

TIRLEY. RIVER SEVERN GRAIN BARGE.

By Nige Dale.

Some notes on the vessels history.

Tirley was originally built as a coal barge for use on the River Trent, and her original name was, Thealby . Built at 129'9" x 17'6" x 8' 186 grt. Propelled by a Gardiner LX 6 cyl 110 bhp unit, built by John Harker Ltd in 1973 at Knottingly, for the Flixborough Shipping Co.Ltd. Thealby was converted (1975) for grain cargo and renamed, Tirley. The conversion to grain transport was done by R.W. Davies Shipyard, at Saul, The Sharpness Canal, Gloucestershire.

The Tirley serviced a proportion of the requirements of grain to the Allied Mills (Healings Mill) at Tewkesbury from 1975-1998. The barges (when first commissioned) carried 250 tonnes of grain. A return trip to the docks, and collect the grain for the mill, would take two days, 36 gallons of fuel, and two men as crew per day. Whist a lorry would take ten journeys and about 60 gallons of fuel. The tonnage of the barges at the end of their tenure was 180 tonnes per load due to the silting up of the waterways.

Fig 1.

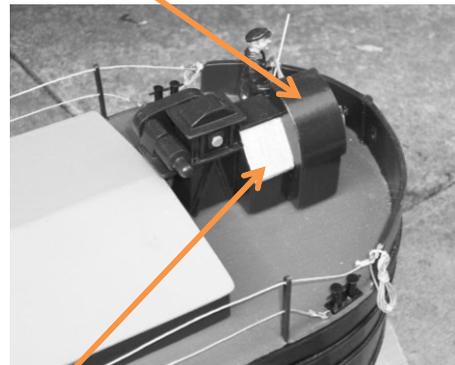


The Tirley, on her last voyage down the River Severn, to the Sharpness Docks.

In making the model I included little things that were there when she last went down the Severn, for example the silver coloured plate on the elevator section (see Fig 2). This silver coloured plate is to mimic the aluminium plate that was the replacement for the cover plate which was accidentally dropped over the side of the barge, when being unloaded one time.

Fig 2.

BUCKET ELEVATOR



SILVER PLATE

For the unloading of the grain from the barge there was a Drag Link Conveyor running the full length of the cargo hold/ void, positioned in the bottom of the barge, and fed by the sloping sides of the cargo hold. This Drag Link Conveyor fed a short Bucket Elevator assembly positioned in the front of the barge, as indicated in Fig 2.

To unload this barge the silver plate is removed (see Fig 2) to allow access to the outlet of the elevator. An elevator with a floating foot (and is the means of delivering the grain to the mill) is positioned into the void made by the silver plate being removed.

The Drag Link Conveyor feeds the first elevator (on the boat) which feeds the second elevator (with a floating foot) which carries the grain up into the mill and storage silos.

There are quite a few technical terms for the various parts of these conveyors and elevator which I have left out to remove explanation. I have worked on quite a few of these types of machinery, and they are to be treated with respect. Upon cleaning and putting away your tools at the end of a job, it was always wise to count your fingers to make sure you had all of those as well. There is a science to moving raw materials by these types of machinery, as with all the mechanisms and systems that are required to move any raw material, and is a fascinating field of expertise all of its own.

The wheel house on the model Tirley, is a replica of the one she had when she left the service as a grain barge. This wheel house replaced the original design which was designed for use on the River Trent. The original wheel house needed replacing due to age and use, and was done so by Tommy Nielson and Co of Gloucester docks, UK. The replacement was designed to be more compatible with the requirements of the River Severn, Gloucester-Sharpness Canal, and the Sharpness Docks.

The handrail stanchions were different to the initial fitment due collision damage. The originals were of a round cross section, with an eye for the hand line to pass through. The replacement stanchions were of flat mild steel with a hole drilled for the hand line. The reason for this was for ease of replacement, or that when minor damage occurred it could be bent back into place with force of hand.

The Healing Mill in Tewkesbury was built in 1865 by Samuel Healing. The mill was steam driven and was considered the most modern in all of Europe of that time. I have not been

able to find any information on sailing barge delivery to the mill from the time of the building of the mill (1865) until the acquisition of the motorized barge, The Deerhurst in 1933, accompanied by two dumb barges The Apperley, and The Bushley. But because of the nature of the River Severn I do not rule out the use of the river as a means of delivering grain to the Mill prior to 1933.

The use of sailing barges was not out of the question, as Tewkesbury at that time was the most inland sea port in the UK, and when the Severn is in flood is still affected by the tides. Tewkesbury during this time had railway lines within the main street and also had a Foundry amongst other heavy industries. The railway lines within the town, and across the river bridge into the mill have long gone, but shows the character of a town that had sea and rail transport as a means of moving produce.

