flowed northwards into the plain of Ayrshire, where, joining the stream that was descending from the Highlands, it bent round to the west and went southwards down the Firth of Clyde. Still thicker and more extensive was the great ice-field that crept off the southern side of Galloway into the Solway Firth and the Irish Sea, both of which, at the height of the Ice Age, were filled with ice. Across the eastern part of the uplands, the pressure of the icy stream, which, coming down from the Highlands, spread out over the low-land valley, seems to have driven the southern ice eastward, and the united stream turned away southward along what is now the bed of the North Sea. Proofs of these movements are furnished not only by the direction of the striæ, but by the scattered erratics which have been strewn over the ground. The evidence for them is given in summary form on the Map of the Glaciation of Scotland accompanying this volume.

The boulder-clay tells perhaps even more markedly in the scenery of the Southern Uplands than in the Highlands. It has accumulated to a great thickness in the valleys, where it forms a kind of sloping floor or platform, extending from the base of the declivity on either side, and trenched by the stream which, in winding across it, has exposed great scars of it in the banks. It is more especially banked up on the lee sides of the hills, while the opposite sides, against which the full pressure of the ice came, are comparatively bare. In Peeblesshire and Selkirkshire, where the march of the ice-sheet was from the west, the west sides of the valleys are thickly spread with boulder-clay, while on the east side the bare rock comes abundantly to the surface.

In these valleys, the boulder-clay has a twofold influence

vast sheet that moved outwards and downwards into the low grounds on all sides.