

*ing* value of each rivet to be equal to its diameter, multiplied by 12,000 pounds, multiplied by the thickness of the thinnest plate. The plates and angle-bars subject to *tension*, under such riveted construction, must have an allowance made up for the area cut out by the rivet-holes.

Pin-connection work and solid section iron will be considered to have an advantage of 10 to 20 per cent over and above riveted or compound work. The spacing of the rivets must not exceed five inches between centres, and in the flanges of plate-girders this pitch must be reduced as the ends are approached, according to the value obtained by the above rule for the proportioning of rivets. Before shipment, all iron must have a thorough coating of mineral paint, well rubbed in, and all bright work must be protected with white-lead and tallow.

To the above specifications must be added the degree of finish required, such as the painting after erection, the manner in which sidewalk is to be laid, whether the plank is to be planed, etc.; also the kind of railing desired, whether plain or ornamental, and proposed arrangements for lighting.