

RIVIERE DU LOUP, December 25th, 1890.

To the

*Directors of the St. Lawrence
and Maritime Provinces Railway Co. ;*

SIRS,—

In obedience to your instructions to make a survey of the line of railway authorized by your Charter to be built from Edmundston in the Province of New Brunswick, at the junction with the Temiscouta Railway (now in operation from Riviere du Loup) to Moncton, or the best point of connection near there with the Intercolonial Railway. I beg now to report to you the result of the survey just completed by me, and under my instructions, by the staff under my orders.

As the most difficult section of the proposed line was that between the St. John River at or near Grand Falls to the Miramichi River, I commenced by sending two of the engineers under my orders, Mr. Force, C. E., and Mr. Cranston, C. E., to walk over and examine the country between those points, and to report on the most favorable route to be obtained.

After receiving their reports I organized and sent out three parties to make an accurate preliminary survey of the line, that under Mr. Force from the St. John River to the Tobique River, under Mr. Cranston from the latter point to Doaktown, on the line of the Northern and Western Railway of New Brunswick, and under Mr. William McCarthy, C. E., from Doaktown to Moncton.

They have now completed their surveys, and have prepared the profiles and estimates of the quantities of work on the proposed line, and I now submit to you the result of the survey.

A practicable and satisfactory route suitable for a first class road, adapted to through traffic, with reasonable grades and curvatures, can be obtained at a moderate cost of construction.

I did not consider it necessary to make a complete survey of that portion of the line from Edmundston to Grand Falls, as there are no engineering difficulties between these points, and a good line can be obtained there by a distance of about 36 miles, but I have also examined a route from the junction of the Grand River with the St. John River, about twelve miles above Grand Falls running to the North of the Sisson Range of Hills, which I am satisfied is readily obtainable, and which would shorten the total through distance by at least ten miles.

The complete survey, however, made by my assistant engineers commenced at Grand Falls and terminated at Berry's Mills, a station on the Intercolonial Railway seven miles north of Moncton.

From Grand Falls to the Tobique, a distance of 24 miles, two local summits of about 300 feet each, on either side of the Salmon River, have to be overcome, and will necessitate a maximum grade of 60 feet to the mile on this section, with a curvature not exceeding 5° or 1146 radius. The work will be somewhat heavy on this section, as two large cuttings are required, and steel viaducts will be necessary at the crossings of the Little River, Salmon River and Little Salmon River, in all about 2300 feet, at an