

that of former times. They are kept hard at work in the school room, and have the look rather of undergraduates than of sailors.

July 26.—Preached in Chalmers' Church in the forenoon, and St. Matthew's in the afternoon.

July 28.—Spent the night at Windsor College, the oldest in British America. It is delightfully situated on a rising ground at some distance from the town. It is connected with the Church of England, and is the training school for the clergy. The Arts course three years, and the students preparing for the ministry receive their theological education at the same time, but they have to attend a fourth year which is exclusively devoted to theology. This is not so satisfactory as the course of the Church of Scotland, which requires the Arts course to be completed before the theological studies commence. Professor Everett is engaged in an interesting series of observations on atmospheric electricity with the aid of ingenious apparatus furnished by Professor William Thomson, of Glasgow College. He has also a small astronomical observatory with an altitude and azimuth circle by Ramsden. The residence of Judge Haliburton is close to Windsor. His reputation as a writer, however, is not so high as in England; most of the villagers think they could write as clever books themselves.

July 29.—Soon after leaving Windsor we passed the region of Grand Pre and the river Gaspereau, the scene of Longfellow's *Evangeline*. The fog was, however, so thick, that I could not appreciate the beauty of the landscape. The French are still found in considerable number all along the head of the Bay of Fundy where dyke lands exist. I landed at Parrsboro, and drove by stage to Amherst, a distance of 30 miles.

July 30.—Left Amherst for the Joggins. It was necessary to cross the Bay of Cumberland, one of the secondary bays of the Bay of Fundy. Here the tide rises about 70 feet at spring tides. When the tide is rising, a bore is formed, that is, a perpendicular white crested wave rushes up the shallow beach and the estuaries. The swine feeding on shell fish on the mud flats, take instantly to flight when they hear the first roar of the bore advancing on the land. The ferry boat being unable to come nearer than a few yards of the shore, I drove out to her, but, although this required only a few seconds, the driver could with difficulty get to land with his horse and waggon, the tide having nearly covered both. The water is of a yellowish brown colour from the mud suspended in it. At every tide a deposit of mud is left, and thus the fertile dyke lands are formed. They receive this name from the dykes formed to keep out the sea.—In this dyke land there are deep water courses. These are crossed by what is termed an *abitou*, being a bridge, with flood gates to keep out the sea at full tide and allow the stream to flow at ebb tide. I was hospitably

entertained by Mr. Seamans, who, from his vast territories receives the name of the king of Minudie. He made his fortune by a grind stone quarry on the coast. Mr. Cutler, who leases the quarry, drove me to the Joggins. The best stone is found on the beach at low water mark. The block is blasted from the rock at ebb tide, a chain is put round it, and this is attached to a boat. At high water the boat floats and bears up the block, which is thus brought to high water mark and worked into a grindstone.

Mr. Cutler, pointing to a huge stone, admiringly said, "There is clear grit for you." I eagerly asked, What is clear grit? as I had always failed in getting an intelligible explanation of this term, as applied to a political party in Canada. His answer was, "Clear grit is perfect purity, no hard black specks to turn the edge of the finest tool." We visited a school at the quarries for the labourers who are chiefly French. It was taught in a rude log hut by an old man, whose accent at once told that he belonged to Aberdeen. It was somewhat singular to find, in this remote corner of the world, a venerable Scotch Presbyterian teaching the children of French Catholics. The religious knowledge of the children was fair, but their ignorance on other matters was rather startling. Boys of thirteen or fourteen had never heard of London, and could not tell who the Queen of England is. The idea of disloyalty was however dispelled, when I found that they had never heard of Paris or Napoleon. This ignorance has contributed to the isolation of the Acadians, and made them a distinct race. They seldom intermarry with other than their own people; and the features of the race have become so distinct that you could as readily distinguish the French as you would Indian children. The type of feature is quite different from that of the Normandy peasantry, from whom they are descended. I spent the afternoon in inspecting the Joggins, which Dr. Dawson has made so familiar to Geologists, in his work on the geology of the Province. It is the best and most complete specimen of the coal formation in the world. The strata are shewn in sections along the sea shore. For a distance of about three miles, you can walk at the base of the cliff which rises several hundred feet, and examine the successive strata as you would the leaves of a book. The strata are inclined at about an angle of forty-five degrees, so that at every step you come to some new layer with its embedded fossils. The surface is always kept fresh by the action of the high tides of the Bay of Fundy and the weather, and as it wears away, discloses some new treasures. Fossil forests are seen standing on the soil on which they grew. In one place an old fossil stump with its roots grasping the solid stone was seen beside a recent stump of about the same size. At a distance you might suppose them contemporaneous, but at a nearer view, how vast the gulf of time that separated them!