

cost of constructing a single line. On the basis which I have assumed, however, the case stands as follows:—

|                                            |      |      |                  |
|--------------------------------------------|------|------|------------------|
| New Zealand, 1,764 miles, average cost     | .... | .... | £7,570 per mile. |
| Victoria, 2,116 miles, average cost        | .... | .... | £12,368 „        |
| New South Wales, 1,955 miles, average cost | .... | .... | £12,313 „        |
| Cape Colony, 1,614 miles, average cost     | .... | .... | £8,755 „         |

For the purpose of a more simple comparison of these cases, I propose now to state, on the basis of the average price per mile in each colony, what the cost would be, in Victoria, New South Wales, and Cape Colony respectively, of a mileage equal to what we have in New Zealand; and, stating the case in that way, the figures would be as follows:—

|                                                                                |      |      |      |      |      |             |
|--------------------------------------------------------------------------------|------|------|------|------|------|-------------|
| In New Zealand, at our average cost per mile, 1,764 miles comes to             | .... | .... | .... | .... | .... | £13,352,978 |
| In Victoria, at their average cost per mile, 1,764 miles would come to         | .... | .... | .... | .... | .... | £21,817,152 |
| In New South Wales, at their average cost per mile, 1,764 miles would come to  | .... | .... | .... | .... | .... | £21,720,132 |
| And, in Cape Colony, at their average cost per mile, 1,764 miles would come to | .... | .... | .... | .... | .... | £15,443,820 |

From these figures it will now be seen, that if we had proceeded on the Victorian basis, our railways would have cost us £8,464,174 more than they have done; and similarly, on the New South Wales basis, they would have cost £8,367,154 more; and, on the Cape Colony basis, £2,090,842 more; and the question which has arisen in my mind for consideration is, whether we would have been better or worse off if we had adopted any of these bases of construction, rather than the one which we have adopted.

The first aspect of the matter which naturally strikes one in this connection is, What has Victoria gained for its £8,000,000 extra cost, and New South Wales for its £8,000,000, and Cape Colony for its £2,000,000?

Presuming that in each case the railways fulfil the requirements of the existing traffic, the advantage, or disadvantage, of a more expensive class of line, will rest mainly on the relative cost of its maintenance, as compared with the maintenance of a line having structures of a cheaper and more perishable character, and it is on this basis that I propose to examine these several cases.

In applying this test of the relative cost of maintenance, however, it is of course necessary to bear in mind the fact, that before it can be properly applied, the lines must all have been in existence for a sufficient time for the renewals of structures on the cheaper class of line to have become general, and to have got, in fact, into such a condition that they are uniform year by year, and not liable to periodical culminations or fluctuations to any great extent.

I believe that the New Zealand Railways as a whole have already got into this condition, and I think, therefore, that a comparison may fairly be made as between them and the more expensive class of lines with which I am now comparing them; and I should here explain that it was for this reason that I have selected the Victorian, New South Wales, and Cape Colony railways for comparison, rather than the cheaper railways in Tasmania and elsewhere.

The conditions governing working expenses, as a whole, and the relation of working expenses to revenue, are so intricate; depending upon the situation of the lines, the character of the traffic, the gradients, and the tariff rates, &c., that it is scarcely possible to make any intelligible comparison on that basis.

The relative cost of maintenance, however, is not such an intricate subject, because, for similarly constructed lines, when rates of wages and prices of materials are about equal, the cost of maintenance, with reasonable speeds, should depend almost entirely on the train-mileage.

When once a railway has got to such a stage that the cost of maintenance becomes uniform, the matter of permanence or otherwise of the structures becomes practically eliminated out of the question, and the only matter for consideration is, whether the interest on the extra cost of the more expensive line, is greater or less than the extra cost of maintenance of the cheaper line. This is, of course, presuming, as already stated, that in either case the railway is good