Reprinted from: Gloucestershire Society for Industrial Archaeology Journal for 1992 pages 27-33

HARRIETT: Last of the Kennet Barges

Stuart Bryan & Judith Hague

Note: This article was originally given as the 1992 GSIA AGM talk and was illustrated but the present illustrations are those of the editor. The article has been divided into two parts. The first is on Kennet barges and the HARRIETT. The second is on the Nautical Archaeology Society of which the authors are members and on how the survey came to be undertaken. The survey part formed a very important part of the talk but is only briefly mentioned here.

Part I: The HARRIETT

Introduction.

London and Bristol were linked by the Thames and Severn Canal in 1794 but this link was long and unreliable. It took 9 or 10 days to travel from Brimscombe to London and 12 to 14 days to make the return journey.

The opening of the Kennet and Avon Canal in 1810 created a more effective link between London and the west coast port of Bristol.

The canal became an important highway in the days of poor roads, before the railways were built. It took about 7 days to travel along the canal from Bristol to London. The reverse journey took about 8 days through the inland county of Wiltshire.

Honey Street

In the canal side hamlet of Honey Street, between Devizes and Pewsey, the firm of Robbins & Co started trading in timber shortly after the opening of the canal. Soon they were making some of their imported timber into craft for the water. The original partners in 1812 were Samuel Robbins, Ebenezer Lane and Samuel Pinnigar and so the firm was known as Robbins, Lane and Pinnigar. The firm did not vacate Honey Street until the late 1940s, defeated by the then decaying canal, and finally it ceased trading in 1950. Some of the craft the company made were for their own use to carry timber from Avonmouth and Bristol, the rest were sold to other carriers. The business was very successful and continued making barges for over 100 years. They probably stopped producing barges in the first quarter of the 20th century and certainly by 1937 they were using barges which had been built elsewhere.

In the 1840s, the advent of the railway alongside the canal caused a rapid reduction in the canal's traffic and Honey Street wharf concentrated on producing boats for further afield. Narrow boats were built for the Midland waterways and small flat bottomed sailing boats (trows) were built for the Severn.

But the main output of Honey Street was barges for the Thames area, South Wales and Bristol Docks.

The barges for the Thames area, in particular the river Wey Navigation and the Basingstoke Canal, were known as Kennet barges and they were particularly successful. When the Basingstoke canal opened in 1794 the swimhead barges, with their punt like bows from the River Thames were locally being replaced by barges with rounded bows. The swimhead barges had right angles at the chines: that is the sides were vertical and the hull bottoms were horizontal, and this caused the craft to dig into the shallow clay linings of the canal. The barges with rounded bows have curved chines and over came this problem.

Robbins & Co built curved shaped hulls on their trows and they capitalised on this when building their highly successful Kennet barges. Some of these were sailed as well as towed. The towing was generally by horse, before the advent of tugs. The lines of these barges were copied by local bargebuilders on the River Wey and the Basingstoke Canal.

The typical features of the barges from Honey Street were the style of transomed stern, the shaped guard rails, the stiles and timber heads for mooring and towing and the design of the rudder.

The barge building site was rural rather than industrial. The timber carrying and barge building formed an integrated timber business; even the oak chips from the barge building were carried by canal to Harris of Calne, where they were used to smoke bacon. As well as the timber side of the business, Robbins & Co made iron work, shod horses (presumably so that they could tow the barges) and repaired machinery. They even produced fertilizer from acid they carried from Avonmouth.

Also, many of the barges were built for use in Bristol Docks, at the end of the canal. These were generally larger than the true Kennet Barges and usually carried 80 or more tons, as opposed to the 60 tons of a smaller Kennet barge. These larger barges were called Honey Street barges.

Although large ships could be brought from the Bristol channel. up the Avon, under the suspension Bridge and into the floating Docks, such large ships could not go east of the city centre, where much of the industry lay. St Anne's Board Mills and the United Alkali Works needed regular bulk shipments of their raw

materials. So towed barges, such as Honey Street barges were in great demand to do this final transshipment.

These barges were generally made as large as could possibly squeeze through the locks of the Kennet and Avon Canal, for they were not designed to spend their working life passing through many locks on a regular basis, unlike their sister Kennet barges. One of the design differences was the steering position. Because the Kennet barge passed under many low bridges, the tiller or shifting beam was operated with the bargee standing on a low platform in front of the rear cabin. The Honey Street barges were steered from on top of the aft cabin.

Into the 20th century

In 1950 most of the fleet was purchased by Fred Ashmead and Son, who had been a carrier using Honey Street barges since 1840.

In their early days the Ashmeads provided transport the length of the Kennet and Avon, but with smaller craft. They even did round trips by continuing up the Thames, along the Thames and Severn canal, down the river Severn and back into Bristol. Much of Ashmead's work in the later years was to carry wood pulp to St Annes and this continued until 1967.

