

CHAPTER XIV.

CHRONOLOGICAL RELATIONS OF THE GLACIAL PERIOD AND
THE EARLIEST SIGNS OF MAN'S APPEARANCE IN EUROPE,*Continued.*

SIGNS OF EXTINCT GLACIERS IN WALES — GREAT SUBMERGENCE OF WALES DURING THE GLACIAL PERIOD PROVED BY MARINE SHELLS — STILL GREATER DEPRESSION INFERRED FROM STRATIFIED DRIFT — SCARCITY OF ORGANIC REMAINS IN GLACIAL FORMATIONS — SIGNS OF EXTINCT GLACIERS IN ENGLAND — ICE ACTION IN IRELAND — MAPS ILLUSTRATING SUCCESSIVE REVOLUTIONS IN PHYSICAL GEOGRAPHY DURING THE POST-PLIOCENE PERIOD — SOUTHERNMOST EXTENT OF ERRATICS IN ENGLAND — SUCCESSIVE PERIODS OF JUNCTION AND SEPARATION OF ENGLAND, IRELAND, AND THE CONTINENT — TIME REQUIRED FOR THESE CHANGES — PROBABLE CAUSES OF THE UPHEAVAL AND SUBSIDENCE OF THE EARTH'S CRUST — ANTIQUITY OF MAN CONSIDERED IN RELATION TO THE AGE OF THE EXISTING FAUNA AND FLORA.

Extinct Glaciers in Wales.

THE considerable amount of vertical movement in opposite directions, which was suggested in the last chapter, as affording the most probable explanation of the position of some of the stratified and fossiliferous drifts of Scotland, formed since the commencement of the glacial period, will appear less startling, if it can be shown that independent observations lead us to infer that a geographical revolution of still greater magnitude accompanied the successive phases of glaciation through which the Welsh mountains have passed.

That Wales was once an independent centre of the dispersion of erratic blocks, has long been acknowledged. Dr. Buckland published in 1842 his reasons for believing that the Snowdonian mountains in Caernarvonshire were formerly