RAILWAY DEVELOPMENT IN CANADA.

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Railways form a tremendous factor in the commercial importance and development of any country and especially is this true in regard to Canada.

The railway has been the potent factor in enabling the Western farmers of the United States and Canada to prosper and multiply by supplying their productions to the more populous countries of Europe. It has compelled the British farmer largely to discontinue the growing of cereals and has brought the agricultural interests of Great Britain to the verge of bankruptcy. Here, in Canada, it has conducted population along lines other than the original rivers, streams and lakes and has widened beyond all calculation the area of productive labor.

The least expanse of this country has been brought all the year round under grip by means of railways which have supplemented the exceptional facilities Canada possesses in her magnificent waterways.

When one stops to consider that there are 24,104 miles of railway in Canada at the present time, that they employ 125,000 people, and that their aggregate earnings for the year of 1909 were over \$145,000,000, one has some idea of their immensity and importance.

The purpose of this paper is to trace briefly the beginning and the growth of this wonderful system of railways in Canada, but before doing so a few points as to the early history of railway building in Great Britain may be of interest.

In 1814 the first locomotive that propelled itself by adhesion of its wheels on round top rails was tried at Killingworth Colliery by George Stephenson and Nicholas Wood.

In the autumn of 1825 George Stephenson opened a line from Stockton to Darlington, and a speed of five miles an hour was attained.

The opposition by the public to the construction of these railways was very plainly brought out when application was made to Parliament for a charter to permit the construction of a railway from Manchester to Liverpool. Sir Isaac Caffins' speech in Parliament is a fair sample of the attack of the opponents.

He "would not consent to see widows' premises and their strawberry beds invaded. Railway trains would take many hours to perform the journey between Manchester and Liverpool, and in the event of the success of the scheme what, he would like to ask, was to be done for all those who had advanced money in making and repairing turnpikes? What with those who might still wish to travel in their own or hired carriages after the fashion of their forefathers? What was to become of coachmakers, harnessmakers, coachmasters and coachmen, underkeepers, horse breeders and horse dealers? Was the House aware of the smoke and noise, the hiss and the whirl, which locomotive engines passing at the rate of ten or twelve miles an hour would occasion? Not even the cattle ploughing in the fields or grazing in the meadows could behold them without dismay. Iron would be raised in price 100 per cent. or more; probably be exhausted altogether. It would be the greatest mischief, the most complete disturber of quiet and comfort in all parts of the kingdom that the ingenuity of man could

The agitation for railways in British North America began almost as soon as the success of George Stephenson's railway was assured. One of the earliest efforts was made in St. Andrews, N.B., in 1827. In 1828 John Wilson con-

vened a public meeting in St. Andrews to discuss the question of a railway to Quebec.

In 1832 Mr. Henry Fairbairn, writing in the United Service Journal, turned the attention of the British public to the necessity of a railway system for British North America. He proposed first to form a railway from Quebec to the Harbor of St. Andrews upon the Bay of Fundy. He pointed out the advantages of a railway which would convey the trade of the St. Lawrence to the Atlantic, with more speed, regularity and security than by the St. Lawrence River.

He supported his plan by an argument from the Imperstandpoint. He said: "Indeed, if the difficulties and expense of constructing these works in our North American colonies were tenfold greater an imperative necessity would exist for their adoption, if it is desired by the Government of this country (Great Britain) to maintain an equality of commercial advantages with the neighboring United States, for the splendid advantages of the railway system are well understood in that country, where great navigable rivers are about to be superseded by railways of great magnitude, reaching over hundreds of miles. Indeed, in no country will the results of the railway system be so extensive as in the United States, for it will neutralize their only disadvantage, inland distance from the sea, and it will effect the work of centuries to connect, consolidate and strengthen that giant territory lying beneath all climes and spreading quarter of the globe.

"If, then, we would contend with these advantages in our North American provinces, it is only by similar works that we can bring to the Atlantic agricultural exports of the colonies and secure the streams of emigration which otherwise with the facility of inland transportation will be rapidly diverted to the western regions of the United States."

It is needless to point out that a man who, seventy-eight years ago, could foreshadow the advantages and the necessity of the tremendous amount of railway building that has been going on in the United States and Canada up to the present time, had no ordinary mind. It was his ideas which have been followed by the people of Canada with the results seen to-day.

Three years later—1835—the Imperial Government made a grant of £10,000 to be expended in the exploration and survey of the proposed line of railway from Quebec to St. Andrews. The survey was placed under the control of Capt. Yule, an officer in the Royal Engineers, and the work was begun on the 24th of July, 1836.

In another direction the suggestion of Mr. Fairbairn bore immediate fruit. A company known as The Company of the Proprietors of the Champlain and St. Lawrence Railroads obtained a charter for the construction of a railroad from Laprairie on the St. Lawrence River to St. John's on the Richelieu. This road was first opened in July, 1836, and has the distinction of being the first passenger railway in Canada. The first train consisted of four passenger coaches drawn by horses, locomotive power being adopted in the following year.

The length of the line was 16 miles and the gauge 5 feet 6 inches.

The object was to connect the waters of the St. Lawrence with those of Lake Champlain by taking the base line of an isoceles triangle instead of the two water sides up to that time used thus securing speedy communication between Montreal and New York by a mixed water and soil route.

In the year 1844 this railway carried 27,118 passengers, 12,639 tons of freight, and its gross receipts were £15,234.

The expenditure was 77.8 per cent. of the total receipts in 1844. In 1909 the expenditure of all railways in Canada