direction of the strain. But it has recently occurred to the author, that perhaps, after all, a circular section of block would have the advantage, inasmuch as it would not require so short a bend at the ends of links; whence they could the better adapt themselves to the block, and would not require so great a disturbance in the condition of fibres or particles of the iron in forming the bends. With a diameter of block equal to 3 times that of the link iron (in case of round iron), it is believed that good iron would suffer the bend without material deterioration, or greater liability to break the ends, than in other parts of the link, especially if welded in the straight part.

The enlarged central portion of the connecting block has upon its upper side, a flat surface rising a little above the links, to afford a beam seat for the cross-beams of the bridge to rest upon; which, in case of wooden beams, should present a bearing surface of 30 to 40 square inches.

CL. The upright is made of round wrought iron, 1¼ to 2 inches in diameter, for bridges from 60 to 100 feet in length, when designed for common road purposes. The upper end is furnished with a screw nut, and a ring or collar welded on at a sufficient distance below the nut to allow the arch castings, and eyes of diagonals to come between nut and collar.

The lower end is turned or swaged down to a diameter ¼” or ⅜” less than the body of the rod, for a length sufficient to reach through the connecting block, and receive a nut on the end. This is to form a shoulder at the upper side of the block, to act in case of a thrust action of the upright.