lower. For instance, if 5" in thickness be sufficient in the end panel, and 7" be required in the next, a timber extending over the width of two panels, 6" at the smaller, and 8" at the larger end, will answer the requirement with perhaps less waste of timber and labor than would suffice under a different arrangement. But such matters must be left to the judgment of the designer.

The upper chord acting by compression, the timbers may be connected by a half-lap of 1½ or 2 feet at the nodes, where the main connecting bolts will secure the ends.

The diagonals which act principally by compression (represented as the narrower ones in Figs. 65 and 66), may be in pairs, while those mostly exposed to tension (the wider ones), may be single, and placed between the former. Thus usually three pieces are united at each node.

**Fig. 65.**

In some cases where the thickness of diagonals exceeds the space between half-chords, the thrust diagonals may be shouldered to fit a boxing upon the inside of the chord; as by either of the vertical dotted lines, Fig. 65. Sometimes also, the boxing may extend through the whole depth of the chord, so as to require no cutting of the diagonal; and again, the thickness of the diagonals may be reduced in the parts