Pass a vertical plane through the middle point of the bottom chord: all the dead loads to the right of this plane may be considered to go to the right-hand pier, and all to the left of the plane to the left-hand pier. Should there be a post at the middle of the bridge, the weight at the foot is to be considered as halved, one-half going to each pier. Then the stress in any main diagonal of the left-hand half of the bridge is to be found by commencing at the right-hand end, and adding the numbers at the panel points until the foot of the diagonal considered is reached, multiplying the sum by \( \frac{I}{n} w \sec \theta \), and to the product adding the number of panel dead loads between the central plane and the panel point at the foot of the diagonal considered (including the one at this point) multiplied by \( W_1 \sec \theta \).

For instance, in a ten-panel bridge, the stress in the end main diagonal, the number at its foot being eight, will be

\[
(1 + 2 + 3 \ldots + 8) \frac{w \sec \theta}{10} + (\frac{1}{3} + 1 + 1 + 1) W_1 \sec \theta.
\]

The stress in a counter on the right-hand half of the bridge will be found by adding the numbers at the panel points until the foot of the counter considered is reached, multiplying the sum by \( \frac{I}{n} w \sec \theta \), and from the product subtracting the dead-load stress of the main diagonal which crosses the counter. Thus, in the ten-panel bridge, the stress in the second counter from the centre in the right-hand half of the span, or the one at the foot of the third panel point, is

\[
(1 + 2 + 3 \ldots + 7) \frac{w \sec \theta}{10} - (\frac{1}{3} + 1) W_1 \sec \theta.
\]

The greatest stress in any post is found by adding \( W' \) to the vertical component of the greatest stress in the main diagonal attached to its upper end; thus, in the same bridge, the stress in the first post from the left-hand end, or the one at the eighth panel point, is

\[
(1 + 2 + 3 \ldots + 7) \frac{w}{n} + (\frac{1}{3} + 1 + 1) W_1 + W'.
\]