

sleepers may be laid on formation, being carefully tamped with dry earth. The Contractor will be permitted to run ballast and material trains over the line thus laid at a speed not exceeding ten miles an hour, but the ballasting and lifting must be proceeded with with all possible despatch.

The changes of gradients shall be made by a gradual curve.

There are to be 2,050 sleepers per mile, to be spaced as directed. The following timbers to be used to the extent of not less than 75 per cent. of the whole:—Totara, jarrah, Oregon pine, kauri, or puriri. The remaining 25 per cent. may be of matai (*Podocarpus spicata*) or birch (*Fagus fusca* or *Solandri*). They shall be 7 feet long, and 7 inches by 5 inches, all of heart. They are to be flatted top and bottom, true and out of wind; but any extra width beyond 7 inches need not be removed. The rail seats are to be accurately adzed to a correct bevel.

The rails will weigh 40 lbs to the yard; they will be jointed with Ibbotson's patent steel clip-joint, weighing about 12 lbs. each joint, and fastened to the sleepers by six fang-bolts to each rail, and two spikes to each sleeper, where fang-bolts are not used. The rails and fastenings will be delivered to the Contractor at the ship's side, Wellington, and he shall be responsible for all materials delivered to him.

#### USE OF PERMANENT WAY MATERIALS BY CONTRACTOR.

16. Permanent way materials shall not be laid down or employed, without written permission of the Engineer, within 100 yards of the face of any excavation or the end of any embankments, nor used for hauling earthwork before the ballast is laid. When the Contractor shall have complied with the above requirements, he may use the rails and other permanent way materials for the purpose of hauling earthwork or materials on parts of the line.

#### SIDINGS.

17. The Contractor shall construct at his own cost, at such points as may be indicated by the Engineer, one half-mile of sidings, including the necessary earthwork, ballast, sleepers, and laying of permanent way, similar to that of the main line, without the points and crossings. He shall also make and construct, wherever required, such station-grounds, buildings, points, crossings, extra sidings, telegraph and other things required for station accommodation, and shall furnish the Engineer monthly with a detailed statement showing their actual cost, exclusive of all cost of management, properly supported by vouchers or as otherwise directed, and to this cost a sum equal to ten pounds per centum shall be added for Contractor's profits, and this amount shall be in addition to the contract sum.

#### TELEGRAPH.

18. A single wire telegraph will be constructed and paid for as for station accommodation, and the use of it allowed to the Contractor during construction of the works. During the period of maintenance the Government will transmit, free of charge, all messages sent by the Contractor on the business of the Railway.

#### ROLLING STOCK.

19. The Contractor shall take delivery from the ship's side at Wellington of the articles of rolling stock enumerated below, and shall land, erect, and place the same on the line in working order, and bear all cost of the same.

#### LIST OF ROLLING STOCK.

- 2 locomotives.
- 8 carriages and brake-vans.
- 13 waggons.

#### USE OF ROLLING STOCK.

20. The Government will furnish the Contractor with such locomotives and rolling stock as they may have on the line, the Contractor to pay the wages of the engine-drivers and stokers, who must be approved by the Engineer, and to furnish fuel, water, oil, grease, waste, &c., at his own expense. The Contractor