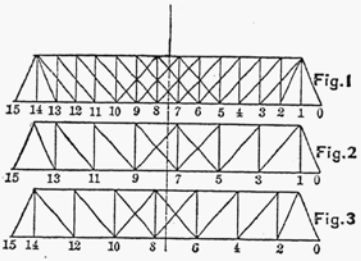
top chords, batter braces, and posts, are compressive, and those in bottom chords, main diagonals, counters, and hip verticals tensile.

Next let us consider the double-intersection truss.

The formulas for this case are so complicated that it is better not to employ them. The simplest method is to draw a skeleton diagram, and number the panel points, as in the single-intersection truss. The double-intersection truss really consists of two trusses, as may be seen in the accompanying diagram.



Such a division is necessary in order to calculate the chord stresses when the truss contains an odd number of panels. This is accomplished by finding, by the method of moments already explained, the chord stresses in each of the trusses shown in Figs. 2 and 3, and then combining them. Thus the stress in panel 9–10 of the lower chord in Fig. 1 is equal to that in panel 9–11 of Fig. 2, plus that of panel 8–10 of Fig. 3.

The live-load stress in any diagonal sloping upward from right to left is found by noting whether the number at its foot be odd or even, then taking the sum of the odd or even numbers, from one or two up to the number at the foot of the diagonal, and multiplying the sum by $\frac{w}{n} \sec \alpha$, or $\frac{w}{n} \sec \beta$, as the case may be.

The stress due to the dead load is found by taking the sum of the same numbers, and from it subtracting the sum of the odd or even numbers from one or two up to $(n - n' + 2)$, where n is the number of panels in the span, and n' is the number at the foot of the diagonal considered. Whether the odd or even