Oxfordshire

FLASHLOCKS

This is an extract from our forthcoming EPE paperback ***Henley-on-Thames: Town, Trade and River*** (Phillimore 2009), by Simon Townley. See the book for full text, illustrations and maps.

In a modern poundlock, gates at each end allow water to be pumped in or out to equalize the water level before the boat enters or leaves. But the earliest Thames poundlocks were built in the 17th century, and most of them much later. Until then, fish- or mill-weirs could be passed only through a flashlock.

In these, part of the weir was made up of removable wooden paddles set between vertical baulks or 'rimers', which in turn were secured to a wooden cill on the river bed, and to a horizontal swinging beam above water level. To open the lock, the miller or keeper removed the paddles and rimers individually, then swung the beam on its pivot to open the gap. Boats going downstream were carried through on the resulting cascade or 'flash' of water (Figure A) – a risky exercise for heavily laden barges, although on the river's lower stretches the flash was less extreme than higher up.

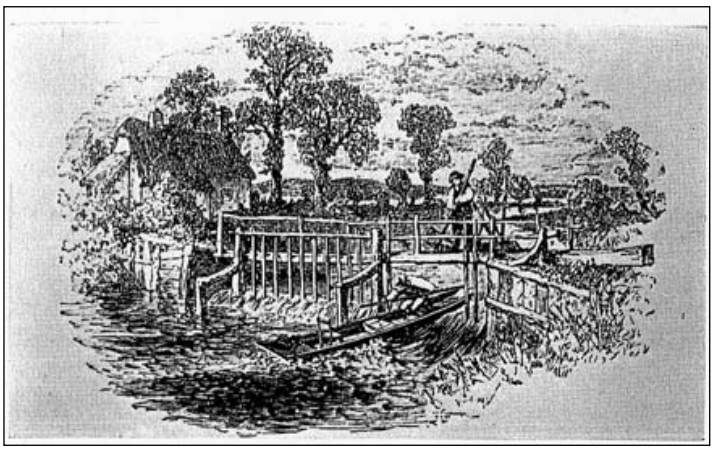

Figure A *A punt shooting a flashlock on the upper Thames (near Northmoor) in the 1850s, from SC Hall,* The Book of the Thames *(1859). The paddles to the left of the opening have been removed to control the water level. On the lower stretches near Henley the process was less dramatic, but still time-consuming and with a risk of grounding in low water.*

Boats going upstream had to be physically dragged up through the lock after the main ‘flash’ had subsided and before the paddles were replaced. By the 14th century this was usually with the help of cables attached to a fixed onshore winch, used sometimes in conjunction with a second winch aboard the vessel (Figure B). Cables could break with disastrous consequences. At Hambleden lock (a little downstream from Henley) in 1383:

> '... John Willus and Robert Asshele together with many others hauled up a shout [or boat] ... with two cables and two devices, one called the land winch and the other the shout winch; and when the shout was in the lock the cable fixed to the shout winch

broke ... and then the other cable pulled back the land winch in such a way that it struck each of them on the left side of the head such that their heads were totally shattered'

More routinely, boats had to wait for the weir to be closed and the river above to rise high enough for them to continue, which in dry seasons might take several days. Similarly those travelling downstream had to wait for the miller or owner to release the flash, which millers were often reluctant to do as they wanted to keep the water level as high as possible to power the mill. As late as 1793 a bargemaster complained that mills either side of Goring lock sometimes drew off so much water as to hinder entrance into the lock.

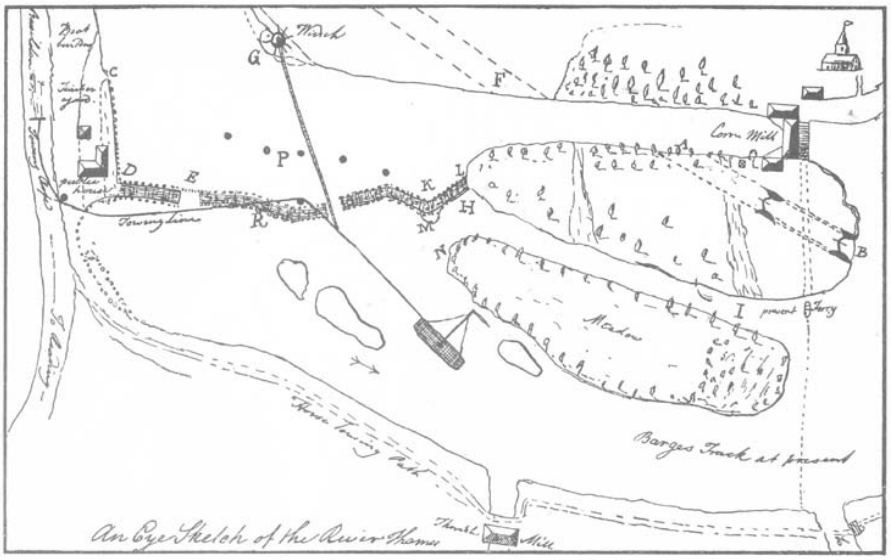

Figure B *Copy of a Thames Conservancy plan of Whitchurch mill-dam and flashlock in 1786, showing a barge being pulled upstream. A towing line runs round a post by the lock-opening to another post on the left bank. A second line, apparently attached to the first, runs to a land-winch on the right-hand bank, which is hauling the boat through. The first line was presumably attached to an onboard winch to take up slack, similar to the 'shout winch' mentioned in 1383 .(Illustration: F.S. Thacker, The Thames Highway, frontispiece)*

Despite these disadvantages, cost, self-interest, and the absence (until the 18th century) of a single body with overall responsibility for the river left most flashlocks in place until modern times (Figure C). On the Thames, poundlocks were built at Iffley, Sandford, and Culham (Swift Ditch) between 1624 and 1632, but only after the establishment of the Thames Commissioners in 1751 did the vast majority of flashlocks begin, very slowly, to be replaced by modern gated locks (see Chapter 7). At Eynsham, upstream from Oxford, a new flashlock was constructed as late as 1913, and the last on the Thames (at Eaton weir) was removed only in 1937.

cont

Figure C *Eynsham weir and flashlock (upstream from Oxford) in 1883, showing the open passageway next to the weir. The boat-slide (on the right) was a modern innovation, over which light punts could be dragged. (photo: Oxfordshire County Council Photographic Archive)*

Further reading: Lewis, MJT, Slatcher, WN, and Jarvis, PN, 'Flashlocks on English Waterways: A Survey', *Industrial Archaeol*. 6 (1969), 209–53; Peberdy, RB, 'Navigation on the River Thames between London and Oxford in the Late Middle Ages: a Reconsideration', *Oxoniensia*, 61 (1996), 311–40 (including winches and Hambleden).