

BRITISH
NORTH AMERICA.

<i>In New Brunswick.</i>			
Westmoreland County	.	.	301,000
Kent	.	.	640,000
Northumberland	.	.	1,993,000
Gloucester	.	.	704,000
Restigouche	.	.	1,109,000
			4,747,000
<i>In Canada.</i>			
Bonaventure	.	.	2,000,000
Rimouski	.	.	5,000,000
Kamouraska	.	.	500,000
L'Islet	.	.	600,000
Bellechasse	.	.	500,000
			8,600,000
General Total	.	.	14,427,000

The land for the railway will have to be purchased in Nova Scotia for nearly its whole course, and in Canada for the 110 miles mentioned.

The latter, however, it is expected, will cost very little more than the expense which it would be necessary to incur in cleaning, getting out the stumps, and preparing the wild lands for the railroad.

No part of the line will ever be at any great distance from Crown lands; but it will be a question of detail for this part as well as for the Nova Scotia section, whether it will be more advantageous to cut and convey from them the timber and materials required, or purchase them.

The direction of the proposed line being determined upon, the next points which present themselves for consideration are, the character of the road and method of construction.

In the first instance, it is considered that one line of rails will be sufficient; but in taking ground for the railway and stations, and wherever the line passes, regard should be paid always to the prospect of its being made at some future time a double track. And in the anticipation of a heavy traffic, which there is a fair prospect of soon passing along it, and with a view to ultimate economy, as well as the saving of much inconvenience, it is recommended that the road (being intended for the great trunk line) should be constructed at once in a substantial and permanent manner, with a good heavy rail, capable of bearing high rates of speed for passenger trains.

On all the principal lines of railway in the United States, the flat iron bar is everywhere being discarded, and the H or T rail, generally of 56 lbs. to the yard, is being substituted for it.

On several of the lines also a double track is being made, and the works constructed are of a more permanent character than formerly.

Much has been said in praise of the cheap method of making railways in America, and the advantages to be derived from it in a new country.

As an example of this system, and its practical results, the Utica and Syracuse Railway may be here quoted.

This road is 53 miles in length, and forms part of the Great Western line, connecting Albany on the Hudson River, with Buffalo on Lake Erie—one of the principal lines in the country.

In its construction more than a usual amount of timber was used. For a considerable portion of its length (upwards of 19 miles) it passes through a deep swamp. Piles were driven into this, to support a long continued trestle-bridge, over which the railway track was carried upon longitudinal bearers.

For the other 33 miles the grading was made in the usual manner by excavations and embankments: but the superstructure was of wood.

Upon the grading in the direction of its length, a small trench was excavated, and a sill of wood was firmly bedded in it. Where the sills abutted end to end, they were supported by a piece of wood of the same section laid beneath them. At right angles to and upon the upper surfaces of the sills were spiked cross-ties, and again, at right angles to the cross-ties, and immediately over the sills, were laid the longitudinal wood-bearers, to which the iron plates were firmly spiked. The centre of the rail and sill were in the same vertical plane.

Thus everything was done for economy, as much wood as possible being used. This railway for its construction and equipment cost on an average only 3600*l.* per mile.

It was thought worthy, in 1843, to publish an account of it in London, and it forms the chief subject of a volume thus entitled “*Ensamples of Railway Making, which, although not of English practice, are submitted to the Civil Engineer and the British and Irish Public.*”

The following Report is extracted from the Annual Statement of the Secretary of State to the Assembly of the State of New York, dated 4th March, 1847:—

“The Syracuse and Utica Railroad has been opened for the transportation of passengers for the last eight years.

“The company having determined to relay the road with an iron rail of the most improved form, have contracted for a considerable portion of the iron necessary, and are proceeding with the intention of laying a substantial structure adequate to the proper performance of the business required.