The upright should have a shoulder sufficient to prevent its rising through the arch in case of thrust action; which may be made by turning down the upright about $\frac{1}{4}$" in diameter, from shoulder to end; and, the section of the castings, cut away by holes, should be compensated for, by swells opposite the holes. A thick washer above the eye of the upright, may form a beam seat, raising the beam above the eyes of the chord plates.

Fig. 59, in which $\alpha$ denotes the arch and $c$ the chord, will afford an illustration of the device here suggested.

The other plan alluded to for a plate chord, proposes to use the plates as long as may be, consistently with their convenient management; and connect them by splicing-plates, of half the thickness, (or a little more,) of the chord plates, using one on each side, riveted or bolted with such a distribution of rivets, &c., as may not weaken the plates by more than the width of one hole.