

down in this latter paper appeared so indisputable to Mr. Stephenson, the eminent engineer, that he has been materially guided by it in reference to the construction and site of the great Victoria Bridge.

In 1842 the Canadian Legislature came to the determination of having the Province geologically explored, and it was in the same year that Mr. Logan—having been recommended most strongly by the leading geologists of Great Britain, from each of whom he received the most flattering testimonials—was applied to by Lord Stanley, then Secretary for the Colonies, to undertake the investigation. In the same year he proceeded to Canada, completed a preliminary examination, made arrangements with the Colonial Government and returned to Britain,—the whole expense of which visit he paid out of his own pocket,—and early in the following year (1843) he finally returned to Canada, accompanied by an assistant, to commence the investigation in earnest.

It was in 1842, also, that Mr. Logan examined and accomplished the measurement of the remarkable section of the coal measures at the South Joggins, in Nova Scotia: a work acknowledged to be one of the most important in American geology, as the key to the structure of the whole Eastern coal basin;—and which was published as an appendix to his Report of Progress in 1843.

The first grant of money made by the Canadian Legislature to carry out the proposed survey for two years, was only £1500 currency, so that it will be obvious it was only by the strictest economy that the salaries could be paid, and travelling and other expenses met; indeed, notwithstanding all the care possible, the necessary work could not be effected with this small grant, and, accordingly at the expiration of that time, Mr. Logan found himself out of pocket upwards of £800.

During the summer and autumn of 1843 Mr. Logan was employed in an examination of the coast of the Gaspé Peninsula, while he sent his assistant to make a section of the Upper Province, through the country lying between the Lakes Huron and Erie—one grand object of the expedition being to determine what the probabilities were of the existence of coal measures at either end of the Province. In 1844 both Geologists were occupied in exploring and completing a topographical survey of the Gaspé Peninsula, and in 1845, while the Director made a survey of the Ottawa River up to Lake Temiscameng, and of its tributary the Mattawau to Lake Nipissing—his Assistant continued the examination and topography in Gaspé. In 1845 the Legislature made a farther appropriation to the Survey of £2,000 currency per annum for five years, and the same was renewed in 1850