

GOOD ROADS ONE OF CANADA'S GREATEST NEEDS.*

By W. A. McLean, Deputy Minister of Highways, Ontario.

RURAL roads are the primary channel of traffic. Along them, production, industry and commerce have their origin. Let the common roads be closed, and railways will decay in idleness; ocean liners will rust at their moorings. Nations have prospered without railways; but common roads, "Good Roads," have always been vital to national progress and development.

The lessening of the cost of transportation is a measure of economy, of national thrift, which will produce a large return on the expenditure. On this continent, the cost of team haulage is rarely less than 25 cents per ton-mile and is sometimes twice that amount. Under the favorable conditions of good roads in Europe, the cost is reduced to between 8 and 12 cents a ton-mile.

The tonnage carried over the country roads of Canada is not readily estimated; but railway statistics show that the total amount of freight carried by the railways and originating in Canada, is about 60,000,000 tons. This, for the most part, at one or both ends of the railway journey, must pass over the wagon road. And a considerable additional amount, consumed locally, passes over the wagon road without railway transportation. The average wagon haul for farm and natural produce is estimated at between seven and eight miles. It is probably a moderate assumption for Canada that a total of not less than 100,000,000 tons passes over the roads of the country with an average haul of five miles.

Compared with European costs, good roads would effect a saving of not less than ten cents per ton-mile. Putting the amount saved at only five cents a ton-mile, or 25 cents per ton for the average haul of five miles, an adequate system of improved roads would create a profit of \$25,000,000 annually on the produce and merchandise now passing over the roads of Canada.

The time lost in travelling over bad roads is very great. It has been estimated that bad roads occasion a loss of a man and team for two weeks (12 working days) annually to the average farm.

Bad roads limit the output of farms to the kind and quality of produce that can be drawn to market. Good roads permit the farmer to take advantage to the utmost of the location and fertility of his land. In other words, it may be broadly said that with bad roads the production is restricted to the produce that can be hauled over the roads; whereas with good roads it is restricted only to the amount and quality that can be grown and sold on the market.

If the nation and the city are to reap the advantage of increased farm population and production, rural conditions must be made to compete with city, by making them profitable and agreeable.

Road-building is clearly one of the most important public works remaining for Canada to undertake. When the war is ended and our armies return, with a large additional influx of immigration, it will be well if we are so organized that roads can be built on an adequate scale, not only to aid in the development of Canada, but, temporarily, to assist in giving employment during what will probably be a trying period of industrial readjustment.

Only a very wealthy country, improvident of its resources, can progress under the handicap of bad roads.

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Those who have bad roads consider good roads an expensive luxury. But those who have the advantages of good roads, know that Good Roads are a necessity.

Road-building is a slow process in part, because it is expensive. And because the work is expensive, it must be distributed over a term of years and among various administrative organizations. But so distributed, and looked at from the standpoint of annual ability, the undertaking becomes less difficult. The total twenty-year cost of maintaining a household does not worry the average man—if his annual income is sufficient for the annual outlay. Road-building is a continuous work; if properly carried on, is cumulative in its growth, and is a question of annual expenditure available to meet direct outlay, plus sinking fund, interest and cost of maintenance.

In the Dominion of Canada there are about 250,000 miles of graded roads. The immediate objective in Canada should be to substantially improve about 16 per cent. of the total, or 40,000 miles, which would carry the more concentrated market or farm traffic; while about 2 per cent. additional, or 5,000 miles, should be treated on a trunk road basis. The total cost might be approximately estimated at \$250,000,000, of which about \$50,000,000 has been spent.

LETTER TO THE EDITOR.

Need of Sewage Disposal Plants.

Sir,—I have read with interest your editorial on the Lethbridge epidemic, but beg to differ from you regarding the solution of the problem.

The fact that the supply was being chlorinated raises the presumption that the authorities were aware that the water was subject to either continuous or intermittent pollution, and yet it is evident that the efficacy of the treatment was only checked by the examination of samples taken at long intervals.

Chlorination, when properly supervised, has been proved by scores of instances to be effective in preventing undue typhoid incidence, and the cost of such supervision is cheap compared with that of an epidemic.

If Lethbridge wishes to obtain a satisfactory supply, I would suggest that such means of purification be adopted as will ensure a water of safe quality, and not depend upon the prevention of pollution by some other authority. It is becoming deplorably prevalent for corporations to endeavor to place the responsibility for epidemics on other corporations because they have utilized the natural water-courses for the disposal of their sewage; and to petition legislative authorities for assistance when the remedy lies in their own hands. The sooner the cities of this Dominion realize that the rivers are the natural drainage courses for sewage, and that such streams must not be utilized for domestic purposes without proper purification, the quicker will typhoid become a disease of the past. Only when the sewage of one community so pollutes a river as to render it impossible for its neighbor to adequately purify it by reasonable measures, is there any warrant for interference. If one community neglects to protect itself, I cannot conceive that it is the duty of its neighbors to relieve it of that task. This is, of course, contrary to the principles of riparian law, but I submit that it is the sane solution of the problem if municipalities are not to be unduly burdened with excessive expenditures with consequent retardation of development.

JOSEPH RACE,
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