

deduct, fall, 8ft.—total rise from Abbotsford to mine, 162·40ft. The tracing annexed hereto shows this section in better form.

The line has been made more with a view to its permanency, and to the consequent reduction of annual charges for repairs, than to any immediate saving of cost. Materials of the best quality, and which were procured by the Public Works Department, were used throughout on the permanent way. The wisdom of this has been shown by the smallness of the cost now ruling for the maintenance, the figures being only £11 per month, or at the rate of £75·428 per mile per annum; whereas the average Government charge on the length of the Hurunui-Bluff line and branches for 1885-86 has been £165·72, or, if the charges for maintenance of buildings, structures, and for miscellaneous be struck out, the rate for 1885-86 will be found to be £113·595 per mile per annum. It must be borne in mind that, had the Fernhill branch line been several times the length, the cost per mile per annum would have been considerably less, although the total annual cost would have been more. The work would be arranged to better advantage. For the first two years, or two years and a quarter, of course, this item of maintenance was very much larger, owing to frequent slips from the sides of the cuttings, and settlement of embankments, insufficient drainage, &c., but all these have been successfully dealt with, and now there is only the maintenance to look forward to. In estimating the value of the railway, the Government should bear in mind the fact that the line is not a new one just completed, but one upon which the Fernhill Company have borne the cost necessary for the first few years of a railway's life—I mean the cost of slips, subsidences, &c.—and have not allowed the line to deteriorate, but have very considerably improved upon its condition when passed and handed over by the Public Works Department to the Fernhill Company. It is now in first-class order from end to end. The rails used throughout were iron, of 42lb. to the yard. They are flat-bottomed, or T section, and are well secured to the sleepers, which are full-size (7ft. by 8in. by 4in.), and are cut from good sound wood to Government specifications. The sleepers are placed at the usual distances apart from one another, as allowed by the Public Works Department. The rails are all well and carefully curved where requisite, and are laid with a good amount of pitch, proportionate to the curves, and securely jointed together by means of fish-plates and screw-bolts. The whole line has been well ballasted, and, as an almost unlimited supply of good ballast has all along been close at hand in the company's sand- and gravel-pits, the platelayers have not stinted its use, but have had as much as ever was requisite to keep the line well packed and boxed up.

At present the Fernhill Company are very much handicapped over the question of the railway and freights generally on coal, consequent upon the action of the Government. The line is owned and maintained by the Fernhill Company, and yet the Government charge rates as from the colliery. That is, they get rates on a mile and three-quarters of line belonging to and maintained by a private company. This, I think, on the face of it, seems manifestly unfair, and doubtless if properly placed before Government would soon be remedied. There are two methods by which the extent of this handicapping may be calculated. The first is freight on a mile and three-quarters of railway, at say, 8d. per ton per mile (which I gather is about the average freight). This amounts to 54d. per ton for the whole length of railway, which, at the exceptionally low rate of 7,500 tons per annum (the output for 1885-86, when the sales were practically stopped for a long time on account of a fire in the mine), amounts to £164 per annum, and, as the company very soon hope to send out fully four times that quantity, the sum would amount to £656 per annum. The second method, which is the proper way to look at the matter, is the actual cost to the company. This may be reckoned by adding the following charges together: namely, interest on the capital expended on the railway, the annual cost of maintenance, and the depreciation. As the Fernhill Company would be unable to borrow money solely upon this class of property under 8 per cent. per annum, even if they could get it at that, and as the line would only be of actual use to them during the continuance of the leases, and consequently there must be a very considerable allowance for depreciation, which I estimate at 5 per cent. per annum, the figures would work out something like the following as the extent of the annual handicap of the Fernhill Company in comparison with any other Green Island coal company: Interest on capital value of line, £10,625, at 8 per cent., £850; maintenance—labour and material, £165; depreciation, &c., £10,625 at 5 per cent., £531 5s.: making a total of £1,546 5s.

The Fernhill Company are compelled to take into consideration the contingency that at the end of their leases the line may possibly be practically useless to them; for it is quite possible that some other firm might secure the leases of coal. To the Government, on the other hand, the line will always be equally valuable, for the coal-mines at Fernhill will continue to be worked by some firm or another, and revenue will be always derivable from this kind of traffic from this mine.

To put the matter into comparative figures, the traffic (inwards and outwards added together) of the Fernhill and Walton Park collieries, and the expenses incidental to the same, according to the official returns as printed in the Public Works Statements, were as follows:—

	Fernhill Company.			Walton Park Company.		
	1883-84.	1884-85.	1885-86.	1883-84.	1884-85.	1885-86.
Total traffic returns as per Public Works Statements	£1,594 12 3	£1,742 14 5	£1,055 0 5	£2,239 5 9	£2,688 0 3	£1,825 9 8
Government maintenance costs as per Statement	Nil	Nil	Nil	£693 5 0	£628 13 1	£636 19 4
Percentage of maintenance costs only to gross traffic from mine	Nil	Nil	Nil	30·958	23·387	34·893
Tonnage output by rail	9,047	11,405	7,500	15,678	28,641	16,514
Average freight per ton	3s. 6·3d.	3s. 0·67d.	2s. 9·76d.	2s. 10·29d.	2s. 3·29d.	2s. 2·53d.
Rate per ton of cost to Government (maintenance only) on branch-lines	Nil	Nil	Nil	10·616d.	6·382d.	9·257d.

A very cursory study of the above table will show how much more valuable is the Fernhill Branch Railway to the Government than the Walton Park Branch. It will be seen that for last year the maintenance expenses reached the fearful rate of 35 per cent. on the total revenue for goods coming off and going on to the Walton Park Branch line, and not on the proportionate amount of revenue properly due to the line. Without actual figures before me (they do not appear to be given in the General Manager's report on working railways) I can only roughly guess at the proportionate amount of revenue which, in fairness, should be credited to the Walton Park Branch; but I think it would be a very liberal allowance to take one-third. Now, one-third of the gross revenue would be £608 9s. 11d., while the maintenance charges are £636 19s. 4d.; to which must be added the mileage cost of locomotives, £275 9s. 9d.; wagons (in estimating this item I have taken half the amount shown in "carriage and wagon repairs" of the reports), £43 6s. 4d.; traffic expenditure, £344 1s. 10d.; general charges, £57 6s. 11d., and sundry charges, £16 17s.: making a total of £1,374 1s. 3d., or considerably more than double the receipts. It may, perhaps, be hardly fair to charge against this branch-line the average expenses on the Hurunui-Bluff line; but, even allowing for that—which will be liberally provided against—if we only charge one-half the average amount we should then have:—

Receipts.		£	s.	d.	Expenditure.		£	s.	d.
Proportion of freights	..	608	9	11	Maintenance	..	636	19	4
Loss on working, allowing nothing for interest on the construction-capital ..	..	397	0	5	Locomotives	..	137	14	11
					Wagons	..	21	13	2
					Traffic expenses	..	172	0	11
					General charges	..	28	13	6
					Sundry charges	..	8	8	6
Total	..	£1,005	10	4	Total	..	£1,005	10	4