should not run into the plate, even if a washer be required in order to fetch the work together.

A convenient modification of this fixture is to have it made in two pieces with two 3/8" bolts outside of the upright, as seen at c, Fig. 32. This affords a convenient means of attaching a light bracket (b), to sustain face plank and coping (a), over the chords, such as are commonly used in this kind of bridge. It also enables iron beams to be inserted in bridges originally built with wooden beams.

The connecting block in this case, should have an elevated ring around the upright, for the eye of the fixture to bear upon, to keep the beam from bearing altogether upon the inside of the upright, and producing unequal strain.

CIX. Another suggestion is, to form a stirrup in the upright just above the connecting block for the beam to pass through and rest in: as seen at b, Fig. 31. This will admit of projecting beams to support side walks.

The stirrup may be formed of iron 1" by 2" or 2 1/4", according to the character of bridge. The iron should