## Buildings and Platforms.

22. The Contractor shall erect the following Station Buildings. Conical Hills-6th class Station, passenger platform 100 feet x 12 feet, and loading platform 50 feet x 10 feet; Pomahaka -6th class Station, passenger platform 100 feet x 12 feet, loading platform 50 feet x 10 feet, and water tanks stand with four tanks, well, and fittings complete; Gore Road-6th class Station, passenger platform 100 feet x 12 feet, and loading platform 50 feet x 10 feet; Tapanui—4th class Station, passenger platform 150 feet x 12 feet, loading platform 50 feet x 10 feet, goods-shed 60 feet x 30 feet, and second-class Station Master's house; Kelso—5th class Station, passenger platform 100 feet x 12 feet, goods shed 60 feet x 30 feet, 2-stall engine shed, coals shed, water tanks stand with four tanks and fittings complete, and second-class Station Master's house. Separate drawings, specifications, and schedules of cach of these buildings and platforms are attached hereto, and shall form part of the plans and specifications of this contract, and their cost shall be included in the sum total of the tender. It must be distinctly understood that the Station and Station Master's house at Tapanui are to be proceeded with immediately on the acceptance of tender, and completed as soon as possible for the use of Engineer and Inspector in charge.

## WAIPAHI JUNCTION.

23. The existing sidings at Waipahi shall be altered as shown on plan. The new passenger platform shall be common to both main and branch lines, and shall be of the form and dimensions shown. The present passenger station shall be carefully removed and re-erected behind the new platform. All damage caused by removal shall be made good, and the whole building repainted two coats, in the very best linseed oil and whitelead, as specified for other station buildings.

Dunedin, 21st June, 1878.

## TAPANUI BRANCH.—SPECIFICATION OF RAILS AND FASTENINGS, AND POINTS AND CROSSINGS.

1. Templates must be submitted by the Contractor for the approval of the Consulting Engineer before the work is commenced, in strict accordance with which the rails and fishplates are to be made.

## RAILS.

2. The rails are to be each 24 feet long, but a proportion, not exceeding 5 per cent., will be accepted in lengths of 21 and 18 feet, cut from longer rails faulty at the ends. No deviation of more than 1-4th of an inch from the proper length of the rail will be allowed.

3. The weight of the rails is to be 40 lb. per yard; none will be received which weigh less

than  $39\frac{1}{2}$  lb., and no allowance will be made for any excess over  $40\frac{1}{2}$  lb.

4. Each rail is to be made from a pile  $7\frac{3}{4}$  inches deep by 7 inches broad, consisting of top slab 7 inches broad, 14-inch thick, the full length of the pile; and puddle bars 4 inch thick the entire length of the pile, and of such unequal width as will secure perfect break of joint; and a bottom slab of No. 2 iron 1 inch thick the full length of the pile, and 5½ inches broad, and side pieces  $2\frac{1}{2}$  inches broad and 1 inch thick, also of No. 2 iron. The whole of the iron used is to be of the same original quality and make, without admixture of cinder.

- 5. The top slab is to be made of a bloom formed from two puddle balls thoroughly worked together under a 5-ton tilt hammer, then re-heated to a welding heat, and rolled out to the required size. Should any puddle ball break under the hammer it must be rejected. Or the following plan may be adopted: The top slab may be made from a pile 8 inches square, of puddle bars, the entire length of the pile, and \(\frac{3}{4}\) inch thick, laid so as to break joint. This pile to be bloomed at a welding heat to convenient dimensions, then re-heated and rolled out to the required size.
- 6. The rail pile, made as above described, is to be rolled into a bloom, again raised to a welding heat, and rolled into the rail. Should the Contractor wish to adopt any other mode of manufacture, he must receive the sanction of the Consulting Engineer in writing before making any alteration.

7. Each rail is to have marked distinctly on the side the initials of the maker, the weight

per yard, the year of manufacture, and "N.Z.R."

8. Two oval holes  $\frac{7}{8}$  inch x  $\frac{3}{4}$  inch diameter are to be punched in the vertical web of each rail at both ends, in the position shown on the drawing. The holes must be clean and square through the rails. Any deviation from the correct sizes and position of these holes will render the rails liable to rejection. Four 11/11-inch holes are to be drilled in the bottom flange of each rail, at right angles to its upper surface, in the positions shown.

9. The rails are all to be turned out perfectly true to the template and straight throughout, free from imperfect welds, splits, cracks, flaws, or other faults; the ends to be sawn off clean and Should any rails require to be straightened when cold, it is to be done under presses,

and not by a hammer.

10. The rails are to be subject to tests applied as follows:—

3 E.—7.