

Sankey Canal Restoration Society

CANAL CUTTINGS

VOLUME 9 Number 12
Winter 2021



Seasons Greetings

Stanley Bank Basin gets its first snow of Winter 2021

Sankey Canal Restoration Society

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Founded 1985



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Cllr. Richard McCauley, Mary Presland,

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(Councillors from the three Local Authorities which own most of the Canal's line):

Steve Parish (Warrington)

Paul McQuade (St. Helens)

Kevan Wainwright (Halton)

The Inland Waterways Association:

Colin Greenall (Chester & Merseyside Branch)

Sankey Canal Restoration Society

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VOLUME 9 NUMBER 12: Winter 2021

**Editor and Production: David Long
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CONTENTS

- 3. The Chairman's Report**
- 5. Biography of Henry Berry**
- 9. News from the Boroughs**
- 14: Visit the Catalyst Museum**
- 15. St Helens Historical Society in 2022**
- 18. Heritage Photography Project**
- 19. Canals and Global Warming**
- 20. Inside the Sugar Works**

The Chairman's Report—from Colin Greenall

Chairman's Report

It's true what they say that the years pass more quickly as we get older and that is particularly true of the past twelve months, which seemed to have past us by in no time at all. And what a year we have been through. Let's start by saying it will be better next year, we are all feeling the strain of never-ending restrictions that are continuing the plague our lives at present, so look on the bright side and hope for better thing to come.

In this issue of Canal Cuttings, I hope you can find something of interest, once again we have Mike Harrison continuing his story of sugar refining and a couple of interesting articles from Peter Keen along with news from around the boroughs and two more pictures from the Wilf Britch series of photographs taken in the 1970's. There is also a biography of Henry Berry written by Brian Leyland and reproduce here with his kind permission. If anyone has anything to say about the canal or other society matters, please get in touch.

I would like to take this opportunity to welcome Linda Dirra onto the Committee. Linda has had a long association with the society as a serving Warrington Councilor, and her knowledge of what goes on in the Penketh area will be an asset to the society.

I would like to thank John Hughes who has now decided to step down from his position as Work Party Organiser due to recurring health problems. John took on the role in 2014, and has guided our volunteers on many projects along the canal. Conscious of developing Health and Safety concerns, he introduced the Hi-Vis vest making our group more prominent when out on site. Our Assistant Work Party Organiser, Ian Hornby, will take John's place. Ian will bring enthusiasm to the role as well as his experience in practical matters and environmental issues.

In 'News from the Boroughs' you can read that the newly-announced Rail Plan for the Northwest and Midlands, includes a proposal to upgrade the Fiddlers Ferry Line which runs parallel to the Sankey Canal from Warrington Bank Quay Low Level to Widnes. The line crosses the Sankey Canal on the level at Sankey Bridges, where a fixed bridge replaced the swing bridge in the 1960s. Unless a higher-level bridge is installed, these plans are a serious threat to our restoration hopes. We need to act now to try and persuade HS2 that we will require headroom under such a crossing or that they consider an alternative route. i.e., the Cheshire Lines route via Warrington Central and Widnes. IWA have been consulting with HS2 since the first rumbling of the scheme emerged years ago. Can I ask all member and friends of members to write to their local MP and put in a case for the restoration of the canal and an objection to the proposed HS2 Plan in its present form?

Moving on to other things, it's that time of year when I must ask if you would all be so kind and renew your membership and to try and get others interested in joining our campaign to restore the Sankey Canal.

The bid that Groundwork made for a grant from the UK Community Renewal Fund failed, but they have committed themselves to work with SCARS on small scale projects along the canal in the Blackbrook area.

St Helens Council have given planning approval for two Red Wheel Transport Heritage Plaques to be sited on the Sankey Valley Railway Viaduct.

Please look out for the pages below advertising the St Helens Historical Society's 2022 programme; our partnership with the Phoenix Amateur Photographers; and the newly-refurbished Catalyst Museum at Spike Island.

Let me finish by wishing you all a Happy Christmas and a Prosperous New Year—and hope that things do indeed get better.

Henry Berry By Brian Leyland

This biography of Henry Berry appeared in the book "St. Helens: The Great & the Good (and a few of the not so good)" by Brian Leyland and is published here with the kind permission of the author.

Henry Berry, Liverpool's second Dock Engineer, was the man primarily responsible for the construction of the world's first modern artificial canal which was the Sankey (also known as the St Helens Canal). As such he must be placed on the pantheon of the great and good from the era of the industrial revolution.

Although there is no actual record of his birth, he was almost certainly born and raised in St. Helens. His tombstone at the St. Helens Congregational

Church, (*right*) which once stood in Ormskirk Street, stated that he died in 1819 in his 93rd year, which would suggest he was born in 1726.

