solution to the problem of the permanently unemployed worker. Where therefore a local industry is so affected that it cannot be expected to sustain the previous level of employment, the industrial problem cannot be evaded by recourse to parttime farming, and other means of meeting it must be found.

Again under changing conditions new industries and new opportunities for industrial employment may appear. These possibilities may be related to parttime farming in two ways. Growing knowledge and changing techniques may make it possible to establish new industries in rural areas. These will offer new sources of employment to farm families, and an extension of part-time farming will occur. Indeed, because of the small size of many farms in Nova Scotia, the limited employment they can provide, and the limited income which can be derived from them, the establishment of such rural industries would be a beneficial and stabilizing influence in rural communities. It is therefore desirable that such opportunities as present themselves should not be missed. possibilities should be fully explored, and such encouragement and assistance provided as may be consistent with the establishment of local industries on a permanent and self-supporting basis. While the decision in each case would require a close consideration of the particular circumstances, it seems reasonable to suppose that the diversified resources of the Province of Nova Scotia can provide favourable opportunities for development along these lines.

In the second place, where new industries develop in or adjacent to towns, and attract new workers to the area, the associated housing development calls for consideration of the provision of parttime farming facilities. While the preceding discussion implies that the possibilities will vary with the particular circumstances, there is a strong case under any circumstances for providing the workers with at least enough land to provide them with the opportunity to establish a garden.

Within limits part-time farming can be expected to make a significant contribution to promoting more stable and generally satisfactory conditions in the Province of Nova Scotia. The interests of the provincial government, local governments, employers, workers' organizations, and individuals are involved, and development can be most effectively promoted through the sympathetic and active cooperation of all concerned.

Public Transportation in Canada After the War

By John L. McDougall

THERE are four chief transportation media, air, road, rail and water, all of which have their part to play. It is probable that, after the war, air travel will take a large part of the high-class passenger travel and first class mail for distances beyond 6-800 miles. Both road and water carriage are of present importance and will probably grow in relative importance as time goes on.

But rail transport is now and will long remain the basic carrier in a country of continental extent such as Canada.

It is highly probable that far too much attention has been given to the "railway problem" in Canada and far too little to the disorganization of the economy which has had sharply unfavourable effects upon railway operations and earnings. Since 1920 there has been a most extraordinary disparity between the returns to those engaged in rural pursuits and to those in urban industry without

EDITOR'S NOTE: Dr. John L. McDougall is on the staff in Commerce at Queen's University, Kingston, and has for a long time specialized in problems of transportation.

arousing that degree of public interest which might have been expected. From 1929 to 1940 there was a continuously low level of output, of investment and of employment (and an even greater spread between rural and urban earnings than in the 1920's) which many were willing to deplore but which few were willing actively to remedy. Omelettes are made by scrambling eggs, depressions are remedied by equally drastic and irreversible remedies; but in the 1930's we seemed to decide that it was better to worship the egg in its roundness and to dream of the omelette in our sleep than to find a basis on which we could agree to get on with the work of production. It was no longer fashionable to talk of producing real goods which men could eat and wear, houses in which they could live, electric power stations to light those houses and to drive the machinery with which men worked; instead, one spoke of the "faulty distribution of purchasing

It was as if we all of us hoped to live like petty rentiers when once the government had learned to mumble over our heads the appropriate abracadabra. There was an infinite amount of discussion of how much the ideal society would give to its fortunate citizens, and no move to take up the task next to hand in order to work toward that millenium.

The war has broken that evil spell. We have got to work again. The fact now stares us in the face (I cannot say that we have digested it) that if we are willing to work we cannot only make great capital investments in war goods, but that we can also hold up our production of goods for current consumption. Indeed, until at least the middle of 1941 we were able to increase our net consumption while recruiting an army and producing for its equipment.

It is clear also that the people on the low side of the income scale—the unemployed and common labour in the towns, fishermen, farmers, farm labourers and workers in the bush have all been greatly improved in their relative position. The efforts of the 1930's to "improve the

condition of labour" had helped those who, having employment, stood least in need of having their bargaining power bolstered. Full employment has given the relatively weak a share in the national output which they could never have got otherwise.

The railways which suffered as much if not more than any other non-extractive industry in the 1930's are now phenomenally prosperous. They have also proven themselves to be in remarkably sound operating condition. In the year ending August 31, 1942, they produced about 30 per cent more ton miles and 45 per cent more passenger miles than in the peak year 1928. They have done this in the face of significant reductions in the number and in the aggregate tractive effort of their locomotives, in the number and aggregate carrying capacity of their freight cars, and in the number of their passenger cars. They have also reduced their labour force about 20 per cent. If comparison is made with 1938 as the last year of nominal peace, then freight traffic is now double what it was and passenger traffic two and one-half times. They have demonstrated their operating efficiency and their profitability under existing conditions. Because their ratio of annual gross revenues to capital investment is so low they are inevitably sluggish in adjusting to new conditions, but they have made great reductions in their operating costs over the last fifteen to twenty years and the process is by no Their future is largely means ended. a matter of traffic volume which is not under their control. It is a function of the economic health of the whole com-

^{1.} Indeed, one of the serious problems of war finance is the very rate of improvement in the position of agriculture. Urban labour was given a cost of living bonus on earnings up to \$25.00 per week. The rise in farm prices threatened to push this bonus beyond the present high levels. The War-time Prices and Trade Board is now engaged in a desperate rearguard action to hold agricultural prices down. If they succeed then the problem will become one of stemming the exodus of workers from the farms into an industry hungry to absorb them and able to pay much higher for their services. Agricultural output is also important, and we shall probably come finally to admit that our desperate struggles to maintain some of the conditions of a status quo which we all deplored when it existed deserve to stand alongside other equally strenuous and fatuous efforts to support experiments "noble in purpose" which might better never have been made.

munity. If we are ready actively to push toward the maximum in output and employment after the war, then the railways will be all right; if not, they will languish as they did in the '30's. This is not a condition which they can control. They are too small a proportion of the whole society to have a decisive influence upon it.

