

such enormous quantities of boulders, so as not merely to bring them down into deep confined valleys, but actually to sweep them up again to the summits of the seaward hills.

Such work as this could have been done by only one agency in nature—that of ice.

When we once embrace the idea that the transport of these endless heaps of boulders has been effected by ice, the difficulties which previously seemed insuperable one by one disappear. And the more we examine into the facts of the case, the more firm becomes our conviction that this, after all, is the true theory. Looking at the Carrick hills with an eye that has been trained in the study of what are known as glacial phenomena, the geologist sees at every turn traces of a time when one wide mantle of ice and snow was thrown far and wide over the hills and valleys. The peculiarly-shaped hummocks and bosses of rock, so shorn and smoothed, recall at once the *roches moutonnées*, or ice-worn rocks, of Alpine valleys. The huge blocks of granite strewn along the hillsides remind one of the *blocs perchés* that abound on the flanks of the Swiss mountains, where they have been left by the retreating glaciers. The mounds of earth and rubbish, noted in the ascent of the course of the Girvan, are quite comparable with the moraines or rubbish-heaps that are shed from the ends of glaciers at the present day. Indeed, the whole contour of the ground, especially in the upper parts of the Girvan valley, suggests at a glance the former existence there of a massive sheet of ice which, descending ceaselessly from the higher tracts towards the sea, ground down and smoothed the surface of the rocks over which it moved. I have noticed in these uplands many examples of what are known as “dressed surfaces” on the rocks, and they are well seen in many places near the sea. These “dressings” are long ruts,