

Wales, and the assemblage of fossils in each is very nearly the same.

I have already mentioned the occurrence of an important episode characterised by volcanic eruptions, during the accumulation of the Lower Silurian strata in Wales. The proof of this is that in Carnarvonshire and Merionethshire extensive interstratified sheets of felspathic lavas and ashes are associated with the Silurian rocks on two horizons, the lower that of the Llandeilo beds, and the higher in the Caradoc series. I do not, however, wish to imply that between them there was a complete cessation of volcanic activity, but simply that in what is now the region of North Wales, there was for a time an interval of comparative repose.

If any one will examine the Geological Survey maps of North Wales, he will observe that opposite Barmouth, beginning with the hills on the south side of the estuary of the Mawddach, a great series of igneous rocks sweep round the country in a crescent form, including the mountains of Cader Idris, Aran Mowddwy, the Arenigs, and lastly the Moelwyns, the high southern escarpments of which overlook from the north the beautiful vale of Ffestiniog. These consist of felspathic lavas, and interstratified ashes or tufas, the whole being also associated with bands of Silurian slate, which are sometimes found to be fossiliferous, especially when bedding and cleavage coincide. Among these volcanic rocks, but especially in the Arenig, Tremadoc, and Lingula beds below them, there are numerous lines and bosses of greenstones (diorites, &c.), and also of more purely felspathic traps, which are not interbedded but distinctly intrusive. These I have elsewhere shown give evidence of the underground working of the