

HALIFAX RAILWAY, AND PUBLIC WORKS IN CANADA. 35

BRITISH
NORTH AMERICA,

hills in many places come out boldly to the river, and will render it necessary to cross it in several places.

The rock formation is nearly all slate. There are settlements on the Metapediac River as far as the Mill stream.

Generally speaking, however, the greater portion of this section of country is unfit for cultivation, consisting of a gravelly rocky soil, covered with an endless forest of spruce, pine, birch, cedar, &c.

From the mouth of the river as far as the 365th mile, the line continues upon the east bank. Above this, at the mouth of Clark's Brook, the rocky bank of the river is very unfavourable, and to obtain proper curves, it crosses to the point opposite, and then recrosses immediately above, to the more favourable ground on the east bank.

Between this and the mouth of the Apemetquagau River, the line, to obtain good curves and avoid those places where the hills come out bold and rocky, crosses the river four times.

The position of the line for three miles above and below the Apemetquagau River, where the hills are steep and rocky close on the river, will be the most expensive part of the line.

Above this the line follows the eastern bank to the 377th mile. The hills on either side are very high, but the eastern bank is pretty favourable. Between the 378th and 380th mile, the river turns twice almost at right angles, shut in on the south side by a rocky precipice 150 feet high.

It will be necessary to cross the river three times here. The centre bridge will be a heavy one, but there is an island in the elbow, which will serve as a natural pier. Above this from the 380th mile to the Forks (the mouth of the Casupscul River) at the 395th mile, the valley becomes more favourable. The hills on either side are not so lofty, and recede further from the river. The line crosses the river twice between the 385th and 390th mile, to avoid a rocky precipice on the left bank; and again about one mile below the Forks, making in the first 38 miles up the valley of the Metapediac, 12 bridges in all. These bridges will average from 120 to 150 yards long.

From the 395th mile to the Metapediac Lake, the line continues on the eastern side of the valley; the ground is stony and uneven. The gradients will be very favourable, and, with the exception of "The Grave," at the 405th mile, where there is a rocky spur running out on the river, there are no very serious difficulties.

The line again crosses the river at the 409th mile, and from thence follows the eastern side of the Metapediac Lake to the 420th mile.

The mountain ranges to the westward are very lofty. There are two spurs running out on the lake, at the southern end, which the line turns at easy curves close to the shore; beyond this it passes through a cedar swamp into more favourable ground at Brochers, clearing at the north end of the lake; from this it ascends to the summit-level 763 feet above tide-water at the 426th mile. This is the water shed between the Restigouche and St. Lawrence waters.

Between this and the St. Lawrence the country is intersected and crossed by a constant succession of ridges, rising to a considerable elevation between the different small tributaries of the Tartigau and Metis Rivers. The line descends at easy grades by the valley of the former to the 432nd mile, where it turns to the westward, and ascends to the 435th mile, by the valley of one of its small tributaries. The water shed here between the waters of the Metis and Tartigau is about 750 feet, and the descent from this to the Metis, by the valley of Pachet's Brook, is rapid, and will involve a grade of 55 feet per mile, for eight miles, which will carry the line clear of the highlands.

Further explorations may probably suggest improvements upon this line through the highlands, which, however, as far as regards gradients and curves, is as favourable as can be expected.

A party was sent to explore for a line from the Metapediac River, westward, following the valley of one of its tributaries, and thence across to the Rimouski River; and, from the reports I received from them, it appears probable that a practicable line may be obtained following the valley of Metallics Brook, five miles below the forks of the Metapediac, and along a succession of lakes to the Rimouski, and thence by the valley of the Torcadie River to the Abersquash, and by its valley to the point where the proposed line crosses it.

It would require a whole season to explore this section of country.

The proposed line, after descending the valley of Pachet's Brook and the valley of the River Metis, crosses the river at the 445th mile, about 10 miles above its mouth, and ascends by the valley of the River Haget, one of its tributaries, almost on a level to the water-shed at the 459th mile between the Metis and Rimouski waters, and descends to that river at the 469th mile at a grade of 44 feet per mile for five miles.

The Rimouski River lies in a deep valley, and the line descends to it at this grade by the valley of the "Rosseau Bois Brulé," to gain the opposite valley of the Rigamard stream, by which it is proposed to ascend to the table land lying between it and the Trois Pistoles River. A bridge 500 feet long and 40 feet high, will be required across the Rimouski, as it is necessary to pass it opposite the mouth of the Rigamard. The hills on either side for the first two or three miles of this valley are steep; above that it widens, and the line reaches the table-land which extends to the Trois Pistoles River, at a grade which it is calculated will not be more than 20 feet per mile for six miles.

An improvement on this line may, perhaps, be made by descending the valley of the River Bois Brulé, and ascending by the valley of the stream of the little Rimouski.

The line proceeds at almost nominal grades to the Abawisquash River, which it crosses at the 500th mile.

Four miles further the table-land is intersected by the deep ravine formed by the stream of the Trois Pistoles River.