

where, the believers in subterranean agency as the primary cause of rock-basins might look for support to their views. They might insist that the sides of the glen are themselves the sides of the open fissure, worn down indeed by subsequent denudation, yet still gaping asunder as when they were first parted, and that the lakes lie in the deeper parts of this great chasm. But an examination of the valley will convince the observer that the amount of rock which can be shown to have been worn away from the surrounding ground would have far more than sufficed to fill up the cavities. Let him, for instance, stand on the ice-worn barrier of rock between Loch Ness and Loch Oich. He will see there that, even on the supposition of an open fissure, the deep concavity of the glen at this point must be due to denudation, for as the rocks can be traced across the bottom of the valley there is no room for a wide open fissure. The very arrangement of the rocks is enough to prove that the hollow has been worn out by the erosive agencies of nature; the upturned strata, vertical or highly-inclined, present their truncated ends to the sky, and can be followed bed after bed across the glen till they rise high the effects of the fracture, or of one continued in the same line, can be seen along the western side of the Moray Firth where the Jurassic beds of Eathie and Shandwick are thrown down against the Old Red Sandstone. Hence the downthrow at this end of the line is to the east side. It seems to me that this line has been from a very early geological period up, indeed, to the present day, a line of weakness in the crust of the earth. The prolongation of the tongue of Old Red Sandstone up the valley of Loch Ness appears to show that the valley is older than that formation: the dislocation of the Eathie and Shandwick shales proves disturbance even after the Lias; and the agitation of the waters of Loch Ness, during great earthquakes in modern times, shows that even yet underground movements tend to reveal themselves along the same old line. Hence it may be reasonably conjectured that the fracture along the line of the Great Glen has been repeatedly modified during the subterranean changes of successive geological periods.