

A description of a Bridge that may be built 70 foot long without any pillar under it, taken out of the Journal of the Philosophical Society of Oxford.

A Timber *Bridge* may be built 70 foot long or somewhat more without any *Pillar* under it, which may be useful in some places where *Pillars* cannot conveniently be built : It may consist of two such *Arches* of Timber, as that which is represented in the Figure, wherein AC and BO are Beams 28 foot long, and AB is 32 foot long. Under the Angles are set 2 large Braces EL and SR. At each end is a wall, on which are laid two Beams BH and AD, each 20 foot long ; under these are 2 Braces DE and RH. There may also be Braces at the ends of the *Arches*, that may be obliquely cross the *Bridge*. It may be laid with Planks and railed. Behind the walls are Causeys FD and HN. The Length of the *Bridge* CMO is 70 foot ; the Height KM is 19 foot.

Observations