ing their shape will oppose very little resistance. As the arc forms so small a portion of a circle (about sixty-four degrees and three quarters), the weight at the spring of the arc need not, according to the theory of equilibration, be double to that at the crown, to support, without danger of rising, any pressure derived from the mass of the structure itself: but, in so flat and light an arc, an overload on any part must have a great tendency to bend it, and consequently tend considerably to break it, at a distant part, with all the energy of a long lever. We think, therefore, that a better form might have been adopted than what has been put in practice at Wearmouth Bridge.

**BRIDGES AT BRISTOL, OF CAST-IRON.**

There are also two elegant cast-iron Bridges lately erected over the New Cut, for the improvement of the harbour of Bristol by float. The span of the arch of each Bridge is one hundred feet, by thirty feet high. These were built under the direction of Wm. Jessup, Esq. engineer, and are admirable for their simplicity of construction and strength.