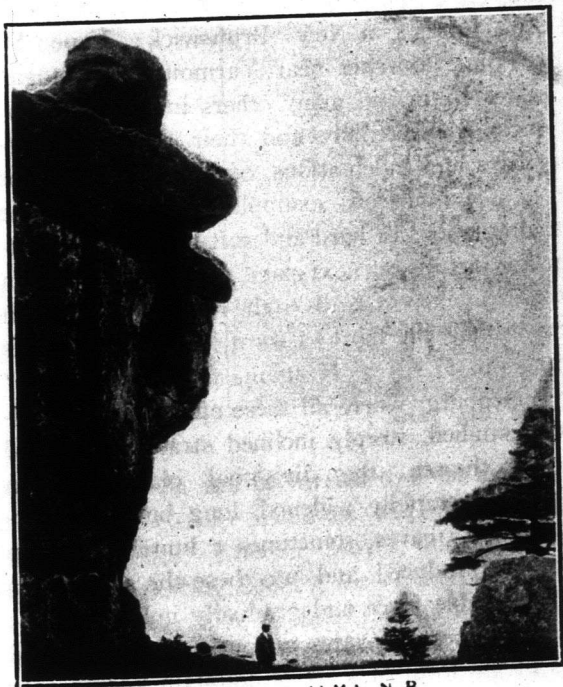


Our Coasts. II.—Their Character.

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What are the lessons of the sea-coast? They are many and most interesting. To appreciate them, all that one needs is to *observe* and to *think*.

The most important lesson to be thus derived is, I fancy, the fact of *change*. Everywhere this feature is pressed upon one's attention, though more obviously of course at some points than at others. Let a student stand upon a seashore, such for instance as almost any part of the Bay of Fundy coasts, and after satisfying his sense of beauty or of grandeur, ask himself what fact forces itself most strongly upon his attention? Is it not the fact of *waste* and *wear*? If the coast be bold, like that of Hopewell Cape, illustrated in the last chapter, or that near Alma, N. B., of which a



CLIFF NEAR ALMA, N. B.

photograph is here given, he will find that all the striking and often grotesque details of the picture are the evident results of a carving process, whereby the sea is eating, or attempting to eat, its way into the land. Here there is a great battlemented wall of which, as in the photograph, the top overhangs the base, and below which the visitor treads with fear, as he sees great masses already disjointed and liable at any moment to fall, hanging threateningly above his head; here he sees great angular blocks, often many tons in weight, which have al-

ready fallen; at one point he sees a huge cave, sheltering perhaps some picnic party, but evidently owing its origin to the excavating action of the waves; at still another point he sees some huge mass of rock, wholly disconnected from the mainland of which it once formed a part, and now, though possibly eighty or a hundred feet in height, resting on so narrow and frail a base that one wonders how it can stand at all. Sometimes, with that tendency which Nature so often exhibits towards the ludicrous, the details of the sculpture suggests fanciful resemblances to familiar objects, or to the human form or countenance, and these explain the names they bear, such as Anvil Rock near Quaco, the Friar's Head on Campobello, the Southern Cross on Grand Manan, the Owl's Head on the coast of Albert county, N. B., the Devil's Dodging Hole, and the like.

Evidently to produce such results a large amount of material must have been removed, and we are led to ask at what rate does the removal take place? How much has been removed, and how long a time was required for its accomplishment? Is the removal uniform at all times and places and is there any limit to its continuance? Finally what has become of the material removed? Some of these questions we must now attempt to solve.

In the case of the "Hopewell rocks," where for nearly half a mile there is a succession of bluffs and outstanding masses, carved with a degree of variety and grandeur probably not approached elsewhere along the whole Atlantic seaboard of America, the visitor must choose his time, for at high water passage along the base of the bluffs, except by boat, becomes impossible. The waters not only reach but sweep the face of the bluffs, being endlessly moved by wind and tide, while in periods of storm the waves are driven with fury against the rocks, reaching far above their ordinary level, and striking with a force which even the hardest materials cannot altogether resist. Water then is the tool by which all this work is being accomplished, and that work never ceases. Ever since there have been sea coasts upon which the restless waters of the sea could act, the wear of the shores, their waste and removal, have been continually in progress, and the results which we witness are at once the proof and the *measure* of the changes thus effected.

But obviously not all portions of the coast are equally susceptible to wear. Rocks are of various