Nothing is known of his childhood however, other than he had an elder brother, John, who was a



trustee of the Independent Chapel in the town. Henry's first appearance in any surviving documents is also a Trust Deed, dated 1742, in which he is described as "of Parr Batchelor". In the next few years, he makes several further appearances in the Parr township papers-at one point he is a highway surveyor and then later an Overseer for the Poor. In 1850 however he surfaces in the Liverpool Town Books when following the death of Thomas Steers, Liverpool's first Dock Engineer, it is recorded that his "late clerk" Henry Berry was to take temporary charge of all the ongoing works. Henry obviously made a decent fist of it as the following year he was formally appointed to the top job and became Liverpool's second dock engineer.

Whether he had any formal training in engineering we do not know, although one assumes he would have learned a huge amount from the tuition of Thomas Steers, the founder of Liverpool world famous dock system and widely regarded as one of the finest engineers of his time. Critically Thomas had experience not just in the construction of the docks but also in inland waterways, and knowledge that Henry picked up in that arena would certainly prove useful to him in the fullness of time.

After Henry had been in the job for three years, the Salthouse Dock was

opened and it is generally accepted, notwithstanding that its construction had begun before the death of Thomas Steers, that most of the credit belonged to Henry Berry. It may well have been a consequence of his good work there that he was entrusted by the proprietors of the Sankey River (all of whom were on the Liverpool Council which had appointed him as Dock Engineer) with the responsibility for investigating whether it could be made navigable.

By 1755 he was giving evidence in Parliament on behalf of those proprietors as they needed Parliamentary approval for the project. It was Henry however who concluded that the proposal was impractical and who instead suggested the construction of an artificial canal along the Sankey Brook valley. It seems this suggestion may have been withheld from some of the proprietors on the grounds that they would not have given their approval, but one way or the other Henry got the go ahead and therefore can be acclaimed as the person responsible for the construction of the first post-industrial canal*, which opened for business in 1757.

**It should be noted in passing that there are some who contest the assertion that the Sankey or St. Helens Canal was the first post-industrial canal on a somewhat specious basis that the final 400 metres were shared with the Sankey Brook. I do not think we need to consider the merits of this argument further.*

Henry had been granted two days a week off from his job as Liverpool's Dock Engineer to supervise the Sankey project but nonetheless his work continued there as well-, he was responsible for the graving dock which was constructed in 1756 (and two later ones which he constructed in 1765) all of which formed part of what later became Canning Dock. He then supervised the construction of George's Dock which was completed in 1771 and finally King's Dock which opened in 1788.

Liverpool was not the only port with which Henry was involved. His reputation spread quickly – there is evidence that he was consulted by the Hull Corporation in 1756 although it is probable his other commitments prevented him becoming engaged on the other side of the Pennines at that point. However, he was later heavily involved in the construction Hull Dock which opened in September 1778 and was the largest single dock with which he was associated. He was also consulted by the Port of Lancaster and asked to provide an estimate for the construction of a dock there but again turned down the opportunity as he could not “make it convenient to attend to this business”.



Posed in front of the Blue Plaque which was recently installed on the World of Glass building to commemorate Henry Berry are SCARS' Committee Members Ian Hornby, (far left), Chairman Colin Greenall (2nd from right), and Neil Forshaw (far right), accompanied by Peter Frost, Director of the World of Glass (2nd from left), and Dr Barrie Pennington, who donated the plaque (centre).

Henry was employed for a while to investigate the possibility of extending the navigation of the River Weaver after powerful Liverpool merchants had exerted pressure on the trustees of the river to improve the waterway. This project did not end well for Henry however- it seems that whereas he had had no problem in harnessing the stream from the Sankey Brook, when he tried to do the same with the more variable currents of the river, he caused a minor flood and was relieved of his position. Whether his dismissal was fair or not is debatable, as there was certainly at the time considerable friction between the Cheshire gentlemen, who made up the trustees and the somewhat less genteel merchants from Liverpool, and Henry was very much regarded as the agent of the latter!

Despite all the above activity, there was clearly not enough dock and canal construction taking place to keep Henry fully occupied and there are several references to him being used by Liverpool Corporation for other services, particularly as a surveyor on the construction of roads in both Liverpool and surrounding areas.

Henry's retirement as Dock Engineer came in 1789. He had lived on Duke Street in Liverpool since 1865 and it seems retired with an annual income of about £1,000- not an insignificant amount in the early 19th century.

When he died in 1819, in accordance with his will, his remains were interred "at the Dissenters Chapel at St. Helens, but not within the chapel where his mother and father were buried, but in the chapel yard as I would not have the grave opened". His remains were later moved from Ormskirk Street to the Borough Cemetery when work was being carried out to widen the road.

