

## THE IRISH RAILWAY PROBLEM.

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Probably one of the most serious of the many important economic problems urgently calling for a settlement is the future of the Irish railways. What is to be their fate? They certainly cannot go on as they are, for Government control, first exercised in August, 1914, under the provisions of the Regulation of Forces Act, 1871, by universal assent, is not a success or proving satisfactory to any person or interest, and it obviously must soon cease and determine; and the sooner, therefore, the inevitable is faced by the Irish public the better for all parties concerned. In this question three interests are involved and have to be reconciled. Those are, first, the interests of the travelling and trading public, the community in general, their right to obtain the best service at the cheapest possible rates compatible with a fair remuneration to labour, and a just return on the private capital supplied for construction and working, without which capital the lines would never have been built. Secondly, are the fair and just claims of labour for adequate remuneration; and, lastly, the interests of those who represent the money originally sunk in the enterprises. The problem calling for solution is how best to reconcile these three not necessarily conflicting interests. Several plans are suggested, and I will try to deal with those most popular and finding favour with a discriminating public. As Mr. Balfour Brown, K.C., an eminent railway lawyer, says in an article in the "Times" Trade Supplement of May 1, 1920: "One thing the experience of the War has convinced most people of, and that is that bureaucratic enterprise in relation to trade is a failure. It was shown to be so in relation to the coal industry in the Sankey Report, which proves that, while the State might reasonably become the owners of royalties or mineral rights—or, in other words, the landlords of the mines—the trade of working the minerals should be left in public hands. And this applies with greater force to railways, which are a public necessity essential to civilisation." With this statement there is no disagreement. Some advocates of railway reform suggest

the nationalisation of the railways and their working by the State on the lines of the Post Office Telegraphs and Telephones, but these are very few, for State management has few admirers and, in result, does not mean economy and efficiency, as we know to our cost in everything the Government either here or in America took in hands. Other reformers—and they seem the majority of the few thinkers who have considered this question—are in favour of the Government acquisition and their leasing the lines to private operating corporations. In America this plan finds most public favour where few are found to advocate their complete management by the State. It is for us now in this country to carefully consider these various plans and weigh well the arguments for and against each. These plans I will briefly refer to, and try to explain them and the peculiar conditions of the problems so far as Ireland is concerned. The railway difficulty was dealt with by the State here on exactly the same lines as in England, utterly regardless of our special needs and the essential differences of the Irish question. Expenses were increased on the same level as in England without considering that the resources of the Irish and British lines are not the same, and consequently the resultant load of debt is relatively greater here. The losses on the Irish railways as managed by the State, are calculated at  $1\frac{1}{2}$  millions annually; and how is this to be met? Rates and fares have been increased by some 60 and 50 per cent., respectively, and to a degree burdensome to the public, and still the margin is not covered. There is and will be still a loss in the working. We learn from the White Paper, a Parliamentary Return, that the cost of the working of the railways was caused mainly “by excessive increases in wages throughout the country, and railwaymen’s wages in particular, and by the increased cost of materials.” That palpable fact we know and feel, and might complacently submit to if assured that we thereby solved the problem. In America they had and have the same tangled problem to solve, and have met it by handing back the railways to private operating companies, who are now attempting the task. As Mr. Hoover stated in his address before the American Institute of Mining and Metallurgical Engineers, and as he proved himself in the War, he is probably the greatest organiser in the world, railways are on their trial. He said:

“The return of the railways to the owners places pre-dominant private operation upon its final trial. If instant

energy, courage and large vision in the owners should prove lacking in meeting the immediate situation, we will be faced with a reaction that will drive the country to some other form of control. Energetic enlargement of equipment, better service, co-operation with employees, and the least possible advance in rates, together with freedom from political interest, will be the scales upon which the public will weigh these results."

The Bill handing over the American railways to the operating companies has been passed, and its working was heralded by a strike of serious dimensions and intensity. Under its provisions the railways are handed back their properties to work, and as best they may under changed conditions. So will our Irish railways be on their trial, too, when Government control ends in 1921 or 1922. A great deal has been said of the advantages of nationalisation as applied to railways, and to a great number of persons who have not fully studied the conditions and experience of other countries it seems the only solution of the railway problem.

#### THE NATIONALISATION OF RAILWAYS.

But as Mr. Acworth pointed out in his article in the "Quarterly Review" for July, 1919, and in his work, "Historical Sketch of Government Ownership of Railways in Foreign Countries," prepared for the information of the American Government, no country has ever nationalised its railways as the result of deliberately weighing the respective advantages and disadvantages of private and public ownership. He gives some illuminating instances of the failure of State railways being successfully worked as business undertakings. Belgium, after its separation from Holland in 1830, tried the experiment lest the lines would become Dutch. Prussia built State railways to serve poor provinces, because private investors could not be got to do so. After 1870 all the railways were nationalised more for military than commercial purposes. In 1898 Switzerland acquired its railways, and Italy took over all the small State lines; but in 1885 the Government leased all the lines to three companies for a period of sixty-three years, with a break at the end of twenty years; but there being constant disputes and labour troubles in 1905 the State resumed possession. In 1907 Japan took over its railways partly for military reasons. In 1908, in France, M.

