FINCK TRUSS.

It may be proper in this place, to refer to still another form of trussing, which has enjoyed a degree of popular favor, and which differs somewhat from any we have hitherto considered. The plan is seen in outline, in Fig. 16. Each weight is sustained primarily by a pair of equally inclined tension members, and thereby transferred either to the king posts standing upon the abutments, or, to posts sustained by other pairs of equally inclined suspension rods of greater horizontal reach; which in turn, transfer a part to king posts, and another part to a post sustained by obliques of still greater reach, until finally, the whole remaining weight is brought to bear upon the abutments by a single pair of obliques, reaching from the centre to each abutment.

Fig. 16.
THE FINCK TRUSS.

In Fig. 16, are represented three different lengths of obliques, in number, inversely as the respective horizontal reaches. The first set contains 8 pieces reaching horizontally across one panel, and sustaining each $\frac{1}{2}w$. The next longer set, of four pieces, reach across two panels, and sustain each $1w$; one-half applied directly, and the other, through posts and short diagonals. The third and longest set, contains but two pieces, reach across four panels, and sustain together $4w$; of which $1w$ is applied directly, $1w$ through two short diagonals, and $2w$ through two intermediates.

Now, as each set sustains the same aggregate weight, namely $4w$, the material in each set, will