

sand-laden wind from the north-west, and forcing the sand to fall and accumulate in front of the ridge.

The sand is yellow as in Eastern Turkestan, but rather coarser than in the Takla-makan. The steep leeward slopes fall to S. 70° E., while the crests of the dunes strike from NNE. to SSW.; they often form continuous chains, their lines being visible for a long distance, and here and there are piled into accumulations of quite sterile sand. The dunes, consolidated by coarse grass and tamarisks, often exhibit a deformation, even their western slopes being very steep. In the intervals between the chains of dunes appears the yellowish-red muddy ground, which shows plain traces of water and breaks up in large flakes; it may often be observed how these have been thrown up into banks and dykes with the object of damming up the flood water, whenever it reaches so far, and thus increase and encourage vegetation. In such small fenced-in patches water-melons are grown.

The inhabitants of Alem obtain their irrigation water by the following method. The well Cha-Alem, which we passed yesterday just before reaching the village, is the *ser-i-ab* of irrigation, literally the head of water or spring. It originates in the southern hills and comes down in mud channels partially underground; in any case it subsequently collects in the well and from there is conducted through a subterranean channel to the fields which lie at a lower level. If snow and rain fail, the well dries up; this year the people had no cause for complaint and, besides, were expecting the spring rains in four months. But if these also fail, Alem is left without a drop of water, and then the people abandon their village and betake themselves to Serhed-i-bakhtiari, that is, the "cold land of the Bakhtiari," the country where the Zayende-Rud, the river of Ispahan, has its source, and there they remain through the warm season, feeding their camels. Some years they migrate instead to the districts of Yezd or Sebsevar.

One cannot help envying the great geographical information of these camel wanderers; they know intimately large stretches of the interior of Persia, can go between Hamadan and Sebsevar on pitch-dark nights, and even find