

Reaching Halifax on the 20th of May, Logan spent several weeks in examining portions of the coal-fields of Nova Scotia and New Brunswick, and it was at this time that he made his section of the Coal Measures at the South Joggins, which, as has been truly said, is "a remarkable monument of his industry and powers of observation." It gives details of nearly the whole thickness of the coal formation of Nova Scotia, or 14,570 feet, including 76 beds of coal and 90 distinct *Stigmaria* underclays. Shortly after his visit to the Joggins, he wrote to a friend as follows: "I never before saw such a magnificent section as is there displayed. The rocks along the coast are laid bare for thirty miles, and every stratum can be touched and examined in nearly the whole distance. A considerable portion has a high angle of inclination, and the geological thickness thus brought to view is very great. I measured and registered every bed occurring in a horizontal distance of ten miles, taking the angle of dip all the way along." And again, in a letter to De la Beche written in the spring of 1844, referring to the Joggins section, he says: "Since my return from field-work, I have reduced all the measurements and made out a vertical column. It occupies fifty-four pages of foolscap, closely written, and you will be astonished at the details in it."

Reaching Gaspé early in July, the summer and autumn were spent in making an examination of the coast, while Mr. Murray was at work in the Upper Province, examining the country between Lakes Huron and Erie. The Gaspé peninsula had been selected by Mr. Logan as the field for his first operations, as it was thought that outlying patches of the Carboniferous might be found to exist there, and the government was especially anxious to ascertain whether there was any truth in the reported occurrence of coal.

The following season, the work in Gaspé was continued, the Director being this time accompanied by Mr. Murray, who, in 1845, again carried on the work, while Mr. Logan was engaged in explorations on the Upper Ottawa and Mattawan. Altogether, during the three seasons, 800 miles of the Gaspé coast were examined, and several sections made across the peninsula, from the St. Lawrence to Bay Chaleur. No coal was found, but many geological facts of importance were accumulated, and a large amount of topographical work accomplished in what was previously almost a *terra incognita*.

"Living the life of a savage, sleeping on the beach in a blanket sack with my feet to the fire, seldom taking my clothes off, eating salt pork and ship's biscuit, occasionally tormented by mosquitoes,"—such is the record which Logan has left us of his Gaspé life, the foretaste of what was to be endured for many years. From early dawn till dusk he paced or paddled, and yet