It will facilitate calculation, to change the dividend \((ac + 2be + c^2)\), in the expression just given for the value of \(x\), to \(c(a + 2b + c)\).

The letter \(a\), in the diagram, shews the splicing of a 7-8th" with a 1" plate, the thickness being equalized by a furring plate.

Fig. 62 gives also, a general idea of the splices proposed for this kind of chord, in case of the adoption of short splice-plates, and opposite rivets, as seen at \(BB\), Fig. 61. \(p\) indicates the connecting-pin, which should have a cross-section in the parts passing through the chord plates, about equal to that of one of the two main diagonals connected by each pin respectively, at the several nodes.

The body of the pin, between chord plates, must have lateral stiffness enough to withstand the stress produced by diagonals horizontally, estimated upon the principles of the Lever, and will be greater as the distance of diagonals from chord plates is greater, & the contrary. If the bearing of uprights upon the pin, be between diagonal and chord plate, as with a bi-furcation like that at the upper chord, the body of the pin will usually require a section about equal to that of the two main diagonals connected with it. But this is no universal rule.

The ends of the Connecting-pin should extend through the chord plates so as to receive a thin nut upon each end, and also, the eyes of sway-rods, upon the inside end, in case that mode of connection be adopted for those parts.