

114. Tamping bars must be used on all ties. Ties must not be equally tamped throughout their whole length. A sixteen-inch space on each side of the rail must be thoroughly tamped, and the centre of the ties lightly tamped in order to prevent them from becoming centre-bound. Tamp joint plates must shoulder ties particularly hard.

115. When ties are being renewed they must be tamped at once to give as solid a bearing as the surface of the rail.

116. When track is being re-ballasted, the ballast must be put under the ties and well tamped with the shovel blade, and before ballast is trimmed it must be thoroughly tamped with tamping bars.

RAIL BRACES.

117. Rail braces shall be used on shimmed track, guard rails, and switches, as shown on the standard plans, and on curves where tie plates are provided.

118. Where rail-braces are used they must be placed in pairs one on each end of the same tie. On curves up to 4 degrees, use four pairs per 100 ft. rail length, increasing one pair per 100 ft. for each additional degree of curvature until 10 degrees.

119. They should extend from the point on the tangent where elevation of the outer rail begins, to the same point at the other end of the curve, but their frequency along the easement curve or tangent should diminish in the same ratio as the elevation of the outer rail decreases.

123. At the centre bolts

tightened to serve the purpose. The remaining

tightened as follows:

124. Nuts

third time as

125. One

the Section 1

126. Inspect and take out