

## No. 9.

## RETURN OF TIMBER LANDS INTERLOCKED WITH TAUPO TOTARA TIMBER COMPANY'S BUSHES.

Block.	Millable Area.	Estimated Crop of Timber (Log Measurement).			
		Totara.	Matai.	Rimu, &c.	Total.
	Acres.	Feet.	Feet.	Feet.	Feet.
Dansey's 1,000 acres, Tatua West (estimated)	140	2,760,000	3,866,000	18,224,000	24,850,000
Whangamata No. 2E, Section 1 ..	114	3,214,000	1,205,000	135,000	4,554,000
Pakuri—Native portion, two-tenths ..	66	1,000,000	500,000	500,000	2,000,000
Waipapa—Whatapo ..	294	9,327,000	2,418,000	345,000	12,090,000
Crown land Reserve (191 acres) North Whangamata, No. 2B	166	2,730,000	1,370,000	Nil.	4,100,000
Run No. 92 (guessed) ..	350	About 30,000 per acre, say ..			10,000,000
					67,594,000

## No. 10.

## REPORT BY CHIEF ENGINEER, WORKING RAILWAYS DEPARTMENT.

SIR,—

Wellington, 24th November, 1920.

In compliance with your request I have the honour to submit the following report on the railway belonging to the Taupo Totara Timber Company from Putaruru to Mokai, and estimates of the cost of—(1) Making the railway suitable for passenger and general goods traffic; (2) bringing the railway up to the New Zealand Government standard for secondary railways; (3) bringing the railway from Putaruru to 19 m. (near Kopokorahi) to the New Zealand Government standard for secondary railways.

*Railway, Putaruru to Mokai.*—For the purpose for which it was designed—the conveyance of timber from the sawmills at Mokai to the Government railways at Putaruru—the railway is, in my opinion, suitable. The railway generally is in a satisfactory condition for the present timber and limited general traffic, and has been fairly well maintained.

*Formation, Cuttings, and Embankments.*—In the construction of the railway it was specified that embankments should be 10 ft. wide and cuttings 8 ft. wide, with the proviso in the latter case that cuttings on curves should be made sufficiently wide to allow of 65 ft. lengths of timber being carried without touching the sides. Although not generally up to the width stated, the embankments are fairly satisfactory in width. I did not see during my inspection any place where the banks are as narrow as 7 ft. (as I understand previously reported), but there are indications of comparatively recent work having been carried out in widening. The cuttings generally are too narrow. It is evident that the widening beyond 8 ft. in some cuttings has been done, but even with the greater width provided there is very little side clearance for the wagons used, which have a width of 7 ft. 6 in. In many cases the cuttings have very little batter—in fact, in some cases the sides overhang—but these appear to be standing well.

*Bridges.*—From Putaruru to Kopokorahi the bridges have been built of rimu. From general experience of this timber, and from indications of decay in the structures themselves, these bridges have about reached the limit of life, and in the ordinary course will have to be renewed at an early date. The cost of this would presumably be debited to working-expenses. The principal bridge on the railway is that over the Waikato River (about 36 m.), approximately 250 ft. long. To counteract some movements in the structure some heavy struts have been introduced, but the bridge shows very considerable deflection under load. Apart from the limited side clearance provided I consider the bridge would require rebuilding before being certified as suitable for passenger traffic under Order in Council. Other bridges than those referred to are principally built of totara, and are in satisfactory condition.

*Track.*—The track consists of 30 lb. steel rails, secured to sleepers spaced at about 21 in. centres by dog-spikes. The rails are generally in good condition. A good many sleepers are rimu, and renewals are required. Check or guard rails are provided at a number of the curves, but these are not sufficiently secured to the running-rails to be of much service. Curves are very numerous. About 17 per cent. of the track consists of curves under 5 chains radius, about 12 per cent. of curves of 3 chains radius and under, while nearly 5 per cent. of the track has curves of 1½ chains radius. From 21½ m. (Kopokorahi) to 25 m. (Wawa Saddle), and from 36 m. (Waikato River) to 42½ m., approximately, 40 per cent. of the track has curves under 5 chains radius, 30 per cent. of 3 chains radius and under, and nearly 10 per cent. of 1½-chain curves. These curves must absorb a large proportion of the time of the men employed on the track. Although the track appears to be maintained, so far as I could judge, sufficiently for the present traffic,