

But as experience seems to have proved the decided superiority of the Independent Arch, judging from its great popularity, it is not deemed profitable to spend labor and ingenuity in endeavors to improve the details of the Cylindrical Arch Truss. Still, I would have the plan regarded as worthy of respectful consideration.

### Note on the Cancel-Truss Bridge, described on Page 75, et seq.

For bridges from 30 to 60 feet long, upon this plan, with floor or track between trusses, the upright and connecting-block may be cast together, or separate. In the latter case, the block should have a suitable seat to receive the upright, and keep it in place. The Beam, whether of wrought or cast iron, should be firmly bolted, or otherwise secured to, and at right angles with the Upright,—usually near the lower end, though the connection may be at such point in its length as will best accommodate grade of road, and water-way underneath.

The stiffness of beams and uprights, is relied on to afford lateral support for the Upper Chord.

The web & flange form of section for uprights, is well adapted to this case. The web should have the greatest width at the connection with the beam, and may taper upward, and downward, whenever any considerable space occurs between beam and block. Fig. 55 may serve to illustrate a feasible mode of forming and connecting the upright.