ON BRIDGES.

REMARKS*

ON THE CAST IRON BRIDGES CITED IN THIS WORK.

- We conceive that Bridges erected with this sort of material, on a plan suitable for the valuable purpose, is well worthy the attention of those who wish to add durability to the strength of structures, that are of so much importance.

The bridge at Wearmouth, no doubt, ranks first upon the list of bridges that has been erected with this sort of materials; and it would be gratifying to those concerned in its welfare, if we could add, that it is now in as sound a condition as it was when first erected; but the reverse is the fact. The last account, received from respectable authority, states that it was then contemplated to make a centre immediately, to take it down before it fell down. The cause stated was, that the abutment on one side resting on infirm strata had sunk by the thrust which the arc by its weight had produced. This, with numberless other past instances, conspires to prove, that whether an arc of lateral pressure be built with wood, stone, or cast iron, it matters not; if any part of the structure rests on infirm strata, it is sure to become a wreck; which fully demonstrates that an arc of this kind is wholly unsuitable for a Bridge.

It would be a waste of time and paper to descant further on the various absurd modes of Bridge-building, which emanate from the old system, where strength is made to depend solely on the lateral grain of timber; and although many persons will, no doubt, deem it presumptuous in the author to make the assertion, yet he does confidently assert, and fears not he shall very soon be able to prove, that every other manner of Bridge invented before the present day, whether the work of a Vitruvius or a Burr, is but chaff or dross comparatively with that of the author's invention. When prejudice and infatuation can be overcome, and a proper encouragement given to ingenuity and sound knowledge, the "baseless fabrics" which are every year thrown over, or rather into, our rivers, will vanish, and "leave not a wreck behind." We shall only remark on one Bridge more.