

Arch Bridge



The **Iron Bridge** crosses the River Severn at the Ironbridge Gorge, by the village of Ironbridge, in Shropshire, England. It was the first arch bridge in the world to be made out of cast iron, a material which was previously far too expensive to use for large structures. However, a new blast furnace nearby lowered the cost and so encouraged local engineers and architects to solve a long-standing problem of a crossing over the river.

An **arch bridge** is a bridge with abutments at each end shaped as a curved arch. Arch bridges work by transferring the weight of the bridge and its loads partially into a horizontal thrust restrained by the abutments at either side. A viaduct (a long bridge) may be made from a series of arches, although other more economical structures are typically used today.