

THE PORTAL

Issue 73 - Summer 2020

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Friends of the Cromford Canal

Registered Charity No. 1164608

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Front Cover

Despite Coronavirus lockdown, work was able to continue on the iconic Aqueduct Cottage, albeit at a reduced rate – see page 7.

Photo: Hugh Potter

Back Cover

Top: Coincidentally taken at almost the exact same time in 1968 as the image on the back cover of the last *Portal*, this photograph of the aqueduct across Stephenson's North Midland Railway at Bullbridge shows it in the few days after demolition of the road aqueduct before the railway aqueduct was also destroyed.

Photo: Belper Historical Society

Bottom: An early spring morning at Starvehimvalley Bridge.

Photo: Ken Brockway

Copy date for the next issue is 27th August 2020

The aims and objectives of the Friends of the Cromford Canal



The restoration, reconstruction, preservation and maintenance of the Cromford Canal, its associated buildings, towing path, structures and craft and the conservation of its natural character as a navigable inland waterway system for the benefit of the public.

EDITORIAL

By Hugh Potter

Although much of the world has shut down over the last couple of months, there is still plenty going on 'behind the scenes' in FCC, *Portal* being one example. I am delighted to be joined in that task by *Birdswood* crew volunteer Keith Bailey who has valiantly volunteered to take over the design and layout work on *Portal*.



It is great to see at least some physical work continuing on the canal at the iconic Aqueduct Cottage (see page 7). Elsewhere, the towpath – at least between Ambergate and Cromford – has been busier than usual, particularly with cyclists, the majority of whom, I am pleased to report, have been most courteous.

Wood you Believe it?

One thing about the recent Coronavirus lockdown is that people have been sorting out their houses. I had a phone call from Ann Fiorentini, whose late aunt's friend had once lived in Matlock. Amongst the items discovered in the London house clearance was a piece of timber with an inscription. The timber is a quarter round of what looks like a piece of oak trunk. The plaque reads:

*This Timber Was Retrieved From
CROMFORD CANAL
On The Thirteenth Day Of June In The Year
Nineteen Hundred And Forty Six
By
John Virtue Fullwood Esquire
And
Edward Iniquity Huson Esquire
Both Of This Parish.
*Pro Aris Et Focis**

Ann kindly posted the timber to me for the FCC Archives and I was surprised at just how 'chunky' it was: it measures 7½in x 6½in x 5½in and weighs in at over 3lb. The curious middle names and 'latin' inscription (meaning roughly "For Hearth and Home") suggests it might have simply been done in jest.

But does anyone have any idea who the people were, what the wood might have been and why they went to the trouble of having the plaque made?



Finally, thanks to John Reeve of the Leewood Pump Group for pointing out my error in the piece on *Duchess* last issue – she was of course fitted out and christened in 1986, not 1968. Glad to know someone reads *Portal*!

Keep reading, keep supporting FCC and keep safe.

CHAIRMAN'S NOTES

By David Martin

Well what a strange new world we find ourselves in. As we enter the summer it seems an age since we had our last FCC social gathering at Ironville where Steve Adams gave us a very witty and enlightening talk on being a volunteer on our trip boat *Birdswood*. I must say he was very brave to do so with there being so many knowledgeable peers in the hall, but he pulled it off! As for *Birdswood* and our subsequent talks, they've all been kicked into the long grass until further notice. When the time comes that we can all start back again I think everyone will breathe a sigh of relief to get back to some kind of normality, and of course we will keep you all informed as and when that day arrives – hopefully in the not too distant future.

Just before lockdown we had quite a lot of improvement work done to the Wharf Green recreation ground in Jacksdale, which was all about improving the car parking facilities and disabled access routes to allow people of all abilities to get to the towpath of the canal. In addition, the FCC work party built some new access steps (page 14) on the far side of one of the two boardwalks across the canal recently installed by the Cromford Canal & Codnor Park Res group along with Derbyshire Wildlife Trust. This has made a great circular walking route around the old Forge site which also has a few benches on thanks to the Friends of Belper Parks. Ron Common and the Aqueduct Cottage contractor have miraculously still been making progress on restoring the iconic building (page7).

The joint planning application for the



canal extension at Langley Mill has come down to three things; we are awaiting responses from three statutory consultees: Derbyshire and Nottinghamshire wildlife trusts and the Archaeology Department at Derbyshire County Council. These have all sadly been

delayed by the recent pandemic but we hope to resolve these outstanding issues soon and we can then move on to the detailed planning and design process. With that in mind, if anybody out there is able to assist us with any of the forthcoming planning, design or fund-raising processes we would greatly appreciate any help that you could give us, so please do get in touch at [restoration@cromfordcanal.org](mailto:restoration@ Cromfordcanal.org).

We all know that as we come out of lockdown and exercising rules are relaxed, the towpaths of our canals will be a great draw to many folk from all over the country partaking in all forms of exercise. We would ask you all to please be courteous, and mindful of your passage, but most of all be kind to others using these beautiful countryside routes.



Recent improvements to the access to Wharf Green, Jacksdale.

Photo: David Martin

MEMBERSHIP MATTERS

By Yvonne Shattower

There really isn't a lot to say this time due to the lockdown and cancellation of our meetings and Friends' activities, but I would like to give a warm welcome to the new members who have joined us since the last edition of *Portal*. I would also like to thank all those



who have renewed their membership so promptly, but I would ask you all to be aware that it may take longer than usual to bank your cheques and issue renewal notices in the next couple of months.

Even though we are not 'out and about' we still need your support, so please bear with us. I can assure you that things are still going on in the background, even though we cannot physically meet up. At the time of writing this, we are still very much in lockdown, with no indication of when we will be able to hold our meetings, work parties or re-commence *Birdswood* trips, but hopefully things will become more optimistic in the coming weeks.

How have you managed to pass the time during this strange period? Most people seem to have been clearing cupboards, gardening, doing jigsaw puzzles or, like me, catching up on outstanding paperwork, sorting books and finding history-based television programmes, which were great at first, but they seem to be repeated so many times that I could almost recite the script. Also many people have, for the first time, found the joys of such programmes as Teams, Zoom and Skype to keep in touch with family and friends, as well as work colleagues. We also have to remember those who are working from home for the first time,

and those who have always worked from home and in some instances are finding themselves busier than ever; also parents who are having to act as 'teacher' as well as Mum or Dad, and those who have had to cope with the immediate effects of the Coronavirus.

Keeping in Touch

Our new email Newsletter seems to be very popular and we have to thank Richard Handley for all the work he has done to get this off the ground, as well as other work he has done for us behind the scenes. The newsletter goes out to all of the members who opted for contact by email on the GDPR form sent out two years ago (and subsequently to all new joining members), as well as many people and concerns who we feel would have an interest in our efforts to restore our lovely canal. If you would like your name to go on the list, please let me know with your email address.

Have you moved house in the last year? I had three copies of the last issue of the *Portal* returned 'gone away' and in two cases I do not have an alternative contact, so these members will be lost to us; please remember to let us know if any of your contact details change; this includes your email address if you have previously given it to us.

Hopefully, by the time I write the next Membership Matters, we will be back to something approaching 'normality' (whatever that is), and we will be able to hold our meetings, work parties and *Birdswood* activities. In the meantime, please keep safe and well.

AQUEDUCT COTTAGE RESTORATION CONTINUES

By Ron Common

Amid the doom and gloom of these strange and unprecedented times, it makes a nice change to report some good news. Despite the lockdown, announced by Boris Johnson on 23rd March, the restoration of Aqueduct Cottage has continued to make progress, albeit at a reduced pace and with some management changes.

When the lockdown was first announced, the project was immediately put on hold. Then, once the Government restrictions were clarified, our builder, Andrew Churchman, kindly agreed to continue working. Social distancing rules meant that his team could no longer be on site, but Andrew was allowed to work alone, with certain measures in place. Since all work is undertaken within a fenced compound, there is no risk of contact with members of the public. Also, all materials are on site and the nature of the work means that much of it can be done single-handed. For added safety, given the remoteness of the site, regular check-in calls are made to Andrew by his team.



The restored gable end.



