

the ordinary macadamized roads were the nearest railway station located at St. Rose or still further east.

The plateau on which Mile End is situated, being elevated one hundred and twenty feet above the principal part of Montreal, no direct railway connection with the heart of the city could be had, except at a cost too great to be entertained, even were it prudent to allow engines to traverse crowded thoroughfares.

It has, therefore, been thought desirable to reach the level of the harbor by an extension of the main line from near Cotnam St. Louis road, curving to the east, and passing in nearly a direct course to the division line between Shapard and Peck's properties, and from thence, curving slightly to the south, it strikes the river a short distance above the present Hochelaga wharf.

The length of line from its point of departure, at Mile End, to the harbor of Montreal is 2.71 miles, of which 1.33 miles are straight, and the balance of 1.33 miles in curves, 5,730 feet. The total cost of this section will be about \$45,000, or \$16,605 per mile, without taking into account its proportion of rolling stock or equipment. The wharf, it is presumed, would be constructed by the Harbor Commissioners, the company doing the filling, with the excavations from the line.

With reference to the necessity of making this short extension of the line, I may be permitted to express an opinion strongly in favor of its immediate construction, when the company will at once find a large traffic in lumber for exportation, either by water or by the line of railway projected from Longueuil to unite with the American lines on the south. This trade is soon designed to be largely increased by the junction of our line with the Canada Central Road from the great lumber producing region of the Dominion. In the meantime, the Hochelaga extension is urgently required for supplying cord wood to the extensive brick and lime kilns, and to a large portion of the eastern suburbs of the city, receiving in return a considerable amount of freight in the form of bricks, lime, &c.

The bridges are designed on the "Howe-Truss and Arch" principle. The timber work of the bridges is roofed, and entirely covered in by boarding or sheeting to prevent decay.

The average width of land taken is 30 feet, sufficient for a double track at the future period. The gauge adopted is the narrow one, or 4 ft. 8 in. The wooden permanent way recommended that known as the "Foster wooden Railway." An estimate of the cost of the equipment, reaches the sum of \$140,000, which has been embraced in the estimates, or \$3231 per mile, from Hochelaga to St. Jerome via Moulin a la Pelle.

The style of engine strongly recommended for a road of this character is the "Fairlie Eaton Engine."

Mr. Hubert states that the track, or permanent way on the Clinton road cost \$1,500 gold, per mile. Mr. Foster, will be prepared to lay the new style down on the road complete at \$1,650 per mile, or one dollar per yard. Two serious objections, in my opinion, exist to the Clinton system of wooden track, and are as follows:—

1st. The rails are laid longitudinally, exposing the fibre of the timber in the weakest condition to the traction causing it to "cup" or "broom up."

2nd. The joints in the rails occurring at short intervals of 12 to 14 feet, without assistance of the chairs or fish plates of the ordinary iron rail, cause an uneven surface to the road. The engines and rolling stock, in passing over the line, at each inequality, impinge on the rails to a greater extent, than if they were uniform and continuous, and thus increase the destroying agencies, while at the same time, acting prejudicially on the rolling stock itself.

These two leading objections have been surmounted in the "Foster system." It is a

well known fact, that the fibre of timber, when placed endways, is capable of resisting a much greater amount of strain, or wear and tear, than if exposed horizontally to the same force, wooden steps for supporting the shafts of the water wheels being cases in point, are used in preference to metal bearings, and last for many years.

At St. Jerome the present price of cord wood is one dollar per cord, and at St. Saeveur, but seventy-five cents per cord. The aggregate supply of wood from these districts will amount to the enormous sum of 46,612,000 cords, capable of supplying this city with its present consumption, for 288 years.

In the Townships of Oxford, Doncaster, Carleton and so on North, there is reported to be abundance of good pine timber.

Collecting our computed annual revenue from the three items enumerated we have:

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| Traffic charges on transport of 80,000 cords of wood at \$1.50 per cord..... | \$120,000 |
| Traffic charges on transport of 450,000 bushels of grain at 2 cents..... | 9,000 |
| Traffic charges on transport of 24,000 passengers at \$0.50.... | 12,000 |

Making a total annual revenue of \$141,000 Of which we will allow the large margin of 80 per cent, to cover working expenses and renewals, and there will remain \$28,200 for interest account.

The amount of money required to build and equip the line from Hochelaga to St. Jerome is.. \$489,854

Which at 7 per cent per annum will require..... \$34,275

To meet this amount are the proceeds of the Government guarantee of 3 per cent, on \$5,000 per mile for 34.04 miles=\$170,200 at 3 per cent.....\$5,106

Cost of bridges over Ottawa \$107,058, at 3 per cent 3,211 Estimated profit on traffic....\$28,200

————— \$36,517

Leaving a balance of.....\$2,241

After paying 7 per cent, on the total investment, and allowing 80 per cent. for working expenses and renewals.

