As for the more durable timbers, totara—the one hitherto most used—is also getting scarce and dear. It must be replaced by birch, by far the most plentiful timber on the West Coast. I have no doubt the greater portion of the sleepers for the Middle Island railways will be of this timber. 100,000 sleepers per annum are taken on the Hurunui–Bluff lines for maintenance, and the requirements for construction during the last five years have averaged about 85,000. The two together make about 4,316,000 superficial feet.

The question of exporting timber from New Zealand bears to some little extent on the prospects of the East and West Coast Railway. I do not think it will pay to send ordinary building-timber to England in competition with the supplies from the Baltic and North America; but it is possible that a small trade in furniture-woods might be established, and there is said to be a large market on the Continent of Europe for cask-staves, for which birch is suitable. A small quantity of timber was exported from Westland to Melbourne when the communication was more direct; but for some years it has entirely ceased. It is probable, however, that the trade will revive when the harbours are made and direct communication resumed.

Taken altogether, it is clear that the timber trade of the West Coast has every prospect of becoming an important industry, and that it will contribute largely to the revenues of the East

and West Coast Railway.

Mineral-traffic.—Although gold-mining of one kind or another is bound to be a permanent industry on the West Coast, we cannot anticipate such an expansion as will materially affect the prospects of the railway. Beyond augmenting the general traffic, it will not contribute much to the revenue.

As already indicated, I am clearly of opinion that the main strength of the West Coast lies in its coalfields, and that, directly and indirectly, this is the source from whence the railway-traffic will chiefly come. The direct traffic in coal will, however, be very small when compared with the indirect traffic that must ultimately accrue from the development of the coal industries. The railway will, no doubt, carry all the coal consumed in Canterbury, and possibly supply steamers at Lyttelton. The line ends in the middle of a coalfield, the coal goes direct from the mine into the truck, and thence to the consumers, thereby saving two handlings. This secures the whole of the Canterbury traffic to the railway: but that is all; coal cannot be carried by rail to the large centres further south, nor exported by way of Lyttelton. There is, however, no such limit to the possibilities of the indirect traffic, and anomalous though it may appear this traffic is augmented by the construction of the harbours.

Effect of Harbours.—Hitherto we have all looked on the West Coast harbours as antagonistic to the East and West Coast Railway. I believe this view is not correct—that they are really the complements of each other. Without the harbours the coalfields will never be properly developed; and the development of the coal industries is necessary for the success of the railway. On the other side, the railway is a factor in developing the mines. With a large population on the West Coast mining coal and carrying on an extensive export trade, it is immaterial to the railway whether all that coal is carried or not. The general traffic, which pays better, would increase in proportion to the population.

Summing-up.—To sum up the traffic prospects of the East and West Coast Railway: The Royal Commission in 1883 estimated the receipts at £120,000. Since then there has been a substantial increase in the population of the West Coast through the growth of coal-mining alone. That industry is capable of great expansion, and so also is the timber trade, which carry with them an increase of settlement generally. I think, therefore, that it would be fair to calculate that the railway revenue of the colony would be increased by fully £120,000 by the construction of the East and West Coast Railway. But, for the reason previously given, I am not in a position to say how much of this is profit.

## WEST COAST-NELSON RAILWAY.

There has been no detailed traffic-estimate made for the Nelson-West Coast line since 1868, when the late Mr. Wrigg estimated the balance of receipts over expenditure at about £10,000. It is more difficult to give an idea of the probable traffic on this line than on the one between the two coasts. There will be a considerable through-traffic between Greymouth and Reefton, and between Westport and Reefton; also, a fair amount for intermediate places on the Greymouth-Reefton section: but it is not easy to predict what will be the nature and extent of the traffic on other parts of the line.

Until the coalfields in the Upper Buller are opened out, there will be no mineral-traffic worth mentioning; when this takes place, Blenheim and Nelson will be supplied from these fields; and, under exceptionally favourable conditions for working the mines, coal for export may

possibly be sent to Nelson and Picton.

The passenger traffic on the Nelson-West Coast Railway will be considerable, particularly when the connection is made between Tophouse and Blenheim. This will be the direct route from Wellington to the West Coast. Westport can be reached in thirteen hours, and Greymouth in fourteen hours. The Rotoroa and Rotoiti Lakes and the gorges of the Wairau and Buller will also attract large numbers of sightseers.

## RECAPITULATION.

I shall now briefly summarize the leading points of the report and the principal conclusions arrived at.

1. The route adopted for the East and West Coast and Nelson Railway is the best available,

and it fits in with the future railway system of the colony.

2. The alignment and levels of the railways are equal to those on the Middle Island main line, and the engineering difficulties are confined to the crossing of the main range and the gorges of the Waimakariri and Buller.