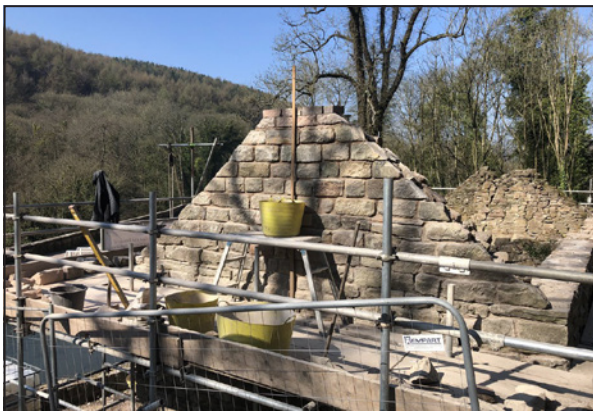
Removal of a large tree root and replacement of the stones revealed the full extent of the recess for one of the gates on the stop 'lock' beside the cottage.

Sadly, the restrictions did not allow our volunteer team to continue on site, so the working parties were put on hold on 16th March. At the time of writing, despite some easing of restrictions, we are still waiting for a date when our volunteers can resume. Also, since most of the Derbyshire Wildlife Trust staff are furloughed, the day-to-day management of the project is being temporarily led by DWT's architect, James Boon, and myself in liaison with the skeleton staff still working at DWT.

The good news is that the repairs to the structure of the cottage have made great progress in recent weeks. I reported in the spring *Portal* that the first major repair, to underpin the front left-hand corner of the building, had been completed. Since then, further structural repairs have been made – the rear right-hand corner of the cottage (which had a tree growing through it!) has been completely rebuilt, the large hole in the front wall (inside face) has been filled, the north gable-end has been rebuilt with replacement stone, and new oak window lintels and a cross-beam installed.

In addition, the front and rear wall heads have been repaired, the raking out of the old mortar is well advanced (the stone facings get a clean-up during this process), and the south gable-end (which had a large settlement crack in it) has been dismantled ready for reconstruction.

It's been fascinating watching our master craftsman at work, thanks to the regular supply of photos and videos on Andrew's Twitter feed. He's enjoyed some great weather and, with the benefit of his elevated working platform, his recordings have provided a rare glimpse of the beauty and tranquillity of the Cromford Canal where, thanks to an almost complete absence of traffic on the A6, the only sound you heard was the birds.



Andrew's view of progress on the gable end.

Andrew commented, several times, on the stunning location and how the unusual circumstances helped him appreciate the natural wonder of the landscape. He said he felt privileged to witness it. I couldn't help feel a sense of envy.



Andrew's view of the aqueduct and passing walkers.

With the stonework repairs nearing completion, the next step is the most eagerly awaited – the rebuilding of the roof. The first stage of this is rather interesting. The restoration plans include creating an open plan first floor which will better utilise the space (intended to be rented out to generate income for the cottage's upkeep). To make

this possible, instead of rebuilding the central wall, which has partially collapsed, the roof will be supported by a large wooden truss spanning the centre of the building. Once the design is signed off by the structural engineer, the individual sections of the truss will be made by a local carpenter, Phil Twigg, who has kindly volunteered his services to the project.

Installation of the truss and the construction of the rest of the roof is expected to take place during the summer. It will feature re-claimed stone tiles at the front and slate tiles at the rear to replicate the original design of the cottage.



The lock gate anchor strap revealed.

The Stop Lock

Prior to being stood down, our fabulous restoration volunteers also made some impressive progress on the cottage grounds, including restoring the stone recess of one of the stop-locks and discovering inlaid ironwork which was part of a gate anchor strap.

Over the years, a tree root had grown between the stones causing them to be dislodged. It took a concerted effort by several volunteers working together to remove the root but, once out, they were able to re-set the

This prompted an on-site discussion with Hugh Potter, Patrick Morris and Ian Hooker about the position of the second stop-gate. Based on a diagram produced by Hugh, and the visible evidence which shows part of the recess of the second stop-gate a few feet away, it was concluded that part of this recess (and possibly another anchor strap) was buried under the concrete footbridge. You can read more about this on page 30. The planning application for the cottage restoration includes the possibility of re-introducing a replica stop-gate sometime in the future, although Derbyshire Wildlife Trust has not committed to this and there would be all kinds of hoops to jump through to obtain the necessary permissions.

However, where there's a will, there's usually a way, and it would be so exciting to see this opportunity come to fruition. It's a matter of historical fact that the requirement for the stop-lock was the reason Peter Nightingale built Aqueduct Cottage in the first place. It therefore sets the context for the cottage. The recreation of at least one of the lock gates would improve the visitor experience by providing a physical example of how disputes over water were resolved in the



Detail of the stonework.

stones back to their original position. Through removing the soil, they also uncovered the anchor strap. An exciting find!

valley 200 years ago. What a fitting and worthy addition to our World Heritage Site that would be.

COVID-19, FCC AND THE AGM

By FCC's Executive Secretary John Baylis BEM

Especially for those members whose only access to the work of the Friends is by reading *Portal*, this report brings you up to date on our actions regarding Covid-19.

On 11th March, at the trustees' request, I wrote to all committees and work party organisers asking them to follow the Government's suggestions on hand washing and cleanliness, and that no person should attend a meeting, a work party or as crew for *Birdswood* if they had any potentially infectious symptoms, such as high temperature/fever/coughs in which case they should stay at home and self-isolate. No volunteer or employee should feel pressured, or be pressured, to attend if they were not entirely comfortable in doing so from a medical or welfare perspective. Shortly after, following further Government advice, all meetings and work parties were cancelled.

On 31st March, following the Government's restrictions on non-essential leisure businesses and the need to practise public separation, along with the requirement for group maxima, all *Birdswood* boat operations were cancelled until further notice and the Weighbridge Office Shop remained closed. This was particularly necessary as many of our volunteers are in the critical age group and/or have long-term illnesses. *Birdswood* will not operate until the national situation has improved; in the meantime the Boat Operations Manager has been designated as a 'furloughed worker' under the Government's Coronavirus Job Retention Scheme.

Consequently, the *Birdswood* phone line will not be taking messages or enquiries on bookings. Existing bookings will be postponed to a date to be arranged by the customer when *Birdswood* operations recommence



and any payments made carried forward to that time. This complete closedown is in line with other similar organisations such as the Arkwright Society at Cromford Mills, Derbyshire Wildlife Trust and the Inland Waterways Association. All charity trustees are responsible to the Charity Commission for the

appropriate management and wellbeing of the charity and its members and have been working from home by telephone and email.

Following the cancellation of the Annual General Meeting on 20th April, I contacted the Charity Commission asking its advice on re-scheduling the AGM if this was beyond the time frame in our constitution. The reply was "The Commission understands our concerns during this period and we [the CC] will be taking as flexible and pragmatic approach as possible. If you feel that in the best interests of your charity, and to follow the Government's public health guidance, it is necessary to cancel or postpone your charity's AGM that



DCC car parks at Cromford Wharf and High Peak Junction were blocked off until restrictions were eased in mid-May.

Photo: Hugh Potter



Derbyshire County Council put up posters like this at all access points to the canal
Photo: Hugh Potter

will be fine. You should record the decision you have made to show good governance.” At the commission’s request the audited accounts and trustees’ report have been sent to the commission.

We hope that by the autumn edition of *Portal* the personal separation may have been relaxed and, if that is the case, we could have the AGM at an autumn meeting. If that is not possible we could hold a ‘virtual’ AGM using the results of proxy and postal voting. We already have the postal responses from those members not intending to attend the original AGM. However, those members who would have attended the AGM on 20th April, and did not send a postal vote, may now do so by completing the voting form sent out with the last *Portal* and sending to secretary@cromfordcanal.org before 30th June. This form is also on the FCC website along with the audited accounts for 2019. If we can arrange an AGM in the autumn any postal or proxy votes from those attending the AGM will be null and void.

Following the Prime Minister’s minor relaxations of the Government’s guidelines on 10th May, personal distancing will continue for some time, probably several months.

We continue to be in contact with the Arkwright Society, Derbyshire County Council and the Inland Waterways Association and resumption of work parties may depend on their advice. It is unlikely that cafés and pubs will reopen before July and use of the Cromford Canal will be restricted to walkers

and cyclists practising personal separation.

If there are any further relaxations they will be posted on the FCC website and emailed to those who have requested the email Newsletter.

