern half of the desert there does not exist a single bajir with an eastward inclination; bajirs exhibiting that tendency appear only in the southern part of the desert, and in the extreme south the eastward inclination is more common than the western. This applies to bajirs no. 19, 24, 28, 30, one-half of 33, 36, 39, 41, 42, 43, 44, 46, and all the miniature bajirs, their mean inclination being  $12^{\circ}.5$  E. Hence the angle which this makes with the prevailing wind is  $72^{\circ}.5$ . Let us take a few bajirs at random, and see how they lie with respect to the wind. We find

No. 1 = $28^{\circ}$	No. 23 = $48^{\circ}$
» 4 = $19^{\circ}$	» 28 = $92^{\circ}$
» 11 = $36^{\circ}$	» 32 = $55^{\circ}$
» 17 = $53^{\circ}$	» 40 = $37^{\circ}$
» 19 = $74^{\circ}$	» 41 = $87^{\circ}$

From this it is clear that the angle increases, although irregularly, as one advances southwards. Throughout the entire series there is only one bajir, namely the eastern half of No. 28, in which the angle exceeds a right angle. The one after that which comes nearest to a right angle is No. 41, its angle being  $87^{\circ}$ . The great difference that exists between bajir No. 4 and bajir No. 41 is shown in fig. 299 and 300; for whereas the former lies  $S. 41^{\circ} W.$ , the latter lies  $S. 27^{\circ} E.$ , or a difference of  $68^{\circ}$ . Even between No. 40 and No. 41, close as they come together, there is a difference of fully  $50^{\circ}$ . Thus the whole of the dune-accumulation does not advance at the same rate throughout, but certain parts lag, as it were, behind. It is precisely what may be observed in a small series of dunes which have fused together, the one wing is smaller than the other, and consequently is driven forward by the wind at a faster rate. The varying angles show that the dune-concatenation does not possess the same degree of massiveness throughout.

The circumstances being then thus, one would expect that some parts of the sandy mass would drop behind and get cut off from the rest; and this is what actually does take place. In the case of the waves of the sea one may often observe a break in the succession, that is waves which run off from the main mass and dwindle away. Disruptions and severances of this kind are commoner in the south of the desert than in the north. For instance, from bajirs 1 to 15 inclusive we had identically the same unbroken sandy wall on our left hand throughout; but between No. 9 and No. 10 we were able to perceive preliminary tendencies towards a bulging