

run down from their summits till they join the corresponding sloping plains of a parallel range or merge in the broad desert—had long puzzled me. But here, among the lower ridge of the Altai Mountains, I had better opportunities of examining the rocks, and it seems to me that the following is the true cause of the formation of these sloping plains.

The hills in the Gobi, as has been noted several times, are perfectly bare, and in such an extremely dry climate, exposed to the icy cold winds of winter and the fierce rays of the summer sun, and unprotected by one atom of soil, the rocks first decompose, and then crumble away to a remarkable extent, and there being no rainfall sufficient to wash away the *débris*, the lower features of a range gradually get covered with a mass of *débris* falling from the upper portions, and in the course of time a uniform slope is created, often thirty or forty miles in length, and it is only for a few hundred feet at the top that the original jagged rocky outline is seen.

In the smaller features the process of decomposition could be seen actually going on. The rocks are all cracked and give way at a touch,\* while occasionally masses spontaneously detach themselves. The general effect, then, that is being produced on these mountains by the combined action of the heat of the sun and the winter frosts, is the same as would be produced by heat upon a rugged mass of ice. In the course of time (for the one, a few million years—for the other, a few minutes) both would be modified into round smooth masses.

From Ula-khutun we passed through some low hills, and on the march came across the horn of an *Ovis argali*. It was lying in the middle of the path. On measuring it, I found it was fifty inches round the curve and seventeen inches in circumference at base—an immense horn. The

\* The rocks used actually to become sunburnt. On the side exposed to the sun and the weather they would become dark brown and shining, while on the side unexposed to the sun they were of a dull light-brown colour.