Birdswood

The new hydraulic motor has been purchased but requires considerable modification to the housing in the rudder and hydraulic pipework. We had made contact with four local firms to do various parts of the work but all have stopped work as they were deemed to be non-essential. However, they are all likely to be back at work and able to complete the job before *Birdswood* is allowed to re-start cruising.

Legacy Windfall

In 2019 I received a phone call from a solicitor’s office in Cheshire asking if we were a registered charity as they were writing a will and we may be left some money. Then, towards the end of 2019, I had an email to say that the person had died, and that we would be getting a legacy when probate had been granted. Much to my surprise, at the end of May, £40,000 was deposited into our account by the solicitors. We are extremely grateful for such a generous legacy; however, we are still not sure who the donor was or even if he/she was a member of FCC. Due to the current lack of action due to Covid-19 we have deposited the money in a building society account pending starting the work at Langley Mill.

In the past we have received smaller donations or legacies from members, but this legacy demonstrates that mention in wills can generate a generous donation or legacy. Currently, banks, charities and solicitors are obliged to strictly follow the guidelines of the Financial Conduct Authority to prevent money laundering and often take advise before progressing such things as legacies. If you or anyone you know is thinking of making a donation or legacy please contact the Chairman, Treasurer or Secretary who will give strictly confidential advice.

WORK PARTY REPORTS

John Guyler offers what is inevitably a shorter than usual report

5th February, Chase Bridge

Led by Chris Broome, a team of 12 volunteers from the environment department at AECOM in Chesterfield came along for the day to help clear vegetation and reeds from a 100m section of the canal, some 300m north of Chase Bridge, between Ambergate and Whatstandwell. A large amount of reeds were piled on the towpath edge for drainage.

Chris Broome, FCC's Chartered Water Engineer, worked for AECOM until his retirement in 2017. Last year he organised a larger group of volunteers from AECOM to litter pick along the Erewash Canal south of Langley Mill. Chris hopes the FCC will continue to have

teams of volunteers from AECOM in the future, to help with canal maintenance. Their help is greatly appreciated.

5th February, Pinxton Wharf

Seven volunteers had a very productive day at Pinxton Wharf. John Dyson had his usual bags of litter, comprising empty beer cans and sweet corn tins. These are, I am told, angling essentials. Pity they can't have some exercise and walk to the litter bin. Three bags of litter picked. The vegetation team worked opposite the Boat Inn, clearing some 30m of very dense foliage and saplings. It was a very successful day.



Assistance from DCC's tractor and trailer to clear dried-out reeds.

Photo: John Guyler

5th February, Cromford Wharf

Four of us worked with driver Sean and the tractor and trailer from Derbyshire County Council Countryside Services. The main job was to lift the reeds which had been pulled previously and dumped on the towpath to drain and allow any waterborne animals and insects to get back into the water. We were working just south of Lawn Bridge. Loading the bucket on the front of the tractor and the trailer at the back we got into a good rhythm, loading in a matter of a few minutes. The tractor went off to tip the load behind the toilet block at Cromford car park. Whilst the tractor was away, we pulled more reeds a bit further down the stretch. We estimate that 15 tons of reeds were moved away to the dump.

Join Us

If you feel you would like to join the work parties when they resume, please contact John Barker 01773 760358 or email work@cromfordcanal.org.

12th February, Codnor Park

Working from the Codnor Park Reservoir car park – always a pleasant area to be in – 11 of us began work just over the bridge where the path crosses the water. We cleared some overhanging trees and shrubs which were encroaching on the towpath, then we moved to the brick weir and cleared some serious sized pieces of branches from the channel. A winch had to be used on some of the bigger pieces. The team succeeded in cutting and clearing a number of trees that were in danger of eventually falling in the channel.

19th February, Westwood Farm & Codnor Park

Five of us were at John Boucher's work shop to build the steps that were to be fitted at the Forge site (see page XX). The other eight removed saplings and a couple of large branches from the channel on the offside between the water and Coach Road. A lot of vegetation was cut down, the areas spaced out, so there is still refuge for wildlife.

26th February, The Forge, Jacksdale

Sixteen of us were fitting the steps to the forge – see page XX.

4th March, Lower Hartshay

Five of us cut brambles and vegetation growing over the towpath. An area was cleared and raked to allow wildflower seeds to be sown. The area near the sunken boat was tidied and a lot of brush cleared.

4th March, Cromford Wharf

Again, we had the services of Sean with the tractor and trailer, helping 11 of us finish clearing the pulled reeds on the south side of Lawn Bridge – five loads. We then moved to the north side and cleared a long length of reeds, with a lot being pulled by the *Birdswood* crew work party on the far side of the canal. A

long hard day to get the job finished, this was the last chance before the nesting season. The total load for the day was estimated at 20+ tons.

11th March, Lower Hartshay

With all the heavy rain that had fallen, there was a lot of water in the channel which was overflowing the towpath. The culvert to the wetland had blocked with some seriously thick pieces of tree. With some persuading, with a long bar and a great deal of effort from Malc Chisnell and John Barker, the logs went



Clearing the blocked culvert at Hartshay.

Photo: John Guyler

through the culvert very quickly and the torrent of water following them was impressive. Other work parties that day had to be cancelled due to high water levels.

A Temporary Halt

Little did we know that would be the last of the work parties for the foreseeable future due to the Coronavirus lock down. Apart from any serious situations, no work parties are being allowed, but John Barker is already planning for return to normal service, whenever that will be.

NEW STEPS TO FORGE SITE

John Guyler on FCC's work to improve access to the Forge site at Jacksdale



A view of the area when it still looked like a working canal. The entrance to Portland Basin was through the bridge on the right (aka 'Humpy' Bridge) and the Butterley Standard Bridge crosses the canal where the boardwalk and steps are now. Unfortunately we have no images of the original bridge which stood here until 1902.

The FCC work party was asked to participate in the construction and fitting of new steps from the canal to the Forge site at Jacksdale. These lead up the bank from the boardwalk close to the entrance bridge to Portland Basin (aka 'Humpy' Bridge). The location was originally the site of Lawn Bridge, demolished in 1902; later the Butterley Co built their 'Standard' Bridge here, which stood from 1943 until 1998 when it was demolished.

The timber and fittings were supplied by the Friends of Belper Park, a charity and conservation group that bought the former Codnor Park Forge site by donations.

Funding for the steps was from a Derbyshire County Council Action Grant. This was primarily to improve access to the Forge site for walkers of all ages and to better connect the villages of Codnor Park and Jacksdale. The steps were a primary part of this plan, as were kissing gates and information boards. The handrails, which are still to be fitted, have been funded by an anonymous donor.



*Fitting the first flight.
Photo: John Guyler*



Digging out for the first flight – note the flooded board walk at the bottom.

Photo: John Guyler

The Forge site was brought to the attention of the Friends of Belper Park by Butterfly Conservation and has two Biodiversity Action Plan species resident (Dingy Skipper and Small Heath). In total up to 25 species have been recorded; the intention is to improve much of the site to enable butterfly species to flourish and to protect ground-nesting birds. Some woodland will be left, and specific trees will be planted which benefit particular

butterflies. Other areas will be developed to benefit dragonflies etc.

The FCC work party group project leader John Boucher put on his civil engineering hat and worked out the angle of bank and determined that two sections would be needed, with a level section between. Each flight's stringers (side pieces) would be 4.2m long with 1.0m wide risers.

Four of us arrived at his workshop one Wednesday and, under his supervision, began by setting the wood out, and then giving it the builders' ritual: all walking around it, standing

looking at it, blowing cheeks out, rubbing chins and then offering the first pieces up.

Luckily, John, being the professional civil engineer that he is, had made some gauges and drilling fixtures to produce the correct angle of the incline.

Using the fixtures, two of the stringers were drilled with the correct spacing for the step boards to be fitted across. These were fitted into place with two, 200mm timber bolts at

each side, working down the whole length of the section. When all were fitted loosely into place, the alignment and positioning of each step was checked and adjusted before the whole assembly was tightened up.

To check that the whole assembly was true and square, measurements were taken across diagonal corners. We found we were within 3mm of square.



An overview of the lower steps, the boardwalk and 'Humpty' Bridge.

Photo: Ken Brockway

Fitting the Steps

The day before fitting at the Forge site, we had to load the steps for transport and check the work site. When we were there, we found part of the boardwalk under water with the water level really high. Not, only that, the aggregate – all 12 tons – had been delivered at the top of the Forge site; unfortunately the ground was so boggy that it was dumped just inside the gate, which gave us a big problem getting it the canal side.

