

the Findhorr., after hurrying over ridge and sallow, amid combinations of rock and wood, wildly picturesque as any the kingdom affords, enters on the lower country, with a course less headlong, through a vast trench scooped in the pale red sandstone of the upper formation. For miles above the junction of the newer and older rocks the river has been toiling in a narrow and uneven channel, between two upright walls of hard gray gneiss, thickly traversed, in every complexity of pattern, by veins of a light red, large grained granite. The gneiss abruptly terminates, but not so the wall of precipices. A lofty front of gneiss is joined to a lofty front of sandstone, like the front walls of two adjoining houses; and the broken and uptilted strata of the softer stone show that the older and harder rocks must have invaded it from below. A little farther down the stream, the strata assume what seems, in a short extent of frontage, a horizontal position, like courses of ashlar in a building, but which, when viewed in the range, is found to incline at a low angle towards the distant sea. Here, as in many other localities, the young geologist must guard against the conclusion, that the rock is necessarily low in the geological scale which he finds resting against the gneiss. The gneiss, occupying a very different place from that on which it was originally formed, has been thrust into close neighborhood with widely separated formations. The great conglomerate base of the system rests over it in Orkney, Caithness, Ross, Cromarty, and Inverness; and there is no trace of what should be the intervening grauwacke. The upper formation of the system leans upon it here. We find the Lower Lias uptilted against it at the Hill of Eathie — the great Oolite on the eastern coast of Sutherland; and as the flints and chalk fossils of Banff and Aberdeen are found lying immediately over it in these counties,