

of the Caledonian canal, fringed by many small islands on the west. The next would extend from the canal to the valleys of the Tay and Forth, bordered by many islands on the west and south, and in both the ground was penetrated by many fiords, some of which were longer than our longest fiord-lochs of the present day. The third large island included most of the country between the Clyde and Forth, and the Solway and Tyne, while two deeply-indented islands lay south of that line and the Derbyshire hills north of Ashbourne. On the east of these would lie fourteen islands, formed of part of the North and East Ridings of Yorkshire, while nine-tenths of Wales would form one large island with many small ones lying to the east, south-east, and south, including the highlands of Devon and Cornwall.

Such islands, as far as Wales and Cumberland were concerned, I am convinced still maintained their minor glaciers, which descended to the sea, where their ends broke off as icebergs, which, floating hither and thither, deposited their stony freights as they melted. We shall, however, presently see that in some districts there is evidence of the country having sunk much more than 500 feet.

In many parts of England shell beds associated with glacial material are by no means uncommon, and it is difficult to believe that in scores of places where they occur, on the coast cliffs between Berwick and the Humber, they had always been thrust up from the sea by glaciers. The most plentiful species there, as determined by Mr. Etheridge, are *Cardium edule*, *Cyprina Islandica*, *Dentalium entalis*, *Leda oblonga*, and *Saxicava rugosa*, together with undetermined species of *Venus* and *Tellina*. In Cheshire, near Macclesfield, lying between a lower and an upper Boulder-clay, Professor