

- Diagonal 4 has tension from $\frac{1}{6}p$, and a compression from $\frac{4}{6}q + \frac{2}{6}r + \frac{2}{6}s + \frac{1}{6}t$.
- " 5 " compression from $\frac{1}{6}p + \frac{2}{6}q$, and a tension from $\frac{2}{6}r + \frac{2}{6}s + \frac{1}{6}t$.
- " 6 " tension from $\frac{1}{6}p + \frac{2}{6}q$, and a compression from $\frac{2}{6}r + \frac{2}{6}s + \frac{1}{6}t$.
- " 7 " compression from $\frac{1}{6}p + \frac{2}{6}q + \frac{2}{6}r$, and a tension from $\frac{2}{6}s + \frac{1}{6}t$.
- " 8 " tension from $\frac{1}{6}p + \frac{2}{6}q + \frac{2}{6}r$, and a compression from $\frac{2}{6}s + \frac{1}{6}t$.
- " 9 " compression from $\frac{1}{6}p + \frac{2}{6}q + \frac{2}{6}r + \frac{4}{6}s$, and a tension from $\frac{1}{6}t$.
- " 10 " tension from $\frac{1}{6}p + \frac{2}{6}q + \frac{2}{6}r + \frac{4}{6}s$, and a compression from $\frac{1}{6}t$.
- " 11 " compression from $\frac{1}{6}p + \frac{2}{6}q + \frac{2}{6}r + \frac{4}{6}s + \frac{4}{6}t$, no tension.
- " 12 " same as 11, only tension.

Summing these effects of the moving load, and remembering that the loads at each apex are the same in amount, or 9000 lbs., $\frac{1}{6}$ of which is 1500 lbs., which, converted into longitudinal effect, is $1500 \times \frac{11.18 \text{ ft.}}{10 \text{ ft.}} = 1677$ lbs., we have for the strains in the web:

- Diagonal 1. $15 \times 1677 = 25,155$ lbs. tension.
- " 2. $15 \times 1677 = 25,155$ lbs. compression.
- " 3. $10 \times 1677 = 16,770$ lbs. tension, and $1 \times 1677 = 1677$ lbs. comp.
- " 4. $10 \times 1677 = 16,770$ lbs. comp., and $1 \times 1677 = 1677$ lbs. tension.
- " 5. $6 \times 1677 = 10,062$ lbs. tension, and $3 \times 1677 = 5031$ lbs. comp.
- " 6. $6 \times 1677 = 10,062$ lbs. comp., and $3 \times 1677 = 5031$ lbs. tension.
- " 7. $6 \times 1677 = 10,062$ lbs. comp., and $3 \times 1677 = 5031$ lbs. tension.
- " 8. $6 \times 1677 = 10,062$ lbs. tension, and $3 \times 1677 = 5031$ lbs. comp.
- " 9. $10 \times 1677 = 16,770$ lbs. comp., and $1 \times 1677 = 1677$ lbs. tension.
- " 10. $10 \times 1677 = 16,770$ lbs. tension, and $1 \times 1677 = 1677$ lbs. comp.
- " 11. $15 \times 1677 = 25,155$ lbs. comp.
- " 12. $15 \times 1677 = 25,155$ lbs. tension.

To the above values must be added, for final maximum web-strains, the effect of the permanent load, 3000 lbs., at each apex, which, converted into longitudinal effect as above, is 3354 lbs. This is done in the following table: