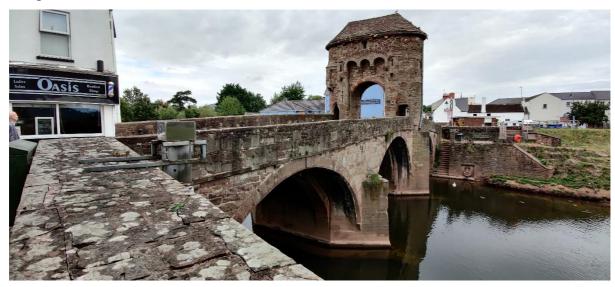


## Bridge of the Month 158, September 2024

Monnow Bridge, Monmouth

BILL HARVEY ASSOCIATES LTD

We have friends with a holiday house in Overmonnow, just over the Monnow from Monmouth town centre, who very kindly let us stay from time to time. It is a lovely place to relax, surrounded by beautiful countryside, and with the Wye on the doorstep. I'm not sure Bill ever got to Monmouth, and <u>Pont Trefynwy – Monnow Bridge –</u> has never featured as Bridge of the Month.



Dated to the late C13 the bridge is distinguished as one of only two surviving fortified bridges in Britain, and the only where the gatehouse is mid-river, an arrangement that was apparently unusual even when gatehouses were common.



Remains of an earlier timber bridge have been found at the site, with timbers dated to mid C12, slightly before the earliest parts of Church of St Thomas the Martyr that sits at the southwest corner of the bridge.

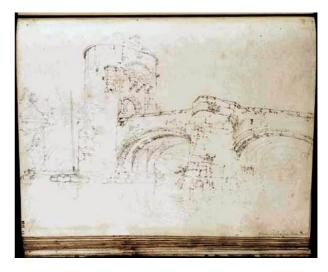


The gatehouse was added around 30 years after the bridge was built. There seems to be some debate as to the original purpose. The obvious assumption is defence, but Monmouth was an important market town, and it has certainly played a significant role over the centuries in taxing produce brought to market.

Monnow Bridge is one of the select few Grade I listed bridges. It has been illustrated more than most in its long life. The examples here are from Wikipedia, but many more can be found online at <u>Amgueddfa Cymru</u>, <u>British Museum</u>, <u>Coflein</u>.

The current stone bridge has been widened twice with arches springing from the cutwaters on each side of the bridge. The widenings are after Turner's 1795 sketch, right, and an 1818 drawing by Copley Fielding from a similar vantage point, below. This view can't easily be recreated, as the land to the northwest is private.

The original gatehouse seems to have had a portcullis. The slots for this are still present at lower level, but the upper part is obstructed by <u>machiolations</u>. Whether these were ever used in anger I don't know,

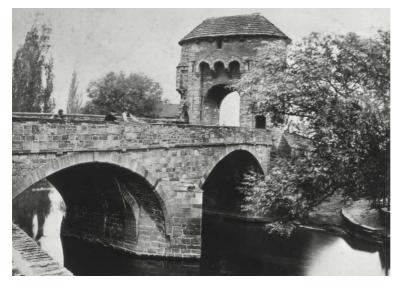


but users of the bridge today must run gauntlet of unpleasant projectiles from the pigeons that now gather above.





The widenings carry footpaths. The pedestrian passageways to both sides of the gatehouse were added at the same time. The upriver widening and passage are dated to 1819, just one year after the Fielding drawing above. The downriver widening and passage are from 1845. The two passageways are in very different styles. The earlier has pointed arch entrances, a stone slab roof, and stone walls, with a distinct plan curve. The later passageway has flat lintels and is formed within of timber and brick.

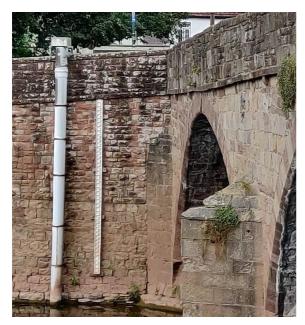


An 1866 photograph shows both passageways and the downriver widening clearly, and the parapet line on the upriver side does not seem to deviate, so the widening is surely present there as well. The bridge now is little changed from this view, apart from local repairs.

Modification of the landscape around the bridge continued longer. In the 1866 photograph, it seems that the east span is at

least partially obstructed and might be completely blocked on the downriver side (the tree branch obscures the view). Either would tend to encourage scour.

River access upriver of the bridge on both sides shown in Fielding's depiction has since been lost to vertical river walls. A river wall on the downriver east side is already visible in the corner of the 1866 photograph. This might have been needed earlier than others to protect the church, or even to allow its riverward extension.



The present-day version of that southwest river wall now exposes a small portion of what could be a further cutwater. Was there once another span to the west? Or is this simply part of a wing wall? The plan angle isn't quite the same as the cutwaters, but the cap looks more like cutwater than wing wall.

Looking at this in satellite imagery, the west river wall alignment is interesting. Bridge house on the upriver west bank projects well into the west span. The river wall immediately downriver has been brought out to near the springing; it steps back about 10m south. The natural extension of that southern section of wall past the bridge aligns well with the west end of bridge house, suggesting that this

might be built entirely on claimed land. I should bring a camera pole with me to get a look under the span at this end.



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The parapet widens slightly on the upriver side over the west cutwater. A ring of cast iron fragments embedded in lead remain in a groove in the stone, concentric with a through hole. Presumably the remains of a lamp post, tied down through the central hole.





The string course on the downriver side sags over the west arch. The sag is already visible in the 1866 photograph so must have developed soon after the downriver widening, probably immediately on decentring.

The parapet over this dip also bows out slightly.

The widenings have a similar general design, but the details are different. The downriver widening (above) has a tapering chamfer on the corner between elevation and soffit. The ring face here is formed of contrasting stone with alternating voussoirs. The upriver and earlier widening



(left) seems more functional in approach.



The gatehouse has suffered badly from vehicle impact over the years. Coflein <u>has images</u> of the town side arch knocked out completely, with the remaining masonry arching to the upper window. The voussoirs on this side are still have very rounded corners, perhaps the arch was rebuilt from the existing stones.



The arch over the road on the Overmonnow side of the gatehouse was rebuilt relatively recently in freshly dressed stone, but it was in place for long enough to accumulate lots of impact scars. It is dated 1989 (I think) on the inside face. The road was finally closed after construction of a new road bridge in 2004.



The replacement arch has an open crack at the crown. This crack should give anyone working on under-ringing an arch pause. There is no thrust in these voussoirs; they must be hanging on the mortar above. If that mortar let go, they would drop into contact, so this isn't dangerous, but it isn't what was expected

either.

The crack seems to extend up from the ring into the masonry above, which suggests it is associated with an outward movement of the springings, and that this movement has taken place (or continued) since the repair.

The spalled stone that makes the last digit of the date difficult to read isn't easily explained without invoking cyclic movement. This is a southwest face, so temperature could play a part in that.

The growth of vegetation in the gutter is getting severe, no doubt aided by accumulating guano from the resident pigeon colony. The vegetation is not visible in any of the Google StreetView



images from 2009 to 2018, confirming my feeling that it was a recent problem. The pigeons themselves may be a recent thing, encouraged by people feeding them on the bridge.

I'd like to see some monitoring of the crack in the gatehouse arch with sufficiently frequent recording to establish the speed of any progressive movement and whether there is a cyclic component. And if the roof isn't maintained, the interior of the gatehouse (sadly not open to the public) must be at risk.