

than that from the action of the breakers.²⁸⁰ Even when a cliff actually overhangs, however, it may often be shown that the apparent greater recession of its base, and inferentially the more powerful denuding action of the sea, are deceptive. In Fig. 172, one of innumerable examples from the Old Red Sandstone cliffs of Caithness and the Orkney and Shetland Islands, we at once perceive that the process

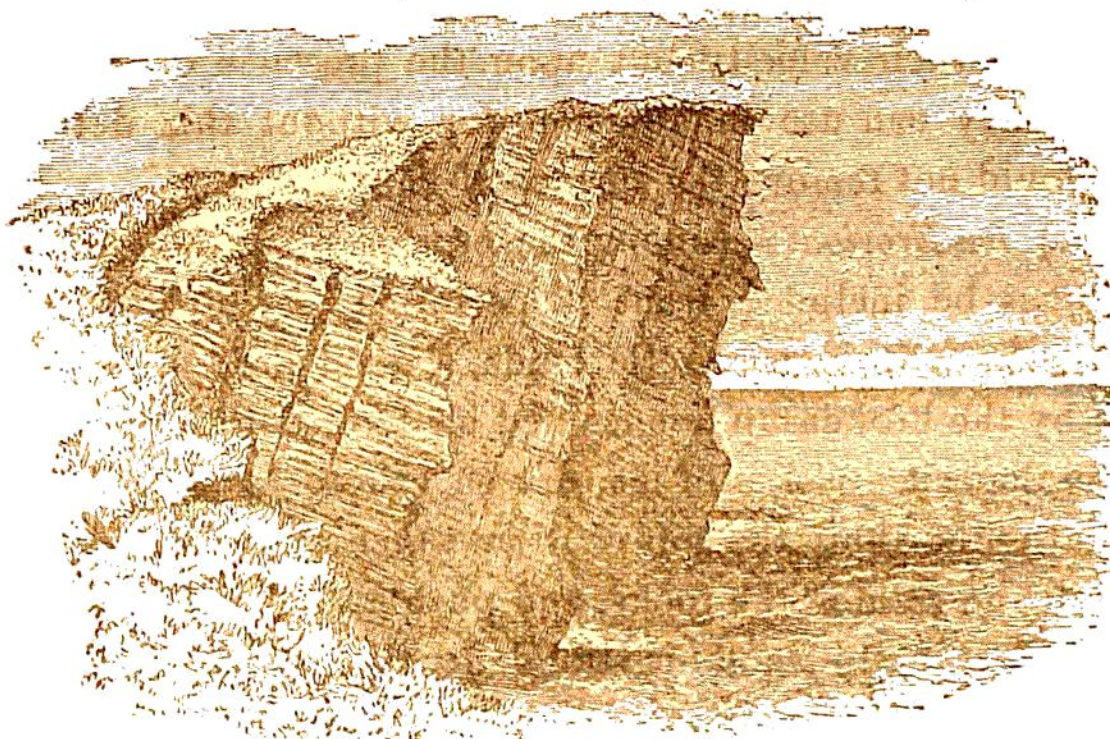


Fig. 172.—Overhanging cliff, Brough of Birsá, Orkney, due to landward inclination of joints.

of demolition is precisely similar to that already cited in Fig. 170. The cliff recedes by the loss of successive slices from its sea-front, which are wedged off not by the waves below, but by the subaerial agents above, along lines of parallel joint. To the inclination of these divisional planes at a high angle from the sea, the precipice owes its slope toward the land.

(v.) *Tidal Erosion*.—Reference has already been made (pp. 733, 736) to existence of currents at considerable depths

²⁸⁰ Whitaker, *Geol. Mag.* iv. p. 447.