The 1950s and 1960s saw a decline in the use of such barges, because of the general decline of docks and the replacement of local water transport by the ubiquitous lorry. Accordingly barges from Honey Street became disused and disappeared.

The Survivors.

The Kennet barge UNITY was built in 1896 and used by its builders until 1933. In the latter part of its life it was used to check the navigability of the Kennet and Avon Canal to ensure that its owner and competitors, the Great Western Railway complied with their agreement to maintain it. Finally the UNITY was abandoned and only the huge rudder was subsequently rescued and conserved for display in the Kennet and Avon Canal Trust Centre in Devizes. The rudder, incidentally is some 1.7 metres by 1.5 metres. This, as far as is known is the only remnant of a true Kennet barge. Boat builders in the Basingstoke and Wey areas drew heavily on the designs of Robbins & Co, an example being the "Wey barge" SPEEDWELL. This was built for William Stevens of Guildford at the Guildford Dapdune Yard. It is now preserved in the Ellesmere Port Boat Museum, but can only be described as a second cousin of the true Kennet Barges.

There are remnants of a Honey Street barge in one of the public houses at Limpley Stoke near Bath. These were taken from the barge that lay derelict for many years near Dundas Aqueduct and was finally destroyed by fire in the 1970s. Until recently these were the only known remains of the barges from Honey Street.

The River Severn Graveyards

It has been the common practice for many years to protect and stabilise the banks and harbour installations of the estuary of the River Severn by sinking redundant vessels of many types on the highest spring tides at strategic positions. Trows, lighters and barges have been used for this purpose, and are found at such places as Sharpness Docks, Lydney Docks and near Purton, a village near Sharpness.

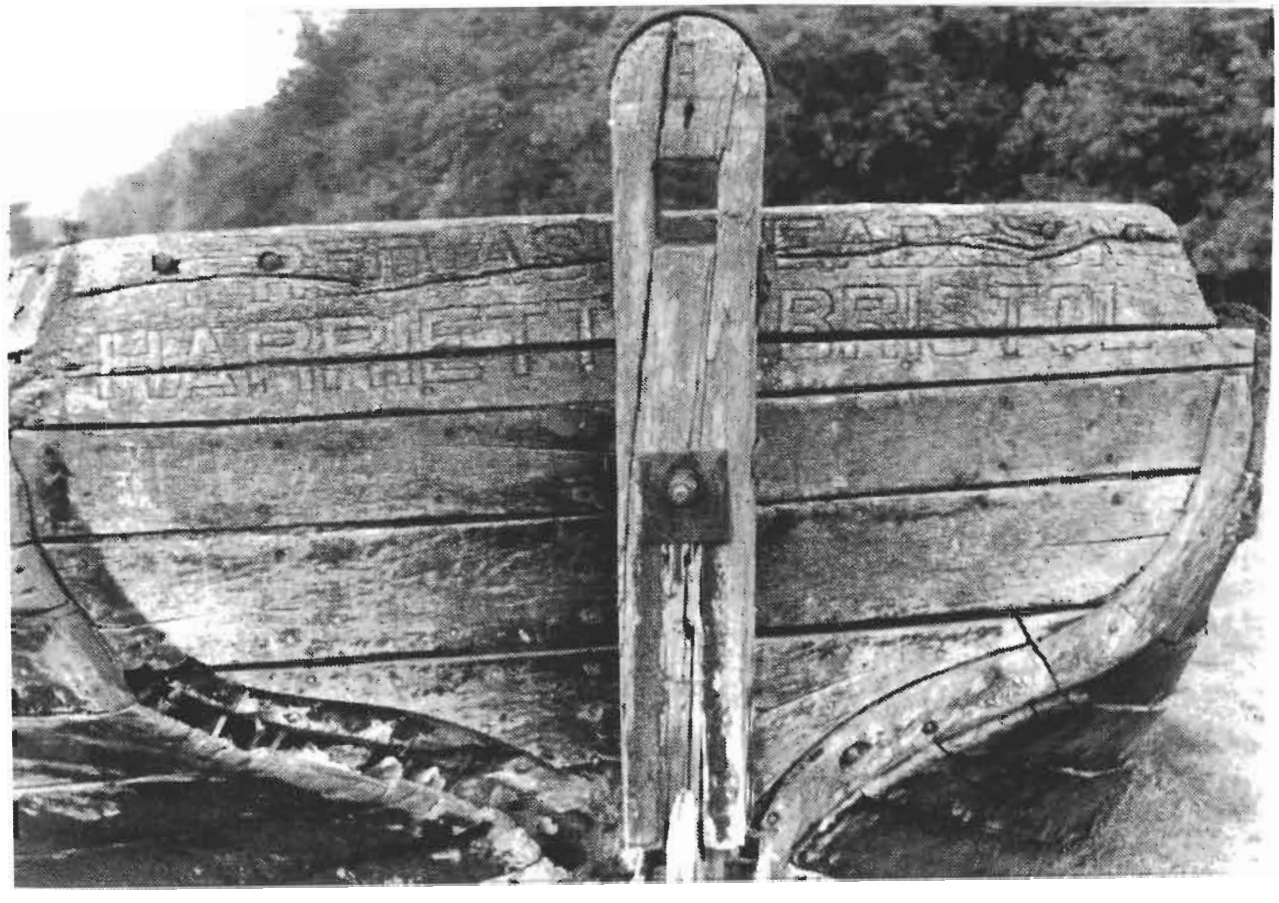
Unlike Sharpness and Lydney, there is no harbour for the Purton derelicts to protect. Here the Gloucester and Sharpness Canal lies very close to the river and the fear was that the canal bank could be eroded and undermined by the spring tides. The tidal range here is about 10 metres. From at least the 1930s onwards, old vessels have been towed from Sharpness, usually in groups of three on the highest spring tides, to near the bank at Purton. The towing rope was then generally transferred from the river tug to a tug on the canal. The vessel was hauled as near as its draught allowed to the bank supporting the canal. The vessel was then holed and left to be filled by the flood tide as it rested on the bottom.

