

struction and made the most of for the public benefit. But, at the same time, it is not to be supposed that even the most careless settlers would wilfully destroy timber when they know that by selling it they would get a large sum of money for it. No settler would think of injuring his wheat crop, and it cannot be imagined that he would act differently with his timber. Once let a farmer know that the timber on his lot is worth from \$20 to \$100 an acre, and that there is a good market for it, and without doubt he will not waste a tree. So much for the objection regarding destruction—an objection that if not removed by the self-interest of every settler, could, at all events, be obviated by law.

As to the other objection, namely, that settlers would decamp as soon as they had "cut their stick," that is, cleared off the timber—that, too, could be prevented by appropriate laws. But it does seem as if such cases would be exceptional, and not the rule. It does not seem as if it were probable that a man who went into the woods and settled on his lot, and made a handsome revenue for the first three or four years by selling his timber, would then turn round when his farm was cleared, and when the virgin soil was ready to yield him large crops, and run away. It is not likely that such a man would wilfully turn the tables upon his good fortune, and perhaps make himself amenable to the laws—especially as by remaining on his farm and continuing to work it for a few years longer, he would receive a patent of it, and be able then to sell it at a fair price if he felt so inclined.

On the whole, we think the Premier of Ontario has not made out a strong case in favor of his policy. He has based his arguments on mistakes, misconceptions, and fallacies, and further, in inaugurating his policy he has had to admit his profound ignorance of the requisite information on which to found it. Under such circumstances we can only hope for the best. What Ontario wants is a proper and liberal free grant system that will promote immigration and secure the settlement of her wild lands. And it is quite possible to secure this result and also to preserve our valuable forests from criminal or careless destruction. It is also possible to attain this object and to husband the timber resources of the country for the benefit not only of the present, but also for the benefit of future generations.

WELLINGTON, GREY, AND BRUCE RAILWAY.

(To the Editor of the Trade Review)

YOU have, on two or three occasions, made reference to the efforts which are being made to secure the construction of a Railway through the fertile Counties of Wellington, Grey, and Bruce, and the rivalry between Toronto and Hamilton in relation to that work. In a late number you allude to the proposed line from Guelph to Lake Huron as a Hamilton enterprise. While the merchants of Hamilton very fairly claim credit for the efforts they have made on behalf of that work, the description is hardly an accurate one, and is calculated to mislead. The work is only a Hamilton work in so far that it gives to this city the opportunity of competing for the trade of that fine district of country. But as a matter of fact, at Guelph, the passengers or produce coming over the line are half a mile nearer to Toronto by rail than to this city. So that the enterprise ought to be regarded as quite as much a Toronto as a Hamilton enterprise.

I perceive that you are somewhat attracted by the project of a narrow gauge railway on the ground of its superior cheapness and greater adaptation for opening up new districts. One or two facts will, I think, establish to any reasonable mind, that, however well narrow gauge railways may have answered as feeding lines in Queensland and Norway, it would be the greatest folly to build such a road as a means of giving railway facilities to the North West Counties. These facts are:

1st The more enthusiastic advocates of the narrow gauge railway do not pretend that, the cost being the same, they are to be preferred, or considered even equal, to the broad gauge. In the evidence of prominent European Engineers, given in a recent pamphlet, by Mr. Geo. Laidlaw of Toronto, the energetic promoter of the Toronto, Grey, and Bruce Railway, the merit of the narrow gauge railway is put upon the ground that it can be built through districts through which it would be impossible to construct the more substantial 4 ft. 8½ in. or 5 ft. 6 in. railway. Thus the whole question is reduced to this: Can a broad gauge railway be built through the Counties of

Wellington, Grey, and Bruce? If it can, and if there is prospective traffic sufficient to make it pay, there can be no doubt of the folly of adopting the narrow gauge, involving a break of gauge and necessary transshipment of all produce at Toronto for all time to come.

2 The cost of the narrow gauge railway, estimated without an approach to an instrumental survey, is fixed by its promoters at \$15,000 a mile. But in the statement of John T. Schwartz, Director of the Drammen Randsfjord Railway, published by Mr. Laidlaw, the cost of the 3 feet 6 inch railway is put down at from £3,200 to £5,000. And, when it is remembered that the cost of labour at the Cape is much less than in this country, it is not too much to say that the roads cannot be built for less here—that is in round figures, from \$15,000 to \$25,000.

3 Any one who knows the country through which this proposed narrow gauge will run, will readily believe the cost will more nearly approach the maximum than the minimum sum; the heavy rock cuttings through the middle Silurian ridge, in making the ascent, from the Lake Ontario level, of about thirteen hundred feet, being a formidable obstacle to the construction of a railway direct from Toronto. If any one desires to be convinced of this let him travel on the Great Western to Copetown, or on the Grand Trunk to Acton, and consider that the same heavy rock cuttings must be made even for a light narrow gauge railway going from Toronto direct to Lake Huron.

4 The quantity of rolling stock in use on the Cape railways, mentioned by Mr. Schwartz, is utterly insufficient to move the produce of the North-West Counties, and the necessary increase must add largely to the capital account of the proposed railway.

5 It may, therefore, be fairly assumed, even on the evidence furnished by the advocates of the narrow gauge railway, that the cost of constructing it from Toronto to Lake Huron would not be less than from \$20,000 to \$25,000 per mile.

6 I send you a copy of the prospectus of the Wellington Grey, and Bruce Railway, with the report of George Lowe Reid, Esq., the chief Engineer of the Great Western Railway Company, on the survey of the Wellington section of the road. If you could find space to publish Mr. Reid's report, I would feel very much obliged by your doing so. It will be seen from it that the road can be built for \$15,500 a mile; exclusive of rolling stock. Rolling stock can be furnished new for about \$3,000 a mile. But as the road is built on a uniform gauge with the other roads of the Province, rolling stock could be obtained from them, well suited to the immediate wants of the district, at a lower price. It may be assumed that the road could be built and equipped for about \$18,500 a mile; actually less than the narrow gauge can be built for, owing to the fact that the former avoids the serious engineering difficulties which the latter must encounter.

