

ruptions, there is an inclined wall of rock, which rises at a steep angle in the interior to nearly two thousand feet over the level of the Great Canal, and overhangs the sea towards its northern termination, in precipices of more than a hundred yards.*

The direction of this rampart and fosse — this Roman wall of Scottish geological history — seems to have been that in which the volcanic agencies chiefly operated in upheaving the entire island from the abyss. The line survives as a sort of foot-track, hollowed by the frequent tread of earthquakes, to mark the course in which they journeyed. Like one of the great lines in a trigonometrical survey, it enables us, too, to describe the lesser lines, and to determine their average bearing. *The volcanic agencies must have extended athwart the country from south-west to north-east.* Mark in a map of the island — all the better if it be a geological one — the line in which most of our mountain ranges stretch across from the German Ocean to the Atlantic, — the line, too, in which our friths, lochs, and bays, on both the eastern and western coasts, and especially those of the latter, run into the interior. Mark, also, the line of the geological formations, where least broken by insulated groups of hills — the line, for instance, of the Old Red Sandstone belt, which flanks the southern base of the Grampians — the nearly parallel line of our Scottish Coal-field, in its course from sea to sea — the line of the Grauwacke, which forms so large a portion of the south of Scotland — the line of the English Coal-field, of the Lias, of the Oolite, of the Chalk — and how in

* The valley of the Jordan, from the village of Laish to the southern extremity of the Dead Sea, furnishes another very remarkable instance of a geographical right line.