We know precious little of Henry's private life. He certainly had no wife or children who survived him and probably never married. He took no part in public life, through his dissenting views would probably have prevented him from doing so. His obituary in the *Liverpool Mercury* observed that despite his age, there were "no marks of imbecility" which is borne out by the clarity of his will which he wrote at the age of 88. His assets included, inter alia, an estate in Parr as well as several properties in Liverpool. He left the Silver Cup, which had been awarded to him by the proprietors of the Sankey Canal, to his nephew.

Henry does however have one surviving legacy- Berry Street, in Liverpool which adjoins Duke Street at the point where Henry's house was situated, was named in his honour, albeit, as with much of his life, details of when and by whom are sadly lacking

News Round-Up Around the Boroughs

by Colin Greenall

HALTON

Water Supply: News from Halton with regards to the water supply for the canal is unchanged. Halton Council are working with Warrington Council and Scottish Power to secure a permanent solution to the water supply problem.

Swing bridge: No decision yet as to what kind of crossing will be installed to fill the gap.



Celebrating Halton's Heritage – Community Grants:

Halton Borough Council has been awarded funding by the National Lottery Heritage Fund to celebrate the diverse history of Halton throughout the years. The main Borough of Culture 2021 theme is Pioneers and Trailblazers and, as part of that overall project, this Small Grants Scheme focuses in on Trades - who were the movers and shakers in the Borough's industries? Who were the 'workforces,' locals, immigrants etc.? What were working conditions like? How did trades in the area change over time?

This is an opportunity for local groups to apply for a grant of up to a maximum of £5,000 towards the cost of delivering a project which explores the themes further and bring them together at a showcase event in Sept 2022. Applicants will work in a partnership made up of a Community Organisation and a member of Halton Heritage Partnership. Either partner can submit the application form.

SCARS and the Heritage Fund: Working with the Phoenix Amateur Photographers as the lead community organization, and SCARS as a Halton Heritage Partnership member, a successful bid was achieved for the maximum grant of £5,000 under the above fund. This funding will be used to buy photographic equipment and training in the use of the equipment for a group of amateur photographers to work on the production of a video about the waterways of Halton and the industries they served. It will also record the memories of people who worked in these industries using oral recordings of former employees and other people with experience of the vicinity of these industries. (If any readers can provide any information about this subject, please contact Barrie Davidson. See advert on page 18 for details)

Another Heritage Fund winner: There will also be a “Celebrating Halton’s Heritage” project which will see the work of two professional artist producing a series of conceptual exhibitions based at the St. Marie’s Heritage Hub in Widnes over the next twelve months. The artists Neil Musson and Jono Retallick will start by researching the exhibition themes over the next couple of months and then begin community engagement through workshops and outreach events.

I was recently contacted by Neil Musson one of the artists and a meeting was arranged so that I could tell them about the Sankey Canal and the Industries it served.



Neil Musson
07981 870532

 @Neil_Musson

Jono Retallick
07779 169851

@jonoretallickartist

info@mussonretallick.com

M+R create large scale site-specific artwork to enhance a sense of belonging



WARRINGTON

HS2 Integrated Rail Plan for the North & Midlands: A new high speed Northern Powerhouse Rail (NPR) line is proposed - from Warrington to join HS2 West into Manchester, and a route from Liverpool to Warrington, using the Fiddlers Ferry freight line will be upgraded and electrified.

The new NPR Liverpool-Manchester route between Warrington and its connection with HS2 West will need a further crossing of the Manchester Ship Canal and of the Bridgewater Canal. As the favoured route is via reinstated low-level platforms at Warrington Bank Quay, this may involve rebuilding the closed viaduct over the MSC at Latchford, as space is otherwise limited. In the other direction from Warrington, it is proposed to electrify and upgrade the “virtually disused” Fiddlers Ferry freight line which runs for several miles right alongside the Sankey Canal and crosses it at low level on a former swing bridge at Sankey Bridges. Although an adjacent low level road crossing and the nearby A57 already create major problems for the restoration of this key section, retaining a fixed low level major rail route crossing could permanently prevent full restoration. The Sankey Canal Restoration Society will need to campaign for a raised crossing or a different route through Warrington to avoid this. (This information was supplied by Philip G. Sharpe (Secretary to HS2 Waterways Working Group) Inland Waterways Association)



Left: The railway swing bridge at Sankey Bridges being opened —on this occasion to pass the LEO, a Leeds & Liverpool Canal barge carrying members of the Railway and Canal Historical Society on a trip to mark the 200th anniversary of the Act to create the canal.

Below: The present fixed concrete bridge.



Old Swing Bridge at Sankey Bridges: Remains in place, but will be removed eventually.

Footpath / Cycleway Up-grade: Works to resurface and widen the footpath/cycleway south of Bewsey Bridge are now complete.

