

of country between Moncton and Quebec. I want to point out to him that the policy of the opposition is not to belittle one part of the country as compared with another. But when hon. gentlemen on that side claim they are going to get a line 140 miles shorter from Quebec to Moncton via the Etchemin valley and the Maine border, they do not know what they are talking about, or are endeavouring to deceive the electors. Take the figures given in the report of the engineer of the Quebec government. They show that with grades almost as low as 53 feet to the mile, and some of them rising as high as 71 to 79 feet, that road surveyed between Quebec and Edmundston is 209 miles in length.

Mr. TALBOT. If my hon. friend (Mr. Hughes, Victoria) will permit me, I would say he is mistaken in his figures. He will find several reports, which give it at 186 miles following the railway showing that it can be done within thirty days.

Mr. HUGHES (Victoria). If my hon. friend (Mr. Talbot) will read the report, he will see that that line is across the state of Maine.

Mr. TALBOT. No, Sir.

Mr. HUGHES (Victoria). I beg the hon. gentleman's pardon. He cannot find an air-line of 186 miles around the point of the state of Maine.

Mr. TALBOT. I will get it and read it to the hon. gentleman.

Mr. HUGHES (Victoria). I shall be glad if the hon. gentleman will do so. What we want is to have the facts of these lines referred to by the hon. member for Bellechasse, one goes by the Etchemin and Daagnam rivers and down the valley of the St. John across Maine, while the other is still further to the south. Now, it is for me to go into these elevations and grades, which are given in my former remarks at page 11951 and succeeding pages of 'Hansard.' I have pointed out the report of the engineer of the Quebec government which says:

I again took up my work which I had left off at the west of Lake Long, behind St. Paul de Montmagny, distant sixty-three miles from the original point of departure at St. Anselme in the county of Dorchester.

And he goes on to say:

I should here observe that Long Lake is really only thirty-eight miles from St. Anselme in a direct line.

That is, the line has to cover a distance of 63 miles in order to reach a point distant 38 miles in a direct line. And he points out that the grades are about 53 feet to the mile, being about the old standard one per cent grade.

And he points out further on, with regard to the grades on this line:

I started from the Etchemin valley line, eight miles south of St. Anselme, and half a mile from the north bank of the Abenakis river.

The grades on this line can be made 52 feet per mile and under for a distance of $6\frac{1}{2}$ miles, after which there is a continuous grade of 79 feet per mile for $4\frac{1}{2}$ miles, rising to Lac Vert, but by lengthening the line and increasing curvature by actual location, that grade could be reduced to 53 feet per mile.

But our hon. friend the expert, the hon. member for North Norfolk (Mr. Charlton) tells us that no road need hope to secure a share of through-traffic unless its grades are reduced to twenty-five feet to the mile. This would stretch the line out still longer. So, for every one of these grades, where it is from seventy-five to seventy-nine feet to the mile, you must multiply the distance by three in order to give you the one-half per cent grades. Here is a distance of sixty-three miles and you must multiply it by two in order to get your mileage. Taking these elevations and gradients with an admitted length of line of 205 or 209 miles these are the extremes and hon. gentlemen will remember that I took the middle distance of 207 as my figures, in order to get grades of one-half per cent, I venture to say it will be nearer 300 miles than 250 miles between Quebec and Edmundston. A little further on, this engineer points out that near the foot of Lake Pohenegomook the grade rises at the rate of 71.28 feet per mile for a distance of nine miles. Multiply that by three as will be necessary in order to secure the one-half per cent grade, and you get a distance of twenty-seven miles, instead of nine miles. Then he goes on:

In that next four miles the summit between the Smoky and Noire rivers was reached with a grade of 65 feet per mile, at an elevation of 1048 feet above the initial point in the Temiscouata Railway.

Multiply that by three again, and instead of four and a half miles you get thirteen and a half miles.

Mr. EMMERSON. That is not the route.

Mr. HUGHES (Victoria). What does the hon. gentleman propose, then?

Mr. EMMERSON. The frontier route.

Mr. HUGHES (Victoria). That is what I am quoting.

Mr. EMMERSON. No.

Mr. HUGHES (Victoria). I can tell the hon. gentleman that lake Pohenegomook comes within one inch of the Maine border. The road will have to cross at the lower part of the lake in order to get round. Now, I come to the hon. gentleman's (Mr. Emmerson's) own province. Between the Salmon and Tobique rivers the line proposed by the hon. member for Annapolis (Mr. Wade)—though I believe the hon. member (Mr. Emmerson) takes the same route—rises in five miles from an elevation of a little more than 366 feet to 1,000 feet, to the