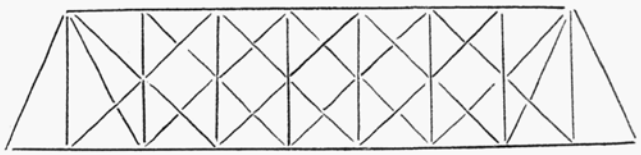
to aid in a little further illustration of the matter under discussion.

1	2	3	4	5	6	7	8
1	2	4	6	9	12	16	20
r	*q*	*p*	*o*	*n*	*m*	*l*	*k*



a	*b*	*c*	*d*	*e*	*f*	*g*	*h*	*i*	*j*
		2	1	1 †	1	1	2		

Now, it will readily be seen, that the tendency of weights (*w*,) at the nodes *b* & *d*, (and such would be their *effect*, if no other weight were acting upon the truss,) is, to give to *d n*, a tension equal to.. $(4w \div 9)\sqrt{2}$; (diagonals inclining 45°). On the contrary, the weights at *h* & *f*, tend to produce tension equal to $(6w \div 9)\sqrt{2}$ upon *fp*. Now, as these are the only weights which act or tend to act, directly, or through the media of diagonals and uprights, upon those two antagonistic diagonals; &, as these tendencies are *un*equal, they can not wholly neutralize one-another, but leave a balance of.. $(2w \div 9)\sqrt{2}$, acting, apparently, upon *fp*, it would seem to prove conclusively, that *fp* does sustain a weight $= 2w \div 9$, and that consequently, *fl* sustains a weight less than $1w$, (as indicated by the