

BRITISH
NORTH AMERICA.

Rouchibouguac are extensive flat barrens, and the country between that and the Miramichi is very level.

The rivers are all small, and no heavy bridging will it is expected be required.

It is proposed to cross the south-west branch of the Miramichi River near the head of the tide, opposite the mouth of Indian Town Brook. It will require a bridge about 500 feet long, and 30 feet high. There are heavy freshets in this river, but no damage need be apprehended to a well-constructed bridge either from ice or freshets.

Between this and the north-west Miramichi River a detour will be necessary to the westward, to avoid the swell of land lying between these two rivers, and which runs to an elevation of about 300 feet. The line crossing the Miramichi opposite to the mouth of the Indian Town Brook, will ascend by the valley of that brook, and then diverge to the westward, through a flat cedar country, to the north-west Miramichi River, which it crosses at the 234th mile by a bridge, which will require to be 2000 feet long and 30 feet high, the river here being very wide and shallow. A site requiring a bridge of less length may probably be selected on further examination.

From this the line follows the broad valley watered by the north-west Miramichi, as far as the 260th mile, at gradients varying but slightly from a level, excepting the first five miles, which will require gradients of about 25 feet per mile. The land between the north-west Miramichi waters and the Nipisiguit River traversed by the line is almost a dead level, and it descends to that river by a grade of 25 feet per mile for three miles.

It is proposed to cross the Nipisiguit River near the Pabineau Falls, and after following the valley of the Nipisiguit a short distance it continues as far as the 325th mile to follow the general direction of the shores of the Bay Chaleurs, passing within a short distance of the town of Bathurst.

The precise direction of the line will, of course, depend upon the bridge sites selected on the several streams and rivers flowing into the Bay Chaleurs.

As far as the 305th mile the land is very level and the streams small. The Jaquet River lies in a large deep valley, but it is believed may be approached and crossed about four miles from its mouth without any great difficulty.

The gradients on this portion of the line will be found very favourable, and will not, it is calculated, exceed 17 feet per mile, the greater portion being very much less.

The shores of the Bay Chaleurs are thickly populated. The inhabitants near Bathurst are chiefly Canadian-French. Towards the Restigouche the inhabitants are principally Scotch, many of them having excellent farms.

After reaching the valley watered by the Eel River the line may approach the Restigouche River, either by following the valley of the Eel River to its source, and thence by the vallies of several small streams, and reach that river either at the mouth of Christopher's Brook, seven miles above Campbellton, or at a point five miles above that.

The summit level at the head waters of the Eel River has been calculated at 368 feet, which will probably be found too high. This would involve a grade of about 18 feet per mile for 16 miles.

It will perhaps be better to avoid this gradient and the curves which will be necessary in descending the vallies of the small streams flowing into the Restigouche, to cross the Eel River, and pass through the range of hills lying south of the river Restigouche, about five miles from the town of Dalhousie. The hill which rises immediately in the rear of that town here falls away almost to the level of the country about Eel River, and from thence the line would follow the bank of the Restigouche, passing through the village of Campbellton, and continuing between the present road and the shore as far as the mouth of Christopher's Brook. The gradients on this portion would be very slight.

Opposite to and above the mouth of Christopher's Brook the Restigouche is full of islands; the mountains, especially on the south shore, come down boldly to the river, and it is proposed to take advantage of these islands to cross the broad channel of the river to the more favourable ground on the north shore.

There is no accurate survey of these islands, but they are so numerous that the expense of bridging will not be greater than if the line were to cross above, when it would require a bridge at least 1800 feet long, and a heavy embankment on the north shore. The danger from the rush of the ice freshets, which sometimes occur in the spring of the year in this river, will be less, if the bridge be carried over among these islands.

After crossing the Restigouche River the line will follow the north bank as far as the mouth of the Metapediac River, at the 359th mile.

The section of country lying between the Restigouche and St. Lawrence Rivers is a vast tract of high land, intersected in every direction by deep vallies and vast ravines, through which the rivers flowing to the St. Lawrence and Restigouche wind their course.

The height of land from which these rivers flow respectively north and south is full of lakes, and along them the mountain ranges rise to a great elevation.

The average distance between these two rivers is about 100 miles.

The only available valley which my knowledge of the country, or the explorations we have carried on enable me to report upon, by which a line of railway can be carried through this mass of highlands, is that of the Metapediac River.

This valley extends from the Restigouche to the Great Metapediac Lake, a distance of between 60 and 70 miles, and as the summit level to be attained in that distance is only 763 feet above tide-water, the gradients, generally speaking, are extremely favourable.

From the broken and rocky character of this section of country, some portions of this part of the line will be expensive, especially the first 20 miles of the ascent, in which the