

- Drawing No. 18.—Over-bridge (Lepper Road) at 6 miles 46 chains.
 „ 19.—Bridge over Waiongona River at 7 miles 25 chains.
 „ 20.—Details for ditto.
 „ 21.—Stone and timber culverts.
 „ 22.—Level crossings and cattle-guards.
 „ 23.—Fencing, &c.

GENERAL SPECIFICATIONS FOR FOUR-RAIL FENCING.

The fence is to consist of posts and four rails either split or sawn, as shown in accompanying sketches, which also show details of slip-panels.

All posts to be entirely of heart of totara, sound, and of full dimensions. Ordinary posts to be 8 inches x 3 inches, 6 feet 9 inches long, mortised to receive four rails with mortises 6 inches x 1 3/4 inches. To be placed 8 feet 6 inches between centres, sunk 2 feet in the ground, and securely rammed. End and corner posts to be same length and depth in ground, securely rammed, 7 inches square in section, and to have mortises 4 inches x 1 3/4 inches.

The rails shall be of any of the following kinds of timber, viz.: Red birch (as known in Wellington) totara, black birch, or rimu of Taranaki growth, all of good sound wood, containing at least four-fifths of heart, and free from winding. To be at least 5 inches deep by 2 1/4 inches thick, or of equal strength, and not exceeding 9 feet in length, properly bevelled at ends so as to pass 1 1/2 inches through posts one above the other in ordinary posts, and so as to drive home in end and corner posts in all cases driven tight and perfectly fitting and filling the mortises. The stoutest rails to be chosen for the top, and rails slightly bent to camber upwards; straight and bent rails not to be put in the same panel.

This means that the posts must measure 8 inches wide and 3 inches thick in the centre, or of equal strength, so that they will have an area of 24 inches in section, or equal to 2 feet of timber to the foot run.

The number of slip-panels and their positions will be fixed by the Engineer. Posts at the slip-panels to be 10 inches x 5 inches x 8 feet 3 inches long, placed 10 feet apart, sunk 3 feet 6 inches in the ground, and securely rammed.

Each post to have eight mortises; four mortises to be 4 inches x 1 3/4 inches for the ordinary rails, and four mortises to be 5 inches x 2 inches for slip-rails. Those on one side to be fitted with a 3/4 inch hardwood pin to fasten each slip-rail.

Rails at slip-panels to be four in number, of black or red birch as above described, finished to a length of 10 feet 7 inches x 6 inches x 2 1/2 inches, reduced at ends to go freely into the mortises.

The fence is to be erected upon the boundary line of the land occupied by the railway, or upon such other line as may be directed by the Engineer, and is to be made good up to the ends of all bridges, and up to all cattle-stops; and all existing fences crossed by this fence are to be securely made good up to it either by placing a 7-inch x 7-inch corner post at the junction or by an additional post, as in sketch.

Posts of any length and depth in ground additional to those specified are to be provided and fixed by the Contractor, as may be required by the Engineer, in swampy or loose ground, for which a fair allowance will be made.

Where fencing between the road and railway occurs on the very edge of the road formation the bottom end of the posts will be mortised and pinned into a sole piece of the same size as the posts and 3 1/2 feet long, and a brace 6 inches x 2 inches x 4 feet long will be spiked to each, with two 6-inch spikes at each end, the sole piece projecting under the road.

SCHEDULE.

WAITARA AND NEW PLYMOUTH RAILWAY.

Time of Completion, 1st April, 1875. Completed— Length of main line, 11 miles 13 chains.
 „ sidings, 40 chains.

Description.	Unit.	Quantity.	Rate.	Amount.	Total.
<i>Earthwork.</i>					
Excavation, earth to bank ...	c. yd.	58,832	/10	£ 2,451 6 8	£ s. d.
„ „ spoil ...	„	8,970	/10	373 15 0	
„ „ side cutting ...	„	38,352	/10	1,598 0 0	
Loose rock to bank ...	„	948	3/	142 4 0	
Hard rock ...	„	1,309	5/	327 5 0	
Haulage, average 400ft. ...	„	108,511	/6	2,712 15 6	
Ditching, not to exceed ...	„	2,000	1/3	125 0 0	
Catchwater drains above slopes ...	ch.	495	6/	148 10 0	
Drains in cutting, double ...	„	495	12/	297 0 0	
Retaining walls, in cement ...	c. yd.	316	35/	553 0 0	
Stone pitching ...	„	327	5/6	89 18 6	
Backing ditto ...	„	60	15/	45 0 0	
Surface-forming ...	ch.	103	25/	128 15 0	
Trimming for ballast ...	„	871	8/6	370 3 6	
					9,362 13 2
Carried forward ...	...	...	...		9,362 13 2