

the entire \$10 is paid by the shipper.

As, in the long run, the entire expense incurred in providing the service of transportation must be borne by the industry of the country, the public welfare demands that, other things being equal, that railway policy shall be adopted which will keep this expense at the lowest practicable minimum. Now, assuming that there are certain unit costs, such as the wages of labor and the prices of materials, which must be met, and a certain standard of service which must be maintained, it is evident that that railway policy will be most conducive to economical management which is adapted to securing the ablest and most energetic administration of the affairs of the railways.

Business costs are always of two classes—return to invested capital and expenses of operation. It is as absolutely impossible to avoid incurring the one as to avoid incurring the other. If private companies are to be permanently successful in furnishing railway service they must be able to raise capital, and they will not be able to raise capital unless they are able to, and do, pay interest and dividends on it. Likewise, if a government is to provide railway service it must raise capital, and if it is to raise capital it must pay interest on it. The books may be so kept as not to show how much interest actually is paid on the investment, but because the books are not made to show the facts will not alter the facts. You might also so keep the books as not to show all the operating expenses, but this would not make the operating expenses any less.

The advocates of government ownership contend that it enables capital for the construction and development of railways to be raised more cheaply, and that it causes their administration to be more efficient than private ownership and management. Governments ordinarily can borrow money cheaper than private companies. But the total return which must be paid on the capital invested in railways does not depend merely on the rate of interest paid. The total return required on the investment in a mile of railway is determined not only by the rate of interest, but also by the amount of capital spent to produce that mile of railway. If a company would have to pay 5% for capital and a government only 4%, but the company would build a railway for only two-thirds as much as the government would spend, the total interest which the company would have to pay on the investment would be less than the total interest the government would have to pay.

Now, whether the cost of building a new railway or of improving an old one will be high or low will be determined chiefly by whether its affairs are skilfully administered. The same thing is true as to operating expenses. The situation is precisely similar to that met in other lines of business. One man builds a factory extravagantly and operates it expensively, and it is a commercial failure. Another, with perhaps less credit and financial resources, builds a factory economically and operates it efficiently, and it is a commercial success. In the railway field, as in that of manufacturing, costs of production depend upon the skill of the management; and the requisites of skilful administration are the same under government as under private management.

Probably the most fundamental and important difference between government

regulation and government ownership of railways is that under the former public officials exercise merely the authority of supervision and correction, while under the latter they exercise the authority and perform the duty of actual administration. The two functions are widely dissimilar. The main function of all regulating bodies is to make broad general rules for the guidance and control of the acts of others. The administrative, or managing, function, on the other hand, is initiating, dynamic, executive. The management of a railway system conceives projects and carries them out. It determines where it will be advantageous and desirable to build extensions and make improvements and how these things shall be done. It determines according to what ideals and standards the property shall be maintained and operated. It selects and directs the officers of all ranks. It selects, directs, trains and disciplines the employes and determines within limits fixed by law and public opinion their wages and working conditions. On its judgment, courage, energy and ability in doing these things mainly depends the success of the railways, whatever their ownership.

Whether the governments of Canada and the United States, under the political conditions which prevail in these countries, may be confidently relied on to develop and support railway administrative organizations which will manage the railways as well and economically as private companies, is open to grave question. One of the greatest difficulties met in securing the skilful administration of government concerns is that of obtaining and retaining efficient managers for them. Governments, and especially democratic governments, will seldom pay as high salaries as private concerns to get men for positions demanding first class ability. However, the honor inherent in public office is more attractive to many able and public spirited men than a large income, and therefore, in spite of small salaries, governments may often get strong men if their appointments and tenure of office are made to depend on their merits and if they are left free to do their work without political influence. But in most democratic countries, such as Canada and the United States, the appointments to important offices in the public service are usually determined chiefly by political considerations. There is hardly an officer of a railway or of an industrial corporation on this continent who does not owe his position to his experience and proved ability in his special line of work. There are few high public officials, except in the army, the navy and the courts, who do owe their positions to such qualifications.

The managers of any business, public or private, even though of great ability, cannot administer it with energy and skill unless left free from interference except on business grounds. But are the officers of government railways in democratic countries likely to be as immune from such interference as those of private railways? You have had some experience with government management of railways in Canada, and I do not understand that the higher officers of your state railways always have been appointed solely because of their qualifications or that they have always been left free from political interference. But if the managers of government railways are not to be chosen and retained solely because of their peculiar qualifications for their duties, and are not to be left free from

political interference, upon what ground can it be assumed that they will be able to develop and operate the properties so as to keep down the cost of transportation to what it would be under private management?

Political considerations tend to cause lines to be built and improvements to be made where they are not most needed to promote the economic welfare of the country. They cause men to be taken into, retained and advanced in the service largely regardless of their merits. They cause a greater number of men to be employed than are actually needed. They sometimes cause contracts to be let and purchases to be made which would not be countenanced if business principles alone prevailed. They sometimes cause passenger and freight service to be rendered, not on business principles, but to placate the voters in certain forward communities. These statements are not based merely on surmise. They can be substantiated by evidence afforded by government management of railways in many countries. Nor are those directly charged with the management of the railways to be held entirely responsible. In many cases they have fought courageously and determinedly against such abuses, only to find that their resistance availed but little.

The conclusion necessarily suggested is that, under democratic conditions at least, state railways are less likely to be efficiently and economically developed and operated than private railways. This conclusion is supported by evidence afforded by the operating and financial results of government and private railways throughout the world. There are 17 countries in the world in which the capitalization, or cost of construction per mile of the railways exceeds the average of the railways of the United States. In only six of these does private ownership preponderate, while in eleven, government ownership preponderates. The cost of construction of the Intercolonial Railway of Canada, the oldest, and until recently the largest, government-owned railway on this continent, is officially reported at \$75,000 per mile. This is about the same as the cost of the leading railways of Australia, the state railways of New South Wales. The National Transcontinental, which also has been built by the government of Canada, has cost substantially more than this. These figures greatly exceed the average capitalizations per mile of the private railways of Canada and of the United States. The average net capitalization of the railways of the United States, including all the great systems, with their numerous multiple track lines and dense traffic in the populous eastern part of the country, is only \$67,000 a mile. There are, of course, exceptions, but the general rule throughout the world is that governments invest more capital in railways to handle a given amount of traffic than private companies do.

When we turn to a comparison of the expenses of operation that state and private railways incur in proportion to the total traffic which they handle, we find facts of a similar character. The private railways of France handle more traffic in proportion to their operating expenses than do the state railways of that country. The railways of Prussia are the best state managed railways in the world, and yet the private railways of France handle more traffic in proportion to their operating expenses than do the state railways of Prussia. The private rail-