Clemenceau promised to nationalise the Western Railway, but the Chamber of Commerce and influential local public bodies protested, and only by a small majority did he carry his plan. In all these countries, with the one exception of Belgium, the States which tried the experiment of nationalisation were before the War seriously considering, after seventy years' experience of abandoning State railways and letting them revert to private ownership. The various opinions for and against State ownership were shown in the elaborate *exposé des motifs* prefixed to the Prussian Expropriation Law of 1878. Therein were summarised the advantages and disadvantages of State ownership as contrasted with private ownership. The Italian Royal Commission, in 1881, gave its views also. It remarked that "most of the pleas for State management are based upon the idea that the State would perform many services much cheaper than they are performed by private companies. This is a mistake. The tendency is decidedly the other way . . . . State management is more costly than private. . . . The political danger would be very great. Politics would corrupt the railroad management . . . . changes of rates are made for the sake of influencing elections." These Reports, although nearly forty years old, are supported by the experience we have had recently and at present, and America too, of State management—its wastefulness and expense. Mr. Acworth was appointed by the Canadian Government in 1916 to report on the general problem of transportation in Canada, and especially on the acquisition of railways by the State. A better authority could not be chosen for a very difficult task. He recommended finally in his report that the Government should take over the whole of the railways with the exception of those belonging to the Canadian Pacific, and this in face of the fact that Canada "had had a long experience of Government railways, and that the financial results had been deplorable, and that for that result the intrusion of politics had been primarily responsible." With the strongest prepossessions against the course, his colleague and himself (the other one dissenting) came to the conclusion that the facts and figures proved that two great railroad companies controlling some 15,000 miles of line between them were unable to maintain an independent existence, and that their undertakings must be transferred to the Government which alone could carry on the burden." The problem before the railways in these countries is very serious. In Ireland it seems almost hopeless in its prospects and outlook.

**THE COST OF WORKING THE LINES AT PRESENT.**

In Great Britain the railway staff received in the year before the War an average wage of 28/- a week for work of from 10 to 12 hours. The wages have doubled and the hours are reduced to eight, with a corresponding increase of the numbers employed. The passenger fares have risen 70 per cent., amounting to some seventy millions as compared with fifty-four millions in 1917. Goods traffic remained practically stationary in the period. It amounted to sixty-nine millions in 1918, and in the last four years it has varied from 71 to 75 millions (leaving out smaller figures). The estimated value of Government traffic carried free rose from 10 millions in 1915 to 42 millions in 1918—the total revenue earned rose from 130 millions in 1915 to 178 millions in 1918, an increase of 27 per cent. But during that period working expenses rose from 85 millions to 131 millions, an increase of 35 per cent. The wages began, in 1915, to rise, and reached 33/- in 1918. The working expenses included allowances for repair works overdue, deferred maintenance of road and rolling stock; but the allowances were undoubtedly inadequate and insufficient. It is calculated that in 1919, so far from railways earning a net revenue, their gross receipts, including Government traffic (which since April 1 was charged for) fell some 20 millions short of the out-of-pocket expenses. The Budget estimated that the railways would cost the Exchequer sixty millions in the financial year 1919-20. As we have no such statistics for the Irish railways, I am unable to say how they stand in this respect.

**AMALGAMATION AND UNIFICATION OF THE RAILWAYS.**

Another plan suggested for meeting the stress and strain of the situation is amalgamation and unification of the existing systems. At all times that was a solution that obviously recommended itself to any unprejudiced person, for in Ireland the number, complexity and variety of our railways never justified their existence. According to the last Railway Returns there are at this moment 227 railway companies in the United Kingdom, of which 106—72 in England and Wales, 20 in Scotland, and 14 in Ireland—are leased, leaving 121 separate systems operating—87 in England, 8 in Scotland, and 26 in Ireland. Fancy 26 railways here and only 8 in Scotland, each with its separate staff, its separate Board, and all the official accompaniment and equipment.

## THE MULTIFORM SYSTEMS IN IRELAND.

The necessity for co-ordination and amalgamation of the present multiform systems of Irish railways is evidenced by a mere passing reference to their numbers, their smallness and relative insignificance, and in that way any reform would certainly carry out needed economies in their working. Let me briefly look at the number of the existing companies, and it is plain that in those days of improved and economical working they cannot justify their existence as separate systems. We have the following fully-equipped Companies in Ireland:—The Athenry and Tuam Extension to Claremorris Co., with seven directors, including the chairman; it is a leased line worked by the Great Southern, and only 17 miles in length; Ballycastle Railway, with seven directors, and  $16\frac{1}{4}$  miles in length; Baltimore extension, with two directors, length  $7\frac{3}{4}$  miles; Belfast and Co. Down Company, with six directors, and a total length, with branches, of 80 miles; Northern Counties Railway, with six directors, and a length of 263 miles; Cavan and Leitrim Railway, with fourteen directors; Clogher Valley Railway, with sixteen directors and 37 miles; City of Dublin Junction Railway, with ten members of a joint committee—it is worked by the Dublin South Eastern Co., and connects the city termini; Cork, Bandon and South Coast Railway, with eight directors—it runs over 94 miles; Cork, Blackrock and Passage, with four directors, 16 miles; Cork and Macroom Railway, with five directors, 25 miles; Co. Donegal Railways, with six directors, running over 125 miles; Dublin and Kingstown Railway, with six directors for its six miles, it cost £63,000 a mile to build; Dublin and Lucan Electric Railway, with five directors; Dublin South Eastern Railway, with six directors, working 157 miles; Dundalk, Newry and Greenore, with eight directors, and running 14 miles; Great Northern Railway, with twelve directors—it connects Dublin and Belfast and Londonderry, and has a total mileage of 616 miles; Great Southern Railway, with twelve directors, the entire length of the main line and branches is 1,130 miles; Listowel and Ballybunion Railway, with two directors, and working 10 miles; Londonderry and Lough Swilly, with five directors, and a total length of 99 miles; Letterkenny Railway—it is worked by the former Company; Loughrea and Attymon Railway, with eight directors, and running over some 12 miles; Midland Great Western Rail-

