

The preceding conclusion must be regarded as applicable mostly to Arch Trusses, in which the Chords are liable to a uniform maximum stress in all parts; and it should have been remarked after the first paragraph, P. 225, that the net section of Splice-plates, through any one or more rivets, should always be at least equal to the net available section of the long plates. Hence, the shorter splice-plates, with the rivets near the joint placed opposite one-another, would require to be enough thicker to balance nearly all the saving in length. Consequently, there is but little difference in economy between the two plans described. [Observe, also, that $16\frac{1}{2}$ " in line 4, P. 225, should be $15\frac{1}{2}$ ".]

To adapt this kind of Chord to the Cancellated Truss, in which the cross-section requires to be increased from end to centre of truss; I would suggest two courses of plates to each half-chord, (except in the first two or three panels from each end,) varying in thickness as the stress upon chord varies in the several panels.

For a truss arranged as in F. 39, P. 141; suppose $w = 12M$, $w' = 4M$, & $W = 16M$; and diagonals inclining at 45° , (except the steep ones,) The end brace, then, sustaining $120M$, would produce a tension of $60M$ upon the two first sections of chord, up to the second node from the end, requiring for each half-chord, (allowing $10M$ to the square inch of net section,) a plate about $8'' \times 7\text{-}16\text{th}''$.