

butting piece, and is bi-furcated at the end *d*, to form an opening for the passage of diagonals.

The lower half of the upright is the same as the upper, except as to the end, which is formed to fit a flat bearing upon the upper side of the connecting-block. An enlarged section of the lower end, is shewn at *l*, F. 57, preceding page.

Floor beams, of wood or iron, may be suspended below the chord, by bolts passing down through connecting-blocks, or, wooden beams may be in 2 parts, resting upon flanges cast on, about 3" above the lower end of the upright; the beam timbers being hollowed out upon the insides, so as to embrace the upright in part, with a space of 2" or 3" between. Diagonal ties, or sway-rods, to give lateral steadiness, may be attached to the inner ends of the connecting-blocks, as indicated at *d*, F. 55; or, may be bolted to the beams, as described with reference to Arch trusses. In either case, they should connect with the Foot-block upon the abutment.

Diagonal ties of wrought iron, and transverse Struts of Cast iron, should also be inserted between the Upper chords, to keep them in line. The cross struts may have the *web & flange* form, with shallow sockets at the ends, to admit the connecting-bolts at the upper chord to enter, after passing through eyes upon the upper Sway-rods, and nuts to hold them in place. (See *b*, F. 57.)

These sway-rods require Turn-buckles for adjust-