way, with seven directors, and a total mileage of 538 miles—it also owns the Royal Canal of a navigation of  $96\frac{1}{4}$  miles; New Ross and Waterford Extension (worked by South Eastern Co.), with a length of  $13\frac{1}{2}$  miles; Sligo, Leitrim and Northern Counties Railway, with three directors, and a total length of 43 miles; South Clare Railway, with four directors, and a length of 26 miles (a narrow gauge); Strabane and Letterkenny Railway, with seven directors, and  $19\frac{1}{2}$  miles (narrow gauge); Tralee and Dingle Light Railway, with six directors (narrow gauge); Tralee and Feenit, with four directors, worked by Great Southern; Waterford and Tramore, five directors,  $7\frac{1}{4}$  miles; West Clare Railways, with six directors (narrow gauge); Tralee and Feenit, with four directors, worked by Great Southern; Waterford and Tramore, five directors,  $7\frac{1}{4}$  miles; West Clare Railways, with five directors, total length, 27 miles.

These returns (taken from Thom's excellent Directory for 1920) do not include Tramways worked by Companies such as the Dublin United Tramways, the Dublin and Blessington Steam Tram, and West Carberry Tramways and Light Railways.

#### THE GAUGE—COST OF CONSTRUCTION, DIVIDENDS AND EARNINGS.

The Irish gauge is, as we know to our cost, broader than the English gauge, being 5 feet 3 inches. The average cost of construction of the lines open for traffic was, roughly, £16,000 a mile. It was estimated that the portion of capital held by resident proprietors, in 1841, was £1,500,000; £11,000,000 in 1859, and £12,000,000 in 1862. The Irish railways are exempt from railway passenger duty, and have been largely helped by Government loans. Since 1878 several light railways with a 3 feet gauge were constructed on guarantees of counties and subsidised by Government, and 525 miles of such class (exclusive of the Listowel and Ballybunion Railway, a single line) are now open for traffic.

The ordinary capital of the constructed lines upon which no dividends were paid was, in 1909, £2,411,315; in 1910, £1,444,325; 1911, £1,207,225; 1912, £1,307,225; and 1913, £1,278,211.

The dividends paid on the ordinary capital never, in any case exceeded 8 per cent. In 1913, one and not ex-

ceeding 2 per cent. was paid on £966,999; above 1 and not exceeding 2 per cent. on £27,480; 2 and not exceeding 3 per cent. on £2,395,000; 3 and not exceeding 4 per cent. on £366,800; 4 and not exceeding 5 per cent. on £5,465,570; 5 and not exceeding 6 per cent. on £4,049,989; 6 and not exceeding 7 per cent. on £493,939; and 7 and not exceeding 8 per cent. on £350,000.

The capital and loans authorised by Parliament up to 31st December, 1913, on 25 lines was £30,172,280 in shares, with £1,609,500 on light railways, and a total for all Ireland of £31,781,780 held in shares, and £13,833,846 for 25 railways and £86,500 for light railways — or a total of £13,920,346 in loans. In shares and loans we have for both railways a total indebtedness of £45,702,326 (£31,781,780 in shares and £13,920,346 in loans).

In preference and guaranteed shares there were due in December, 1913, £11,352,758 on the ordinary railways, and £1,069,080 on the light railways; in ordinary shares, £15,336,749 on the ordinary railways and £57,230 on the light railways. For loans and debentures there were due, on the ordinary lines, £11,531,043, and nothing on the light railways. The total raised by loans and shares was, in December, 1913, for the railways, £38,220,550, and for the light railways, £1,126,310; or, for all Ireland, £39,346,860. Of the 25 railways in 1913, nine paid no dividends; one, the Lough Swilly line, paid 7; one, the Great Northern, paid 6; the Dublin and Kingstown line paid  $7\frac{1}{2}$ ; the Great Southern,  $4\frac{1}{2}$ ; the Midland, 3; the Cork and Bandon,  $3\frac{1}{2}$ ; Cork and Macroom,  $4\frac{1}{2}$ ; and the Waterford and Tramore, 5.

In and up to December, 1913 (and we cannot go any nearer our time than the fatal year before the War), there were opened in all Ireland 3,409 miles. The first class passengers numbered in that year 1,171,601; the second class, 2,689,014; the third class, 27,421,449; or they carried in all classes of passengers 31,282,064. The goods and general merchandise and minerals carried amounted to 6,668,079 tons, and the total receipts from all traffic amounted to £4,867,216 in 1913, having increased from £4,255,458 in 1908. The average receipts per mile were, in 1913, £1,427 as compared with £1,265 in 1905. The working expenses increased from £2,664,741 in 1918 to £3,004,746 in 1913, and this latter item has gone up by leaps and bounds since and in no proportion to any corresponding and compensatory increases in traffic.



