

## Engineering Department

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### The Road and the Farm.

A good road is not a luxury. The road over which a load of farm produce passes is just as necessary as the wagon which holds the load or the horses which draw it. "The road," the opponent of road reform will argue, "need not necessarily be a good one. A track through the fields would serve." On the same principle the wagon, horses, harness, need not be good. To follow the argument to a conclusion, they are not needed at all, since it would be cheaper to use a wheelbarrow, thereby saving the purchase of wagon, horses and harness. Bad roads are cheaper than good roads in just the same way that a wheelbarrow is cheaper than a wagon and a team of horses. If it pays to buy wagons, horses and harness it will pay to build good roads. The road is a part of the farm machinery just as much as is any other implement the farmer uses. Bad roads should be relegated to the age of primitive field culture. We are living in the days of self-binders and steam threshers, and we trust that it will soon be the period of good roads.

For cities, towns and townships bad roads are a great evil. The farmer, however, feels the influence most directly, interfering as it does with all his social and business relations. During certain seasons of the year he is isolated, in a measure, even from his nearest neighbor. He cannot attend church nor the public meeting, his children cannot reach the school, with the result that farming is generally regarded as dull and monotonous. Very much has been said, for a number of years, of the undeveloped resources of Canada, and the need of action in this regard. So long, however, as the roads of this country remain in their present condition, we need not go to Northern Ontario nor Ungava to find resources that are not developed. Surrounding us and at our very doors are farm lands yielding but a moiety of their hidden wealth. Bad roads are not solely responsible, but they are a factor, a very powerful factor, in locking up the riches of the farms.

The farmers realize, and they do not realize, the importance of roads. That they realize it is evidenced by the fact that in the ten years, 1887-1896, there was spent on roads by township and county councils, according to the reports of the Ontario Bureau of Industries, nearly ten million dollars. In addition to this, there is placed on the roads eleven million days of statute labor, the united money and labor having a total value of twenty-one million dollars.

On the other hand, this energy is spent with little forethought, without system, as

is evidenced by the condition of the roads. It is scattered and misapplied, and lends emphasis to the statement that the value of good roads is not sufficiently realized by the majority of the people of the country.

The bettering of the country roads, while of as universal importance as railways and canals, must be looked at, in the main, from the farmers' standpoint. To be able to haul a fair load in all reasonable weather, to be able to drive out on business whenever necessary, on roads that permit travelling at a fair speed, are no doubt the chief requirements of the Ontario farmer. This means that we need a distinct class of roads suited to the requirements of traffic. We do not need English roads, nor French roads, nor the roads of Massachusetts. Ontario roads are needed, such as are suited to moderate travel, and a not thickly congregated population.

It is not proposed that an expensive plan of construction should be undertaken. From the figures quoted above, it is evident that a considerable expenditure is already placed on the roads. What is needed more than additional expenditure is that we make the best use of the annual expenditure now being made.

The total production of Ontario farms has a value annually, it is estimated, of \$200,000,000. All this must first pass over the common highways before reaching the markets. It is the basis of Ontario's wealth.

The amount is far in excess of that needed for home consumption, and the only resource is to obtain a market in foreign countries. This market is available only so far as we can sell more cheaply and produce a better quality than other competing countries.

It is not the effect of present conditions which constitutes the evil of bad roads; but it is in the conditions which they prevent that the loss lies.

It is on the principle that with every means provided for easy, quick and good transportation, a market would be created for two loads, where we now sell but one. Many links in the system of transportation are being perfected, but the chain will not be complete without cheap transportation over the first part of the journey, the common highways.

Bad roads, whether dusty, muddy, rough or from any cause heavy, change what should be one of the advantages of farm life into one of its most disagreeable features. It is the reason why so many of the brightest of the younger generation press into the towns and cities in order to escape the dullness of the country. As has been said, one of the greatest pleasures of country life, driving and travel,

remains as one of the serious drawbacks—bad roads.

Farming is a business which can be carried on as successfully and in as intelligent a manner as the industries of the towns and cities, but the difficulties of travel repel rather than attract. Distance does not constitute the difficulty. It is absence of proper means to overcome it. With good roads the agricultural community will discover a means of attracting rather than repelling population.

No farming country ever had a good appearance, however fertile and productive, when looked at from a road that is rough or dusty, or a river of mud. Appearance, even in farm lands, is of as much importance as in a house or carriage. It is a well known fact that a properly designed street transforms the appearance of city property, and greatly increases the value. A good appearance is a source of pleasure to the owner, and a good many dollars in the eyes of the purchaser. Good roads affect the appearance of farm land in a way that is startling, and those who have any doubt of the matter cannot do better than make the experiment. When a bad road is made good, those who use it have an opportunity to turn their eyes away from ruts and mud, to look at features of far greater attractiveness which no locality of Ontario is without.

This increase in the value of property arises too from the greater profits accruing as the result of the saving in the cost of transporting of farm produce. There are many ways of rendering a business more profitable. One is by decreasing the cost of production. Cheaper transportation by means of good roads means, in effect, that the cost of production and the consequent increase of profit will guarantee a larger and readier investment in the farm.

The value of the farm is further enhanced by the increased opportunities that arise through good roads. The farmer is not impeded in any season of the year in the sale of his produce, and can in consequence reach the market when prices are highest, with perishable produce—fruit, certain vegetables, milk, which, if it cannot be taken to the consumer in the town or city with the least possible delay, is unsaleable or can be disposed of only at a reduced price. Good roads bring farm lands ten, twenty, forty miles away into available distance of a city market, whereas, one mile of really bad road may render otherwise fertile land useless. Distance with respect to the farmer and the market is not measured by miles so much as by the time and labor it takes to transport his product.

Among other branches of agriculture which demand good roads, dairying may be referred to as a specific instance. Cheesemakers tell us that, in order to secure the best quality of cheese the milk should be transferred to the factory as quickly as possible, with the least possible amount of jolting, and that the cheese should be manufactured in large quanti-