



The Saul Junction Lock Story

Hugh Conway-Jones explains the origins and unusual features of the lock on the Stroudwater Navigation at Saul Junction

Significant Dates

The lock at Saul Junction was built in the 1820's to raise the level of the Stroudwater Navigation by four feet to match the level of the newly built Gloucester - Sharpness Canal.

When the canal from Saul to the River Severn closed in 1945 Saul Junction Lock went out of use and its condition deteriorated.

After several years on Historic England's 'At Risk' register, the lock was restored in 2016 with the help of a grant from the Heritage Lottery Fund. The lock is now an interesting feature at a popular tourist destination.



Unusual Features

Although the lock was on the Stroudwater Navigation, it was built by the company building the Gloucester - Sharpness Canal. This led to the structure having several unusual features.

Firstly, it was built in stone rather than the bricks used for the other Stroudwater Navigation locks.

When the water was drained for the 2016 restoration, the entrance to a pipe was discovered in the floor of the chamber.

The original drawing of the lock showed that the pipe passed under the Gloucester - Sharpness Canal

to a sluice in the wall above a stop gate in the pound of the Stroudwater Navigation opposite. That sluice is still in situ. This arrangement enabled the Stroudwater pound to be drained for maintenance purposes.

Because of its origin, Saul Junction Lock has always been maintained as part of the Gloucester-Sharpness Canal. Consequently the restoration fell to Canal & River Trust.

Another unusual feature of the lock is that the upper gates (second photo) are almost as deep as the lower gates (third photo).

This was necessary as the upper cill had to be low enough to allow barges to pass through while the lock was being used at the original level, of the Stroudwater Navigation.



Swinging Paddleboards

Perhaps the most interesting feature of the lock is that the flow of water into and out of it is controlled by large swinging paddle boards rather than the usual vertical lift paddles.

The swinging paddles are similar to those seen on some northern canals, and this led to the incorrect supposition that this feature 'came to Saul post nationalisation when surplus gates were available from up north'.

However, Gloucestershire Archives has drawings dated 1880 showing gates for Saul Junction Lock with swinging paddle boards.

When the existing gates were lifted out, it was found that they were consistent with those drawings.

The gates were also consistent with the specification for the original gates in 1824 which required the paddles 'To be of good Memel timber three inches thick, built and bolted together as per plan'.

Memel was then the most northerly town in Prussia and the principal seat of the Baltic timber trade.

Although the 1824 plan has not survived, when the lock was drained, it was found that the recesses in the chamber walls were shaped very specifically to accommodate the unique outline of the paddle boards when the gates were open.

It is thus clear that swinging paddle boards were, indeed, a feature of the original gates!



Lock on Glasson Branch — Lancaster Canal

But where did the design come from?

The specifications for the lock, and an associated drawing that has survived, were prepared by Thomas Fletcher, the resident engineer working on the last phase of constructing the Gloucester - Sharpness Canal from 1820 to 1827.

Enquiries revealed that Fletcher's previous employment, before coming to Gloucestershire, was on the Glasson branch of the Lancaster Canal.

The photograph left illustrates swinging paddle boards still in use on the Glasson Branch today.

Thomas Fletcher evidently used a design he was familiar with!

Contributors

Hugh Conway - Jones, research and text
Mike Gallagher - CCT Photographer, first three lock restoration photos
David Viner, 'chamber wall recess' image
Angela Marks, Glasson Branch photo
Clive Field, formatting & production