On the day of fitting, four of us were on site early and started preparing the site by digging out the existing steps and widening the location; the early start was to ensure the site was ready when the first flight was delivered. When the flight of steps arrived, we had to manhandle it over 'Humpy Bridge' and across the partially flooded boardwalk. The comparison with *Dad's Army* was close; at one point several volunteers nearly had an early bath. We had intentionally kept the initial working group small because of confined working area.

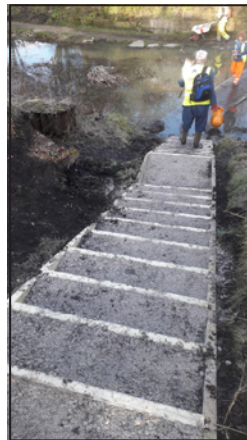
We then began to lock the flight into place with 50mm x 50mm x 700mm angle iron, sledge-hammered into place, and timber screws through the pre-drilled holes in the angle iron.

The call then went out to the other FCC work party group, working half a mile away at Ironville, to come and assist with transporting the aggregate from the Forge gate to site, about a quarter mile, with wheelbarrows. We had anticipated the need for the extra hands but did not need them on site until the first flight was fixed. They all turned up, each with a wheel barrow and spade, and began moving the aggregate. It was a long, slow operation due to the really wet conditions underfoot. The first flight was then part-filled with backfill from the digging-out and then aggregate.

The next phase was to go back to the workshop and load the second flight; we were not able to carry both flights at once go due to the weight.

The second flight was delivered and successfully manoeuvre across the boardwalk, then carefully lifted into place. Eventually it fitted, after digging away at the bank to get the alignment correct. With it locked into place, the intermediate level section between the two flights was built and then we started to back fill the risers to within 12mm of the top edge, to allow for a finish dusting to be put on later. Moving the aggregate turned into a major job with volunteers alternating to bring barrow loads back. The top approach to the steps was also landscaped to finish the job.

Eventually after a very long day and moving several tons of rubble and approximately seven tons of aggregate, the job was done. A great day, lots of laughs with great group of people. We had sixteen volunteers at the peak of the work, producing a total, including build and transport, of 122.5 volunteer hours for the project. We still have to put on the handrail and build another flight of steps with handrail about half a mile away to allow a circular walking route – but that's when we are allowed to get back to work.



*The double flight almost completed.
Photo: John Guyler*

Join Us

To help with FCC work parties, contact John Barker: work@cromfordcanal.org. For Friends of the Forge, contact Sally Fisher: sallyfisher28@icloud.com.

CIRCULAR CANAL WALKS – 7 HEAGE

Ken Brockway offers Heage windmill, views over Amber Valley and Wingfield Park plus Bullbridge aqueducts and Buckland Hollow Tunnel



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2020 Ordnance Survey.
Media 025/20.

Distance: 4 miles.

Start point: Heage, Eagle Tavern DE56 2HU.

How to get there: Bus 6.2 and 6.3 from Ripley, Derby and Belper. See Traveline for details. Car park on street with consideration.

Refreshments: Eagle Tavern, Excavator and Canal Inn; also Black Boy in Heage.

Set off along the road with the Eagle Tavern on your right. Note the hair salon, once a branch of the mighty Ripley Co-operative Society. As the road bends left take the second road right, signed to Nether Heage. Follow this, passing the school and down the hill. Don't miss the best views of Heage windmill. Look

for a bungalow number 4c on the right and take the footpath between it and Brook Cottage.

Enter the left field and keep to the hedge on your left, cross a stream by an old stone bridge and continue. After the next stile turn right and follow the hedge on your right. Join a lane and turn left. Cross the road and take



*The splendid
6-sailed Heage
windmill.*

*All photos: Ken
Brockway*



Old stone bridge at Nether Heage.

You soon discover why as the lane becomes a track at the back of houses. Cross the disused rail line then drop down to join the A610. Cross with care.

From the traffic lights take the road under the bridge; this is Bullbridge with the vast Stevenson's dye works site on the left awaiting housing development. At the canal bridge turn right or continue to the Canal Inn. The canal here is briefly in water. The path narrows to pass a bungalow then a house built on the canal bed. You also cross over Drovers Way before the path opens out along the remains of the embankment leading to the aqueduct over the River Amber and site of aqueducts over railway and road.

After crossing the railway on a huge footbridge, cross the road on

the footpath opposite, cross the field to a step stile, then a squeeze stile.

Turn right onto road and continue for 100m. Turn right towards Gun Lane Farm then immediately left onto a footpath into the field. Follow the hedge on your right uphill. In the second field ignore the gate right. From the brow of the hill is a view of Ambergate with the 'underground' reservoir up on the hill and the National Grid gas depot below. To the right is Bullbridge; the nearest prominent white building is the Canal Inn, towards which you are heading. As you descend, move away from the wall to locate a hidden path just to the left of the gorse bushes. This leads to a road which you follow to the right into Ridgeway.



The isolated and curiously named Starvehimvalley Bridge.

At the cross roads, take the road opposite, the level with care and climb the embankment to rejoin the line of the canal. Follow this well



Wingfield Park.

defined path behind houses passing Sawmills gauging narrows. At the approach road to Lockwood's take a short detour right over the 4-arch bridge to see the original canal bridge, abandoned after the canal was moved to accommodate the railway. After crossing Lockwood's approach road and climbing the steps, the path continues close by the busy road but you have time to admire the view across into Wingfield Park.

The short Buckland Hollow Tunnel brings you to the Excavator Inn. Bear right to pass under the bridge which carried the Midland Railway's Pye Bridge Branch, then across the car park and continue through the gate.

Follow the track then after 300m bear left through a gate into an oasis with water on your right and just around the bend Starvehimvalley Bridge. The canal here has been widened to make a fishing lake. Pass under then over the



The rocky approach to Buckland Hollow Tunnel.

bridge and take the footpath initially with the water on your right. Follow the track across the field the with farm buildings on your right turn left with a hedge on the left and later a hedge also on the right. Follow this track uphill to eventually arrive back in Heage.

BROWN'S BRIDGE PROGRESS

By Doug Readle of FCC's Strategic Restoration Committee

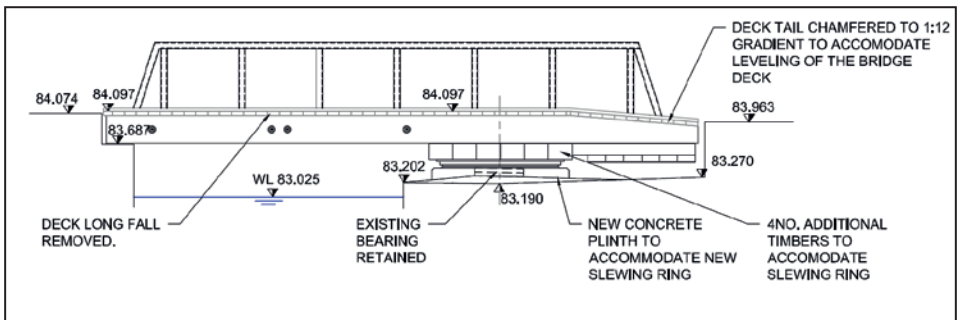


The base of the existing pintle bearing as seen when the bridge was removed for replacement in 2011.

