

of the Grampians. Boulders of the same kind are likewise found both on the plains and hills to the south of the Forth, and beyond the Clyde, they are strewn across Renfrewshire and the north of Ayrshire. Large fragments from the granite mountains of Carrick and Galloway have been carried over the heights and hollows to the north-west and north, up to, and perhaps beyond, the town of Ayr.

When the great Ice Age came to a close, the Midland Valley, freed at last from its envelope of ice and snow, must have worn a very different aspect from that which had distinguished it before glacier or ice-sheet had begun to modify its surface. Its old pre-glacial roughness had been, to a large extent, planed down, and new hollows had doubtless been scooped out by the ice ; but a thick mantle of clay and sand had been spread over the ground, leaving only the harder and higher masses of rock to rise above the general monotonous undulations. The old ravines and water-courses were for the most part buried under these accumulations, and only here and there have the streams returned to them. Since then, too, the other denuding agents have been ceaselessly at work upon the surface of the land. The wide covering of drift has been furrowed in all directions, and in innumerable places has been cut through to the bare rock below by brooks and runnels. The larger streams have dug ravines in it, nay, in numberless cases, they have gone farther, and after trenching the drift, have even hollowed out deep gorges in the rock itself. Most of the present ravines of the country have probably been excavated since the ice retired. And if we turn to the hills that rise out of the wide plain of drift and lift their bare rocks to the sky, proofs of the same waste meet us on every side. The hummocks of diabase are split and broken ; the crags of basalt are rent and splint-