

Boston, Mass., Feb 28 1888

From Cresy's Encyclopedia of Civil Engineering

The Timber bridge over the Portsmouth river in America, built after the designs of Mr. Bludget, has but one arch with a span of 250 feet. The timbers are placed at a distance apart equal to twice their own depth: there are three concentric ribs; the middle carries the floor of the bridge; they were selected from crooked timbers, so that the fibre might run nearly in the direction of the curves, and are connected together by pieces of hard and incompressible wood, with wedges driven between, the ribs being mortised to receive them; thus the ribs are kept at a regular and parallel distance from each other. Each rib is formed of two pieces, laid side by side, about 15 feet in length; they are all disposed in such a manner as to break joint, the end of one piece of timber coming in the middle of the length of the other, which is near it; their ends all abut with a square joint ^{against} each other, and are neither scarfed nor mortised, the two pieces of timber being held together by transverse dovetail keys and joints: all the timbers are admirably united, and freely exposed to the action of the air; any piece may also be removed in case