

Equipment—1 Model "T" Ford, chassis fitted with body carrying the following equipment:—

2 x 40 Gallon Tanks of Soda Acid—150 feet x 1" Hose.

3 x 5 Gallon Hand Water Pumps.

2 x 2½ Gallon, Soda Acid Fire Extinguishers.

Carbo Oxide—Chimney Extinguishers.

1 "Gar" Gun—(Chemical Powder Extinguisher).

8 Water Pails.

Spare Bi-Carbonate of Soda.

Spare Sulphuric Acid.

1 Iron Bar and 50 ft. of Chain for obstinate Cresote or soot chimney fires.

1 Extension Ladder.

4 Other Ladders.

8 Coats and Hats for Firemen.

Whole cost was \$2,500.

This equipment is housed in a Frame Building 25 ft. by 15 ft. Concrete Floor, Electric Light, Work Bench, Stove for

Heat in winter electric heater for engine. Keys are kept with Chief, Assistant Chief, Driver and the Secretary Treasurer and Commissioners.

Whole cost of house was \$1,500.

Initial cost and annual maintenance costs are raised by tax on residents in the two districts—rate amounts to not more than 1½ mills annually, any balances left over are kept in the Fire Protection Fund.

The equipment can reach any point in the 4 square miles covered within 15—20 minutes and has frequently been of service further afield—This equipment has undoubtedly saved a great deal of property—Inspection shows the engine and supplies are well kept and ready for instant service.

Transportation in the Economic Life of the Maritimes

By RAND H. MATHESON

THE nineteenth century witnessed in North America and Western Europe a procession of economic changes commonly called "The Industrial Revolution". This revolution resulted in the concentration of production in large plants, particularly in large centres of population. The larger scale of production required large supplies of materials and also larger outlets for the finished products. Fortunately, at the same time, the application of steam power to carriage furnished the means for large scale distribution at relatively lower costs.

About the middle of the nineteenth century the Maritime Provinces were enjoying a certain amount of prosperity, principally along the seaboard. The commercial cities of Saint John and Halifax were rated highly among the principal

seaport cities of the world. A movement towards the construction of a railroad to connect New Brunswick, Nova Scotia and Prince Edward Island with what was then known as Canada had received a temporary set back because surveys and investigations had determined its commercial infeasibility. On the other hand, the movement towards confederating the Provinces was gaining momentum.

It was generally considered, by the statesmen of the time, that an intercolonial railway was essential for the successful confederating of the Provinces. Indeed, the promise of an intercolonial railway soon became the most important inducement to the Maritime Provinces to enter the confederation project.

At the London Conference in 1866 resolutions were adopted providing for the construction of the Intercolonial Railway. The Imperial Government also

EDITOR'S NOTE: Rand H. Matheson is Transportation Manager of the Transportation Commission of the Maritime Board of Trade with headquarters at Moncton, N. B.

guaranteed a loan to assist in the construction on the understanding that national, imperial and strategic considerations would supersede those of a commercial nature. The British North America Act of 1867 provided for the construction of the railway "with all practicable speed". The undertaking was completed by a circuitous route in 1876 to River du Loup where the Grand Trunk gave the Intercolonial access to Quebec and Montreal.

From the outset it has been the general understanding that the Intercolonial railway was "to afford Maritime merchants, traders and manufacturers the larger market of the whole Canadian people instead of the restricted market of the Maritimes themselves." Indeed, the rate policy of the railway up to about 1912 appeared to confirm that understanding. However, from 1912 to 1925 relatively greater increases were effected in the freight rate structure in the Maritimes than in central Canada. These increases the Royal Commission on Maritime Claims, in 1926, found to have placed upon the Maritime Provinces a burden which was never intended it should bear and, moreover, a burden which tended to depress abnormally business conditions in the Maritimes. An immediate reduction of 20 per cent was recommended by the Commission on "all rates charged on traffic which both originates and terminates in the Atlantic Division of the Canadian National railways (including both export and import traffic, by sea, from and to that division), and that the same reduction be applied to the Atlantic Division proportion of the through rates on all traffic which originates at stations on the Atlantic Division (excluding import traffic by sea) and is destined to points outside the Atlantic Division."

The recommended reductions, with the exception of import rates to stations in the Atlantic Division, were implemented in full by the Maritime Freight Rates Act. The reductions became effective on July 1, 1927.

The industrial development, which took place in Canada during the latter part of the nineteenth century, tended to

favour concentration in the central Provinces. The principal factors influencing this concentration were: proximity to raw materials, greater density of population, protective tariffs, low cost transport, advantages of a central location for distribution, etc. Of all these, protection policies and the low cost of transportation for production and distribution were undoubtedly the most dominating. Thus it is not difficult to understand why the Maritime Provinces, producing principally primary commodities a considerable distance from the principal markets of Canada, tended to lag in the economic progress of Canada.

The industries that did establish and develop in the Maritimes were, at the outset, considerably handicapped by differences in transportation costs. It is only those industries that have been able to offset the disadvantages of transport to the larger markets of Canada by other economies or by export to foreign markets that have been able to survive. In fact, even the few industries that produce commodities of relatively high value have complained from time to time of the burden of the transportation factor as compared with their competitors located nearer the principal markets.

Manufactured and miscellaneous commodities loaded at railway stations in the Maritimes in 1936 amounted to only 15% of the total whereas agricultural, mine and forest products amounted to about 84%. In Ontario for the same year manufactured and miscellaneous commodities amounted to about 34% of the total freight loaded not including a large movement by motor truck. In other words, the bulk of the goods produced in the Maritimes are basic or primary commodities which, because of their low value and high density, cannot bear high freight rates.

