inch channels are used for the batter braces, the thickness of
the shoe plates, roller plates, and bed plates, is to be one (1)
inch; and, when fifteen (15) inch channels are used, it is to be
one and an eighth (1\(\frac{1}{8}\)) inches.

Bed plates must be of such dimensions that the greatest
pressure on the masonry shall not exceed two hundred (200)
pounds per square inch.

Every bearing upon masonry must be provided with either a
bed plate or a roller plate, well fastened to the masonry by bolts
not less than one (1) inch in diameter; but, if the shoe plate
be sufficiently large, it may act as a bed plate at the fixed end
of the span.

**Beam-Hanger Plates.** — Beam-hanger plates are never to be
made less than three-quarters (\(\frac{3}{4}\)) of an inch thick, and their
areas are to be such that the hanger nuts will always have a full
bearing thereon. The necessary thickness for a beam-hanger
plate is to be determined by considering it as a beam uniformly
loaded by the whole weight that comes on the hangers; the
length of said beam being the distance between the centres of
the holes through which pass the ends of one hanger, and its
width being the extreme dimension of the plate, measured par-
allel to the floor beam. The intensity of working-stress for
bending in the plate is to be taken equal to that used in pro-
portioning the floor beam.

**Riveting.** — In riveted work, all joints are to be squarely and
truly dressed, and the rivet holes must be accurately spaced.

No rivets with crooked heads, or heads not formed accurately
on the shank, or rivets which are loose either in the rivet holes
or under the shoulders, will be allowed in a bridge.

Rivet holes in top-chord plates and batter-brace plates shall
be spaced as nearly as practicable two and a half (2\(\frac{1}{2}\)) inches
centre to centre near the panel points, and four (4) inches centre
to centre elsewhere.

No rivet-hole centre shall be less than one and a half (1\(\frac{1}{2}\))
diameters from the edge of a plate: whenever practicable, this
distance is to be increased to two (2) diameters.

The diameter of a hole shall never exceed that of the rivet by
more than one-sixteenth (\(\frac{1}{16}\)) of an inch.