

Hence, in spite of the efforts of nature to heal the wounds with a covering of vegetation, fresh raw scars are always appearing. Among solid rocks similar effects are to be seen, though the rate of degradation is there much slower. Where a thick stratum of pervious stone lies upon another of more impervious kind—a massive sandstone upon shale or clay, for example—and where these rocks end off in a cliff or steep bank, the conditions are favourable for the occurrence of landslips. Water oozing out along the outcrop of the lower bed loosens the support of the overlying stratum, which, consequently, from time to time breaks off in large blocks that roll down to join the masses that have already fallen. In this way, the vertical edge of a harder bed forms an escarpment, which, by continual loss along its face, creeps backward.

FROST.

In close connection with the disintegrating effects of springs on cliffs and steep slopes of rock, comes the influence of frost. When the water, which is trickling between the joints of a cliff, is frozen, it expands, and in so doing exerts a vast disparting force on the rocks within which it is confined. On the thawing of the ice, the rocks which have been thus separated do not return to their former position; the severance remains until it is increased by another frost. Winter after winter, as the loosened masses are separated, the wedge of ice is driven farther in between them, and at last, losing cohesion and support, those on the outside fall with a crash from the face of the cliff, leaving a raw scar to mark whence they have come.

Every mountain group in Scotland will be found to supply examples of this operation. Some rocks being more jointed or opening more easily along their joints than others,