## THE QUESTION OF AMALGAMATION.

It would seem from these figures that the one way of salvation for these multiform railways is unification—a concentration of the machinery of management, an amalgamation under one or more centralised authorities, if the railways are to be run as paying enterprises. In Prussia a Special Commission in 1873 reported in favour of an universal State system, urging as arguments for that course those reasons which would recommend the adoption of the same policy in Ireland. The German reasons for consolidation may be thus summarised—(1) the avoidance of competing lines; (2) a reduction of the number of officers and staff and of the amount of correspondence; (3) unification of tariffs and train schedules; (4) simplification of dealing with damage claims; (5) provision of interchange stations; (6) better use of equipment; (7) avoidance of duplication of service and of round-about routing of traffic resulting in higher operating costs and consequently higher rates. It is the duty of the State (says the Memorandum to that Report) to secure to the public rates which shall be low, steady and uniform. Some years ago a Vice-regal Commission sat in Dublin and heard evidence on the working of our railways, and then recommended the State purchase of the Irish lines. But the Government has apparently now committed itself, for the present, to another policy, and the Act recently passed constituting a Ministry of Transport is evidently an attempt to try an alternative policy to purchase or the present system. The Act has been put in operation in England, and the Minister is publishing instructive and useful statistics respecting the working of the English lines. We will soon have similar information about our Irish lines. Beginning with the appointment of the Minister for Ireland, an experienced and capable Irishman and railway man, Mr. Burgess, the Act has been put into operation here, but the difficulties are greater. Under its provisions extensive powers are given to control railways, to establish transport services, to appoint a rates advisory committee, among other things. Probably until the period of so-called Government control is determined, some eighteen months hence, no important changes or experiment can be made in the present Irish systems, and they may jog on as they are with all their defects, deficiencies and drawbacks. It is clear that, judging by recent and painful experience, there are few to be found

who will be prepared to advocate complete Government control; for, as we have seen its work in these countries of late—and, indeed, as it has worked in America and in all countries—it has not resulted in economy and efficiency. The English experiment of State control tried with the Telegraphs and Telephones was not a success, and confirms the conclusion of an Italian Commission of 1887: "That the State is more likely to tax industry than to foster it." The telephones were carried on at a loss of a million a year for the ten years before the War, and the telegraphs are equally proving a losing transaction. The application of electricity to commercial purposes in these countries is far behind America and Germany, and this drawback is attributed to the fact that municipal authorities have monopolised the electrical supplies, and are not found progressive or encouragers of invention or improvements. They are cumbersome and unenterprising.

#### THE ARGUMENTS FOR STATE OWNERSHIP.

It is plain that something must be done to save the Irish railways, to protect the properties, and safeguard the interests involved, and what that something is remains to be seen. Whether an intelligent policy is really going to be carried out, or only a happy-go-lucky sort of makeshift attempted, seems doubtful. Absolute State control has been recommended here, but it has few advocates elsewhere, and the experience of other countries where it has been tried is certainly not encouraging or hopeful. The reasons which have induced Governments to take over the railways may be reduced to three heads—(1) to increase their own political influence; (2) to make up for the lack of private enterprise; (3) to avoid the abuses incident to private management. As Mr. Ackworth shows in his admirable little work, "State Railway Ownership," there is no country which has throughout its history kept its whole railway system in its own hands. In Germany the lines were acquired chiefly for strategic and military purposes. In Belgium, in 1860, the State lines were less than a half of the whole mileage—in 1870 this dwindled to a third, but later on the entire system, for political reasons, was acquired. Switzerland nationalised its railways, so did Italy and Japan in 1907; and the French Government took over the western line, one of the six great systems with which France had been distributed. Brazil, on the other hand, and several of the Central American Governments sold to private companies

the lines they built. In Australia the railways had originally to be constructed by the State for want of private capital, and the several Governments had to carry out the work and construct their own systems. They have now some 20,000 miles of railway owned and worked by the seven Governments. There have been abuses in the running and the pass facilities were a scandal. The rates were, in 1915, for the ton mile 1·10d. and 1·06d. for New South Wales and South Australia as against 0·375d. for the private lines of Canada and 0·369 for the private lines of the United States. It has been proved that private enterprise has led to inventions and improvements, and all the best improvements in railways were due to and carried out by the American and English private companies, while there is not a single instance of a State line having brought out an invention or improvement—steel rails, brakes, corridor carriages, automatic couplers, fast express trains, the block system, and countless other inventions which have made railway travelling a comparative luxury are due to private enterprise. "Rail-roading is a progressive science, and it is difficult to see how it can progress under State control, for the State official usually wants no progress and is content to enjoy his salary only. He does not look with favour on new ideas, and anything out of the routine he discourages. Railway management, as we know, is essentially a commercial business requiring commercial aptitude, and commercial training and capacity and merit and not seniority should control appointments if we want an alert, up-to-date efficiency, a man abreast of his work, however arduous, working all day and night if necessary to carry out a particular undertaking."

The Italians found that Government employees did less work, and consequently they had to employ more men; and that the discipline, energy and promptitude of the staff, which had been excellent under private management, broke down, and the service became abominably bad under State control. In America and in England, to avoid the evil of political patronage, appointments in the public service must be made by Civil Service methods. This, as Mr. Ackworth points out, means an appointment by examination, mainly literary at an early age; a life tenure, except in cases of gross incompetence and promotion mainly by seniority. "Will any human being claim," he says, "that American railroads would have achieved their magnificent record of technical progress, of rates steadily reduced in face of a steady rise not only of railway wages, but of prices of almost all other necessities of life if the management of

the railroads had been in the hands of men selected by an examination forty years before who had since risen to the top, not as the result of conspicuous competence, but by sheer seniority? And would the men who are now at the head of the railways have stopped in the Government service if they had only the prospects of promotion and compensation which Government service affords?" So the question of nationalisation and State control is beset with difficulties. Private ownership has its abuses, and it is a question for every country to try and decide whether they outweigh those of State control or not.

