this horizontal effect, pull toward each other, producing compression in the horizontal beam to which they are attached. This form of truss is called the "King Post" truss, and when inverted will be at once recognized as the commonest form of wooden trussing in existence. In that case, however, the vertical post becomes a tie, the inclined ties become thrust braces, and the beam is strained tensively, instead of compressively, since the horizontal effect of the inclined thrust braces is to tear the beam apart.

Fig. 6. When an opening becomes too great to be spanned by a beam trussed with a single post, two posts

![Diagram of Queen Post Truss]

are added, forming three spans, the posts being the piers as before, which piers are supported in turn by the inclined ties running up to the ends of the horizontal beam as before; each tie sustaining the whole weight on one pier or post. This is a complete truss when both posts are loaded; but if only one is loaded, the condition of affairs changes. The load is unbalanced on the other side of the centre, and the horizontal effect of the inclined tie on the loaded side will be greater on the beam (which hereafter we will call the