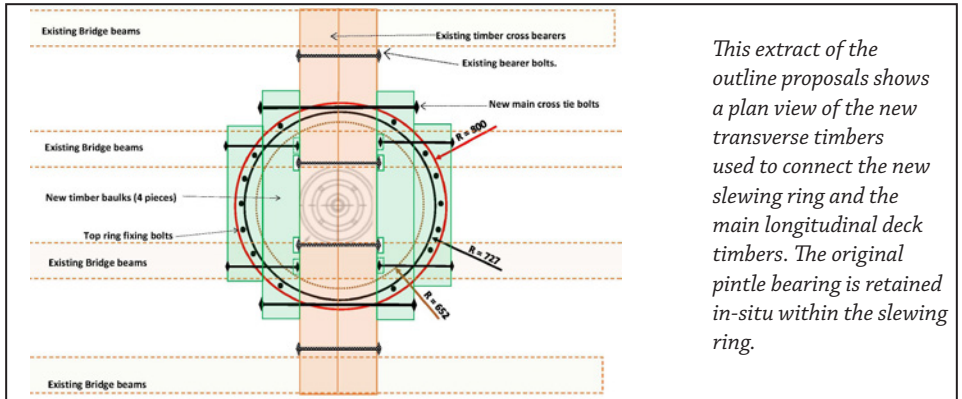
For those less familiar with it, Brown's Bridge is a timber deck swing bridge supported on a pintle bearing, which allows the bridge to open and close. It is believed that the cast iron pintle bearing, which is at least of heritage value if not an original feature, is now beginning to show its age and seize up. The easiest way to improve the operation of the structure would be to undertake a like-for-like replacement of the pintle bearing. However, the structure forms part of the wider High Peak Junction site, which is a Scheduled Monument. Therefore this requires special permission from Historic England who have a statutory duty to protect England's historic buildings and structures.

As many of you who have been involved with *Birdswood* will know, Brown's Bridge at High Peak Junction has become increasingly difficult to operate in recent years. Currently the bridge takes at least two members of the boat crew to open and close and, on occasion, more. The Friends have been looking at this for a while now and are bringing together a scheme to improve the operation, whilst safeguarding the heritage of the structure.

To balance the heritage value of Brown's Bridge with the need for a smoother operation, Dave Ratner and John Boucher developed a scheme to mount the timber deck of Brown's Bridge onto a slewing ring (similar to those used on tower cranes). This would sit around the existing pintle bearing, allowing the original bearing to remain in situ, whilst also making the opening and closing of the structure much easier.



An extract from the technical drawings produced to support the Approval In Principal.



This extract of the outline proposals shows a plan view of the new transverse timbers used to connect the new slewing ring and the main longitudinal deck timbers. The original pintle bearing is retained in-situ within the slewing ring.

Following on from the sterling work of Dave and John, I was asked to take the project from concept through to the detailed design phase, including liaising with the relevant statutory bodies. The two key groups that were consulted on the proposed works were Derbyshire County Council, who own the structure, and Historic England, who needed to approve any works proposed.

The two vital documents that would allow the Friends to undertake the proposed works were:

An Approval In Principal (AIP) – This is reviewed by Derbyshire County Council’s Structures team and details all the technical parameters of the proposed works.

Scheduled Monument Consent – This is reviewed by Historic England and establishes the impact of the proposed works on the heritage value of the historic site as well as the owners who are impacted by the works.

Without the above documentation no work can be undertaken to the structure and we would be in limbo, so getting these documents prepared and signed off was key.

Bringing together these documents and getting approval has been a long process. The AIP itself is a 130-page document that requires detailed technical drawings of the proposals, backed up with structural calculations to demonstrate the design is viable. The AIP also details the proposed construction sequence and also how the project will minimise the health and safety risks associated with the

structure, from design and construction through to maintenance and decommissioning. Liaison with DCC and Historic England has been a key part of this process.

I am very pleased to announce that both the Scheduled Monument Consent and AIP have now been approved! This is a major milestone in the scheme as it allows the Friends to complete the detailed design process (which is now largely complete) and start to think about plans for construction.

The Friends are now in the process of bringing together a project team to plan the construction of the improvements. If any readers would like to help with this, please don’t hesitate to get in contact through the Editor. We are particularly looking for volunteers with experience of delivering Civil and Structural schemes on site.

Over the past four years John Baylis and Waterway Recovery Group East Midlands, based at Langley Mill, have done considerable work on the bridge deck and bearings but, with the constraints of time and working to DCC instructions, improvements to the original bearing was not possible.

FCC would like to thank the following people who have been instrumental in getting the Brown’s Bridge scheme to this point: Dave Ratner and John Boucher of FCC; John Thompson of DCC Countryside Services; Rob Spencer of DCC Highway Structures; Nick Carter of Historic England; with special thanks to Doug Readle for his huge input to this project.

LEAWOOD JOTTINGS

By Ian Yates

Before Coronavirus stopped us working, we had started to replace the wooden blocks on the air pump. The wood has been cut, formed to shape and put in place. We were in the process of finally trimming the blocks and fitting the copper wire that holds the blocks in place when we had to stop.

Whilst we were waiting for the blocks being made we drained the outlet in preparation for the fitting of a new packing ring to the pump. We removed the defective top ring and put in the last of the packings we had in stock. It was then decided to add another ring on top but this time revert to the use of rope, tallow and graphite. A search on the internet found a supplier that could provide a natural fibre rope of 36mm diameter which is close enough to the 40mm (or 1.5in) that we needed.

A source of tallow was then required. Tallow is not readily available due to restrictions in its use, so after a discussion with my local butcher it was decided that dripping or beef fat was the best option. In his opinion processed dripping would not be suitable so I was given a large piece of beef fat to render down. Luckily I live alone and duly rendered the fat down – Reg 5 for 2 hours in a large roasting tin! This provided two medium saucepans of fat ready for use. We fitted the rope in place and then plaited the ends together ready for the fat and graphite mix to be applied.

In the meantime we had left the securing ring resting on the top of the securing bolts. During the week we had a downpour which caused the canal level to rise and the water went over and through the boards and filled the rear outlet again. The weight of water lifted the packing rings and allowed water to pour out into the engine house; the whole area was soaked and the atmosphere very damp.

The stop planks were quickly sorted out and the flow stopped, the downside being that the rope was now saturated and we were unable to put the hot fat mixture on it. The rope was lifted out and placed on top of the pump to dry out. The securing ring was lowered right down and nuts put back on the bolts to stop the packing being lifted should the planks overtop again. At this point worked was stopped.

The existing lagging on the boilers is old and disintegrating so it has been removed from Boiler 43 and bagged ready for disposal. This is the boiler requiring the most work so it was our intention was to use 44 for the season. However now both boilers will be out of ticket in June so we are going to have a look at a way forward. Quotations have been sourced and passed to Derbyshire County Council but it now depends on the funding position before any commitment can be made to further steamings. If possible it may be prudent to get both boilers sorted out whilst we are in this situation.

A way of working in line with social distancing has been tentatively worked out using a one way system through the building as the access path is too narrow to let people pass. The access stairs would have to allow people to go up or come down separately but the handrail will be an issue with people touching it and will require regular cleaning. The other pinch point is by the driver as this is a narrow passage but if things are working correctly the driver can stand aside.

We will need discussions with DCC Health & Safety before anything can be put in place. A volunteer who lives nearby has kept his eye on it during his daily exercise and things were fine apart from the lawn being overgrown. He has now moved away so will have to see how

things work out, but with the travel restriction lifted someone may be able to visit.

Due to our age or medical condition several of us are locked down for twelve weeks so that will restrict the volunteer numbers available. Also most of the work left will not comply with

social distancing guidelines as you get very close putting the air pump back because of its position under the engine. Hopefully there will be better news next time and we will have moved on. Everybody keep safe; we will return at some point.

RECRUITING VOLUNTEERS

Peggy Cope and Alan Oakley recently volunteered to become FCC's Recruitment Volunteers

Well what a start to our new role as Recruitment Volunteers!

Full of enthusiasm and ideas all ready for the season, then all comes to a halt by Coronavirus!

Alan delivered lots of leaflets and I organised events for us to attend during the summer, all of which have had to be cancelled. We did however attend one at the beginning of March at Cromford Mill and actually got details for six new volunteers. Wonderful. Hope they will still be interested when everything is back to normal.



Prior to the Coronavirus lockdown, Peggy and Alan, with cheery smiles, demonstrate just one aspect of volunteering.

Photos: Hugh Potter



Peggy was in the process of contacting coach companies and nursing homes to increase our trip numbers and charters. These can of course be contacted again later in the year.

Our Boat Operations Manager will send out an email asking for help at the events we attend, when we start again, so if you could spare an hour to help 'man the stall', it would be much appreciated.

We do hope everyone keeps safe and we look forward to seeing you when we resume.

LOCKDOWN DOORSTEP THERAPY

Marie Brown on the reassurance and benefits that nature brings

A couple of things have become abundantly clear during this lockdown and it is worth noting them: some people have no idea what beauty is literally right outside their door; and volunteers are key to the upkeep of any natural beauty spot in the UK.