#### THE PROGRESS OF RAILWAY ENTERPRISE.

In the history of progress there is nothing comparable with the growth of railways. On May 24th, 1830, the first few miles of the Baltimore and Ohio railway were opened for traffic in America; and on September 15 of the same year thirty miles of the Liverpool and Manchester line were opened in England. Since then what vast developments have taken place not only in America but in these countries. According to the figures in the "Archiv für Eisenbahwesen," the official organ of the Prussian State Railway Administration, there were in Europe (in 1913), 216,396 miles of railway, of which 116,111 were State railways. There were in the whole world nearly 700,000 miles of railway, of which less than one-third were State railways. The capital invested in railways, according to the same authority, amounted to 208 billions of marks or, in round figures, ten thousand million pounds. In Great Britain and America, where railways are in private hands, will be found more than one-half the world's total railway capital. It was stated by Mr. Glason Thompson that, in 1915, the 25 principal countries of the world had 187,530 locomotives, of which 89,668 (almost half) were in the United States and the United Kingdom, while out of 5,816,441 freight cars these countries had 3,123,660.

#### HOW PRIVATE CAPITAL BUILT UP THE RAILWAYS.

As to the extent to which private capital has been embarked in these enterprises, Mr. Ackworth is of opinion that two-thirds of the railway capital of the world has been provided, and two-thirds of the current railway work of the world is done by private enterprise, and only the remaining third by State undertakings. It is, therefore, a serious matter for any Government to undertake to go into the railway business and extend the sphere of their business

activities in that direction. Three motives usually induce Governments to do so (1) political reasons; (2) to make up for lack of private enterprise; or (3) to procure for their citizens better conditions, such as lower rates, greater facilities, more impartial treatment, etc., than private enterprise has given or is expected to give. Sir George Gibb, a distinguished railway authority, contends that here and in America private enterprise is bolder, companies more flexible, more ready to take risks and to try experiments in new methods than any State organisation can be. So great was the faith of the public in railways as investments that before the War the interest on first class railway debentures averaged a half of one per cent. above the interest obtainable on Government obligations. If anything has destroyed the value of that security it is Government management. The railways of the United States in 1915 (deducting inter-*corporate* ownership) were capitalised at £13,300 per mile, and the State railways of New South Wales and Victoria were capitalised at £15,500 and £13,150 per mile respectively. The average passenger rate in America is a penny a mile, and the freight rates lower than any country. The difficulties that State governed lines had to obtain additional capital for extensions and improvements were in these countries met by private investment to an extent we see in the figures given.

#### THE WORKING OF THE MINISTRY OF TRANSPORT ACT.

To partially meet the difficulties of the railway question Parliament passed a measure extending to these countries—and now on its trial—a measure known as the Ministry of Transport Act (9 and 10 Geo. V., c. 50). It is an ambitious and comprehensive measure, giving to a new Department large powers of control and consolidation. Under its working great things are expected, vast reforms are hoped for, and it is expected to be the salvation of the unfortunate railways. So far as Great Britain is concerned, some progress has been made, something has been done to put the Act in operation and show some results. The Ministry for that country has published a very interesting statement giving the statistics hitherto not accessible to the general public of the working of the lines. The Return is published in a White Paper submitted to Parliament, and it gives us a good deal of information of a useful character, enabling one to form some idea of the utilities and capacities of the railway service. A comparison of those figures with what

are available for other countries gives us some idea of the possibilities of economy and such reform as will reduce the present wide and widening margin of unprofitable working, and by a concentration and fusion of the divergent systems and an enlargement of their capacities for dealing with traffic, effect such economies which may be fairly attempted so long as they will not interfere with the efficiency of the railways as a whole, or circumscribe or limit their utilities in the service of the public. We are now in a position, from reliable and authoritative statistics, to see what railways are in the working in Great Britain, at any rate. Very instructive figures are now for the first time given the general public, by which one may compare the working of the lines in this country with that elsewhere. The statistics, so far, only relate to Great Britain. The Ministry of Transport in Ireland has not from the complicated systems been able to give these figures, so we are still in the dark as to the real working of our several railways. No intelligent person can affect to be satisfied on these heads with the almost meaningless tables, published at some cost once a year by the various companies, which returns merely duplicate the information of previous years, and are of no real value whatever for guidance.

#### THE COST OF STATE WORKING.

The White Paper (Cmd. 654) issued on 7th April, 1920, prints the various agreements and arrangements between the Government and the companies since August 5, 1914, when the railways were taken over. We also have a statement of the financial liabilities of the Government for the ensuing year. We are promised the prompt publication of statistics of railway traffic and operations which, by the way, other countries long since have supplied to their public, and which reformers in these countries have for over thirty years vainly been calling for. It is difficult to summarise these agreements, but as the "Economist" of April 17 points out, comparing the treatment of railways with that meted out to gas and tramway undertakings or to railway companies in Canada and United States, British railway shareholders have not much to complain of, and they have been even generously treated, receiving from the Government many millions of pounds on account of "deferred maintenance." This money some companies, not being able profitably to spend, have invested, and the sums have been permitted to carry interest year after year—not in relief of the cost

to the Government of their future, but to their own net revenue accounts; and it is to this source apparently that the increased dividends paid by many companies last year were due.

