

there layers of stratification will be formed, whether they fall in the sea or on land. It has been suggested by Mr. Ward that some of this fine volcanic dust fell into lakes that filled old craters or areas of subsidence during periods of partial repose, and this seems highly probable, for the finely divided matter is so beautifully stratified, that these beds were, and still are by some, mistaken for marine strata.

When we consider the vast amount of these products of ancient volcanoes, there can be no doubt that, rising from the sea, some of them must have rivalled Etna in height, and others of the great active volcanoes of the present day, and, as most volcanoes have a conical form, we can easily fancy the magnificent cones of those of Lower Silurian age. But that is all we know respecting them, and whether or not they were clothed, like Etna, with terrestrial vegetation, no man can tell. It is hard to believe that they were utterly barren, but as yet no trace of a flora has been found in Lower Silurian strata.

There is another point bearing on the physical geography of the time that has sometimes crossed my mind in connection with these island volcanoes, which is, that we may, with some show of probability, surmise, that then, as now, the prevalent winds of this region blew from the west and southwest, for the following reason. In Merionethshire and Caernarvonshire the various volcanic products gradually thin out and disappear to the west, between the ground south of the estuary of the Mawddach, and the neighbourhood of Tremadoc on the north. As we pass round the large crescent-shaped masses of lavas and ashes it becomes evident as a rule that the ashy series of beds show a tendency to thicken more and more in an easterly direction for a space, and finally to decrease in