This may be done by 1 rivet or 2, placed opposite $e$; and thus, the length of splice-plates may be reduced to $16\frac{1}{2}''$, instead of $20\frac{1}{2}''$, as represented in the diagram.

Whether it would be better to increase the thickness of 6'' plates to more than 3-4th'', when greater section were required, or to increase the width of plates, I do not now propose to discuss. I am, however, of the opinion, that it were better, for the purposes under consideration, that the thickness of plates should seldom exceed $\frac{1}{3}$ of their width.

The end connections of plate chords of this kind, may be effected by riveting on side plates at the ends, as seen at $E$, $F$, 60, so as to give a thickness that will allow about $\frac{1}{3}$ of the width of plate to be cut away by a hole for the connecting-pin $p$, either round, or oblong with square ends, for adjusting keys or wedges.

Or, the side plates may be omitted, and 2 key-holes made in the middle of the plate, one for a key of a thickness equal to the diameter of the smaller rivets, far enough from the end to allow another hole nigher to the end, with about 2'' between the holes. This may, if necessary, have twice the width of the other hole, and should leave at least, twice the width of hole, between hole and end.

The width of the wider hole, + twice that of the other, should equal nearly or quite half the width of the plate; and the keys should be driven to an equal bearing, before the work be subjected to use.