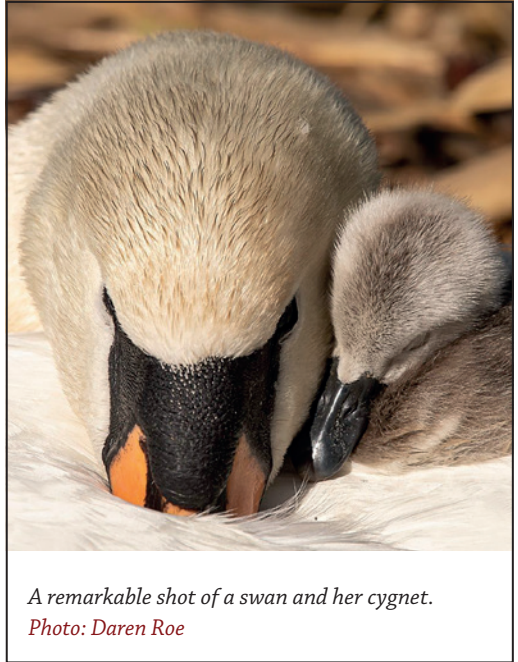
Walking around the local area has become a new way of exercising as we all know, but countless people have also told us that they had no idea that the canal, the reservoir and the Forge Nature Reserve was even here, let alone how stunningly beautiful they are. Over the last few months we have met hundreds of families taking a new interest in nature, wildlife, conservation and outdoor education; this appreciation for all things local has been a joy to behold.

There are, of course, some of us that feel like we wanted to keep it all a secret so that we preserve what has taken years to build and we didn't want to risk the health and wellbeing of our water voles, otters, shrews and other rare creatures. We were also wary about the monster we created in highlighting the abundance of wildlife to other people.



Ducklings are one of the first signs of spring.

Photo: Jill Castledine



A remarkable shot of a swan and her cygnet.

Photo: Daren Roe

But, if the reservoir and the canal can go some way to helping people cope with this frightening and worrying situation in which we find ourselves, then surely we need to accept that and embrace the new way of living and begin to educate the new visitors on how to care for the area, hopefully then creating a whole new group of potential volunteers, funders and future conservationists.

The other side of the increased visitor numbers of course is an increase in litter, and the dog poo bins need emptying more regularly. With many of the Wildlife Trust volunteers being unable to do the work parties and some of the staff on furlough, it comes down to a dedicated few people to keep the area clean of litter and the bins accessible to the visitors.

Thank you therefore to all of our volunteers who are out there litter picking and emptying bins – we salute you and thank you.

Our volunteers provide a vital role in keeping the area free from litter and dog mess and their presence locally also shows people that work is still happening and to remind them that things don't just grow wild and become beautiful; it takes hard work and a consistent effort to maintain the areas we have cared for over the years.



Great crested grebe and 'humbug' chicks.

Photo: Andrew Reardon



A pair of kingfishers appreciates the improved canal environment.

Photo: Phil Wardle



Mandarin ducks are one of the more exotic species to be seen around Codnor Park Reservoir.

Photo: Paul Cutting

Whilst we are not sure when life will return to normal, the wildlife just gets on with it and the spring babies herald the fact that life goes on, the world keeps turning and one day soon life will return to normal. The question we need to ask ourselves is what parts of normal are not worth returning to and what parts are something that we need to do more of, including, I hope, a renewed interest in our local communities and the abundance of resources on our own doorstep.

If you would like to learn more, get in touch on our facebook page 'Cromford Canal & Codnor Park Res' or by email at cromfordcanalgroup@outlook.com.

COAL, COAL, COAL, COAL

Christine Johnstone looks at traffic on the Cromford Canal 200 years ago

1820 PERMIT to navigate the under-mentioned GOODS. CROMFORD CANAL. on board May 9 1820 Boat No. 912

SPECIES	Where loaded.	Where landed.	Weights by Bill of Lading.	Dwt Tons.	Tonnage Weight.	Miles, per Ton.	RATE		
							per Ton	lb.	sh.
Sundries	Buckland Hollow	Leicester	1418 7/2	1 1/4	8 1/2	5 7/2			
of Pinxton			1	1	6 1/2	10			

1820 PERMIT to navigate the under-mentioned GOODS. CROMFORD CANAL. on board May 9 1820 Boat No. 393

SPECIES	Where loaded.	Where landed.	Weights by Bill of Lading.	Dwt Tons.	Tonnage Weight.	Miles, per Ton.	RATE		
							per Ton	lb.	sh.
Coal	Birchwood	Grantham	1420 3 1/2	5	8 1/2	110			

A page from the permit book of 200 years ago showing two entries for 9th May 1820. The first is for J Cutts on an N&G Wheatcroft boat carrying 'sundries' [ie mixed goods] from Buckland Hollow and Pinxton to Leicester. The second shows Richard Ellison on his own boat carrying coal from Birchwood (Selston has been crossed out) to Grantham.

In May 1820 Mr & Mrs Nightingale welcomed a new daughter, who they named after her birthplace – Florence. And John Constable exhibited a painting of Harwich lighthouse at the Royal Academy. But what was happening on the Cromford Canal 200 years ago?

Fortunately, we know the answer, or at least some of it. Between 1st and 24th May 1820, 436 Cromford Canal permits were issued at Langley Mill for 554 cargoes. The permits for the rest of the month and from other canal toll offices have not survived, but these 436, along with all the other surviving permit receipts, have been transcribed and put on a database. This is some of what they can tell us about the Cromford Canal in May 1820.

At Langley Mill, about four times as many cargoes were going away from the canal compared with the number coming on to it. There were 112 inbound cargoes, which were going to Benty, Selston, Codnor Park, Golden Valley, Pye Bridge, Pinxton, Buckland Hollow, Bull Bridge, Chase, Whatstandwell or Cromford. 77 cargoes were described as sundries (miscellaneous goods), 19 were industrial (cotton, puncheons, castings, iron and pit wood), 12 were food for people or animals (beans, hay, bran, malt, salt and wheat) and there was also one cargo each of 'empty things', soap, slates and timber.

There were 442 outbound cargoes recorded at Langley Mill, of which 323 were coal and eleven either coke or coke and coal.

One-third of the 323 coal cargoes came from Pinxton and Brinsley (64 and 46 cargoes respectively). Almost another third came from five more pits or wharves: Beggarlee (35), Birchwood (31), Swanwick (28), Benty (21) and Codnor Park (21). The remaining 58 coal cargoes came from eight places: Forge, Hartshay, Oakerthorpe, Somercotes, Fenton's, Riddings, Stoneyford and Top Lock.

Other than coal and coke there were 60 outbound stone and mineral cargoes (lime, grit, clay, lead), 31 consisting of sundries and 'goods' and 17 of industrial products (castings, iron, bricks, skins and troughs).

The outbound cargo was carried all over the East Midlands and to some surprisingly distant places beyond. Locally, the Nottingham Canal took freight to Eastwood and Nottingham. Between 1st and 24th May, 3,343 tons of coal were carried to Nottingham alone.

Destinations on the River Trent included 'Trent', Bridgford, Carlton, Gainsborough, Newark (just coal, 642 tons of it), Gunthorpe, Fiskerton and Collingham, as well as Sawley upstream. Downstream off the Trent, 178 tons of coal went along the Fossey to Lincoln, another 128 tons of coal continued on the River Witham to Boston and 31 tons turned off the Witham to get to Sleaford along the Sleaford Navigation. Freight also went from the River Trent onto the Grantham Canal, to Gamston, Cropwell, Clawson, Woolsthorpe and Grantham (which received 240 tons of coal and some other items).

Along the Erewash Canal, cargoes were shipped to Ilkeston and Long Eaton. From the Erewash Canal 1,062 tons of coal, plus other items, reached Derby on the Derby Canal. A few cargoes went onto the Trent & Mersey, for Shardlow, Wychnor (Staffordshire), Birmingham, Runcorn and Manchester.

The River Soar was the start of another set of routes. Cromford Canal cargoes were shipped to Kegworth, Mountsorrel, Loughborough (mostly coal, 732 tons of it) and Leicester (again, mostly coal, 1,118 tons). From the Soar, the Melton Mowbray Navigation took

cargoes to Ratcliff and to Melton Mowbray (178 tons of coal). Beyond Melton Mowbray, 188 tons of coal continued on the Oakham Canal to Oakham. And beyond Leicester, on the canals now part of the Grand Union, 442 tons of coal went to Market Harborough and other smaller cargoes to Northampton and London.

