

Cambrian mountains of Merionethshire, such as those of Afon Atro, Ardudwy, and Afon Ysgethin, are marked by deep grooves and striations pointing more or less westward, according to the trend of the valleys.

In ascending the valley from Llanbedr on the coast south of Harlech to Llyn-cwm-bychan, the experienced eye is at once attracted by the long smooth sweeps of the ice-ground rocks of Mynydd Llanbedr, all trending towards the west, and from the summit of Graig-ddrwg, looking south towards Rhinog-fawr, the same effects of old glacier-ice are seen on a still grander scale. The deep craggy pass of Bwlch-drws-Ardudwy is itself strongly ice-grooved, while the western flanks of Graig-ddrwg are covered with deeply incised striations, up to the very summit of the mountain, all trending westward. The rock-bound hollows of Llyn-cwm-bychan, and other mountain turns, tell in like manner of the effects of thick masses of glacier-ice, as I shall afterwards explain.

The broad flat moors and roughly hilly, but not mountainous country of Cors-goch, Afon Eden, Trawsfynydd, and indeed all the lower ground bounded by the splendid amphitheatre of scarped mountains formed by the Arenigs, the Manods, the Moelwyns, and the Cambrian steeps of Diphwys, Graig-ddrwg, Rhinog-fawr, and Cefn-cam, were at the same time filled to the brim with deep accumulations of snow and ice, from which were discharged radiating currents of glaciers, one pressing southward to swell the ice-stream that filled the valley of what is now the estuary of the Mawddach, another through the Pass of Afon Trewern between Arenig Mawr and Arenig Bach eastward towards Bala and the valley of the Dee, there to be aided in the work of erosion by the glaciers that descended from