

IV.—*The Application of Commercial Enterprise to the Construction of Railways.* By W. Mulholland, Esq., A.B., Barrister-at-Law.

[Read, Tuesday, 18th December, 1866.]

At a late meeting of the Society Dr. Hancock exhibited a very suggestive table, showing the unsatisfactory financial position of Irish Railways. It must have occurred to many at the time that a similar table of the English and Scotch Railways would be instructive, and enable us to see whether State interference with the Railways of Ireland was rendered necessary by any circumstances peculiar to this country, or was only an aggravated form of the general unhealthiness which affects the Railway System of the entire kingdom.

I have prepared such a table with the purpose of making it the groundwork of my remarks to you this evening.

The Irish table, you will remember, proved clearly that railways in Ireland have not on the whole been at all successful as a commercial speculation. We found that out of thirty-five railways there was only one whose shares were above par, and only six, representing in mileage but a third of the entire, paying a dividend exceeding 3 per cent; seven others paying a dividend under 3 per cent; and twenty-one paying nothing, and in various stages from approaching to actual insolvency.

The present table shows, I think, that the result is the same in England and Scotland, and that, except under certain favourable circumstances, the Railways of Great Britain have paid their projectors as badly as our own.

We see that out of more than 9,000 miles\* of Railway in England considerably upwards of 1,000 miles are paying nothing, and are in financial difficulties; more than 2,000 are paying an average dividend of 2 per cent; nearly 2,000 are paying an average dividend of 4 per cent, and the remainder (considerably less than the moiety of the whole) is paying an average dividend of 6 per cent.

Thus it appears that more than half the railways of England are a losing speculation at the present moment, leaving out of the question the loss upon the minor railways which have become amalgamated with the great Companies. It is of course impossible to tabulate these last with any certainty, or within a reasonable space, but it will be found upon analysing the various amalgamated systems, that there are numberless small lines which are leased by the monster Companies at a perpetual dividend varying in different instances from 1 to 4 per cent; or which have been entirely absorbed, their shares having been exchanged for the shares of the great Companies at a large reduction on the paid-up capital. So that there has been an enormous loss upon railway enterprise which does not and cannot appear upon this table.

Again, if we look at Scotland, the same state of things appears.

\* The figures in these pages and the annexed Tables are taken from the Board of Trade Returns for 1865, and the Railway Share lists issued by the London Stock Exchange.

Out of 2,200 miles of Railway, 1,000, or nearly half, are paying nothing, even to some of its preference shareholders, 300 miles are paying 1 per cent, 160 miles are paying 4 per cent, and only in the residue of 736 miles are the shares above par, so that two-thirds of the mileage of the Railways of Scotland are a complete failure as a commercial speculation.

The first thing which strikes one in glancing at these tables is the glaring inequality in the paying capabilities of the different lines. To some extent amalgamation has removed this, but it is still apparent where amalgamation is impossible. For instance, take the Great Eastern and the Lancaster and Carlisle; the one is paying nothing on its ordinary stock, and nothing even on some of its preference shares; while the other is paying  $10\frac{1}{2}$  per cent. The Great Western is paying only 2 per cent, the Furness and Whitehaven lines are paying 10 per cent. The cause of this might perhaps be expressed in the one word,—coal, or perhaps in the generic term minerals. It is a curious and instructive fact this, and one which we realize more and more as we study the railways of these countries, that no shareholder can look for a satisfactory dividend on his line unless its traffic in minerals is very large, and just in proportion to its mineral traffic will be its dividend. Draw a line westward from London to Bristol, and another northward from London to the Wash on the boundary of Lincolnshire, and you will cut off the whole south and extreme east of England, a district containing seventeen or eighteen counties equalling in area probably one-third of the whole of England and Wales, and possessing more than a third of the entire Railway mileage of the country—counties containing a most prosperous agricultural population, some manufactures, and possessing a wide and extensive seaboard with every advantage for shipping and fishing, but which does not contain a single coal mine; and you will also cut off a district in which the Railway dividend averages about 2 per cent, and which does not possess out of 3,200 miles a single line whose shares range higher than 11 per cent discount. Take Wales, north and south. In North Wales the Holyhead and Chester line, with all the traffic of passengers, mails, and ordinary goods from Ireland is leased by the London and North Western Railway at  $2\frac{1}{2}$  per cent. In South Wales collieries abound, and the lines are paying 6 to 9 per cent.

