

cold regions of the atmosphere, the mean annual temperature is below the freezing-point, the condensed moisture falls chiefly as snow, and remains in great measure unmelted throughout the year. A line, termed the *snow-line*, can be traced, below which the snow disappears in summer, but above which it continues to cover the whole or great part of the surface. The snow-line comes down to the sea around the poles. Between these limits it rises gradually in level till it reaches its highest elevation in tropical latitudes. South of lat. 78° N. it begins to retire from the sea-level, so that on the coast of northern Scandinavia it is already nearly 3000 feet above the sea. None of the British mountains quite reach it. In the Alps it stands at 8500 feet, on the Andes at 18,000 feet, and on the northern slopes of the Himalayas at 19,000 feet.

Snow exhibits two different kinds of geological behavior: (1) conservative, and (2) destructive. (1) Lying stationary and unmelted, it exercises a protective influence on the face of the land, shielding rocks, soils, and vegetation from the effects of frost. On low grounds this is doubtless its chief function. (2) *a.* When snow falls in a partially melted state it is apt to accumulate on branches and leaves, until by its weight it breaks them off, or even bears down entire trees. Great destruction is thus caused in dense forests. *b.* Snow accumulating on gentle slopes and slowly sliding downward, pushes soil or loose stones down-hill. Considerable transport of rotted rock and boulders may thus arise.²¹⁹ *c.* Snow on steep mountain slopes is frequently during spring and summer detached in sheets from 10 to more than 50 feet thick and several hundred yards broad and

²¹⁹ H. Y. Hind, *Canadian Naturalist*, viii. 1878, pp. 967, 976.