COMPARISON
OF DIFFERENT PLANS OF WROUGHT AND CAST
IRON BRIDGES

I propose in this Chapter, to canvass the Relative merits of Four Styles of Iron Bridge-Trussing, which have claimed and received more or less of public notice and approval, during the last few years; and of which, the distinctive principles have already been discussed in preceding pages, though not in the precise combinations here about to be presented.

I shall take the number, lengths, and stresses, (the latter governing principally the required cross-sections,) of the several long pieces and parts of the truss, as affording a near criterion of the Comparative Cost and Economy of the Bridges respectively; in the manner employed in the forepart of this Work. Then, after reference to such peculiarities as may seem advantageous or otherwise, in the several Plans, leave the reader to his own conclusions in regard to the relative merits.

The Bollman Truss, Fig. 43,
is founded upon the general principle discussed in Pages 8..11; by the substitution of oblique Tension-rods and a thrust upper Chord, in place of the Thrust Braces, and Tension Bottom Chord, as represented in Figs. 3 & 6.