Take Scotland, and with the exception of 162 miles out of 1304, there is not a line north of Stirling paying higher than one per cent. Once the railways of Scotland cease to participate in the great carrying trade from the Scotch and north of England coal-mines to the Clyde, the dividend falls from 7 per cent. to one per cent. There appears to be only one exception to this law, if I may so call it, and that is short passenger lines which are fed from the gorged streets of a great metropolis, such as the Metropolitan and North London Railways in England, and the Dublin and Kingstown in Ireland.

It is true that the chief coal carrying railways have also a larger traffic in general merchandize than the unsuccessful lines, being the principal highways of trade of all kinds. But when we find that in the year 1865 the receipts from mineral traffic were one-third of the entire goods traffic of the railways of these countries; when we find

that on the North Eastern Railway (a fair instance of a Company combining a large general trade with a great coal traffic) considerably more than one-third of the ENTIRE receipts of the railway were derived in that year from mineral traffic; I think we may safely say that if the coal and iron trade of England and Scotland were to cease—nay even be materially lessened—every railway share in those countries would, like our own, fall below par.

It appears, then, that except in the most favourable circumstances railways are not a remunerative field for private speculation, and that their construction and management by commercial enterprise is attended with absolute loss. It is true that many railways have got into difficulties by want of prudence, such as expensive construction, or excessive competition; but, passing by the fact that these very imprudences are the result, and the inevitable result, of the commercial spirit when applied to the construction of railways, I do not think we could hope to raise the dividends of the Great Eastern or the Great Western, under the most favourable circumstances of construction and management, over 3 per cent. It is clear that this would not remunerate private investment. If, then, the commercial speculators who made these non-paying lines knew as much when they projected these undertakings as they know now, these lines would never have been made.

We should only have six miles of railway in Ireland. There would only be three lines in Scotland. There would not be a single railway in the south or east of England. The communication between England and Ireland, and England and France would be incomplete. And who knows how much the now successful lines would suffer from the absence of the unsuccessful. A great part of the traffic on the northern lines in England would never have existed but for the further ramifications of railways into the south and east, which are not self-supporting.

So that the country has become possessed of this complete and enormous system of railways by robbing one set of men and enriching another. It is vain to say that this was a speculation, and, as in all speculations, one man gains and another loses. This must mean that the supply of railways has been in excess of the demand, to the full extent of the loss on the unsuccessful lines; that railways have paid their projectors wherever they were wanted, and that they have not paid where they were not wanted. But the railways, even the worst paying railways, were wanted. They were wanted not only by the locality but wanted by the nation. Will any one say that he would wish to see in the country a mile of railway less than there is at present, having regard to the ultimate development of its resources and its permanent advance? Are not the railways, as well those that have ruined their shareholders as those which pay 10 per cent., the very breath of our commercial life? It is necessary for the general prosperity of trade that hops and wheat should be cheapened in carriage as well as coals; yet the railway which carries hops and wheat will not pay its owners, while the railway which carries coal will pay largely. Railways have done fabulous things for the possessors of coal and iron; but the increased demand for these articles has re-acted wonderfully upon

the railways, and the growing trade has repaid its benefactor tenfold. The quickened transit of passengers and letters stimulates not one trade alone but all trade, perhaps in a still greater degree than quickened transit of goods; but the lines which have rendered most service in this respect have had worse than a thankless task.

If, then, we had to make our railways over again, possessed as we are, both the State and commercial speculators, of the dearly bought experience of the last twenty years, we should stand thus: The State will see that it is necessary for rapid commercial advance and thorough development of a country's resources that there should be a complete system of railways over the country; commercial spirit will see that railways would be a paying speculation in certain favoured localities, but that in other places not so favoured by nature they would be a dead loss. If the construction of the railways be left to a fully informed commercial spirit, and a railway mania do not interfere to blind it for the advantage of the public, the result will be that railways will be constructed through mineral and manufacturing districts, and nowhere else. If railways are to be constructed elsewhere they must be paid for out of the taxes. This will be better than having our railway system incomplete, but it will certainly be attended for a long time with loss to the national exchequer; for, although Government can construct and work railways at a cheaper rate than private speculators, through obtaining its capital at lower rates of interest, yet the average returns from railways in such districts are even less than would pay the Government rate of interest; and capital could not perhaps be obtained by Government for railway purposes at so low a rate as most people think. Is there no means of possessing a perfect and self-supporting railway system? There is a fund from which the State could have recouped itself for the loss on the non-paying lines, which was lying ready to its hand, which was the sole property of the nation, but which it has handed away to private individuals. That fund is the surplus profits of the successful railways.

To see this clearly, we must obtain a clear notion as to what constitutes the difference between these two classes of railways.

