

with grey, worn, and weathered hummocks of schist and granite. Blocks of granite of every size cumber the ground, standing sometimes on rocky knolls, sometimes half buried in morass, as the frosts have split them off and rent open the protruding knobs of rock. Slanting up the mountain, the observer has leisure to remark, as he crosses streamlet after streamlet, that their channels often run in deep groves cut out of the solid unfractured rock. He finds them grow fewer as he rises.¹ On the slopes too the boggy peat and shaggy heather begin to give way to long streams of angular granite blocks, among which the scanty vegetation is at last reduced to mere scattered patches of short grass and moss, with here and there a little alpine plant. A wilderness of debris now covers the bald scalp of the mountain. The solid granite itself cannot be seen through the depth of its own accumulated fragments; but when the crest of the height is gained, the rock is found peering in shattered fragments from amidst the ruin. This narrow mountainous ridge is then seen to rise between two profound glens. The north-eastern glen is crowned with a rampart-like range of pink-hued granite cliffs, from which long courses of debris descend to the bottom. The glen that lies far below on the south-western side is overhung on its farther declivity by the vast, rugged precipice of Ben Nevis, rising some fifteen hundred or two thousand feet above the stream that wanders through the gloom at its base. That dark wall of porphyry can now be seen from bottom to top, with its huge masses of rifted rock standing up like ample buttresses

¹ The highest spring noted by Petermann on the flanks of Ben Nevis was at a height of 3602 feet, or 766 feet below the summit. A spring on Ben Alder, one of the highest of the Grampians, was found by the same observer to be 3650 feet above the sea (*Edin. New. Phil. Jour.*, xlvii. 316). A well fed from melted snow supplies the Ben Nevis Observatory, 64 feet under the top, but fails after a fortnight of dry summer weather.