The remaining destinations – Barkley, Bowden, Debdale, Gally Hill, Stoke and Sutton – are difficult to pin down exactly, either because the name applies to more than one place, or because I can't find it on a map!

Just one cargo stayed entirely on the Cromford Canal – 35 tons of lime from Hermitage to Langley Mill.

And who was moving all this cargo? Four 'captains' were kept really busy, working with ten or more cargoes between 1st and 24th May. They were J Cutts, A Grundy, Samuel Kenney and G Smedley, who all worked for N & G Wheatcroft. Fifteen 'captains' worked with between five and nine cargoes – J Key, Samuel Mather, Thomas Strutt and Thomas Thacker for N & G Wheatcroft; J Jordan and Thomas Parkes for John Coke Esq; Robert Turner for himself, and W Athey, J Denrose, Thomas Eaton, J Howell, W Morris, Samuel Shepherd, J Timms for other owners.

The owners of the boats fall into three distinct groups – small, medium and big businesses. Boats belonging to 156 owners carried just 299 cargoes in total, an average of two cargoes per owner. This could have been two cargoes on one journey, or two journeys each with one cargo. Boats belonging to fourteen owners carried 142 cargoes in total, an average of ten cargoes per owner. These middle-sized businesses were not necessarily based on the Cromford Canal. They belonged to Gabriel Brittain, J Coke Esq, G Wharton, Samuel Thorpe, J Sutton, J Roper, J Barlow, John Eaton, W Stokes, W Hunter, J Dobson, G Athie, R Fothergill and Robert Turner. There was just one big business, the locally-based N & G Wheatcroft, whose boats carried 123 cargoes.

THE OUTSIDE CLASSROOM

Andy Cadman recalls using the canal as a teaching resource

When I was teaching in Derby (and Belper) in the 1980s and '90s, I organised annual field trips to High Peak Junction on a cross-curricular Environment Day involving all departments in the schools where I taught.

High Peak Junction was once the hub of transport activity and is now a true haven of heritage and wildlife – the perfect place for a day of discovery.

Around March every year I would meet with Senior Derbyshire Countryside Ranger Andy Pollock to plan the day. As a result, the school was very lucky to have many of the resources at High Peak Junction to utilise on the day. The day was normally planned for mid-June when the weather and other conditions are normally good. If it does happen to rain at this time of year the children dry out very quickly!

The Science, Mathematics, English, History, Geography, ICT, Outdoor Education, Creative Arts and Technology departments all worked together to organise the day usually for all year 8 students (sometimes year 9). Some students in other years were also involved. As a result the children got a good understanding of how all aspects of the curriculum are interrelated and not compartmentalised. Everyone, whatever their background or ability, had the opportunity work and learn together.



Examining the results of 'pond' dipping.

The aims of the day were threefold:

- To make the students aware of the richness of the local environment;
- To enable students to see the environment as a learning resource;
- To make students aware of the availability of the environment for leisure activities.

Activities on the day often included 'pond' dipping in the canal just outside the workshops, working at the 19th century blacksmith's forge in the oldest surviving railway workshops in the world, estimation and measurement in maths, RE in Arkwright's church, an Alison Uttley trail (Alison Uttley was one of the country's first female physics graduates, born at nearby Castle Top Farm, a writer of over a hundred books including *Little Grey Rabbit* and a pioneering time-slip novel *A Traveller in Time*, about the imprisoned Mary, Queen of Scots), ecology in ancient woodland (Bow Wood), art work, orienteering at Black Rocks, visiting an 19th century beam engine,



Creating a live web feed.

geology (visit to the National Stone Centre/quarry), industrial archaeology at Cromford Mill, environmental drama and much more. At the same time the children learnt much about the history of the canal and High Peak Railway.

The students each did one activity in the



All good friends at the picnic lunch.

morning, then back to HPJ for a picnic lunch and then a second activity in the afternoon. Work completed in the day was followed up by the various faculties using a cross-curricular approach.

The ICT department were on hand with their portable resources – using video cameras to record events and environmental sensors to collect information to support the other groups in recording things such as water flow and temperature. Often they would also create a web page on the day ‘as it happened’, recording the activities of all of the groups.

Teams of reporters were out with the groups using digital cameras, tape recorders, video cameras, walkie-talkie radios, mobile phones, and laptop and palmtop computers to follow events as they unfolded. They set up a number of computers located in a tool room near the working forge, with up to four people at any one time, all busy transferring their work into web-page format. They uploaded the work that they had produced during the day using a modem and the phone line in the HPJ shop (remember, this was in the days of ‘dial up’). Parents, children in other years in the school and students from other schools were all asked to follow the action as the web page changed and developed during the day.

High Peak Junction is very quiet this year.

Let us hope that once the current pandemic is over the school parties will return, the special buzz that they create comes back once more and greater use is made of this very special educational resource.

**Tell me and I forget,
Show me and I may remember,
Let me participate and I
understand**

(sometimes ascribed to Confucius)

LEAWOOD STOP GATES

By Hugh Potter



A pair of stop gates in an almost identical layout to those at Leawood. These were on the Dudley No 2 Canal near Selly Oak and have a second set of gates at the far end of the 70ft chamber. Was this how Leawood was originally?

As work on Aqueduct Cottages was getting underway in March, there was much discussion about the 'lock' which prevented loss of water from the Leawood Arm to the main canal and vice versa. This started with the discovery of one of the iron 'collars' which would have held the gate in place.

Why a Stop Lock?

When the arm was built by Florence Nightingale's great-uncle, Peter, in 1802, there was great concern over loss of water. The original arm (which was twice as long as what you see today) was fed by the Lea Brook which would normally have run into the Derwent. As a result, the mill owners lower down the river insisted that any water that fed into the canal was returned to the Derwent – not to the Cromford Canal! Equally the Cromford Canal Co (CCC) did not want its water to 'go to waste' on the arm.

So it was insisted that a 'lock' be built to prevent any such loss; as a consequence of someone having to control this lock, we assume the cottage was built to house the lock-keeper.



A map of 1811 shows what appears to be a full-length lock, despite the gates being depicted the 'wrong way' (ie not both in same direction)

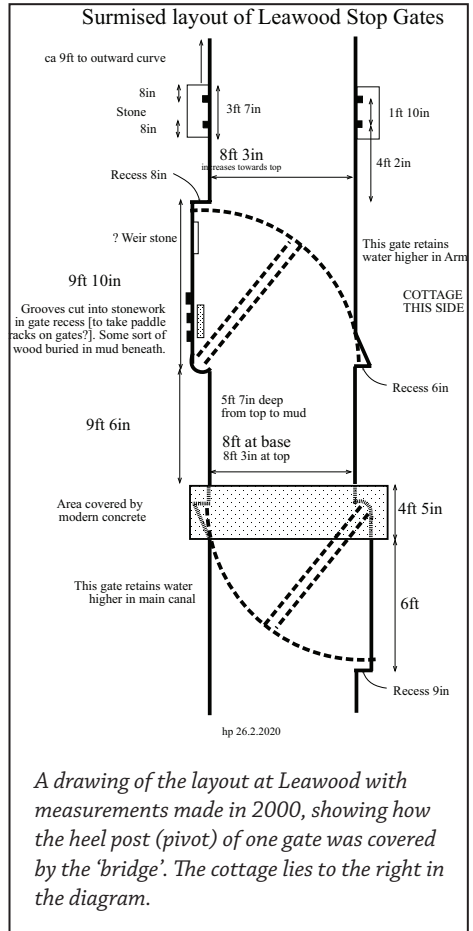
A conventional narrow canal lock is around 70ft long, 7ft wide and has a set of gates at each end. In this case, since the height of water could vary, it is assumed that two gates were installed at each end to allow for the water level either side to be higher. Something approximating to this is shown on a map of 1811.

Anyone who knows about locks will realise that if the gates are accurately drawn, this would not work as they are facing opposite ways, so we assume it is diagrammatic. What is significant though is that it shows a full-length lock with gate(s) at each end. Today we have just one set of gates, so was the drawing inaccurate or were the other set of gates and the lock chamber removed? I think the latter.

