

of the question of transportation generally. There is no doubt that the tariff question, not only in this country but in every country, is one of the most important questions with which any government has to deal. Transportation, however, is equally important, especially in a country like Canada which stretches for three thousand miles from one ocean to the other and which is favoured with so many natural means of transportation. I think it was Bacon who said:

There be three things which make a nation great and prosperous: a fertile soil, busy workshops, and easy conveyance for men and commodities from one place to another.

For a few moments, I wish to deal first with the question of railway transportation in the republic to the south of us. Some statistics which I have been able to obtain but which, unfortunately, do not deal with very recent years, will serve to show the great importance of transportation facilities. For the fiscal year ending June 30, 1907, the average amount per capita of duties collected on imported merchandise by the United States was \$3.84. During that same period the average per capita contribution to the revenues of the railways in the United States was \$30.86; or, in other words, the transportation taxes collected and levied by the United States railways in the year 1907 were more than eight times greater than the amount collected on imports by the Government of that country. This goes to show that financially the Government of the United States was completely outclassed by transportation. In the same year, 1907, the average receipts of the United States Government from all sources, except the sale of bonds, was \$9.84 per capita, while the railway revenues were \$30.86 per capita, or more than three times the former, showing, in a small way, the great importance of the question of transportation.

There are three methods of transportation, the highway, the railway and the waterway, or what is commonly referred to as road, rail and river, the three R's of transportation. The distinguishing characteristics of the roadway may be called availability. A cart or pack-horse may go where a railway is a commercial, if not an engineering, impossibility, and a railway may be built where no river exists and where a canal would be too costly. The distinguishing characteristic of a railway is speed, and of a waterway economy. It is said, Sir, that a horse, or its mechanical

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equivalent, can move two tons of freight at the rate of three miles per hour in a wagon on a fairly level road; 15 tons in a car on a railway, and from 90 to 100 tons in a boat of proper shape on a waterway of a width and depth adapted to its use. Corresponding with these physical facts, we find that the estimated cost of wagon transportation on an average road in the United States is 25 cents per ton mile, which may be reduced to 10 cents on a first-class road. The average rate received by the railroads of the United States in 1907 amounted to 7.82 mills per ton mile, while the average charge per ton mile on the goods carried in and out of lake Superior in that year was eight-tenths of a mill.

The United States has up to the present time no completely improved rivers, but the army engineers claim that when the work under construction on the Ohio river is finished transportation may be conducted thereon for one-half a mill per ton mile as against 7.82 charged by the railways. This means that a dollar will carry a ton of freight four miles on an average road, 10 miles on a first-class road, 127½ miles on a railway, 1,250 miles on the Great Lakes, and, if the contention of the army engineers is correct, 2,000 miles on a river of the first class when completely improved. From this it is plain that good roads are vastly better than poor roads, but that method of transportation is too costly for long distance traffic. Its essential function is the carriage of small loads over short distances. It is equally plain that in economy the waterway surpasses the railway as far as the railway exceeds the highway, and it follows that the essential function of the waterway is the carriage of large loads over long distances. The railway occupies a position intermediate between the highway and the waterway in availability, economy and essential function. Each of them, road, railway and river, is an integral and indispensable part of the three-fold transportation system, which would be logically defective if any of the three were lacking. In regard to waterways, let me just read an extract from a statement made by Mr. Joseph E. Ransdell, president of the National Rivers and Harbours Congress of the United States, in regard to the improvement of waterways, said:

The improvement of our waterways constitutes at once the highest duty and the greatest opportunity which confronts the citizenship and statesmanship of our country.