#### REAL RAILWAY STATISTICS.

The Rates Advisory Committee in England are attempting a general revision of freight rates, and have not completed their work. Up to this no useful information was ever given the public with regard to commodities — the amount of each commodity transported, the average rate paid per ton, or the distance hauled. Henceforth, for 72 commodities, representing 85 per cent. of the goods traffic transported, the numbers of tons carried, the receipts and other particulars will be issued for each period of four weeks on the British lines. In course of time this useful example will be followed in Ireland. Tonnage figures do not suffice, as they only indicate the sum total of the demand for rolling stock and terminal accommodation. Distance must be considered and ton miles representing weight multiplied by distance are the natural units to adopt. With the aid of these figures, as the "Statist" points out, the average haul, the average rates paid and other important units can be deduced, while the density of traffic or the number of ton miles in relation to the number of route miles of the railways can also be considered. The primary figure is the ton mile, and this is the sole test, on the goods side, of the amount of work done by a railway. It is, in fact, the unit of freight transportation that is sold to the railways' customers. In the new statistics for Great Britain pride of place is to be given to the ton mile, and we may hope to see its introduction in Ireland. Ton miles along with wagon miles and engine hours now take a recognised place in the British railway statistics. Further figures as to passenger traffic, maintenance of permanent way and rolling stock and a close analysis of the figures of train miles usually published are required before one can be said to be abreast of the American practice in this respect.

#### RETURNS OF TONNAGE AND MILEAGE AND FREIGHT LOADS.

We have in the statistics published for the four weeks ended February 1st for the British lines, as pointed out, some instructive figures. The table gives the average freight train load; for general merchandise the miles; for coal, coke and

patent fuel the miles; and for other minerals the miles. The division of ton miles by train miles gives the average freight train load, a most important figure, strange to say, now appearing for the first time in these, in this respect, backward countries. The average load for Great Britain is only 132·38 tons, and this figure is eloquent and shows the need of improvement. The average length of the haul is 55·73 miles, and the general average of 56 miles approaches that of the German State railways before the war. The wagon mileage enables us to calculate the average wagon load, and for the four weeks in question it worked out at 5·142 tons for British standard gauge railways. This tonnage is low, taking into account that the average truck capacity is nine tons and remembering that coal, iron ore and limestone, which usually load to the full capacity, are taken into account. The real units of production are wagon miles and ton miles, and the cost of producing them or, in other words, the expense of railway operations. This must be determined by reference to other data, chiefly engine hours. By these figures it seems that the movement per hour of freight traffic is only 3·07 miles, showing that the best use is not made of the locomotive power available. The gross and net receipts per ton mile showing 1·276d. and 1·155d. are interesting, and provide material for useful consideration of railway statistics.

#### SUGGESTIONS FROM TRADERS.

A Parliamentary paper, issued May 7th, 1920, by the Ministry of Transport, contains replies received from commercial associations to questions addressed to them by the Minister of Transport on the question of the revision of railway rates. The Association of British Chambers of Commerce expressed the opinion that the trader should be charged, on all descriptions of traffic, only for such services as are actually performed and for such accommodation as is provided by the railway company and used by the trader; and, further, that railway rates should in all cases be based on the shortest available mileage between any two towns, without reference to the particular junctions.

In their answer the railway companies submit a number of suggestions made on the assumption that a completely new set of rates had first been brought into operation. Among the suggestions is one that the statutory maxima might be abolished and the railway companies be at liberty to vary their rates from time to time, subject to the condition that every rate must be reasonable and duly pub-



lished. All traffic should be charged at actual gross weight. We may expect that the Irish Transport Ministry will also approach the leaders of Irish trade and commerce and get their views on any matter.

#### THE ESTIMATES AS TO THE RAILWAYS COST AND TRAFFIC.

In last year's Estimates a sum of 60 millions was set aside for the railways to cover not only the deficiencies of the year but the obligations incurred in previous years. At a later date the Ministry of Transport estimated that 45 millions would be required to meet the current deficiency in railway revenue for the same twelve months, but the sum actually needed was 40½ million pounds. There was additional expenditure amounting to 5 million, mainly wages, and, on the other hand, the increase in freight rates, which took effect on January 15th, brought in 9 millions additional. The estimate for deferred maintenance for the current year is £22 millions. All the Ministry of Transport, broadly speaking, ask from Parliament is 1 million for the purchase of rolling stock; from the Ministry of Munitions, 1 million for possible grants to transport undertakings, which may or may not be spent; and £400,000, the cost of the Ministry itself. We find, in spite of the increase of passenger fares, not, as commonly believed, 50 per cent., but more like 70 or 80 per cent. when allowance is made for cancelling all cheap fares except workmen and season tickets, ordinary passenger traffic has increased 19 per cent. and season tickets 50 per cent. There were carried on the British lines in 1919, as compared with 1913, the vast number of 300,000,000 more passengers. The increase in the rail traffic carried out of Liverpool was no less than 880,000 tons, and the dock traffic in London was, in 1919, 120,000 tons—which means 80 loaded wagons per working-day—larger than in 1913. The shortage of wagons so much spoken of was never greater than 7 per cent. compared with pre-war stock, and by the end of the year it was reduced to half. The shortage of locomotives—at its worst 7 per cent.—had fallen to 2 by the end of the year. It was the diversion of traffic and not the shortage of rolling stock which seems to have upset the normal flow of traffic. The new statistics will give us the tonnage carried, month by month, and not as heretofore, many months after the end of the year, and not as of old divided into two categories, "coke, coal and patent fuel," and everything else,

but divided into 72 principal commodities representing 85 per cent. of the total tonnage. The average freight train load for all railways is 132 tons—exactly half the average load in Prussia and a quarter of the average load of the United States. The average length of haul varies from a maximum of 54 miles on the Midland to a minimum of 25 on the Lancashire and Yorkshire. If they are regarded as a unit it rises to 55½ miles as compared with 62 in Prussia and 78 in France. As regards cost, the public paid in January 1.276d. per ton mile, or, if we strike off cost of delivery, 1.155d., and the pre-war figure was something like .855d. This compared with a pre-war rate in the United States of .37d., .68d. for Germany, and .65d. for France. The Irish figure will be over 2d.