New Signage for the Sankey Canal Trail: Warrington Ranger Service and Transport for Warrington are working together to upgrade the current Sankey Canal Trail signage. This will include replacement of some existing signs if in a state of disrepair plus installation of some at additional locations to re-enforce the route. The new texts and maps will include alterations to text and map to reflect current situation and remove info which is out of date or incorrect. *Right:* The 'Welcome to Sankey Valley Park' sign at Fiddlers Ferry is one of those to be reviewed and replaced.



Stanners Pool: Work continues on the new extension to Stanners Pool Community Angling Amenity (*right*) - - with more waste material being deposited on the line of the canal near Hulme Lock (*below*).



ST HELENS

New signage: On a recent visit to the canal at Blackbrook, new signage was in evidence at the entrance from the car park.

Towpath/ Cycleway Upgrade:

Work has commenced on upgrading the towpath/ cycleway between College Street and Merton Bank Road (*right*) and upgrades to the towpath/cycleway between Park Road and Merton Bank Road and repairs to the canal wall at Pocket Nook are on their way.



SCARS to work with Groundwork: Starting in January work should commence on a project to clear unwanted vegetation from the canal bank on the section of canal heading up towards Carr Mill Dam. This will be funded by Groundwork who are committed to help with the project and provide volunteer assistance.

The St. Helens Heritage Trail which is being sponsored by St Helens Rotary and supported by St Helens Council held its first meeting at the World of Glass recently which was attended by local business that have properties which are near to the canal. From the feed-back received everyone was supportive of the project and promise to assist in seeing the project come to fruition.

A second Blue Plaque for Henry Berry: The Elders of the United Reform Church (successors to the Congregational Church at which Henry Berry was a trustee) have agreed to a Heritage Trust Blue Plaque being sited on the wall above Henry Berry's gravestone.

Red Transport Heritage Plaques: St Helens Council have approved planning consent for two Red Transport Heritage Plaques to be sited on Sankey Viaduct, one to commemorate the viaduct which is the oldest railway viaduct in the world, and is still carrying the main line passenger service it was designed for two hundred years ago. The second red plaque is for the Sankey Canal which passed below the viaduct and is the first Industrial Canal in England. Both the Red and the Blue Plaques are being sponsored by SCARS member Dr. Barrie Pennington.

Sankey Canal Video's on YouTube: Two interesting Sankey Canal Video's are now available on YouTube. Follow the links below:

<https://www.youtube.com/watch?v=aujaE6K3-4s> <https://www.youtube.com/watch?v=GIImAToRGY>

Catalyst Science Discovery Centre and Museum

Mersey Road, Widnes, Cheshire WA8 0DF

A major refurbishment has recently been completed at Catalyst that involved:

- The café and reception area
—there is no charge for entry into the café
- Archive facilities
- The ‘hands-on’ exhibits gallery

where you can investigate science in enjoyable and informative ways

The building has a high standard of access, including Changing Places toilet facilities. A glass lift enables everyone to get to all floors and provides superb panoramic views over Spike Island, the Sankey Canal, and the Mersey Estuary.

As well as individual and family visits, heritage afternoon teas, science birthday parties and adult group visits are also available. (How about a SCARS visit sometime?)

For further information see: <https://www.catalyst.org.uk>

**Catalyst Science Discovery Centre—
A unique interactive museum for all ages**

The image shows the homepage of the Catalyst Science Discovery Centre website. The background features a photograph of four children in white lab coats, smiling and holding test tubes. The Catalyst logo is in the top left corner. The navigation menu includes 'Visit', 'Schools', 'Museum', 'About Us', 'Community', 'News', and 'Contact Us'. A search bar and a 'What's On?' button are also present. The main headline reads 'We put the fun in science'. Below this, a text block states: 'Catalyst is open Tuesday to Sunday offering a host of interactive exhibits, museum archives, historical galleries, family shows and hands-on workshops!'. At the bottom, there are two buttons: 'Book your visit (essential)' and 'Donate'. A stylized line-art illustration of the Catalyst building is in the bottom right corner.



St Helens Historical Society

List of Presentations for 2022

All Presentations begin at 7.30pm

Monday 17th January

Via Zoom

Liz Stewart:

The Story of Canning Graving Dock

Monday 21st February

Via Zoom—or at the Friends' Meeting House, St Helens

Brian Groom:

