as it is evident that the point $G$, cannot change position, unless the points $B, B$, are thrust outward towards the ends of the truss, which must raise these points, this being prevented by the strain upon the points $F, F$, communicated by the weight $W$, through the braces $E, E$.

Trusses built upon this principle, when loaded nearly to the breaking point, assume something near the shape shown at Fig. 13. By again referring to Figure 8, it will be seen that the effect produced by the load upon Figure 13, is the reverse of that produced upon Figure 8, the latter being greatly depressed toward the ends; the centre remaining comparatively stationary, while the former is raised toward the ends, and is deflected in the centre.

It may be remarked here, that since the success of the "Inflexible Arched Truss" has been generally conceded, parties in other bridge interests having witnessed its great strength and rigidity, in actual practice, but who, nevertheless, seem to have been lamentably deficient in a proper understanding of the desideratum sought to be attained by its combination and arrangement, have in some cases adopted the arched upper chord, supposing, that in this alone, consisted its acknowledged superiority. That those