ter should have a cross-section nowhere less than one square inch to each 2,000 lbs. of the gross panel load. A complete wrought iron connection from beam to elbow, however, is to be preferred.

The thickness of web and flanges of the uprights, should be from \( \frac{3}{4} \) to \( \frac{1}{2} \) inch, and the cross-section of upper chord cylinders should be about 20 per C. greater than that of the portion of bottom chord forming the opposite side of the oblique parallelogram included between consecutive main diagonals and included sections of chords; as \( dekl \), Fig. 12.

The upright should be so formed as to bring the centres of upper and lower chords in the same vertical plane.

Sway rods in this class of bridges, should be about \( \frac{1}{2}'' \) in diameter, with a turn buckle near one end for adjustment, and an eye at each end, for connection with the bolt at \( c \). The screw working in the turn buckle is cut upon the short piece, which should be \( \frac{1}{4}'' \) larger in diameter than the long piece which has no screw upon it.

The lower chords, king braces, and sway rods of the endmost panels, connect with cast iron foot pieces upon the abutments, as represented in Fig. 36. The portion of lower chord in the end panels, usually consists of single rods, instead of links, with an oblong eye at one end to receive the connecting block, and a screw and nut for connection with the foot piece (Fig. 36), at the other end.

This plan of construction will generally yield precedence to the Arch Truss plan, for short spans, except for deck bridges upon rail roads, in which case the