

depths of one hundred and fifty to three hundred fathoms in cold water. It must have been killed as the elevation of the area brought it up into upper and warmer layers of water.²⁰⁶ It has even been said that the pines on the edges of the Norwegian snow-fields are dying in consequence of the secular elevation of the land bringing them up into colder zones of the atmosphere.

Any stratum of rock containing marine organisms which have manifestly lived and died where their remains now lie, may be held to prove a change of level between sea and land. In this way it can be shown that most of the solid

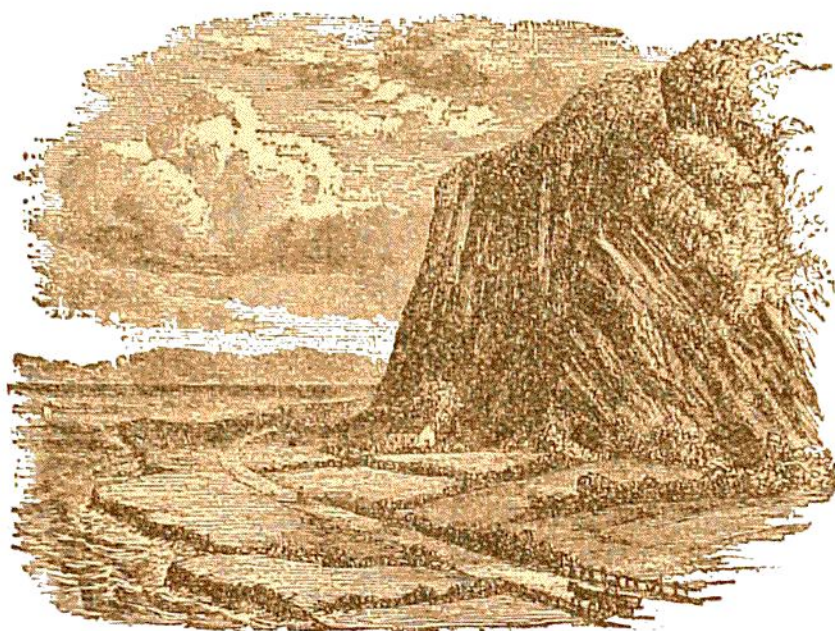


Fig. 75.—View of a line of ancient sea-cliff pierced at the base with sea-worn caves and fronted by a Raised Beach.

land now visible to us has once been under the sea. High on the flanks of mountain-chains (as in the Alps and Himalayas), undoubted marine shells occur in the solid rocks.

Sea-worn Caves.—A line of sea-worn caves, now standing at a distance above high-water mark beyond the reach of the sea, affords evidence of recent change of level. In the accompanying diagram (Fig. 75) examples of such caves are seen at the base of the cliff, once the sea-margin, now separated from the tide by a platform of meadow-land.

Raised Beaches furnish one of the most striking

²⁰⁶ Quoted by Vom Rath in a paper entitled "Aus Norwegen," *Neues Jahrb.* 1869, p. 422. For another example, see Gwyn Jeffreys, *Brit. Assoc.* 1867, p. 431.