them at Bakharden and elsewhere along the base of the Kopet Dagh may be fairly taken to indicate that they do not exist there. The little deltas in the ravines on the mountain flank near Jebel were recognized at the first glance, though a mile or more away; the strands at Krasnovodsk were visible as such from the steamer before reaching land. The treeless piedmont plain on which the Akhal-tekin oases are distributed is open, as soon as one leaves the villages, without obstruction to the view for miles together, and yet shows nothing that could be interpreted as a shoreline. It may be noted that familiarity with the Bonneville shorelines in Utah gave us all the more confidence in the correctness of our conclusion that no shorelines occur along the base of the Kopet Dagh at Kizil-Arvat and farther eastward.

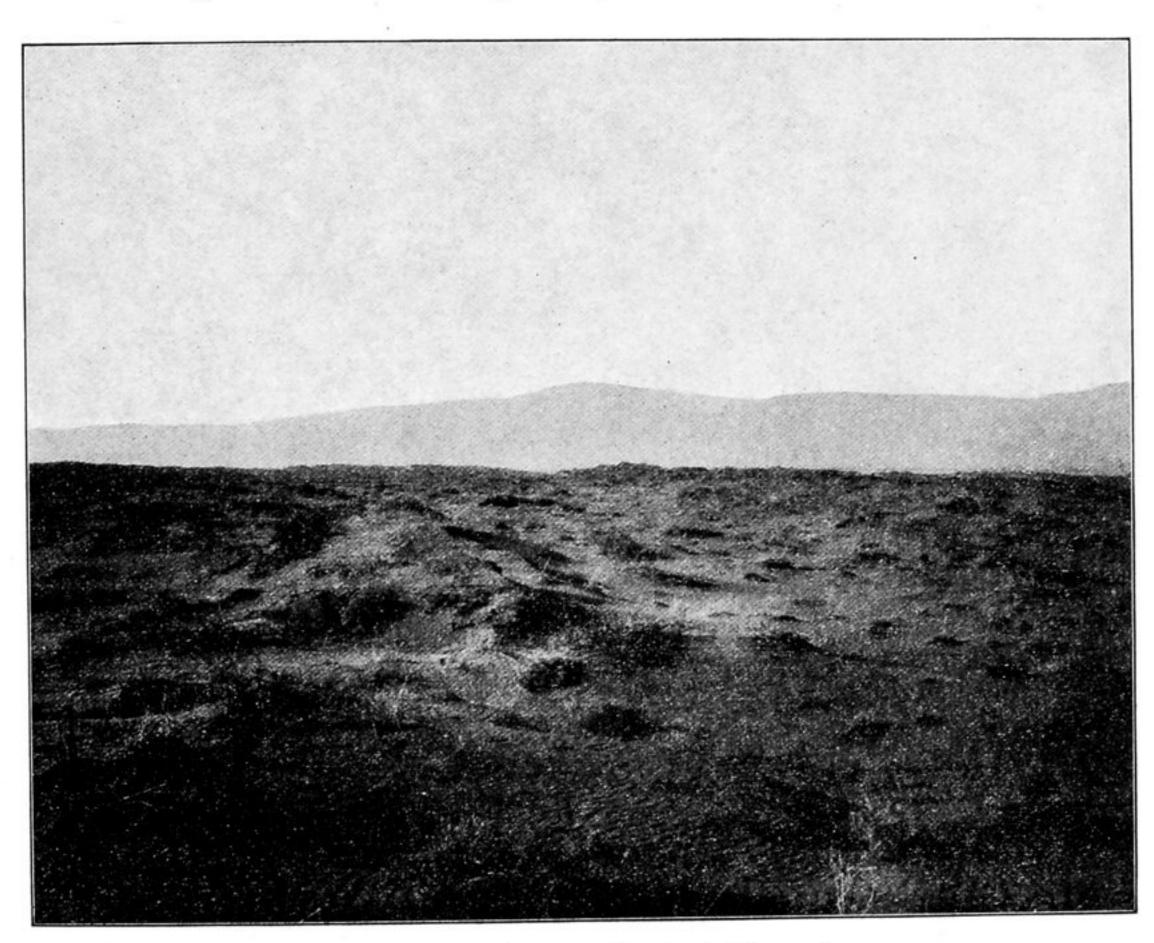


Fig. 23.—Sand-hills near Bakharden, looking south.

The railroad journey through the belt of oases afforded excellent opportunity for many general views of the piedmont slope. Gorges in the barren mountains open upon fans, whose long forward descent was well seen in profile before or after passing them. They had no resemblance to the flat-topped deltas built in the high-level Bonneville waters along the base of the Wasatch Mountains in Utah. In a district where the limited water supply hardly suffices for the needs of even a scanty population, and where the unredeemed desert counts more area in miles than the fields rescued from it count in acres, it was curious to note the precautions taken to guard the railroad from destruction by floods. The faintly convex surface of the fans sheds the floods now on one radius, now on another; the point where a flood will reach the track