

forcibly as a testimony to the vast degradation of the country since older Tertiary time. I have referred to the innumerable parallel basalt dykes which range across the country in a general west and east, or north-west and south-east direction, and which can be traced up and into the great basaltic plateaux of the west. These dykes, therefore, are certainly not older than early Tertiary time. Now it is obvious that wherever the lava rose in the fissures to the surface it might flow out in a stream, and must have done so if the contour of the ground had been at all like what it is now. The dykes run over the tops of hills 3000 feet high, descend from these elevations into deep valleys, and cross lakes whose bottoms are actually below the sea-level. Remarkable examples occur in the district of Loch Lomond. One of the dykes, twenty to thirty feet broad, traverses Ben Vorlich at a height of 2950 feet, and sweeps down the mountain side to Loch Lomond, which it crosses. Reappearing on the other side of the lake, it ranges across ground more than 2000 feet in elevation, and then plunges into Loch Katrine. The difference of level between the dyke near the top of Ben Vorlich and the bottom of Loch Lomond is 3130 feet.¹ Had the deep trough of Loch Lomond been in existence when this fissure was filled with lava, the molten rock never could have risen to the summits of the hills on either side, but would have poured out upon the lake floor and filled up the hollow. Here, then, is a demonstration that, since older Tertiary time, a mass of schists more than 3000 feet thick has been removed by denudation, and a deep wide glen has been eroded. But it is only the happy accident of the dyke occurring there that has enabled us to

¹ These measurements have been made for me by Mr. H. M. Cadell, who has recently mapped the ground in the course of the Geological Survey.