

brown heath and bent, while far below are the green valleys, with their clear winding streams, and their scattered shepherds' hamlets.

The enumeration of the later changes in the scenery of Scotland would be incomplete if it included no reference to those which have been brought about by man. Human agency must be reckoned as a not unimportant factor in the geological mutations which now befall the surface of the land. It would lead me into too wide a discussion, however, were I to attempt to enter fully here into this subject. To some of man's operations in this country I have already alluded, and others may be merely cited. He has uprooted the old forests, drained many of the mosses, and extirpated or thinned many of the wild animals of ancient Caledonia. In place of the woods and bogs, he has planted fields and gardens, and built villages and towns; instead of wild beasts of the chase, he has covered the hills and valleys with flocks of sheep and herds of cattle. The cutting down of the forests and the draining of the mosses has doubtless tended to reduce the rainfall, and generally to lessen the moisture of the atmosphere and improve the climate. Sunlight has been let in upon the waste places of the land, and the latent fertility of the soil has been called forth; so that over the same regions which, in Roman times, were so dark and inhospitable, so steeped in dank mists and vapours, and so infested with beasts of prey, there now stretch the rich champagne of the Lothians, the cultivated plains of Forfar, Perth, and Stirling, of Lanark and Ayr, and the mingling fields and gardens and woodland that fill all the fair valley of the Tweed, from the grey Muirfoots and Lammermuirs far up into the heart of the Cheviots.

In effecting these revolutions, man has introduced an element of change which has extended through both animate