thickness in the same direction, till, in the Bala country and further north, they are represented only by a few insignificant beds of ashy strata, a character of which the Bala limestone itself sometimes feebly partakes. The idea is, that the prevalent westerly winds had a tendency during eruptions to blow the volcanic dust and lapilli eastward, and that these materials fell thickest near the vents and at middle distances, and gradually decreased in quantity the further east they were carried.

To those unaccustomed to technical geological arguments a word of warning remains. Let no reader suppose that in Wales he will now find clear traces of these old volcanic cones and craters in their pristine form, such, for example, as the extinct craters of Auvergne and the Eifel. Semi-circular hollows surrounded by igneous rocks like those of Cwm Idwal and Cwm Llafar he will find plentiful enough, and these, in old guide-books and other popular literary productions, have sometimes been described as craters. So far from that being the case, such *cirques* or corries are ancient valleys of erosion, the rocks of which have been exposed to the weather perhaps ever since Upper Silurian times, and have been subsequently modified by glaciers, during the last Glacial Epoch, in days, comparatively speaking, not far removed from our own. The truth about these ancient volcanoes is, that long after they became extinct the whole Lower Silurian area was disturbed and thrown into anticlinal and synclinal curves, which suffered denudations before the beginning of the deposition of the Upper Silurian rocks, and the positions in which the lavas and ashes now stand will approximately be best understood, if we suppose Etna by similar disturbances to be half turned on its side,