The use of the barges Deerhurst, Apperley and Bushley continued into the 1980's, and were pensioned off after The Allied Mills purchased the Healings Mill. Allied Mills then purchased the Chaceley, and The Tirley, larger barges, for the transport of the grain upon the River Severn, and Sharpness Canal. With coaster traffic dying out and the increase of road transport around 1980, eventually made the use of barges unviable. After an attempt to resurrect the use of the barges for transport in 1993, were finally tied up in 1998.

In 2007, The Chaceley, and The Tirley were moved to Sharpness docks to await a marine survey for a potential buyer. I was made aware that the barges were bought but were not returned to service or maintained, and had to be moved into a dry dock in Sharpness Docks upon the fear of sinking.

Fig 3, show The Chaceley, and The Tirley within a dry dock in Sharpness Docks, these pictures were taken in the April of 2007, and

possibly during the intended survey for purchase.

Fig 3.



Fig 4. The Tirley.



In 2014 The Chaceley and The Tirley were acquired by Noatun, and at my last enquiry, were being restored to use. Chaceley has been reduced in length to 70 feet/ 21 mtr, whilst The Tirley is to retain her original dimensions.

THE MODEL TIRLEY, Scale 1:24.

The making of Tirley was my first scratch build model, learnt a lot, made mistakes that will be averted in the future, and found meaning to the term; making sawdust. Constructing the frame was relatively easy after drawing the parts, these were assembled onto a building jig, from which construction took place.

Fig 5.



The build of the boat progressed and at a stage indicated by Fig 5, it was decided to start taking photographs and put together some sort of build narrative. My photographic prowess is somewhat limited, and not all pictures turned out as was hoped, so great swathes of the build progress are missing, and those that remain break up the narrative. It was a bit late in the project to make the decision about a build narrative, but it's better late than never. Perhaps in future builds of models, a build narrative will become another facet of that build. As the boat comes together, and paint is applied, the anticipation of the finished model starts to heighten the enthusiasm to finish the boat.

Fig 6.



The illustration above, Fig 6, shows the trimming and ballasting of the model using a large 6 volt battery, usually used within domestic security systems. Affectionately referred to as a "Brick" by virtue of having similar size and weight, acts as a supply of ballast and power. Once the preferred location of the battery is determined, it was marked within the hull, and a fiddle was made to locate the battery.

Fig 7.



Fig 7, shows the bow section completed, with the elevator in position. This elevator part is removable as to allow the cargo hold cover to be removed, and is located using wooden dowel pins.

Fig 8.

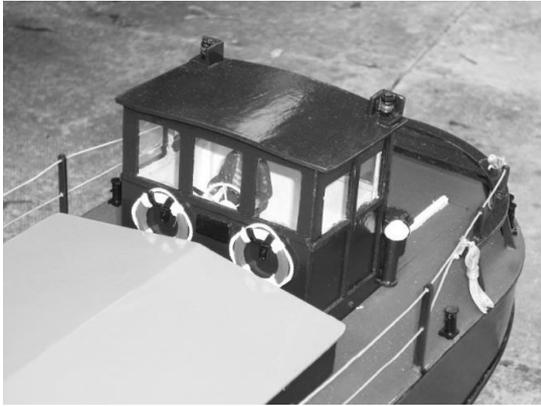


Fig 9.



Fig 8, & 9, show the wheel house fitted. The wheel house is removable if access to the rudder servo is required, and is achieved by removing location pins from within the cargo hold.

Fig 10.

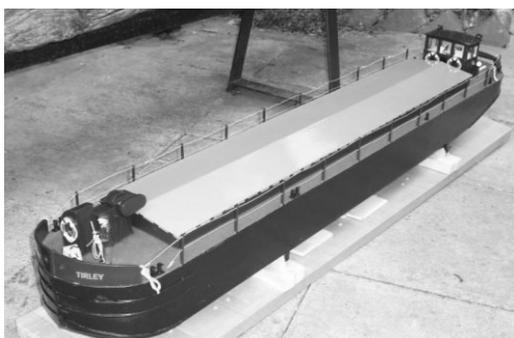


Fig 10, shows the cargo hold cover in place, and effectively displays the boat completed. The board on which it sits here is an evolution of the build jig base, and is not the stand that will be used as the models final support. The ballast trim achieved with a 6 volt brick battery, gave the model a partially loaded repose. Sitting well on the water, and looking the part.

Fig 11.



Fig 12, shows the model Tirley under power. Just an extra note, the model is a little short for perfect scale, this is so it would fit in the shed when built, and also on the back seat of the car.

Fig 12.



Finally, below is a photo of Chris Witts (the last skipper of the Chaceley, and Tirley) on the left, and me on the right, taken on the day of the maiden voyage of the Model Tirley in July 2012.