A railway may be described as an instrument whereby a working capital may be employed at 50 per cent. profit. All railway accounts show this to be a uniform result, whether the line is successful or not, that the working expenses of a railway average one-half of its receipts. Although of course economy in management will not be without its effect in increasing the gross profits, yet so small a sum divided over the whole capital will produce an almost unperceptible effect on the dividend. The Great Eastern and the Great Northern, which contrast very strongly in reference to dividends, have had for the last few years almost the same proportion between working expenses and gross receipts. An instrument which makes money at 50 per cent. on its working capital will necessarily be a very costly one. It is not, however, the difference in the cost of construction which makes one railway pay better than another. The best paying lines generally cost more to construct than the worst. The grand difference between a successful

and an unsuccessful railway is the comparative extent of the field for the employment of a working capital, the comparative amount of money which can be turned over at a profit of 50 per cent.—in other words, the gross receipts.

The Great Eastern and London and North-Western Railways have about the same proportion between working expenses and gross receipts; the rate of profit on their working capital is about the same. The construction of their line cost probably the same in proportion to their respective mileage; indeed, the Great Eastern cost probably less than the London and North-Western Railway. It runs through a level country, and the land is probably not as valuable. The Great Eastern runs 700 miles, and its gross receipts are  $1\frac{1}{2}$  millions; the London and North-Western Railway runs upwards of 1,300 miles,—nearly double the mileage of the Great Eastern,—but its gross receipts are 5 millions. In other words, while the Great Eastern can only make 50 per cent. on  $1\frac{1}{2}$  millions, the London and North-Western Railway can make 50 per cent.—not on 3 millions, which would result in no dividend like the Great Eastern,—but on 5 millions.

We see, then, that the prime element which confers success on one railway enterprise more than another, is not superior skill, or energy, or labour, but peculiar advantages inherent in certain districts and conferred by nature. These are the property of no private person, unless the state chooses to allow him to appropriate them; they belong to the nation and the public; and should not be permitted to be turned to any other than national and public advantage. As various districts possess this advantage in various degrees, the more favourable districts will yield a rent to the state, to the extent in which their profits exceed the ordinary return to capital, and the state can appropriate this by competition. If the full advantages of each district could be predicted at the outset with perfect accuracy, this rent might be appropriated by the state by simply charging a fixed sum for the privilege of making a railway in a particular district; but such a foreknowledge is of course impossible; peculiar latent advantages would begin to show themselves in places where they were not at first perceived. In order, then, that the state should obtain the full benefit of the peculiar advantages to which it is entitled, it must be the landlord of the railways, with power to vary the rent as these advantages varied.

If, then, we were about constructing our railways, we should not permit private companies to seize the most favoured districts, and pocketing the profits, leave us in difficulties with the less profitable railways. Private enterprise, however, might still be our guide; but it would be kept to its proper limits, and be only a guide and not a master. When commercial instinct saw the necessity for a line of railway, it would apply to government. Government, on approval by a parliamentary committee, as at present, would construct the line, and when constructed, hand it over to the company, receiving at first nothing more than the interest on the cost of construction. At the end of a short term of 5 or 10 years, one set

of railways, those in the favoured districts, would appear to be making more than the ordinary return to capital ; to these government would then charge a sum for rent, as distinguished from interest on cost of construction—a remuneration for the peculiar advantages of the district through which the railway runs. In the unfavourable districts, however, the railways would not be paying so much as the ordinary return to capital, and would be unwilling to pay the full interest on the cost of construction. Government could then, out of the revenue from the rent of the successful lines, lower the charge made for interest to the unsuccessful. In this way our railway system would have been constructed rapidly and cheaply over the whole country, with loss to nobody, but with probably an important surplus revenue to government, to be applied to further railway construction or other national purposes. Under this system, amalgamation of the managing companies would have been more easy and more complete. We should have reached the present point in railway history just as soon, without large gains to one lucky class of speculators, and large losses to others, and with the germ of a sinking fund for national purposes in the increasing dimensions of our trade. The state would be in the position of landlord of the railways, possessing a right to the surplus profits of this peculiar speculation over others, and having a right to insert in the lease covenants and conditions in favour of the public ; while private enterprise would be confined to its proper sphere as capitalist farmer of the estate, rent would not as now be confounded with profits, and each would attach to its proper owner.

It is not my object to suggest what course should be now adopted by the State in dealing with the railways ; neither would I be supposed to advocate the superiority of private enterprise over the State in the management of the traffic of railways when constructed. It is a question not so much of principle as of experience and information in detail ; my intention was merely to point out what appears to be the true relative position of the State and private speculation in railway enterprise, if the latter be admitted at all.

