

Our National Railways The Big Freight Train

This article deals with the advantages to a railway system of handling its freight tonnage in large train loads. It will set out the position in this respect in which the Canadian National Railways stand and indicate the prospects of future improvement.

It will be recalled that the last article dealt with the density of traffic on the C. N. R. and endeavored to show how, by merely lengthening the average haul of its freight by 10% per annum, without even anticipating any increase in tonnage at all, the C. N. R.'s traffic density would be increased to a point where the government-owned system would be within measuring distance of the C. P. R. as it was operating in 1920—987,313 tons per mile of line on the Canadian National in Canada (20,089.67 miles) as compared with the C. P. R. with just a little more than a million tons per mile of line in Canada.

It is difficult for a line of light traffic density to handle its traffic in large loads. An annual tonnage density of 730,000 tons is only 2000 tons per day. Under favorable conditions this would represent only one large freight train each way per day. It can be understood readily, however, that for purposes of service to the public this tonnage would have to be split into two, or even three, trains each way. In 1910 and 1911 when the tonnage density on the C. P. R. was 751,000 and 759,000 ton miles respectively, its freight train load was only 340 and 336 tons respectively. Moreover, these two years marked a great advance on that system over previous years as its train load had been increased from only 233 tons in

1902 to 299 tons in 1909; and then, as stated, it went up to 340 tons.

That the tons-per-train-factor is of great significance will be clear from a study of the following table giving the Canadian Pacific freight train performance in 1913 and 1920.

It will be observed that the increase in the actual number of tons handled in 1920 as compared with 1913 was but 2.33% and when the C. P. R.'s 1.4% increase in mileage (11,601.7 to 13,385.5 miles) is considered, the tonnage per miles of line on that system actually decreased. The ton miles per mile of line increased by 7.8% whereas the actual ton miles (when worked out, increased by 23.25%. The train load increased by 38.8%. From this table, also it will be seen there was an increase in earnings per train mile of 84% and a great saving in expense in the operation of train miles. To illustrate this point clearly it might be shown that if the ton miles of 1920 had been handled by the C. P. R. in their average train of 1913, additional train miles to the number of 10,175,973 would have been required. It could not have cost less than one dollar per train mile to have run these additional train miles in 1920 so the extra mileage would have represented a loss in net to the Canadian Pacific of an amount nearly equal to that Company's fixed charges.

This is a striking example of the benefit in operation what may be obtained by increasing the train load. A number of railways in United States had, prior to the war, increased their train load to a point which would not allow their position to be sustained by effecting an advance in this position during the war period. Lack of density prevented similar action in the case of Canadian National Railways. The advantage to the government-owned lines in this direction, that may be expected to accrue as a result of the thorough consolidation of the National System, seem up, therefore as substantial in character.

The National Railways as constituted at present, not including the lines of the G. T. R. in the east, have a freight traffic density of 576,700 tons per mile of line. The Management succeeded, however, in handling this during 1920, in 373 ton trains, which was a larger average than that of the C. P. R. prior to 1913, in many ways a record year, and one in which the private-owned company set its average load to 351 tons when

The Boy Scout Movement

Boy Scouts are organizations of boys and youths between the ages of twelve and eighteen years and upwards, which aim to develop character, to aid in furnishing equipment for a career, and to train in service for others, physical health, and efficient citizenship, by utilizing the natural activities and interests of the adolescent period.

The development of the Boy Scout Movement in England is due to Lt. General Sir Robert Baden-Powell, Bt., who during the siege of Mafeking in 1899 had seen the boys, under Lord Edward Cecil's command, organized and drilled into an efficient messenger service. When Baden-Powell returned to England in 1902, the idea was fostered and received popular support, and a general plan of organization was formed in 1908, and a general charter of incorporation was granted in 1912, the organization being recognized as a "non-military, public service body."

The Boy Scouts Association in Canada is non-military and non-sectarian in character, the movement being supported by Catholics, Protestants and Jews alike. Of late it has also been given consideration as an educational adjunct by well-known educators, some schools adopting the Scout programme in part or as a whole, while some of the universities and leading technical schools conduct special courses for Scoutmasters and other Scout officers.

Local Association or Troop Committees are organized to supervise and extend the movement in communities upon application by representative citizens to Provincial Headquarters, 24 Ritchie Building, St. John. Such Association and Committees become responsible both to their communities and to headquarters for the leadership of Scout troops in their area and for their encouragement and support.

The Scouts themselves are organized into patrols of eight boys, two or three or four patrols to a troop under a Scoutmaster. Scouting is now recognized as the most natural and at once the most successful type of organization for boys. Nearly 30,000 boys in Canada are now members, and many thousands more have had the benefits of Scout training during the past twelve years.

It enjoyed a freight traffic density of 559,000 tons per mile of line. This proves, then, that the train load, a most essential factor in efficient operation, has been given the serious consideration by the C. N. R. Management that the subject warrants. The low density of freight traffic and the necessity of competing in relative frequency of service, have been limiting factors in the progress possible in this direction.