#### AVERAGE MILE OF LINE AND TONNAGE CARRIED.

We learn very interesting facts from comparative statistics. We find that over the average mile of line in four weeks in January was carried 75,626 tons of freight. Multiplying that by 13 we get 983,138 tons carried over each mile of line per annum, or, in round numbers, one million tons. In France it is over 23 more; in Russia it was over a million, and in Germany over a million; while in the United States it reached 1,250,000 tons, although four-fifths of the lines are single lines. We also see that the final result of the employment of an engine for a whole hour is to move a freight train a fraction over 3 miles (3.47 to be exact). At present the price of an engine for one hour is not less than 18/-, or, in other words, it costs 6/- to move a train one mile, and, as the train carries only 134 tons, it is evident that the company is spending for engine power alone over half out of the gross receipts of 1½d. for every ton of traffic carried one mile. Train load depends on three things—operating efficiency, the volume of traffic offering, and the class of service, both in frequency and in speed, that the public demands and is prepared to pay for. The British train load, as we saw, averaged 132 tons; it works the same in Holland, 15 tons less than in France, and little more than half what it was in Germany, where the load averaged 250 tons. The typical train that carries 132 tons consists of 34 wagons (10 empty and 24 loaded). The average wagon, out of every 24 hours, is travelling 1½ hours, and covers in a week 73 miles—52 loaded and 21 empty—for the rest of the time it is shunting, standing or under repair.

For general merchandise the average length of haul (round figures) is 91 miles; for coal, 44 miles; for other minerals, 51 miles; for all traffic laden together, 56 miles, which represents a 48 pre-war haul. For Norway, Sweden and Switzerland the average haul is shorter, for Belgium, Denmark, and Holland it ranged between 52 and 55 miles; in Germany it was 62; in Austria, 65; and in France, 78. For 1919 the gross receipts in Great Britain were seventy-three millions, or, deducting charges for collection and delivery, sixty-four millions. For the four weeks ending January they were seven millions; multiplying by 13 we get ninety-one millions—the increased rate bringing in twenty-seven millions. In 1919 the British public paid per ton carried one mile for merchandise  $1\frac{1}{2}$ d., or, deducting charge for delivery and collection,  $1\frac{1}{3}$ d.; for coal, 2-3d.; for oils and minerals,  $\frac{3}{4}$ d. Including all traffic and excluding collection and delivery charges, the British public paid at the old rates .882d. for carrying one ton one mile. In France, before the war, it was .70d.; in Germany, .67. The .882d. has risen to 1.155d., and on this basis the average rate in future will be 1.318d., excluding delivery and collecting charges.

#### AMERICAN RAILWAYS UNDER STATE CONTROL AND AFTER.

Turning to America we get some interesting information on the subject of railways and their relation to the State. Under the Act now in force the American railways are handed over to the companies. Controlling and advising them is the Inter-state Commerce Commission, whose membership was increased from nine to eleven persons, and whose powers are substantially enlarged. It is authorised, moreover, to grant one-half of 1 per cent. additional income for betterments and improvements. Earnings in excess of 6 per cent. are to be divided equally between the reserve of the carrier in question and the Federal contingent fund, which will be available for loans to develop transportation. A Railroad Board of Appeal is provided consisting of three men nominated by the railway companies, three nominated by the employees, and three appointed by the President to represent the public. This Board is empowered to examine into cases brought before them, to make awards in labour controversies, but it is without any power to compel acceptance except so far as it is effective through pressure of public opinion. The American Federation of Labour, im-

mediately on its appearance, declared its opposition to the scheme, chiefly because of the  $5\frac{1}{2}$  per cent. guarantee. The working of the Act is awaited with anxious interest, and is beset with countless difficulties. The Railway Executive are face to face with a staggering task of finance, organisation and technical operations and labour management. Years ago James J. Hill, one of America's most far-seeing business men, startled the country by declaring that the railways would then need a billion dollars for ten years to meet the growing demand upon them. The companies' difficulties are tremendous. They must find capital to rehabilitate the undertakings, the improvement of the permanent way, terminals, rolling stock, and general equipment. This they must accomplish by their individual credit in a competitive market depleted by Government and private borrowings. The provision in the new law designed to ensure a  $5\frac{1}{2}$  per cent. return on the total property investment of the roads grouped by districts, while designed to help the credit of the weak roads, is likely to lessen the interest of the investing public in the securities of the strong lines, which are to be milked to help their weaker sisters. The "Nation" of March 13, 1920, pointed out all this in an able article.