The Northerners

From Ice Age to Present Day

Monday 21st March

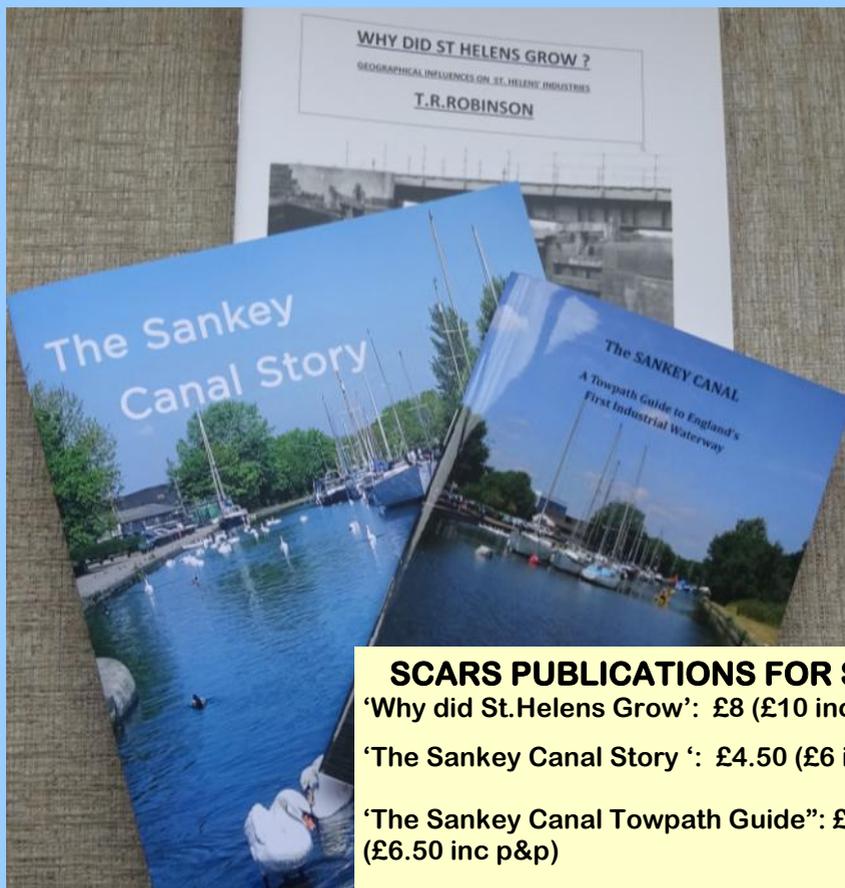
Via Zoom—or at the Friends' Meeting House, St Helens

Lewis Lesley:

Just the Ticket

Horse-drawn Trams in Liverpool

*For further details of the Zoom link, please contact
sthelenshistsoc@gmail.com.*



SCARS PUBLICATIONS FOR SALE

‘Why did St.Helens Grow’: £8 (£10 inc p&p)

‘The Sankey Canal Story ‘: £4.50 (£6 inc p&p)

‘The Sankey Canal Towpath Guide”: £ 4.80
(£6.50 inc p&p)

Order from Colin Greenall:
16 Bleak Hill Road, Eccleston, St.Helens,
WA10 4RW

WANTED—More Volunteers

Our Work Parties are perhaps our most visible volunteering opportunity—but there are other roles we need volunteers for. Maybe you could help out on our exhibition and sales stand when we attend events around the area from late Spring to early Autumn; or perhaps you have a personal skill, for instance in communications or the media, which you could put to use to help promote the Sankey and our Society—even if it’s simply visiting the canal every now and again, taking photographs, and putting them up on our social media sites, or carrying out research into aspects of the canal’s history, or of its associated communities or industries. But don’t let yourself be limited by my imagination...

To offer your services, choose a contact from page 2 of this magazine.

Follow SCARS on any of the social media platforms and keep up-to-date on our activities and news. Find us on:



Facebook Sankey Canal Restoration Society

Twitter: Sankey Canal @scars567



Instagram: Sankey Canal Restoration: sankeycanal1757

Sadly, we have still been unable to re-start our Work Parties as hoped, but are planning to do so in the coming months—look out for an announcement on our social media platforms

WANTED-Volunteers

Our Work Party is champing at the bit to get back to work after the lockdown. If you're also wanting to tone up your muscles, why not join them? The work you put in depends on you and what you feel capable of.

Contact me on: 01744 813943
Mobile: 07753 289765

Ian Hornby

#5210647

**What do you know about the trades,
the people, and the industry
along the waterways of Halton?**



Made possible with

**Heritage
Fund**

**Phoenix
Amateur
Photographers**

A graphic of a camera lens with a yellowish-orange glow in the center, positioned behind the text 'Phoenix Amateur Photographers'.

**Phoenix Amateur Photographers, in partnership with
the Sankey Canal Restoration Society in a project to
produce a chronicled documentary about Halton's
waterways.**

**If you have ever lived or worked around these water-
ways, or have any knowledge to share, and/ or you
want to become part of the team, please contact:**

Barrie Davidson on 07776391196

Or email baznox45@gmail.com



Can a long neglected asset help mitigate global warming?

