

the volcanic floor. Dykes and other protrusions of basalt occur on the surrounding hills, but the chief fissures or vents of emission are still no doubt buried beneath the lava that escaped from them.

In North-Western Europe, however, the basalt sheets were erupted as far back as Miocene or Oligocene times. Since then, exposed to many vicissitudes of geological history—subterranean movement and changes of climate, with the whole epigene army of destructive agencies, air, rain, frost, streams, glaciers, and ice-sheets—the volcanic plateaux, trenched by valleys two or three thousand feet deep and a mile or more in breadth, and stripped bodily off many a square mile of ground over which they once spread, have been so scarped and cleft that their very roots have been laid bare. Viewed in the light of the much younger basalts of the Western Territories of North America, their history becomes at last intelligible and more than ever interesting. We are no longer under the supposed necessity of finding volcanic cones vast enough to have poured forth such widespread floods of basalt. The sources of the molten rock are to be sought in those innumerable dykes which run across Britain from sea to sea, and which in this view of their relations at once fall into their place in the volcanic history of the time.

No more stupendous series of volcanic phenomena has yet been discovered in any part of the globe. We are first presented with the fact that the crust of the earth over an area which in the British Islands alone amounted to probably not less than 100,000 square miles, but which was only part of the far more extensive region that included the Farøe Islands and Iceland, was rent by innumerable fissures in a prevalent east and west or south-east and north-west direction. These fissures, whether due to