

72. The bolt heads and necks must be solid. The threads of screws to be Whitworth's standard, ten to the inch, cleanly cut, to fit tightly into the nuts, and made so as to hold throughout their entire length.

73. Samples to be submitted to and approved by the Engineer before the work is commenced, and the whole must be subject to close inspection at all times.

74. The bolts and nuts are to be heated and dipped in oil to prevent rusting.

75. The spikes are to be made from the best refined iron $\frac{5}{8}$ ths of an inch square Track spikes, and must on test be equal to being bent to a double without fracture.

76. The spikes are to have a pressed head of the usual size and form, and the points chisel-sharpened. They will be 6 in. long over all and similar to sample to be seen in the office of the Engineer.

77. The points, crossings, switches and signals are to be well and truly made of the best materials of their several kinds in accordance with the drawings Nos. 38 and 39; the points and crossings may be made out of the steel rails supplied by the Minister of Railways and Canals.

78. The rails shall be laid to a gauge of 4 feet $8\frac{1}{2}$ in. clear between the rails, and they shall be well and carefully fastened at the joints, which must be as near as possible opposite each other and on the same tie; special care must be taken at points and crossings to have the rails laid to a tight gauge. The rails must be full spiked, and on curves the outer rail shall be elevated according to the degree of curvature as follows, that is to say, on one degree curves 0.05 feet, on two degree curves 0.10 feet, on three degree curves 0.15 feet, on four degree curves 0.20 feet, on five degree curves 0.25 feet, on six degree curves 0.30 feet. The rails shall be handled with care, and before being run over by either engine or cars shall be full sleepered and surfaced. Every precaution shall be taken to prevent them getting bent during the progress of the ballasting.

79. The Contractors shall lay all sidings and put in all points and crossings complete, embracing wing and guard rails, connecting rods, head blocks, switch, signal frames, and gearing. The sidings will range generally from 1,200 to 2,000 feet in length.

80. The Contractors shall remove from the track and straighten all bent and damaged rails, and make good all injuries done before the works are finally accepted; and further, they will be held responsible for all materials provided them, and give a receipt for the same upon taking delivery.

BALLASTING.

81. The surface of ballast pits shall be stripped of soil where such exists, and no material whatever shall be placed on the road bed but good clean gravel, free from