For many decades our canal system was neglected, deteriorating into disrepair.

Restoration societies up and down the country have, in recent years, invested much funding and volunteer time in improving their canals but there is no overall policy for the national network. Canal and River Trust has done a great deal in supporting these societies, but there remain many lengths of waterway in need of attention.

Now, it seems, according to local television, canals may well have an important role to play in the future, faced by global warming. Apparently on a hot day, and they are only going to get hotter, canals absorb heat better than solid stone or brickwork.

In effect the canals act as linear coolers, creating a zone parallel to and above the water, reducing the local temperature by 1.6 degrees. This in-built cooling could have a marked impact upon future building policy since advantage could be taken of the effect simply by building adjacent to the canal with reduced outlay on cooling equipment.

Are we in for a renaissance of our canals where filled-in channels are opened up again and put back into water? It is no coincidence that, in hot countries, water is conducted along channels cut in the floors of otherwise uncomfortably hot rooms, where the temperature is reduced to more comfortable levels.



Dr Joanne Tippett and Dr Harry McDonald are among the team from Manchester University who have been working with the Canal & river Trust for over six years examining the cooling effect of our canals. (*Image: Granada Reports*)

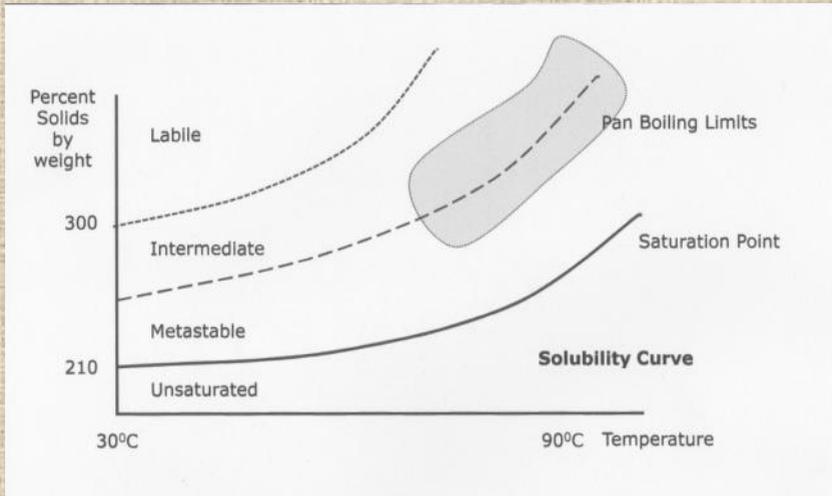
Sankey Canal & Sugar Refining - Part Six

By Mike Harrison

Boiling a pan of fine liquor.

The plot below shows the saturation parameters within which the sugar crystals can grow uniformly without excess fines, etc. Boiling down controlled by vacuum pressure evaporates the water to cause saturation and later supersaturation of the liquor, divided into three zones.

- Metastable zone, where crystals will not form on their own but will grow on crystals surfaces already present.
- Intermediate zone, crystals added will initiate the formation of new crystals.
- Labile zone, crystals are formed whether other crystals are present or not.



Boiling sugar requires keeping the massecuite within the bounds of the sugar saturation, whilst not allowing it to overheat (colour darkens), nor for the crystallisation process to run-away with itself, thereby producing a product not to the standard required.

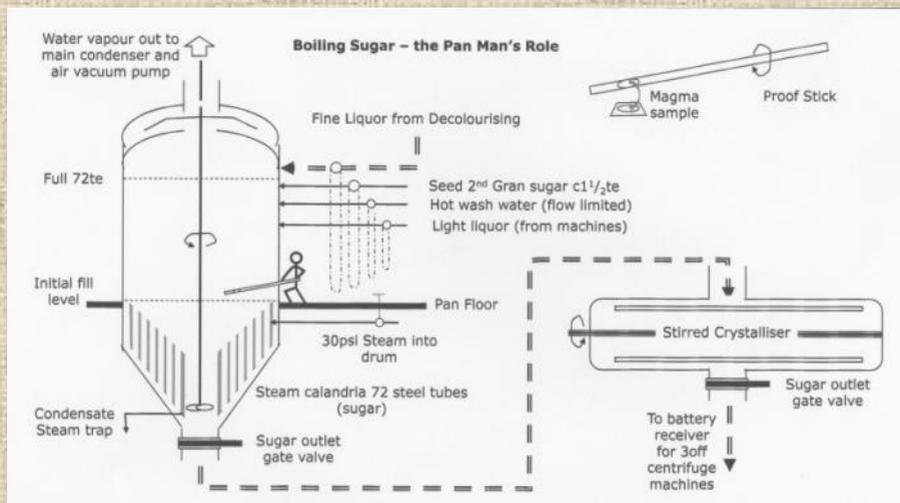
As the pan fills with sugar laden liquor, the varying conditions demand the Pan Man's skill to maintain the contents of the pan within the limits highlighted.

