

long ago sketched them in Skye, rising through the Jurassic rocks and merging into the overlying sheets of basalt. Similar sections occur in the other islands and in the north of Ireland. The lofty mural escarpments presented by the basalt plateaux once extended far beyond the limits to which they have now been reduced. The platform from which they have been removed shows in its abundant dykes the fissures up which the successive discharges of lava rose to the surface, where they overflowed in wide level sheets like those still so fresh and little eroded in Western North America.

That there were intervals between successive outpourings of basalt is indicated by the occasional interstratification of seams of coal and shale between the different flows. These partings contain a fragmentary record of the vegetation which grew on the neighbouring hills, and which may even have sometimes found a foothold on the crumbling surface of the basalt floor until overwhelmed by fresh floods of lava. Not a trace of marine organisms has anywhere been found among these interstratifications. There is every reason to believe that the volcanic eruptions were all sub-aërial. Sheet after sheet was poured forth over the wide valley between the mountains of Donegal and the Outer Hebrides on the one side, and those of the north-east of Ireland and the west of Scotland on the other, until the original surface had been buried in some places 3000 feet beneath volcanic ejections.

I believe that the most stupendous outpourings of lava in geological history have been effected not by the familiar type of conical volcano, but by these less known fissure-eruptions. Both types are of course only manifestations in different degrees of the same volcanic energy. It may be said, indeed, that both are fissure-eruptions, for the more