21 D.—1a.

So far as quantities are concerned, there is very little difference between the estimates of the Railway Commission and those of the Canterbury League. The Commission takes 70,000 tons of coal, 21,000 tons of general merchandise and agricultural produce, and 15,000,000 superficial feet of timber; the League's figures for these articles are 75,000, 20,000, and 12,000,000 respectively.

In my report of 1879 I also estimated in a general way that the East and West Coast Railway would barely pay working expenses. Viewing the subject "entirely from a professional and commercial point of view," I came to the conclusion that there was little prospect of a direct return from the railway, and that the collateral advartages were not commensurate with the enormous expenditure involved. I shall now consider these conclusions in the light of the conditions at present existing. A period of seven years having elapsed, all the surroundings of the question are, of course, considerably altered, and the prospects of the railway improved.

Improvements in Gradients.—As already noticed, the professional aspect of the case is greatly changed by the result of the detailed surveys made since 1879. Instead of an Alpine railway worked by Fell locomotives or stationary engines, which would carry a small traffic at a high cost, we have now a line that can be worked by ordinary locomotives, equal in carrying capacity to the best railway in the colony. Although the capital cost is somewhat increased, there can be no com-The additional interest to be met is more than balanced by the parison as to ultimate results. saving in working expenses.

Traffic Data.—In 1878 the total consumption of Newcastle coal in Canterbury was 53,615 tons, and of seaborne timber of the ordinary market kinds 6,000,000 superficial feet. On this basis I took the coal-traffic on the East and West Coast Railway at 40,000 tons, and the timber at 3,000,000ft.

These figures are, of course, far too low for 1886, but they are also too low for any year since 1880, the demand in Canterbury for these commodities being greatly in excess of what could be anticipated. The following table shows what it has been for the last five years:—

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Coul	١.

			Coal.				
			1881.	1882.	1883.	1884.	1885.
Landed at Lyttelton Landed at Timaru			Tons. 58,194 9,197	Tons. 56,583 10,952	Tons. 66,429 10,445	Tons. 96,523 8,881	Tons. 80,169 13,265
Totals		•••	67,391	67,535	76,874	105,404	93,434
			Timbe	r.			
			1881.	1882.	1883.	1884.	1885.
Landed at Lyttelton Landed at Timaru Brought by rail from South Totals	 nland 		2,439,176 2,569,900	3,222,267 1,917,900	1,869,464 1,998,700	1,922,291 2,079,700	Sup. Feet. 11,917,886 1,769,192 1,993,100 15,680,178

In addition to the above the annual consumption of coal in Canterbury includes about 15,000 tons from the local mines at Malvern, and a few hundred tons that find their way from Kaitangata to Timaru. The local bushes also supply 1,500,000 superficial feet of timber and 13,000 tons of firewood.

Passenger-traffic.—The Commission of 1883 estimated the passenger-traffic on the East and West Coast Railway at £10,000; but Mr. Maxwell thought this out of proportion to the goodstraffic, and increased the amount to £20,000. Independently of these considerations, I think that the tourist-traffic will be considerable with such a large population as Christchurch to draw upon.

Agricultural-traffic.—As already indicated, the traffic from agricultural settlement on the

heavier bush-lands will be of slow growth if the land is not cleared faster than the timber is required. The highest consumption of timber calculated on will not clear more than 1,000 acres per annum. It is possible, however, that as the population increases it may pay to clear land near the large centres, even though the timber is not all sold. On the alluvial flats south of Hokitika, where the land is good and the bush light, settlement will undoubtedly take place so soon as the country is opened up by roads.

Timber-traffic.—The timber-traffic on the East and West Coast Railway is sure to be large. The

line strikes good bush at Lake Brunner, 117 miles from Christchurch; so I have no doubt the greater portion of the Canterbury timber trade will be commanded by Westland. The Southland timber now comes as far north as Ashburton, 300 miles from the forest. At this rate the Westland timber would go as far south as Dunedin: but the Southland timber has the advantage there; consequently the former can only go to the Waitaki, where, as regards carriage, the two supplies meet on equal terms. Another point in favour of the Westland timber industry is the superior character of the bush. In consequence of the large yield, it can be produced at the minimum cost—Mr. Kirk says,

not exceeding 4s. per 100ft., and possibly less if the mills could be kept fully employed.

Kauri is largely used in the South for ordinary building purposes. According to Mr. Kirk, the supply of this timber is rapidly giving out. We must therefore depend more on the other pines; and rimu, which is so plentiful in Westland, is the best substitute for kauri.