If the pan conditions fall too far into the Metastable region and too near the saturation curve, there are fewer opportunities for the crystals to grow. If the liquor reaches too high a temperature, then it may deteriorate, and fructose colouring occurs. If the temperature is too low, there is inability to boil off the water. Finally, excess fine crystals will form on their own, should the liquor approach the Labile zone.

The pan is heated by 30psi steam contained in a calandria comprising an outer drum containing 72 steel tubes for the sugar liquor. For heavy liquors, a stirrer can circulate the liquor to avoid stagnant spaces. A sizeable condenser and air vacuum pump (for a possible 7 pans) enables the pan to operate under vacuum of 7-5psia and boil off the water at a temperature between 80°C and 95°C.

The pan man has direct control over all the sugar, wash water and steam inputs to the pan via chain-wheel gate valves. The contents of the pan are weighed electronically and sighted through lighted inspection ports at appropriate heights up the pan.

The sketch below shows the fine liquor path through the boiling pan and crystalliser before machining in the centrifuge.



Detailed below is that of a typical pan sequence when producing preserving crystals. In this case the stirrer is not used because it causes fines, and the magma is very light and circulates readily within the pan. An initial charge of fine syrup is supplied to cover the calandria. The pan is boiled so that the supersaturated magma reaches the metastable zone.

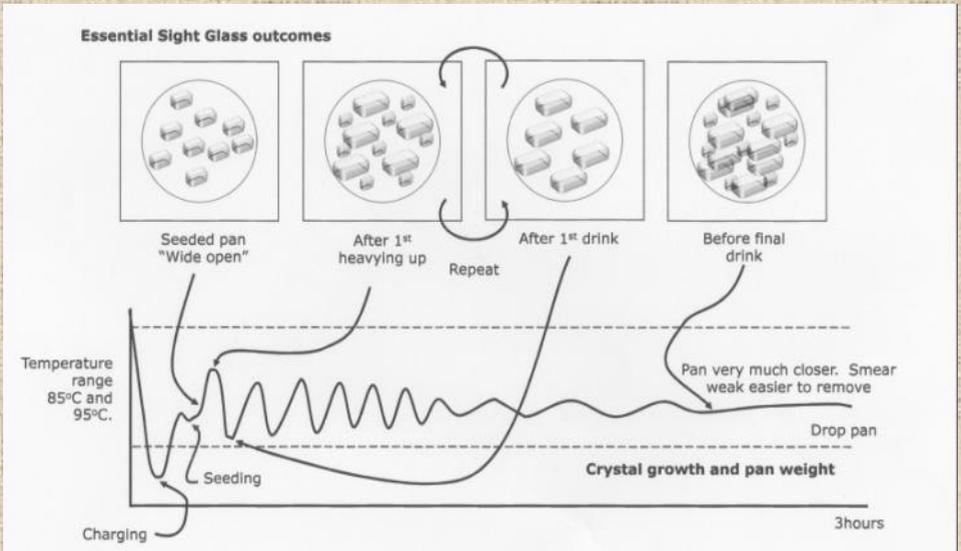
The magma is seeded with c1 1/2 te of small No.2 gran crystals, which act as the host for further crystal growth. The result is a “wide open” pan with high size distribution. The vacuum is boosted to increase boiling to heavy up the pan – smear (additional fines) is formed.

At this stage, the proof stick is used for the first time. As shown, this is a brass rod c100mm diameter with a cavity to collect a magma sample. It is slid into the pan through a gland with the cavity facing downwards, the pan man turns the stick over to collect the sample. He withdraws the stick sufficiently to allow the sample to be turned on to a sight glass, which is subsequently viewed in a light box. Each sample is unique and dictates the pan man’s actions that ultimately results in the maximum yield of the final crystals.

The sight glass sequence below shows the crystal size and smear appearance (and removal) from the addition of the seeding crystals to the final capacity of the pan. The pan is gradually filled with fine liquor from the decolourising process. As each sample is taken the pan man may decide to give the pan “a drink” (or not) to wash out the smear. This is achieved by stopping the liquor inflow and reducing the vacuum (hence boiling) whilst carefully adding some light liquor or hot wash water (the supply is restricted to avoid too much being added). Another sight glass sample dictates when pan filling can resume. This procedure is repeated until the pan is dropped at 72te after approximately 17 drinks.

During the filling, the crystal size gradually increases, and the pan gets closer (heavies-up) towards the end of the boil. At this stage the boiling, controlled by the vacuum becomes difficult, so drinks water is added to ease this control and minimise the last of the smear.