In the majority of cases, the primary industries of the Maritimes are competitive with industries located nearer the centre of greater population and consumption of Canada. It is patent, therefore, that differences in the cost of transportation are actually additional costs of production to Maritime industries.

The Maritime Freight Rates Act, by re-establishing relatively the previous relationship in rail rates, had the effect of alleviating to some extent persons and industries in the Maritime Provinces. But prior to the passing of the Act, economic changes were taking place, including the revival of road transport, which operated to destroy the relationship in rates established by the Act and consequently destroy, to some extent, its benefits.

The railways have felt keenly the development of motor truck distribution and the concomitant more modest revival of water transport. The competition has been more intense and quicker to develop in the industrial centres of Canada. The resultant effects have been reduced cost of transport and improved and quicker means of carriage in that area. In other words, factors which augment the advantages of location in the central Provinces unless off-set by other compensatory factors for industries in the Maritime Provinces.

The economic changes that have been taking place during the last fifteen years or more have been watched with no little concern by business leaders in the Maritimes. Evident on all sides are changes in production and marketing which are closely interwoven with changed transportation conditions. In this connection, it is apparent that the merchandizing policy during the last ten years has stressed small stocks and rapid turnovers; that consignees desire door to door deliveries; that the re-location of production activity is tending to take place in some places; that retailing is forced by traffic congestion in the principal thoroughfares of our cities to less important streets; that burdensome taxation in some cities is forcing industry to seek relief in other localities.

Some of the manufacturing and semi-manufacturing industries of the Maritimes have found it necessary to utilize warehouses, more and more, in the principal markets in order to meet the new merchandising policy and also the door to door deliveries of their competitors. On the other hand, there have been some instances in recent years of

plant and branch re-location in the Maritimes of central Canadian industries brought about, no doubt, by changes in the merchandising policy.

From the point of view of the Maritimes decentralization of industry would be a desirable thing. It would, of course, mean the establishment of more plants in the Maritimes. This section of the country would tend to become more self sufficing, importing only the commodities which could not be produced locally. The principal hindrance to such a development at present is probably the limited markets available within the Maritimes itself. In other words, an industry, economically speaking, would not make a change unless it was clearly indicated that it would be cheaper to establish a plant in these Provinces.

Whether or not there exists a trend or tendency towards industrial decentralization in Canada is not clear from present observations. However, investigations conducted in the United States indicate definitely that there is a tendency for industry to re-locate towards the South and on the Pacific coast. Transportation is an important, if not a dominant factor, in the re-location of industries in that country. Yet, other factors such as labor and taxation also play an important part.

It would appear, however, that decentralization or re-location of industry in the direction of the Maritimes will not be very extensive in the immediate future, unless labor and taxation problems in the larger centres tend to off-set the comparative disadvantages of transportation. But, it must not be overlooked that concurrent increases in Maritime taxation might be sufficient in itself to discourage the re-location of industries seeking relief.

It is evident, however, that a number of Maritime industries have developed despite the disadvantages of distance from the principal Canadian markets. A survey of those industries and the products thereof indicates that:

- (a) Other advantages existed which tended to offset the transportation advantages of competitors.

- (b) The industry enjoyed a monopoly production in Canada.
- (c) Markets were widened because of water transport.
- (d) The cost of transportation to the value of the product is relatively low.
- (e) The products are principally exported.
- (f) Careful grading created a market preference.
- (g) The proximity to raw materials was controlling.

Some of the industries enjoy a combination of these compensatory factors.

The fact that a number of Maritime industries have been able to carry on successfully is worthy of serious study. It might be true that, in some cases, the size of the industries may be small as compared with competitors in the central Provinces. Nevertheless, the fact of the apparent success of these industries gives rise to a hope that through investigation, invention and research it might be possible to develop the production of other commodities which, together with advantages now possessed by the Maritimes, it will be possible to market universally. Specialization in production of high valued goods also offers another field.

The question now arises, in what manner or by what means can new industries be attracted or developed? The largest and most progressive industries in the United States today have been and are promoting research both economically and scientifically with some degree of success. The industries of the Maritimes, generally, are not sufficiently large to afford the establishment of research departments. It is suggested, therefore, that a research department supported jointly by industry and the Governments and operated in conjunction with the universities would be a move in the right direction.

Space does not permit a complete discussion of the possibilities of research. Suffice it to state that particular concentration on the products of Maritime

industries the demand for which, in the present state, has been considerably curtailed due to world economic conditions might result in discoveries that would alleviate depressed conditions in those industries.

The problem of agriculture also could be included in the research program for the purpose of determining the causes and possible remedies for the relatively large vacation of farms in New Brunswick and Nova Scotia while the Maritimes import annually large quantities of food-stuff which, some people claim, could be produced locally.

An industrial development, concomitant with agricultural rehabilitation, would also add materially to the business of Maritime ports. Instead of steamship services to Maritime ports being considerably curtailed during the summer months, as at present, increased industrial activities in the hinterland of the ports would tend to attract more regular and frequent steamship connections. Improved steamship service would also tend to encourage a greater proportion of through traffic originating at and destined to other parts of Canada.

The question of transportation is obviously of paramount importance to the economic life of the Maritimes. Therefore, the maintenance of rate relationships, in a changing rate structure under new economic conditions, is essential if the present and future industries of these Provinces are to develop and prosper. In this connection, the revival of regular steamship connections between the Maritimes and Great Lakes—St. Lawrence waterways, in 1927, was due largely to the effect on Maritime industries of the reduced rates and improved services created by the development of motor truck competition in the central Provinces. Moreover, recently, Maritime industries found it necessary to oppose a Government measure to regulate water transport between the Maritimes and Great Lakes because it appeared that regulation would tend to disrupt present rate relationships to the advantage of other industries to competitive markets.