The Severn waters contain a high proportion of solids, much of which drops out of suspension on the turn of the tide, leaving a layer of sediment in the craft as the water receded. Local deposition is encouraged by any reduction in water flow such as that provided by the enclosing hull of the vessel. The deposited mud helps fix the vessel in its final resting place. These redundant craft are filled with sediment by the subsequent spring tides and become buried or partially buried over the years.

Over a period of time the wooden vessels deposited earlier decayed and collapsed and later wooden and ferro-concrete vessels have been hauled on top of their remains. The practice was continued into the 1950s. The site has become a complex jumble of vessel fragments and as such has become an attraction to visitors from near and far. The site is advertised as "the graveyard of ships" by organisers of local canal trips.

Above: The Severn Graveyard at Purton (22.6.86).

Below: Detail of the HARRIETT (22.6.86).



The HARRIETT

At the south western end of the Purton derelicts lies a partially buried wooden vessel, whose visible hull form is substantially complete. Its transom bears the incised inscription:

Fred Ashmead and Son
HARRIETT BRISTOL

Built in 1898, she was brought here in the 1950s. HARRIETT's hull is 72 feet (21.9 metres) long and 14 feet and 1 inch (4.3 metres) wide. The cost of this type of barge at the turn of the century would have been about £335.

For most of its working life HARRIETT was an Ashmead barge in Bristol Docks.

As well as probably being the sole surviving Honey Street barge from the 100 years of barge production, it was possibly the largest on its maiden journey to Bristol. A Foxhanger lock near Devizes was deliberately damaged in order to allow the passage of this "vessel of exceptional structure and dimensions", to quote the report that had to be made. The expected furore of the owners, the Great Western Railway, did not ensue for they had to be diplomatic because of their wish to remove the competition of the canal against their main interests.

The appearance of the HARRIETT today is as a result of the effects of time. On the fore cabin there would have been yellow deal planking but this and the supporting oak beams have long since disappeared as have the red deal bulkheads. The aft cabin has gone too, although the bilge pump, made in Bristol does survive. At some stage in her history, the HARRIETT has been modified by cladding most of her external hull with an extra inch of timber. This was reasonably expertly done and it may have been the easiest way of re-sealing an ageing barge for further use. The freeboard, the height of the top of the hull above water, has also been increased, but not so expertly. This may have been for a different cargo or for different water conditions, such as her passage to Sharpness or Purton.

The HARRIETT is not the last of the Kennet barges but is probably the closest relative of one. She is however, almost certainly the last Honey Street barge.

Part II: The Nautical Archaeology Society and Survey Techniques

The Society is concerned with all aspects of maritime archaeology as well as the archaeology of inland waterways. One of the main aims is to train recreational divers to be competent underwater archaeologists.

In 1990 David McDougall of the National Waterways Museum at Gloucester, realised that the HARRIETT at Purton is the Honey Street barge of that name. Hugh Conway-Jones was asked to research the barge's history. They suggested the Nautical Archaeology Society survey the HARRIETT. It was also necessary to find out how such barges worked. Much of the research work was carried out at the Kennet and Avon Centre at Devizes. Also of great assistance was Chris Gibson who has copies of many of the barge specifications of 20th century date.

The HARRIETT was about 85% complete when the survey work started. Photomosaics were made of the elevations which enabled a system of timber labelling to be undertaken. The survey was started by fixing two primary datum points. These were levelled and measured relative to the Ordnance Survey using a water level gauge and trilateration. For drawing detailed plans of the HARRIETT a planning or drawing frame was used. Although the techniques used are simple and with cheap equipment the authors hope they have maintained a sufficiently high standard for future detailed publication.

Stuart Bryan is a member of GSIA.

The Registered Office of the Nautical Archaeology Society is: Institute of Archaeology, 31-34 gordon Square, London WCIH OPY.