

of Classes B and C. For pins and rivets belonging wholly to the lateral system of a bridge of any class, the intensity is to be taken equal to seven and a half ( $7\frac{1}{2}$ ) tons.

*Sizes of Upper Lateral Rods.* — In bridges of less than two hundred (200) feet span, the stresses in the upper lateral system in through bridges, or the lower lateral system in deck bridges, usually call for sections of rods which are practically too small: therefore the inferior limits of the diameters of these rods in such cases are to be taken from Table XXV.

*Stiffened Hip Verticals.* — Hip verticals in three or four panel pony trusses are to be stiffened so as to resist compression. If the section employed consists of two channels, the net section of the webs alone is to be relied on to resist tension. If it consists of two flat bars trussed, the intensities of working tensile stress on the net section are to be reduced to three (3) tons for bridges of Class A, and to four (4) tons for those of Classes B and C.

*Trussing.* — Trussing is to be used only in the posts of pony trusses, where there is a great excess of strength, in the hip verticals of pony trusses, and in stiffening lower chord bars.

*Upset Ends.* — Middle panel diagonals, counters, lateral rods, vibration rods, and all other adjustable rods, excepting beam hangers that have an excess of section, are to have their ends enlarged for the screw threads, so that the diameter at the bottom of the thread shall be one-sixteenth ( $\frac{1}{16}$ ) of an inch greater than that of the body of the rod, square or flat bars being figured as if of equivalent round section.

*Threads.* — All threads, except those on the ends of pins, must be of the United-States standard.

*Minimum Dimensions of Chord and Batter-Brace Plates.* — The minimum dimensions for the top plate in top chords and batter braces are to be taken from the following table. For five (5) and six (6) inch channels, the thickness does not increase with the width. For seven (7) inch channels, the thickness should be increased to five-sixteenths ( $\frac{5}{16}$ ) of an inch, should the width exceed fifteen (15) inches. For the other channels, should the width of plate exceed that given in the table by from forty (40) to seventy (70) per cent, the thickness must be