

transported in the best and cheapest way to the domestic and foreign market. We have been giving attention for years to railways and waterways. Much money has been spent in railways and while some mistakes may have been made in the railway policies, I feel that all the railways in Canada are needed, will all be used and that already they have been of great benefit in the development of Canada. In addition we have improved the waterway from Lake Superior to Montreal, the main channel for transportation from the great west to the eastern ports. From the money so spent the people of Canada are reaping benefits so large that it is impossible to estimate them.

System Must be Complete

"It is necessary to have a complete system of highways. We must transport produce of the farms for miles and poor roads increase the cost of transportation. Railways and waterways have cost a high price but much of the benefits of them are lost on account of the weak link, the poor roads between the farm and the railways and waterways. As far as the foreign market is concerned, if the cheapest transportation is not provided between the industries and the other transportation facilities, the profits will be so reduced as to not justify competition with the products of industries in the other countries.

Railway Problems

"As far as the Dominion government is concerned, it realized in 1912 the need of a complete system of railways, waterways and highways. A sum was placed in the estimates and was passed in the commons, but I regret to say it did not pass the Upper House. Had it passed we would have had several thousand miles of roadway which we have not. But we must look at the future, not at the past. I have been talking the matter over with the several provinces. It is easier to deal with the question now than it was in 1912. Then, if any man had gone into a rural constituency and advocated good roads for autos, he would have been drummed out. Now the farmers are just as anxious to have autos and trucks to transport their products and to give their families comforts enjoyed by those in urban centres.

250,000 Miles of Roads

"In the Dominion there are 250,000 miles of roads. The so-called 'first-class roads' are between large centres and large markets, roads travelled most by the public, urban and suburban, and they should be of the permanent character to last almost for all time. Of this class, we have about 10,000 miles in Canada.

"The 'second-class' roads are those leading from large centres to smaller market places, the provincial or municipal road, not built of the same high class construction as the first-class road.

"Then there are 200,000 miles of concession roads leading from farms to first-class roads.

Bill Already Drawn

"Insofar as the first-class road is concerned, the Dominion government is agreed to pay an amount towards the cost of construction as would be fair and reasonable. It is the intention, and the bill has been drawn and is now before a sub-committee of council, to place an amount of money as the Dominion's share of as much as can be possibly expended in the next five years by the several provinces in Canada.

"We will have an estimate of what the provinces can spend in five years and will set aside an amount to be extended over five years so that every province will know that it has the Dominion government's share available for all the roads they can build. If the estimate falls short on account of a large number of roads by any province, the Dominion grant could be supplemented. I can not give you the amount but can assure you it will cover what our portion will be after taking the matter up with the provinces. I am not in a position to say what the proportion will be, but so far everything has been most amicable in the negotiations between the representatives of the Dominion and of the provincial governments. I am sure you will be satisfied with the results.

"The highway bill will be number one on the list and I will ask the senate to pass it with as little discussion as possible, so that it will be through before anything can happen to cause me to lose my seat.

Work of the Provinces

"The Dominion feels it the work of the provincial governments to construct the roads. We do not want to have anything to do with construction. All we ask of the local governments is that they submit plans and specifications with locations, so that our engineers may be satisfied that the money is spent for permanent roads, not for roads that will be useless in four or five years.

"We will have our inspectors look over the work and if we find it is not up to specifications, we will draw the attention of the provincial governments, which, I am sure, also want to give the people the best roads and to expend the money to the best advantage.

Remedy Unemployment

"Building good roads will give employment to many thousand men in the Dominion and we require some public works now to give employment. By proceeding with road work in every province the relief will be large. The great advantage of good highways to the rural population cannot be over-estimated. They will mean larger loads and will cause a big saving in wagons, machinery and other vehicles.

"There are 262,000 licenses for autos and motor trucks in the Dominion, costing two hundred million dollars. The extra depreciation on these, due to bad roads, would build many thousand miles of good roads each year.

"The people in rural sections are entitled to the same advantages as the people in cities and villages. They have phones, rural mails and other conveniences, but with autos and good roads, they can drive into Ottawa or another city in an hour and a half, with little cost, making a trip that would take a whole day to make driving over poor roads.

Bring Farms Nearer

"Good roads bring the farms nearer to the cities and give advantages of market centres. There is in Canada, an agitation for radial railways. With the steam railways and the very best highways, we will have a system of transportation that will render unnecessary the expenditure of many million dollars on radial railways which would then not be needed.

"Along every road where there is a good highway, up goes the value of farms. If we could collect this increased land values, we would want no more money to build improved highways throughout the Dominion. Then we will have the advantage of tourists who would not come without improved highways. Not only do they spend considerable money, but they learn the many advantages Canada offers, and we will get settlers who would not otherwise come. Thousands of lives in rural districts would also be saved by the facilities provided to get medical help quickly.

United States Ahead of Canada

"The U. S. is ahead of us in good roads. Between California and Boston you have a network of good roads. The various states for some time have been improving their road systems, and a few years ago the government at Washington saw the necessity for giving aid in the construction of highways and set aside \$75,000,000 for road work. Today I read that \$500,000,000 had been set aside for roads.

"Wait till we get started in Canada and you will see how we will go. I promise to continue on the work and do my best to see that all parts of the Dominion have assistance to the greatest extent that we should go to get good roads. You have not a better friend for good roads than I am."

Alfred Stansfield, chairman of the Metallurgical Section of the Canadian Mining Institute, proposes to introduce a resolution at the annual meeting of that Institute, which is to be held March 5th to 7th in Montreal, that the name of the Institute be changed to "The Canadian Institute of Mining and Metallurgy."