When it is possible to lengthen the average haul and at the same time increase the train load, a most favorable set of operating conditions is established and without doubt the relatively good showing of the Canadian Pacific since 1915 is primarily due to the opportunity to do this which presented itself to the Management of that System, which, prior to the war had good density of freight traffic and a relatively light train load compared with lines of similar density.

Summarizing, then, the prospects for improving the consolidated National System's freight traffic situation are bright as the Government owned lines, although having but 50% more mileage than their privately competitor, originate twice as much traffic in tons and to raise the density it is only necessary to increase the average distance haul. As the freight density increases the opportunity to increase the train load becomes greater and this, of all factors, is the one most certain to bring about a substantial reduction in the relative cost of moving freight traffic. As to character of traffic, those classes of freights in which the present National System is deficient, will be made up by consolidation with the Grand Trunk which serves the manufacturing sections, and more fully developed industrial districts not previously reached by the National Lines; and the Grand Trunk also provides the United States connections which are essential from a competitive point of view.

As regards passenger service, the Canadian National Railways are now at a great disadvantage compared with the C. P. R. and even when the Grand Trunk Lines are consolidated with those of the Canadian National Railways, the consolidated System will start quite a bit behind, but the prospects for improving the situation are good, as will be pointed out in another article.

Information Re. Land Statement

An increased demand by the public for information regarding land settlement is reported by the Department of the Interior at Ottawa. This increased interest is attributed partly to the fact that Crown lands in Western Canada within fifteen miles of a railway, which heretofore have been reserved for returned men, became available for civilian entry on the 1st of May.

Besides Crown lands that may be available, it is estimated that there are about 200,000 quarter-sections of privately owned lands lying idle in the Prairie provinces, most of them within easy reach of railway. The same condition applies, though in a lesser degree, to the older provinces of Canada. This condition is not, however, due to lack of value in the land itself on the contrary and particularly in the Prairie provinces, much of this idle land is rich virgin soil, for when one considers Canada's vast land area and its comparatively small population it is at once apparent that a large portion of the area in private ownership must be unoccupied and available for purchase at reasonable prices.

In addition to its activities in connection with the settlement of vacant Crown lands in the Western provinces the Department of the Interior, in co-operation with Provincial officials, has compiled and published very full particulars regarding unoccupied, privately owned, farm lands in Manitoba, Saskatchewan, Alberta, Nova Scotia, New Brunswick and Prince Edward Island. This information which has been published by districts is issued free of charge and includes such details as the price at which land may be purchased, the terms of sale, acreage suitable for cultivation, nature of soil, and value of buildings. With such information in his possession the intending purchaser may negotiate with owners of land in any district in which he is particularly interested.

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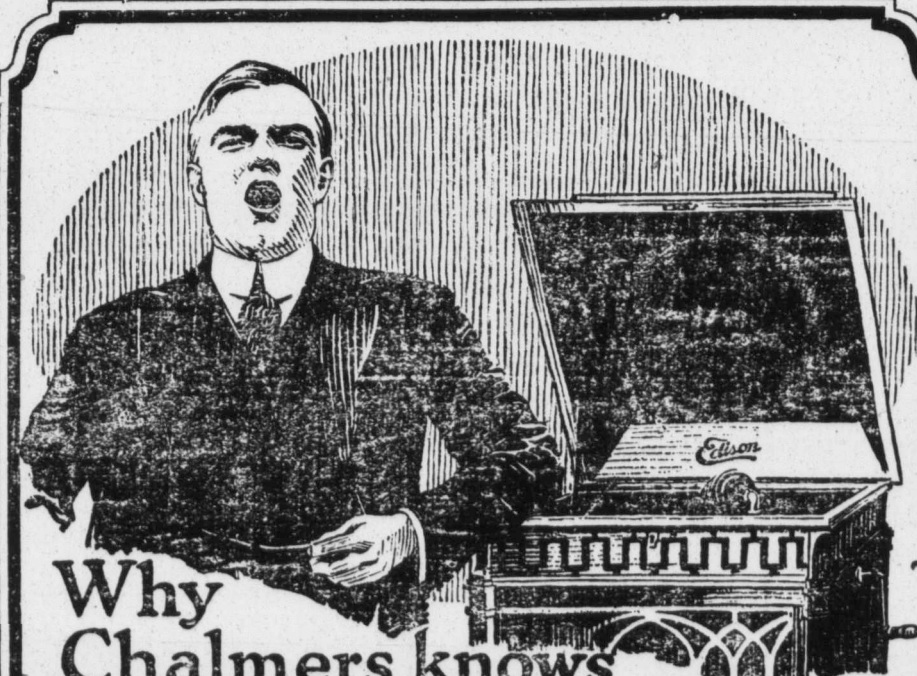
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