NORTH AMERICA.

## HALIFAX RAILWAY, AND PUBLIC WORKS IN CANADA. 11

The results deduced from the observations and sections proved this line to be quite impracti-

cable for a railway.

Whilst the line was being tried, other parties explored from Newcastle on the Miramichi River, over to Crystal Brook on the Nipisiguit, the valleys of the Upsalquitch and its tributaries, and as far as the Restigouche River.

The country at the upper waters of the Nipisiguit, and the whole of the Upsalquitch valleys,

were found to be rough, broken, and totally impracticable.

The result of this season's labours went to show, that the best, if not the only, route that would be likely to be practicable, would be by the North-west Miramichi to Bathurst, and then along the Bay Chaleurs.

During the winter, a small reconnoitring party (on snow shoes) was sent up the Metapediac Valley, as far as Metallis Brook, and they made their way across the country, from thence to

the mouth of the Torcadi River on the Rimouski.

Their report on this line was rather favourable, and had there been any necessity for it, it would have been more fully explored the next season (1847).

As soon as this was sufficiently advanced to admit of the parties entering the woods, the

explorations were resumed.

A grade line was carried over the Cumberland Hills. It was cut out through the woods, from the foot on one side to the foot of the slope on the other, a distance of 10 miles, and carefully levelled with a theodolite. This proved it to be quite practicable.

The exploration of the Eastern line was again taken up.

It was commenced at the head of the tide, on the south-west of Miramichi, and was carried up the valley of the north-west Miramichi over to and down the Upsalquitch River to Bathurst, and along the shores of the Bay Chaleurs to the Restigouche, up the Metapediac to the Metis, and along the bank of the St. Lawrence to the Rimouski and Trois Pistoles River.

The result of this exploration was so satisfactory that the party engaged upon it returned by the same route, surveyed it, and took the levels along it back to the Miramichi River.

An exploratory line was then cut through the greater portion of the flat and generally level

country between this river and the province line at Bay Verte.

An examination of the country was made from the Trois Pistoles River along the St.

Lawrence to Quebec, which, with what had been done in Nova Scotia, during this and the former season, completed the whole of one good and favourable line from Halifax to Quebec.

The details are given in the accompanying Report, Appendix, No. 1; General Plan, No. 1; Model Map, No. 2; and Book, containing exploratory sheets, No. 16, containing plans and

sections of the whole route, and comprises the line recommended to be adopted.

Unwilling to abandon the direct route through the centre of New Brunswick, by which, if a line could be successfully carried out, the distance would be so materially shortened, as is apparent by the mileage given in route No. 4, it was determined to use every effort to decide either the practicability or impracticability of such a line. To this end large parties were employed the whole season.

One party explored, cut, and levelled a line the whole way between the Napadagan Lake

and the Restigouche River, a distance of 96 miles.

The line explored was a very great improvement upon the one of 1846. It is considered to be so far satisfactory as to prove that a line for that distance can be found

which would be within the limits of railway gradients.

The details are given in the Assistant-Surveyor's Report, Appendix No. 2, with three exploratory sheets, Nos. 17, 18, 19, containing plans and sections of the ground passed over.

A large party was engaged in trying to find a line from Trois Pistoles River on the St. Lawrence, through the Highlands to the Restigouche River, for the purpose of connecting on to the New Brunswick party. The winter overtook them whilst still embarrassed in the Highlands at the head waters of the Green River.

The dotted lines on the General Plan, No. 1, will show their attempts.

A line was tried up the valley of the Abersquash, but it ended in a cul-de-sac. There was

no way out of it.

A second line was carried from Trois Pistoles over to Lac-des-Isles, Eagle Lake; and by the middle branch of the Tuladi River, the north-west branch and head waters of the Green River were gained.

But this point was not reached, except by a narrow valley or ravine of four miles in length. A theodolite section was made of it, and it was found to involve a grade of at least one in forty-nine, and to attain that, heavy cuttings at one part, and embankments at another, would be necessary.

There is no occasion at present to enter upon the discussion of whether this should condemn a whole line for having attained the Forks; at the head of the main Green River no way was found out of it, and this explored line, like the first-mentioned, must be considered to have ended in a cul-de-sac also.

Further details are given in the report of Mr. Wilkinson, the surveyor entrusted with the more immediate charge of this part of the line, in Appendix, No. 3, with sketches attached to it.

It is just probable that a line might be found by way of the Kedgwick River and the Rimouski, as far as the mouth of the Torcadi River. From which, to the Trois Pistoles, there was ascertained to be no difficulty.

But as the advantages in every way, except distance, are so much in favour of the Eastern line, it would only be incurring delay, and perhaps useless expense, in further explorations of this part of the country.