

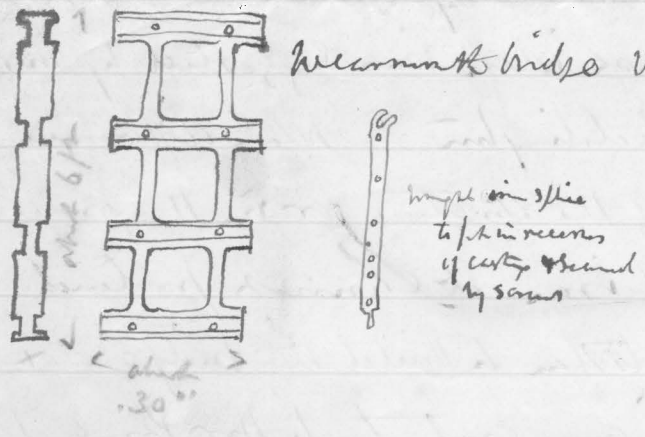
Iron Bridge

The first iron bridge that has been erected on a large scale is that over the river Severn at Coalbrook Dale in Shropshire. This bridge is composed of 5 ribs and each rib of three concentric arcs connected together by ratcheting pieces. The interior arc forms a complete semi-circle. It was constructed by Mr Abraham Darby, iron master at Coalbrook Dale in the year 1779. The arch of this bridge is 100 ft. 6 in. The second bridge was designed by Thomas Paine and set up at Radcliff. After which it was intended to have been sent to America, but Mr Paine not being able to defray the expense, the manufacturers took it back & the malleable iron was afterwards worked up in the construction of the bridge at Wearmouth.

The 3-banded bridge example of the bridge at Wearmouth gave an impulse to public taste and caused an emulation among artists. Mr Wilson has lately finished ^{very} elegant one over the Thames at Staines. The bridge consists of a single arch 181 ft in span and 16'6" rise, being a segment of a circle of 480 ft. The blocks of which the ribs are composed are similar to those in Wearmouth bridge except that there have only two concentric arcs instead of three. The arcs are cast hollow and the blocks connected by means of dunnets and keys, thus obviating the great defects observed at Wearmouth of having so much hammered iron exposed to the action of the air.

Frederick Dictionary

Pictures of these first bridges in groups & also showing the detail



Wearmouth bridge vonshins