

both as a support and as a railing; the 3 intermediate trusses are entirely below the roadway. In the middle of the bridge is a railway track, which is directly over the middle truss, one rail being on each side, and the pressure is distributed over the trusses by means of two longitudinal timbers immediately below the transverse floor beams, and under the rails, suspended by bolts from each floor beam. By this arrangement it is evident that the whole weight upon the railroad track is supported by the middle truss.

The upper chord is represented in the details on the plate; it consists of a cast piece in the middle and rolled plates on each side connected by bolts; the rolled plates are without joints. Beneath the chords are placed angle-blocks at the proper intervals of the panels upon which are cast grooves to fit the plates of the upper chord. The vertical rods are in pairs passing through the chords and angle-blocks; they are $1\frac{1}{4}$ in. in diameter.

The lower chord consists of four plates, 4 in. \times $\frac{3}{8}$, below which the suspension rods pass, as represented in the plate.

On the lower side of the chord suspension rods pass through a wrought iron plate, the end of which is extended to a sufficient length to give room for two holes to receive the hooked ends of the lateral brace rods.

The braces and counter-braces are equal in size, and the cross-section is in the form of an X.

The dimensions of the flanges are only $\frac{1}{4}$ inch by $2\frac{1}{4}$ inches, and the area of the cross-section $1\frac{1}{8}$ square inches.

The horizontal lateral bracing is by means of rods. They are hooked into holes in the projecting edges of the plates at the bottom of the suspension rods; the 4 rods forming the diagonals of each panel of the lateral bracing unite at the centre, where they pass through a ring 8 inches in diameter, and are secured by nuts on the inside of the ring, which furnishes the means of lateral adjustment.

The planking consists of two courses. 1st course, 2 inch yellow pine, laid longitudinally. 2d course, $\frac{1}{2}$ inch white oak, inclined at angle of 45° .