7 Thus on the question of cost, the people of the North West Counties can have the broad gauge road, with the 50 lbs. rail, and without the necessity of transshipment in going on to other roads, for less money than would be necessary to build the narrow gauge railway with 24 lbs. rail, and involving constant transshipment.

Other facts in the comparison of these two roads are important in considering their respective merits.

1. The relative mileage length to be constructed. Taking the village of Walkerton, which both the Companies design to reach, the length of road to be constructed by the Toronto, Grey, and Bruce Railway (narrow gauge) would be ninety miles, and by the Wellington, Grey, and Bruce Railway but sixty. Thus, even assuming the cost of the former at \$15,000 a mile and the latter at \$18,000, the aggregate cost of the narrow gauge to Walkerton would be \$1,350,000, and of the latter, \$1,080,000; or taking the entire line to Southampton, by the narrow gauge, the cost would be, at \$15,000 a mile, \$1,500,000, and by the Wellington, Grey, and Bruce, at \$18,000, but \$1,080,000.

2 These thirty additional miles of railway construction by the narrow gauge, would be mainly through a country already well supplied with railway facilities, and would therefore be a direct competing line with existing railways. The narrow gauge railway bisects the angle formed by the junction of the Grand Trunk and Northern Railways at Toronto, and at thirty miles from Toronto would still be within twenty miles of the Northern on the one side, and, if an air line be taken to Mount Forest, it would be forty miles from

Toronto, be within twenty miles of the Grand Trunk on the other. While the Wellington, Grey, and Bruce Railway, bisecting the square formed by the Northern, the Grand Trunk, the Buffalo and Lake Huron, and Lake Huron and the Georgian Bay, encounters no competition from its starting point at Guelph, being from thirty-five to fifty miles from an existing railway on either side, and traversing, by odd lots, the more fertile and productive portions of the district.

Thus the Wellington, Grey, and Bruce possesses these advantages over the Toronto, Grey, and Bruce Railway.

1. It can be built for a quarter of a million of dollars less capital than its competitor, the narrow gauge, even assuming the cost of the latter at the correct figures given by its promoters.

2. It entirely avoids competition with existing railways.

3. It avoids all engineering difficulties, and the heavy grades—so injurious to railways, which must be encountered by the narrow gauge in ascending the middle Silurian ridge.

4. Being of uniform gauge with the existing railways, it avoids the necessity and evil of transshipment and can at any time enter into receiving arrangements with the Grand Trunk and Great Western Railways, thus giving to the people of the North West the choice of markets at Guelph.

5. Being at Guelph equally distant from the two principal wholesale emporiums of Ontario, Hamilton and Toronto, it gives to the merchants of the Counties of Wellington, Grey and Bruce, the choice of markets in which to buy on equal terms; or, if he prefers going to Montreal, it enables him to get his goods to any point on the railway without breaking bulk, and therefore without delay.

6. It traverses the best portion of the County of Wellington, which the narrow gauge railway leaves entirely unsupplied with railway accommodation.

These facts, which I have endeavoured to give in as concise and brief a form as possible, will, I think prove to any reasonable mind the superiority of the Wellington Grey, and Bruce Railway, in whatever light the question may be regarded.

Yours, respectfully,

THOMAS WHITE, JR.

Hamilton, January 22nd, 1883.

THE COAL SUPPLY.

GREAT BRITAIN VS. UNITED STATES.

A WRITER in the American Railroad Journal says.—

Ten years ago the quantity of coal mined in Great Britain amounted to sixty millions of tons per annum. The increase since that time has been fifty per cent, so that at present the quantity of coal annually mined in Great Britain amounts to one hundred millions of tons, large quantities of which are every year exported to Continental Europe, and even to this country.

In a speech made in Parliament last year by Mr. Gladstone, he dwelt at length upon the importance of coal as the motive power of factories and commerce. He stated that the commercial and manufacturing superiority of Great Britain was based on coal; that with the exhaustion of coal in Great Britain, the commerce and manufacture of Great Britain must decline; and that as the United States contained the largest deposits of coal in the world this country in course of time must surpass all others in commerce and in manufacture.

While the exhaustion of coal in Great Britain has become a question of serious consideration to her statesmen, it is most gratifying to know that the coal fields of the United States are without a parallel for the great extent and superior quality of their coal.

Pennsylvania, east of the Alleghenies, supplies the Atlantic towns and cities with anthracite coal, while Pennsylvania, west of the Alleghenies, supplies the towns and cities on the Ohio and Mississippi Rivers with superior bituminous coal. The valley of the great Kanawha River, in West Virginia, contains the finest deposits of splint and coal known anywhere; and we are pleased to see that parties of this city owning coal lands in the Kanawha regions, are taking steps to insure the improvement of the Kanawha navigation, whereby this city can be supplied with canal coal equal to the best English canal, and at about one-half of the cost thereof. The plan is to improve the Kanawha navigation, and ship coal to this city via New Orleans.

A most favorable charter for that purpose has been granted by the Legislature of West Virginia to Messrs. Pierrepont, Aspinwall, Crosby and others of this city.

A copy of the prospectus, containing the charter and setting forth fully the plan of operations, has been recently issued, and in it is stated that Great Britain exported to this city last year 214,000 tons of coal—a large portion of which was canal coal. Thus, it seems that this city pays every year to Great Britain for canal coal sufficient money to improve the navigation of the great Kanawha River, and thereby open to market the finest canal coal deposits known in America.