Canada has always been organised around her export trades. They still employ a very high proportion of the gainfully employed, but since 1930 our attitude toward such trade has been ambiguous. We have upon the one hand, laid out great sums for the maintenance of the structure of certain industries the great bulk of whose products must be The wheat industry is sold abroad. the outstanding example, though it does not stand alone by any means. the other, we have pursued tariff, currency and wage policies which have hindered the development of normal trading relationships.

At the present time the price of wheat for export is strictly a domestic matter. The funds for its purchase are provided out of the Dominion Treasury and we are eager to send abroad all that can be shipped. That situation is by its very nature unstable. It is hard to imagine it persisting except as part of a war situation; it is equally hard to see a revival of a normal two-way international trade until the mechanisms set up in the last three years for the national control of our economy have most of them been wiped One need not be regarded as a pessimist for fearing that it will be much easier to reduce the armed forces to a normal size than to separate the army of bureaucrats in Ottawa from the truly enormous and nearly uncontrolled power which they now exercise. Yet it will not be through controls but through a high level of productive output and through a willingness to trade that prosperity will be won.

Within the narrower field of transportation there are perhaps three problems which call for consideration. The first is the conflict between Dominion

and Provincial jurisdiction. The solution of 1867 which assigned roads to the provinces as purely local works and railways and waterways to the Dominion as works for the general advantage of Canada, has broken down. operating on all three of them are now carrying long-distance traffic. whose minds run toward the extension of central controls may take that as a reason for bringing all road traffic under the Transport Commission. It is not the only answer to the problem. railway rate structure is founded upon the assumption of complete monopoly. Since the 1890's it has been so strongly affected by public pressure that it seems from many aspects to be an arm of the taxing power for the redistribution of costs rather than a means of maximising profits. Even at 1920 it was an uneasy compromise. By 1939 it was an anachronism. The monopoly was no longer there. Year by year the rail share of the total market was being reduced. If the present situation is allowed to continue then the three agencies will shake down into a working adjustment in which each will tend to get that traffic which it is fitted to carry. Regulation by the Dominion, on the other hand, would almost inevitably end in an attempt to protect the status quo in rates and to smother the technical developments in highway and water carriage.

The second problem is that of the competition in subsidies between the Dominion and the Provinces. The fear of a railway monopoly has been one of the main motivating forces and the movement of railway rates toward a cost basis would do something to ease the pressure; but it is probable that, until the impact of the internal combustion engine upon society has worked itself out, something of this will remain.

The third problem is that of cooperation between the two railways. Ten years ago high hopes of great economies from this source were held out—and very little was realised beyond a limited passenger pooling in the Toronto—Quebec area. For this there are good reasons.

It is hard to maintain competition over large areas while enthusiastically cooperating in others. Habits of mind formed in one environment cannot be sloughed off easily. The very fact that there are only two railways makes it, in certain ways, more difficult than it would otherwise be. If there were five railways all engaged in pooling in various parts of their respective territories no one need lose face by such a change; when there are only two that is impossible. That aspect of face is important, at least as important as the fact that economies through cooperation did not prove to Transportation is one part only of the national economy. If we can resolve the social tensions which kept the whole economy at subnormal levels in the 1930's and if those who are charged with the administration of transportation agencies can keep a reasonable balance between their capital outlays and the revenues reasonably to be expected, we shall get along. But there is very little to be expected from laws to protect fools from their folly and the same holds for administrative devices addressed to the same end.

Farming in Nova Scotia in the Seventeenth Century

By O. J. FIRESTONE

In the course of some research work on early Canadian agricultural history which has recently been undertaken by the writer it became necessary to explore the question of the boundary arrangements of farms in Nova Scotia in the French period and the layout of the fields. Since no satisfactory answer could be obtained from contemporary reports and historical monographs a search was made for a map which would give more detailed information on the topic.

A good map exists for New France, as the Province of Quebec was called in the French period. This map gives a detailed description of the field system which was used by the French settlers along the St. The plan was prepared by Lawrence. Sieur Gédéon de Catalogne at the request of Monseigneur le Comte de Ponchartrain in 1709 and was drawn by Jean Baptiste Decouagne. The original map is kept in Paris while a copy is available in the Public Archives in Ottawa. In addition to the map, Catalogne prepared a minute report on the conditions of the settlements in New France entitled "On the Plans of the Seigniories and Settlements of the Governments of Quebec, Three Rivers, and Montreal" which he completed in 1712. Besides the French text, an English translation of this memorandum will be found in the Public Archives in Ottawa. The original manuscript is in the Colonial Archives in Paris.

Though there exist a number of good maps for Acadia completed in the French period, none of them seemed to go into such detail as to show the field system similar to the work undertaken by Catalogne. The writer therefore undertook to search for such a map in various archives and museums. Thanks to the tireless assistance of Mr. Norman Fee of the Public Archives in Ottawa, a copy of a map was finally found which contained the desired information.

Completed in 1708, this map bears the title "Plan de la Banlieue du Fort Royal a Lacadie et de ses Environs". It gives a detailed description of the Annapolis Basin indicating not only the settlements which existed already at that time but also the shape of the farms and the arrangements of the dykes which were built as a protection against the floods.

EDITOR'S NOTE: O. J. Firestone, Ph.D., is an economist with the Committee on Reconstructtion in Ottawa.

^{1.} Series C 11 A, vol. 33 a.