The foregoing figures all err on the safe side, and should convince the most sceptical of the great importance of the work, both to the country and city.

Taking the saving effected to the city in the reduction in price of the single article of cord wood, and the gain to the country by the enhanced price of the same, with the increased price of agricultural products, and we have a sum of \$286,000 per annum realized by the operation of the road, a saving which in two years would more than build and equip the line.

Or in the event of the Corporation of Montreal, and the various municipalities interested, agreeing to become responsible for the annual sum required as interest on the total cost, less the amount of the Government guarantee, \$8,317, it would only amount to \$25,958. We have shewed that the city and municipalities will each year save, on only two items of the traffic, the sum of \$236,000 from which deduct the amount of interest on cost of railway, \$25,958, for which they would be liable, and a net yearly balance of \$210,042 is in their favour.

It is considered that any further comment is unnecessary.

The figures and facts are now before you, and it is for you to decide whether the deductions drawn therefrom are reasonable or otherwise.

I have the honour to be, Gentlemen, Your obedient servant,
CHARLES LEGGE,
Civil Engineer,
and Provisional Director M.N.C.R.

RAILWAYS TO BRUCE.

IMPORTANT STATEMENT BY MR. BRYDGES.

The following letters have been handed to us for publication.—

To the Warden and Councilors of Bruce.

GENTLEMEN, At the late meeting of the County Council, called specially to consider the Railway question, the Wellington, Grey & Bruce Company's delegation stated that "there was an interchange of cars between the Great Western and the Grand Trunk Companies at Guelph, and that consequently Grand Trunk or Great Western cars, when loaded in Bruce for Toronto or points east of it, would be (as was claimed to be now the case) exchanged from the track of the Wellington, Grey & Bruce to that of the Grand Trunk Railway." Those allegations were denied on behalf of the Toronto, Grey & Bruce Railway Company, and your honorable Council and the Press requested to take notice of that denial and of the statement repeated by the W. G. & B. Company, that there was an exchange of cars at Guelph and elsewhere—Mr. Reid, C. E. making a general charge of inaccuracy as to my statements, and reaffirming that cars were usually interchanged at Guelph and elsewhere, Mr. Adam Brown corroborating Mr. Reid's remarks.

Under these circumstances I am much pleased to call the attention of yourself and honorable Council to the annexed letter from O. J. Brydges, Esq., Managing Director of the Grand Trunk Railway Company and beg to remind you of the pointed manner in which the extraordinary statement of the W. G. & B. Company was pinned for attention.

I need not ask you to reflect therefore that there can be no choice of markets at Guelph without transhipment to Grand Trunk cars and extra cost of running freight and passengers over another railway to reach Toronto.

You will also recollect Mr. White's statement, positively made and reiterated, that the Wellington, Grey & Bruce Railway, if built, would essentially be a branch of the Great Western Railway. How then are you to have a choice of markets? Gentlemen, you will have no choice but of sending your produce to Hamilton. No doubt Mr. Brydges' letter will command that attention which so grave an issue for Bruce demands, and satisfy Mr. Hall that he cannot pass his flour or meal over the Wellington, Grey & Bruce Railway to Guelph and thence in the same cars over the Grand Trunk Railway to Toronto or elsewhere, and this point plainly proven will no doubt induce him and a great many others to withdraw their support from a cause that is mainly kept afloat by misrepresentation.

I am, Gentlemen,

Your obedient servant,

(Signed)

G. LAIDLAW.

Toronto, Sept 22, 1869.

GRAND TRUNK RAILWAY OF CANADA.

MANAGING DIRECTOR'S OFFICE

MONTREAL, Sept 25, 1869

DEAR SIR,—I am in receipt of your letter of the 22d inst., enquiring as to the facts in reference to an interchange of cars between the Grand Trunk and Great Western Railways.

In reply I beg to state that the interchange of cars between the two companies is exceedingly limited.

There is no interchange at Guelph, and it is a very exceptional case for any cars to be interchanged at London. At Paris the Great Western Company have for a long time refused to allow their cars loaded west of Paris to pass down our line in the direction of Buffalo.

The Great Western have also refused, and do refuse, to allow their own cars, loaded at any station on their own line to pass along the Grand Trunk railway beyond Toronto. All freight that is brought by the Great Western Company to Toronto is transhipped at that place from their own cars to ours, and the result of this is, that a large trade which used to go to Toronto and pass along the Grand Trunk Railway is now lost and the great bulk of it passes out of Canada at the Suspension Bridge on to American railways.

At Paris we allow the Great Western Company to send full car loads of freight loaded at Hamilton to stations on the Buffalo and Godé-