

at u , $+28w''$ for that at t , makes $63w''$ accumulated upon tf , when x , v , u , & t alone are loaded.

Now, the action upon this truss, is less certain and determinate, than where the thrust pieces are vertical, or inclined equally with the tension pieces. But if we suppose that the weight of superstructure at s , or at s & r together, neutralizes, or reflects back a part equal to w' , or $27w''$, of this $63w''$, we have a balance of $36w''$, as the maximum weight for tf .

Then, whether this $63w''$ * which must go to the abutment at m , in virtue of the loads at x v u & t , is transferred through fs to sg , or through fr to rh ; or whether it be divided, equally or unequally, between the two; is not quite obvious. But we will assume, as seems most probable, that it is transferred in equal portions to sg and rh ; in which case, sg sustains as a maximum, $36w''$ for weight at s , $+half$ of $63w''$, making, say $67w''$: assuming that sg and re sustain none of the weight of structure; which, though probably not strictly true, will not materially vary the result.

Again, (we are now supposing the nodes at the lower chord to be loaded successively from left to right;) the weight at r , gives $44w''$ to rh , in addition to—say $32w''$ tending to be transmitted from tf ; and w' , or $27w''$, for structure, making $103w''$.

* I use this full amount, $63w''$; for, although it is assumed that only a part of it is transmitted through tf , the balance is restored from weight of structure, which otherwise would pass to the abutment at y .