well as with the preceding plans.

Assuming a truss of the same length and depth, and same load, both constant and variable, as before, acting at the points \( x, v, u, \&c. \); let \( w \) represent the greatest variable load for the length of one panel, and \( w' \), the weight of superstructure bearing upon one truss, for the same length, supposed to be concentrated at the Nodes of the lower chord, and assumed to be equal to \( \frac{1}{3} w \).

**Fig. 45.**—Mr. Post’s Truss.

Also, let \( t \) equal the vertical depth of truss, (between centres of chords,) and let tension diagonals incline \( 45^\circ \), and posts lean \( t \) horizontally, to \( 3 \) vertically, — the length of panel, (or space between posts,) being two thirds of the depth.

Then, omitting Counter-braces, (or ties,) up to \( t f \), from the left, as neutralized by weight of structure; we see that the weight at \( x \), being only \( \frac{3}{4} \) as great as at the other nodes, (on account of the short space \( xy, \)) \( 3w + 80 \), (or \( 3w'' \), substituting \( w'' \) for \( w + 80 \),) represents the proportionate part of that weight tending to bear upon the abutment at \( m, \) & this, with \( 12w'' \) for weight at \( r \), \( + 20w'' \) for that