REPORTS BY THE ENGINEER-IN-CHIEF.

No. 10.

REPORT ON DUNEDIN AND CLUTHA RAILWAY.

Mr. CARRUTHERS to the Hon. J. D. ORMOND.

Public Works Office, Wellington, 4th July, 1872.

This railway is perhaps the best placed of all the proposed lines in New Zealand for doing a large traffic. It is of sufficient length, and passes through a fertile district, which is well settled.

An estimate of revenue was prepared in 1865 by the late Mr. Patterson, in which he estimates the gross revenue at £113,750, and the net revenue at £45,500 per annum, or 16 per cent. per annum on the cost, as let to Messrs. Brogden. This is certainly too sanguine. The following appears to me to be more nearly what may be expected:—

			•			£	s.	d.
Passengers, through,	9,000, @ 1	2s. 6d.				5,625	0	0
	, 12,000, @ 5					3,000	0	0
" 6 miles	, 45,000, @ 1	ls. 6d.				3,375	0	0
Coal,	60,000 tons					10,000	0	0
Merchandise,	35,000 tons					17,500	0	0
Timber,	60,000 feet,	, C.B.M. @	4s.			12,000	0	0
Sundries	•••		• • •	•••	•••	1,000	0	0
Total receipts				•••		£52,500	0	0
Working expenses		•••		•••		36,000	0	0
Net	revenue		•••	•••	•••	£16,500	0	0

This represents a profit of about 6 per cent. per annum.

The line is unfavourable as regards gradients and curves, the worst part being at the Chain Hills, where curves of $7\frac{1}{2}$ chains radius occur on a gradient of 1 in 40.

I have, &c.,

JOHN CARRUTHERS,

The Hon. the Minister for Public Works.

Engineer-in-Chief.