

gneissic rocks (4) that underlie the Old Red Sandstone.

Again, if we examine the map of Scotland, we find a broad band of Old Red Sandstone running from Stonehaven on the east coast to Dumbarton on the west, and there also masses of conglomerate lie at the base, as in No. 2, fig. 56. Overlooking this broad band, the Grampian mountains No. 1 rise high into the air, still reminding the beholder of the ancient line of coast of a vast inland lake, against which the waves of the Old Red Sandstone waters beat, and from its partial waste, aided by glaciers and the work of coast-ice, formed the boulder-beds that now make part of the conglomerates. We are thus justified in coming to the conclusion that the North Highlands generally formed land before the time of the Old Red Sandstone, the Grampian mountains, even then separated from the Scandinavian chain, as a special range forming a long line running from north-east to south-west, the bases of its hills being washed by the waters which deposited the Old Red Sandstone itself.

What amount of denudation the gneissic mountains of the Highlands underwent, before and during the deposition of the Old Red Sandstone, it is impossible to determine, but it

Fig. 55.