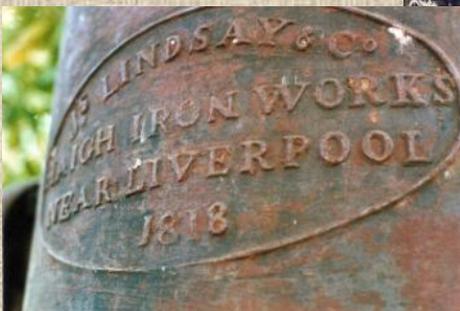
In addition, water is used for lubrication to lighten the syrup around the crystals, which not only improves machining in centrifuges but eases the final drying process.



All pans in the refinery drop their contents into a pan receiver / crystalliser before machine cleaning. This case is no exception, the crystalliser is stirred and allows the magma to cool to room temperature and holds the contents until needed by the intermittent action of the three centrifuge machines. There is a certain amount of additional smear formed, but this is reduced by the treatment of the final drink water and is easily removed during machining.

The next stage in the white sugar path is the machining and granulating processes.

Local connection to the sugar Plantations in the era of slavery—this beam engine in Haiti was made at the Haigh Foundry near Wigan—makers of many of the cast iron structures which were installed on the Sankey when the railways needed to cross the waterway and swing bridges were installed.



Ramlin Rose : The Boatwoman's Story— Sheila Stewart

The great days of the canals saw high tonnages of materials of all types transported around the national network- coal, textiles, clay, pottery and agricultural produce. The coming of the railways heralded the start of the canals' decline as traffic was diverted to the new form of transport which was easier to construct and faster to operate.

The two World Wars brought temporary reprieves as canal transport was requisitioned to further the war effort. But after WW1 hundreds of ex-military vehicles were sold off, many to service personnel, who set up in the transport business. Door to Door deliveries attracted increasing numbers of customers and canal traffic declined further. Even bulk canal transport was reduced despite being the most efficient type available at the time.

Ramlin Rose describes the changing fortunes of the canal folk, their joys and tragedies, their successes and failures. The author has gathered eye witness statements from across the canal community and woven them into a narrative which illustrates their life styles. . In the early days the motive power came from horses or mules which covered many miles of canal towpath, hauling one or two narrow boats. The whole family operated the boats and accompanied their 'animals' along the tow path, calling for a wide range of skills which were learned whilst very young.

There were two types of boat operators. The traditional long distance journeys were carried out by live-aboard families who occupied a small cabin to the rear of the narrow boat. Alternatively there were the day boats which completed regular short runs after which the crews would return to their homes 'on the bank'.

With their constant movement education took second place to delivering cargoes. The children were unable to attend School regularly since they were on the move. If there was a delay in unloading the children would take their attendance book to school and have their attendance recorded. Very few of the boat people could read or write, even into adulthood, but they were mostly confident with numbers, calculating mileages, tonnages, loading times and wages with accuracy.

Children helped their parents from a very early age at all manner of tasks from opening lock gates to looking after their siblings of which there could be many. With only a tiny living area available to families on a narrow boat, children could be loaned out to other narrow boat families which were in need of aid. These 'loans' could be long-term so a child may not come into contact with its family for months or years, only when the respective family boats were moored at the same wharf.

There are many sad stories in Sheila's book. She relates the story of two young boys chasing each other around the moving boat when one of them failed to stop and went over the stern of the boat to be killed by the propeller. On another occasion, a young girl, unhappy with the cramped sleeping conditions in the main cabin, decided to spend the night in the tiny cabin at the front of the boat. Unfortunately in an attempt to keep warm she dragged the brazier close and was found dead in the morning, killed by the fumes from the fire.

Eventually canal carriers lost their reason for carrying on their business. Decreasing demand from customers, changing to other transport, modes, but, most importantly, the increasing dereliction of the canals through water loss and silting all played their part. A complete life style practically disappeared. Historic boats are lovingly restored and worked, and canals, buildings, bridges and locks are put back into good order but none of their present-day users had to put up with the hardships of their predecessors.

The Sankey Canal in 1972

We continue displaying the collection of archive photographs, taken by Wilf Britch in 1972. Our thanks to him for sending these interesting images of a bygone time along the Sankey within the St Helens area



Above: The bridge carrying the Wigan—Liverpool line across the Sankey prior to it being “strengthened” by filling it in. Through the bridge may be seen the Number 9 Cone House and the steam from the “Hotties”, created by cooling water from the glass-works being pumped back into the canal, creating the ideal environment for tropical fish to live in the canal. In the foreground stone sleeper blocks are re-used along the canal bank.

Below: Pilkington’s Sand Yard, seen from the above bridge. A footbridge crosses the heaps, running from the towpath to Watson Street. Behind the wall on the left, at a lower level than the canal, runs Windle Brook. It passes under the canal where the canal bends to the left.

