

Leaving £32·4 as the total annual cost of one mile of steel rails, as compared with £38·7 in the case of iron.

In allowing for the old materials, we have calculated them at the same weight as they were originally. This is not strictly correct, but as steel and iron are respectively treated in the same manner, it does not make any material difference relatively.

No doubt, where the traffic is heavy, so that iron rails would wear out very quickly, the relative advantages for the use of steel and iron are very much increased in favour of steel.

Whichever way the question is looked at, there must be a considerable saving in the end by the use of steel rails at present prices. The question which it seems to us the Government would have to decide is, whether it is of more importance to them to keep down the first cost, through the use of iron rails, than to keep down the cost of renewing these at a time when the advancing trade of the country and increased traffic on the railways may make the additional outlay of less moment than the increase of capital by the adoption of steel would be now. The increased first cost involved in the use of steel rails, as we have already seen, would be £120 per mile of single line.

If rails of 52 lbs. per yard were adopted, the figures given in the body of this report would be modified in the proportion of 52 to 40.

We are, &c.,

(For G. W. Hemans and self.)

GEO. B. BRUCE.

The Agent-General, London.

[MR. CARRUTHERS'S MEMORANDUM.]

3rd March, 1877.

THE question of steel *versus* iron rails is not now very important, as most of the rails required are already ordered. Had the Home prices been as low when the rails were purchased as they are now, I should have recommended steel rails of a heavier pattern than we have used. There is some risk of light steel rails breaking, and I do not think they should be used of a less weight than 52 lbs., and that 56 lbs. would be better.

J. CARRUTHERS.

APPENDIX F.

MR. WILLIAM FOLCHER to MR. BROWN.

DEAR BROWN,—

Lawrence, 15th September, 1877.

Your telegram came to hand at 9 p.m. last evening. Some of the lines were down, hence the delay. I hasten to furnish you with all particulars *re* siding I am in a position to afford.

I applied to Mr. Blair, Formation Engineer, previous to the opening of the Milton and Lawrence line, for a siding to my timber yard. Mr. Blair furnished me with a form, which was duly sent to the Minister for Public Works, guaranteeing the required amount of £300 per annum. I was also strongly supported by several merchants of Dunedin—Messrs. Guthrie and Larnach, Findlay and Co., Mackerras and Haslett, &c. Mr. Blair saw my place on the opening day, and said I was not to trouble myself any more about it, the siding should be put in immediately. I heard nothing more for the next two months, when, calling on Mr. Blair to see the reason of the delay, he (Mr. Blair) handed me a letter, which stated the Minister could not recommend it, as he was afraid the traffic would be too light. Meantime my traffic was increasing, and I had brought the matter under the notice of the General Traffic Manager, who, seeing the amount I was paying monthly, induced me to send in another application, he promising to recommend it; also that Mr. Blair had withdrawn his objection, and the thing would be granted. All that was required was the assent of the Chief Engineer. I heard nothing further, until a few weeks since Mr. Armstrong, Engineer of Constructed Railways, came to Lawrence. On applying to him for information, he said he had heard nothing of the matter, and it would have to go through him to Wellington. I went to Dunedin, and saw Mr. Grant with Mr. Armstrong. They agreed to send forward the papers connected with the affair, and both promised to support my application. I was in Dunedin last week, and find that the General Manager's Department are still waiting for sanction from Wellington. I shall, therefore, feel deeply indebted if you will kindly see the Chief Engineer, and explain matters to him, so that I may get the thing done as soon as possible. I might state that last week I had seven truck-loads of timber at the station at once. It would have been a saving of £10 to me had I had the siding in; and at present we have four trucks standing. These could all have been unloaded in a few hours in my yard, whereas with horse labour it takes some days.

I have no documents but two letters, which tell me I shall hear more definitely in a few days—the last one dated July 7. I furnish you with a statement of the amounts I have paid monthly since the opening of the line to Lawrence, and I have no hesitation in saying that, had they put in this siding for me some months since, my traffic would have doubled itself. The length required would be about 2 chains—you will say not a very great matter, seeing that it would help to make the line a payable one. Trusting you will be successful in pushing forward my interest in this undertaking,

I have, &c.,

WILLIAM FOLCHER.

Statement of traffic since opening of Lawrence and Milton Line, April 2, 1877:—Payments for months of April, £41 2s. 6d.; May, £96 7s. 6d.; June, £60 8s. 1d.; July, £46 3s. 9d.; August, £60 11s. 8d.: total, £304 13s. 6d.

Guarantee required, £300. Length of siding, 2 chains.

I have offered horse labour for filling in and ballast.

W. FOLCHER.