any sound log will furnish. Each is made up of two thicknesses.

The eight horizontal levers, or needles, are also 100 feet long when scarfed together, beside the length to be lodged in the abutments; the small ends thereof are 4 inches thick, by 12 inches deep; the part of each next the abutment is 6 inches thick, by 18 inches deep.

The side strings, and carriage skids, are also the same length with the above, and will average 12 inches diameter.

The span of the deck beams to this Bridge is from 25 to 30 feet long; they will average in scantling 6 inches by 12, and are cut to the shape of two isosceles wedges, or a prism.

The deck or floor of Bridge will average five inches thick, and may be of oak or pine.

If any diagonal or perpendicular braces be needed to this Bridge, the size of their scantling will be regulated by their length.

According to the proportional increase of the size of the sections of the isosceles wedge on Plate 3, fig. 1, so will the increase of the quantity of timber be, in the different bills of scantling for the other Bridges.

Therefore agreeably to the rules whereby the different sizes of the timber in the above Bridge are averaged, the bill of scantling for the timber in each Bridge, in the above section, will be regulated according to their various measurements.