other fine material at the bottom; (2) gravel; (3) drifts and dunes. This, however, applies only to the Quaternary period, for before that we have assumed a dry steppe climate, with æolian formation of löss all over Asia.

After the last glacial period attained its maximum, and the climate then slowly changed to increased drought and heat, the Caspian Sea and the Iranian lakes sank and contracted, among them the great Kevir lake. This at last reached the stage of which Walther says: "If a desert basin is so far filled with plastic material that the inequalities of the bottom are obliterated, the deep trough filled up, and the floor levelled, every change in the volume of water must entail a very considerable alteration in the contour of the lake. The shore moves for miles inwards, and large areas are laid dry." A time might come when the flat Kevir bed contained only in winter a sheet of water as thin as paper, which vanished in summer. At last would come a time when only heavy rains were capable of forming small swamps in the lowest hollows of the bed. This is still the case. When it began it is impossible to say; at any rate, before historic times. It may have been ten, fifteen, or twenty thousand years ago.

During my two meridional journeys through the great Kevir, and, not least, on crossing the Kevir arm between Abbasabad and Khur, I was strongly impressed with the fact that the whole contents of the Kevir are, to a small degree, in motion, like a viscous mass striving to assume a horizontal position. It is, in other words, the same phenomenon to which J. Gunnar Andersson applies the term "moving earth," and which is so common also in the sterile tracts of Tibet. Such a movement is, in fact, betrayed by the scarcely perceptible flat undulations which are parallel to the shore on the northern and southern margins, and seem to indicate a pressure or thrust caused

by the addition of freshly washed-down silt.

On the whole, I quite agree with Huntington's views. I must differ with him in one point only, pointing out with Brückner that the change of climate has progressed so slowly that its existence within historic times cannot be

¹ Das Gesetz der Wüstenbildung, s. 116.