The truss is composed of a horizontal stringer, 5 inches deep by 6 inches wide, two main braces 6×5, 2 pieces of hard wood plank 6×2, and about $2\frac{1}{2}$ feet long, spiked on to the lower side of the stringer at the ends; 2 bolts $\frac{3}{4}$ inch, to secure the lower ends of the braces, with clips, or washer plates under the heads and nuts; and 2 bolts, 1 inch diameter, passing from the vertex of the braces, divergently down through the transverse beam, as seen at B. Under the heads of these bolts at the vertex, is a plate fitted to the wood, about $\frac{1}{2}$ inch thick, and at least 24 square inches in area. Between the two nuts and the lower side of the beam, are plates of the same thickness and same aggregate area, to prevent the nuts from bedding into the timber.

The lower ends of the braces toe into the horizontal stringer, by two shoulders; the extreme one, $\frac{3}{4}$ of an inch deep, and the other $1\frac{1}{2}$ inches deep, and at least 20 inches from the end of the stringer.

The bolts supporting the transverse beam, diverge each at least 5° from the perpendicular, to secure the upright position of the truss, and equal tension of the bolts.

The trusses should be about 14 feet apart in the clear, and the cross beam 12 inches wide by 14 deep; or greater depth and less width, when practicable. It should be secured by bolting, spiking or other means, to the lower side of the stringer. Or, in some cases, it may be above the stringer with advantage.

For the horizontal braces shewn at *C*, 2 by 6 inch stuff is sufficient; and they should be spiked to the under side of the rail timbers.

The rail timbers should be at least 10×12 inches.

Bed pieces 3×12, on the abutments, under the ends of the trusses, may or may not be used.

This bridge will take a trifle less than 100 cubic feet of timber, including, or 55 ft. without the rail timbers; and about 135 lbs. of iron.