

writings on the botany, physiography, cartography, and history of New Brunswick constitute a most valuable guide in that Province for the naturalist, the antiquarian, and the traveller; and who kindly suggested to me, in personal correspondence, several localities particularly worth visiting, in my search for evidences of modern coastal subsidence.

MODERN VERSUS LATE PLEISTOCENE MOVEMENTS.

The elevated beaches, deltas, and sea-floor deposits which are found along the coast of the Maritime Provinces bear witness to a differential emergence of this region from the sea, in post-Glacial time. Judging from the strength of certain strands, especially along the north coast of Gaspé peninsula, this emergence was not steady, but consisted of two or three periods of uplift, separated by periods of stability or of subsidence. In the lower Saint Lawrence, one shore-line, in particular, which forms a wide shelf only twenty feet above the modern sea-level, and a great sea-cliff, records an interval of stability or of subsidence which must have lasted for a considerable length of time, and was followed by an uplift of approximately twenty feet.¹ Recent observations around the coast of Gaspé peninsula point to the probability that this recent upward movement of the lower Saint Lawrence region was attended by a downward movement of the more southerly coast of Gaspé and New Brunswick. It is not known whether the upward movement is still in progress along the lower Saint Lawrence, or not. From New Brunswick, however, a number of phenomena have been adduced as evidence that the more southerly coast is still subsiding. That there has been coastal subsidence, locally, if not over a wide region, since the last Glacial epoch, and presumably since the great Champlain emergence, is shown by the famous submerged forest at Fort Lawrence, Nova Scotia. The supposed evidences of a modern continuance of the subsidence, however, are open to question. On this account, it is important to discriminate

¹J. W. Goldthwait: The twenty-foot terrace and sea-cliff of the Lower Saint Lawrence, Amer. Journ. Sci., vol. XXXII, 1911, pp. 291-317.