But I think it will be seen to follow from these remarks that possession by the state of the soil, at least of the railways of the entire kingdom, is desirable. It is not too late partly to retrace our steps. It is true we cannot put everything into the position it would hold if a different policy had from the first been pursued in railway enterprise. In the case of the prosperous railways we must pay high to purchase back the rights we have foregone, but we will probably be able, unfortunately for the shareholders, to purchase the unsuccessful lines for less than they would have cost us to construct ; and, considering the low rate at which Government can borrow money, the nation will possess the entire system of railways, at a cost which will not be greater, and will probably be less, than the gross letting value, even if the railways of Ireland are included. The average dividend on the capital expended in railway enterprise is for the entire kingdom about  $4\frac{1}{2}$  per cent. This would leave a considerable margin for Government, even if they paid the cost price of the Railways all over the country ; and in the rapid expan-

sion of trade, of which a more enlightened management would be at once the cause and the effect, railway rents would no doubt assume a position of importance among the sources of the revenue of the country.

## ENGLAND AND WALES.

	Mileage	Dividend Half-year, ending June, 1865	Divided Average 3 Years Previous to June, 1865	Price of £100 of Shares, November, 1865
		£ s d	£ s d	£ s. d
<b>I CLASS Under a Receiver</b>				
1 London, Chatham, and Dover .. ..	132			
	132			
<b>II. CLASS. Stand still—none</b>				
<b>III. CLASS. No Dividend on some Preference Stock.</b>				
1 Cornwall .. ..	66			
2 Colne Valley .. ..	19	..		25 0 0
3 Great Eastern .. ..	741			
	826	..		26 5 0
<b>IV. CLASS. No Dividend on Ordinary Stock</b>				
1 Cheshure Midland .. ..	20			
2 Hull and Hornsea .. ..	13			
3 Somerset and Dorset .. ..	66			
4 West Cornwall .. ..	42			
5 Norwich and Spalding .. ..	22			
6 Small Railways .. ..	39			
	202			
<b>V CLASS. Dividend less than Funds.</b>				
1. Fleetwood and Preston .. ..	8			
2 Berks and Hants, Great Western .. ..	25	1 5 0	0 16 0	
3. South Devon .. ..	100	1 10 0	1 10 0	
4 Staines and Wokingham .. ..	30	1 15 0	1 15 0	44 0 0
5 Manchester, Sheffield, and Lincoln .. ..	255	1 1 6	2 3 4	45 0 0
6 Chester and Holyhead .. ..	105	2 0 0	1 17 6	52 10 0
7 Great Western .. ..	1,245	2 10 0	2 10 0	53 0 0
8 Rhymney .. ..	24	2 0 0	2 6 8	54 2 6
9 Kendal and Windermere, London and North Western Railway .. ..	10	3 0 0	3 0 0	
10. Manchester and Matlock, London and North Western Railway .. ..	12	3 0 0	3 0 0	
11 Mid Wales .. ..	48	2 12 6	2 12 6	
12 Cambrian .. ..	132	2 0 0		
13 Brecon, Merthyr Tydvil .. ..	61	1 14 2		
14 Cockermonth and Keswick .. ..	31	2 10 0		
15 Swansea Vale .. ..	20	1 15 0		
16 Small Railways .. ..	64	1 0 0		
	2,170			
<b>VI CLASS Dividends less than Commercial Interest—Shares below Par</b>				
1 South Eastern .. ..	297			
2 North Staffordshire .. ..	144	2 17 6	3 4 2	66 10 0
3 Wilts and Somerset, Great Western .. ..	30	4 0 0	3 16 8	73 10 0
4 Birkenhead, London & North Western Railway .. ..	45	4 0 0	4 0 0	80 0 0
5 Buckinghamshire, London and North Western Railway .. ..	53	4 0 0	4 0 0	
6 London and South Western .. ..	546	4 0 0	4 0 0	89 0 0
7 Llynvi and Ogmore .. ..	20	4 0 0	4 6 8	83 10 0
8. Bristol and Exeter .. ..	121	4 0 0	4 0 0	83 0 0
9 London, Brighton, and South Coast .. ..	275	4 10 0	4 10 0	88 0 0
10. Birmingham and Wolverhampton, London and North Western .. ..	20	4 0 0	5 2 6	89 0 0
11. Warrington and Stockport, London and North Western .. ..	11	4 0 0	4 0 0	
12 Hull and Holderness, North Eastern .. ..	16	4 0 0	4 0 0	
13 Nottingham & Grantham, Gt Northern .. ..	27	4 0 0	4 0 0	
14. Birmingham and Derby, Midland .. ..	55	4 2 6	4 2 6	
15. Llanelly .. ..	60	4 12 6	5 2 6	94 0 0
	1,720	3 12 6		

