same top and bottom, they are not so for the same panel. The inclination of the diagonals brings the panels of equal strain in advance of each other; that is to say, the tension strain in *b c* is the same as the compressive strain in *d e*, *c g* as in *e f*. The example given is for an uneven number of panels, in which case there will be three panels of the top chord—namely, the centre and one either side, of equal maximum strain, to one panel of maximum strain at the centre of bottom chord. If a diagram is made for an even *number* of panels, there will be a post at the centre, and it will be seen that the maximum strain on top chord will extend over two panels, one on either side of centre, and will be in excess of the maximum strain in the bottom chord, owing to the main diagonals of the two middle panels *uniting* at the foot of the post where their horizontal components balance each other. At the top chord, however, these diagonals are spread apart two panel-lengths, and deliver their horizontal component to that chord.

Example.—Let $l = 70$ ft.; $n = 7$; $h = 10$ ft.; $w =$ 300 lbs. ft. = 3000 lbs. per panel; $w' = 1000$ lbs. ft. = 10,000 lbs. per panel; $w + w' = 13{,}000$; abutment reaction = one half of six panel loads = 39,000 lbs.

The horizontal strain on O *a* and *a b* will be

$$\frac{39{,}000 \times 10}{10} = 39{,}000 \text{ lbs.}$$

The horizontal strain on *d e* and *b c* will be

$$\frac{39{,}000 \times 20 - 13{,}000 \times 10}{10} = 65{,}000 \text{ lbs.}$$

The horizontal strain on *e f*, *f h*, *h i*, and *c g* will be

$$\frac{39{,}000 \times 30 - 13{,}000 \times 20 - 13{,}000 \times 10}{10} = 78{,}000 \text{ lbs.}$$