

boundary of the island, a very different scene appears. Bold anticlinal axes, and other dislocations without number, undulate the stratification of Cornwall and Devon, South and North Wales, the western sides of Derbyshire, Yorkshire, and the almost insulated group of the Cumbrian mountains ; and these include the points of greatest elevation, and the ridges of boldest rocks, both inland and on the sea coast, which England has to boast.

Most of the great dislocations here noticed occurred in early geological periods, and besides the local elevations which they have imparted to the western districts of England, they had the effect of entirely changing the bed of the sea, in such a manner as to cause general slopes to the eastward, which were not reversed during the whole subsequent periods of geology. Hence arises another peculiarity in physical geography, which has been long known to inquirers and surveyors, viz. the alternation of ridges and hollows, on lines directed north-eastward and south-westward through a large portion of the secondary as well as primary districts of England.

To describe instances of so well known a truth would be very unnecessary ; but we may remark in North Wales the alternation of the Menai Straits, the Snowdonian Chain, the Bala Vale, and the Berwyn Mountains, all ranging north-east and south-west, as very illustrative of the fact and the explanation. In South Wales Mr. Murchison has traced the same connection of anticlinal axes and hilly ground ; the great hollow which crosses Devonshire from west to east, is formed in a trough of the strata between the Dartmoor and Exmoor ridges ; Mendip is an anticlinal rock ranging east and west ; Malvern, a narrow chain passing north and south ; Charnwood Forest runs west north-west.

The effect of these various elevations on the ancient strata in the western parts of England, is sensible in the very general declivity to the east or south-east which belongs to the carboniferous, oolitic, and cretaceous