#### THE PLUMB PLAN OF SETTLEMENT.

In American public life, before the Act passed, a great deal was said of a proposal made by a distinguished Member of the House of Representatives, and known as The Plumb Plan. It attracted great public interest in that country. It was put forward by Mr. Glenn E. Plumb, General Counsel for the Organised Railway Employees in America, "for the public ownership and the democracy in the control of the railroads." Its principles were embodied in a Bill—the Sim's Bill—which was introduced in Congress, but was not passed. The experiment of private control of railways under the changed and changing conditions is very doubtful, as the entire situation has, as here, been changed. The railway interests asked for a flat rate of six per cent. upon their capital, and that it be guaranteed, while Labour fought this demand and asked for less, alleging that there are billions of dollars of watered capital in the railroads, and that the attempt to exhort 6 per cent. on twenty billions of half-fraudulent securities was enough. The Plumb plan for dealing with the railway situation was the operation of the railways not by a Government department, but by a Board of fifteen directors, of whom five are named by the President

to represent the public, five are elected by the operating officers, and five are elected by the employees. This plan was supported by the Railroad Unions and by the American Federation of Labour. In his Bill "transportation properties" were by sec. 1 defined to "include all of the private rights, titles, property interests, powers and privileges existing in any railway, light railway, or less than standard gauge railway, canal, waterway or inland navigation facility harbour or dock undertaking in the United States and its possessions, together with all rolling stock, plant, appliances or equipment, whether fixed or movable, that form any part of such properties." "Corporation owners" are defined to include any corporation interest in such transportation properties, "individual owners"—that is, any group of individuals, association or co-partners, but not incorporated, owning any interest in such transportation property. And the crucial question "compensation" is defined as "being the amount of money representing the value of the rights, title or interest of any corporate owner or individual owner in any transportation property above defined." An appeal may be made in case of disagreement to the Court of Appeal of the District of Columbia, and a further appeal to the Supreme Court. The Appraisement Board, by section 10, can build new extensions and make capital improvements. The new Board is called "The National Railways Operating Corporation," and consists of fifteen members, as already described. They can create all the offices and appoint all officials, and prescribe the conditions of employment and classification of all other employees. They can fix rates, charges, tolls, dues and fares and salaries, remuneration and wages. Whenever the total amount of the net earnings paid into the Treasury of the United States shall exceed 5 per cent. of the gross operating revenue the Inter-state Commerce Commission shall adjust the scale of rates in such manner as to absorb the sum so paid, thereby producing a reduction of rates. All lines will be worked as a single system with the highest possible efficiency and economy consistent with good service. The earnings and receipts are to go to the payment of labour and materials incidental to the working to provide funds for maintenance and renewals to pay out a sum for a sinking fund for the disbursement of interest charges and retirement of bonds; and when in any one year the operating revenues exceed the net earnings, one-half of the latter shall be paid into the Treasury and the other half shall be held for disbursements to pay for extensions and betterments.

HOW THE AMERICAN LINES WOULD BE FINANCED  
AND LABOUR PAID.

Mr. Plumb, in an article which appeared in "The Public" of April 26, 1919, outlined a plan of settlement which embraced the demands of the employees, and which may be summarised in a few words. The State was to acquire the 250,000 miles of railway in the States, and to pay therefor a price to be judicially determined in proceedings as prescribed in an Act providing for Government acquisition. The Government, as a means of paying for the properties so acquired, should issue its securities at the lowest obtainable rate of interest the amounts to furnish the required working capital. Next the properties shall be operated by a private organisation under a federal charter which shall have no financial investment in the industry, its sole capital being operating skill and ability. Its employees shall be divided into two classes—(a) those employees exercising executive and managerial powers, and (b) the wage-earning employees, who carry into execution the directions of the executive employee. This corporation shall be controlled by a board of directors, one-third of this Board to be named by the President of the United States, with the approval of the Senate; one-third to be elected by the employees in class A, and one-third to be elected by the employees in class B. The Government shall lease the lines, and provide that (1) all operating expenses, including the amounts the Government may prescribe, shall be set aside to meet the maintenance and renewal charges; (2) an agreed amount to establish a sinking fund, which shall not be less than one-half of one per cent. of the outstanding capital account; (3) the amount of the net earnings to be, after making the above payments, divided equally between the Government and the operating corporation. The profits so accruing to the operating corporation shall be then distributed either in the annual, semi-annual or quarterly payments as a dividend upon the pay-roll of the corporation, each employee in class B receiving that portion of the dividends allotted to that class which his wages for the dividend period bears to the total wages paid to employees of his class for the same period. Employees in class A shall in like manner and at like times receive a graduated increased rate of dividend depending upon the amount of profits which their management earned for employees in class B. To provide against excessive rates it is suggested that whenever in one year the

net profits received by the Government shall equal or exceed five per cent. of the gross operating revenues the Inter-state Commerce Commission shall immediately reduce the level of rates by an amount sufficient to absorb these profits. Extensions shall be financed by assessments levied against the property benefited. This is briefly an outline of a workable plan which seems to provide for the protection of all interests in the railway problem, which is based upon three elements—the grant of authority from the people to conduct the industry for their benefit; the investment of capital in sufficient amount to acquire the properties and their equipment and the investment by wage-earners of their service in the industry.

I have endeavoured, within the restricted limits of this paper, to give a general view of this important question and state the arguments for and against the continuance of the present system and the various plans of reform suggested. The problem of the railways is a complex and difficult one. It is one of serious importance and urgency, and it must be faced. I have, as well as I could within the necessary limits of this paper, dealt with the general question of the future of our railways, the advisability of State control, and the form which it is proposed such control should take as in America. I have given a short summary of the working of the various systems in that country operating some 250,000 miles, and face to face with difficulties almost similar to ours. I have tried to show that, as regards the Irish lines, their position, prospects and possibilities are different from the British railways. Their present financial state is a matter of very serious and anxious consideration for the Irish people, not only those who subscribed and found the capital for their construction, but for the trading and travelling public, who want the cheapest rates compatible with efficiency, and for the employees of various grades, who must look to the undertakings for their means of livelihood. The entire problem is a complex and important one, and its solution demands our most serious consideration.