and $d$, the lower chord; the dotted line $j$, shows the meeting of lower chord plates, about 4 inches toward the abutment from the point of meeting of the several centres of chord and diagonals. The side plates of upper chord may meet at the centre of the node, or connecting point.

The upper splice plates are of irregular form (or, they may be cut on a regular slant from upper to lower angle), but such as to cut without waste of iron. They may be clipped out upon the under side, as by the curved line, or not, as may be preferred.

The lower splice plates may be rectangular, and of such length and width as to admit of a sufficient number of rivets, properly arranged, to be equal in strength to the net section of chord plate and diagonals.

It is scarcely necessary to repeat, that rivet section connecting two thicknesses of plate only, should exceed the net section of plate by as much as the direct tensile strength exceeds the shear-strength of iron.

**Lower Chord.**

CXXIX. The following plan of a flat plate bottom chord adapted to a connection of diagonals by connecting pins, is transcribed from the author’s former work; and, by widening the splice plates, as in Fig. 44, is equally adapted to the concrete mode of construction; i.e., by rivet work.

The plan contemplates each half-chord as composed of two courses of plates (except near the ends), spliced alternately, one at each node so as to “break joints.” The two half chords are to be placed at such distance apart as to accommodate the connections with diagonals, and with uprights, when used in connection with uprights.