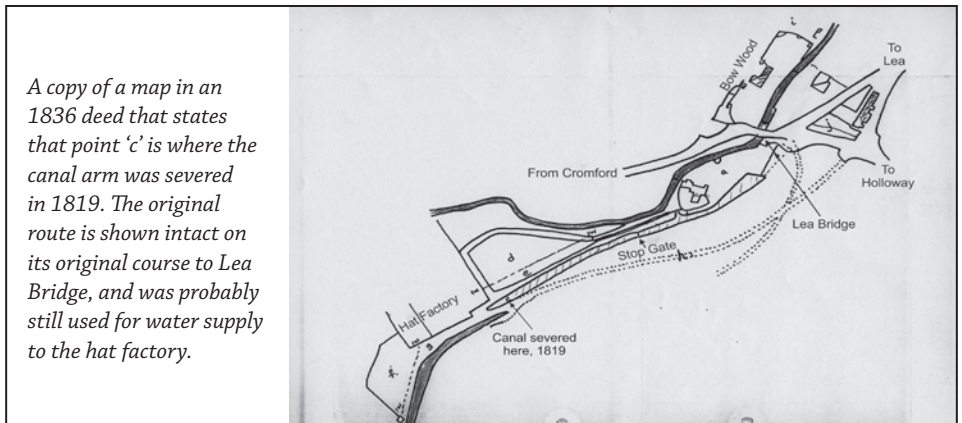
Short Arm, Long Story

For a short arm, it has a complex history. On 28th May 1800 CCC agreed to give £100 to Peter Nightingale (PN) towards building the arm provided he built “a good and sufficient lock and stop gate at the junction with the canal” and kept the water at least one foot above that in the main canal.

However, on 31st March 1802 PN wrote to the CCC that Messrs Strutt would not permit the Lea Arm water to stand higher than the main canal and so instead he proposed “in a dry season always to cut off the communication between the two waters by keeping the Lock empty except when a boat is wanted to pass through and then fill the Lock with the Lea Brook water and immediately when the boat has passed let all the water out of the Lock into the Derwent and another launder to be laid by the side of the lock from the top water in the New Cut to the Cromford Canal and to convey thereon as much water



A drawing of the layout at Leawood with measurements made in 2000, showing how the heel post (pivot) of one gate was covered by the 'bridge'. The cottage lies to the right in the diagram.



A copy of a map in an 1836 deed that states that point 'c' is where the canal arm was severed in 1819. The original route is shown intact on its original course to Lea Bridge, and was probably still used for water supply to the hat factory.

as should be ascertained to drench through the stop gate out of the Cromford Canal. The water to be gauged every time a boat has passed through and the gates and shuttles to be locked so that no boat shall pass through unless my agent be present with the keys. Every Sunday the Lock to stand filled level with the water in the Cromford Canal”.

However the CCC had an alternative plan and in July 1802, when Joseph Wass was about to lease the Arm, the terms above were altered thus:

“That the surface water in the Cut [ie the Leawood Arm] shall at all times except on a Sunday be six inches higher than the surface water in the summit level of the Cromford Canal and that on a Sunday it shall never be less than one inch higher.

“That the surface water in the Lock communicating between the Cut and the Canal shall be at all times not less than one inch higher than the surface water of the Canal.

“That the waste water weir of the Cut shall be made in the lock between the Cut and the Canal and shall be at all times one inch higher than the surface water of the Canal.”

So it is from the above and from the single drawing that we must deduce what exactly this lock looked like. My gut feeling is that it was a conventionally sized lock such as were used for stop locks on most canals with the double set of gates beside the cottage and, at the far end of the 70ft lock chamber, either a single gate holding the water in the Arm at a higher level or a similar pair of double gates.

But it was not long before water supply became much less of an issue, after which the lock would effectively become redundant.

The Shortening of the Lea Arm

But how did the water issue ‘go away’? There are no further mentions of the stop lock/gates in the CCC minute books, so we must look elsewhere.

From documents in the Derbyshire Records Office we learn that in October 1819 the

owners of mills on the River Derwent called a meeting “to take into consideration the abuses committed upon the river by the turning of the different brooks or streams of water into the Cromford Canal”. Exactly what the abuses were is, unfortunately, not explained. For whatever reason, the solution was to cut the canal arm into two, removing the Old Wharf at Lea Bridge and building a dwelling house, weighing machine and crane at the New Wharf Yard at the current terminus. The house and much of the wharf structure survives today.

The best explanation seems to be that the Lea Brook fed the canal arm but that water was also used to power a wheel at the Hat Factory, adjacent to the new terminus, before being returned to the Derwent. Presumably the mill owners believed that some of ‘their’ water was also feeding the main canal, despite the lock. Indeed, John Farey stated in 1817: “The Lea-wood Branch has a Lock at its commencement, but at times, its water is not higher than that in the canal”.

Whatever the reason, there must have been little argument against it because cutting off half the canal arm that was only built 17 years previously and resiting the wharf must have been very costly, and also involve extra land transport to the new wharf.

A map of 1836, shows the point where the arm was severed in 1819. But the date when the new wharf buildings were built seems not to have been for some time as there is reference to them being completed by 1836, when there is also talk of moving the ‘iron weighing machine’ from the old to the new wharf.

Then & Now

So why do we have only one pair of stop gates today? My best guess is that the old lock chamber and the second set of gates were removed and the canal widened to save further maintenance. But until further documentary evidence comes to light the “jury must remain out” on this.

EREWASH ACHIEVEMENT

In an article in January 1991 *Waterways World*, Hugh Potter recalled reaching Langley Mill in 1969



Boat shafts proved ineffective in clearing the accumulated rubbish from the cill of the top gates of Stenson's Lock, so . . .

Photos: Hugh Potter

I've always said "It's a small world" on the waterways, but I was nevertheless surprised to see in *Erewash Outlook*, the journal of the Erewash Canal Preservation & Development Association, an item entitled 'Langley Mill Boat Record' by Ron Henshaw. The introduction read as follows:

"In 1969 the canal was in a very bad condition, it was closed, and few boats had been to Langley Mill for many years. It was decided to give a certificate to any boat getting there.

"And so they began to try; it must have been very hard work, often having to pull the boat

by hand. Below is an extract from the record showing the first dozen boats and the dates that they made it."

And the first boat that made it, on 1st April (no joke!) 1969, was the 46ft *Lark*, with a draught of 2ft 6in crewed by the "Peak Forest Canal Society".

Bells began to ring. Along with fellow PFCS members taking a break from digging out Marple Locks, we hired the *Lark* from Ernie Thomas at Hatherton on the Staffs & Worcs Canal, and took her up to Langley Mill – and a check with log books and photographs confirmed the date: 1st April 1969.

We had realised it would be a struggle to get up the Erewash, but had not realised at the time that we were the first boat to obtain the certificate for that achievement.

I don't recall much about the trip other than the sense of adventure in navigating the 'unnavigable' – and the need to extract a sheet of corrugated iron from a conveniently nearby derelict shed so as to stem the flow of water through the top gate of Stenson's Lock. Immovable rubbish on the cill was apparently stopping them from making a proper mitre.

At the terminus (below the now restored lock to the Great Northern Basin) it was extremely difficult to wind the boat, or to get close enough to the side to moor, and we began to wonder if the prominent sign to which we eventually tied was prophetic.

The Seeds of Restoration

And so the seeds of restoration were sown. The ECPDA's first achievement was to get boats to go up to Langley Mill. Their next step – a mere 3 years later – was to restore and reopen the bottom lock



... a sheet of corrugated iron was 'acquired' and used to stem the flow of water between the gates as the lock was emptied. Holidaymakers of today might be a little surprised by the boating techniques of 50 years ago!



Made it! Lark at the 1969 terminus of the Erewash Canal (or is it the start of the Cromford Canal?) at Langley Mill. Only one way out until the Cromford is restored?

of the Cromford Canal and to dig out the Great Northern Basin and the beginnings of the boatyard beyond.

The successful boatyard has expanded over the years and now FCC's plans are to extend the canal even further through two more locks and under the A610.

I'd like to be on the first boat to reach that new head of navigation when it opens . . .



Only three years earlier, in 1966, Jack Parkinson's Grey Dove had a slightly easier time of reaching the head of the Erewash, and indeed the first lock of the Cromford. This remarkable photograph shows the lock still intact (but as far as we know they did not pass through it) along with the lock cottage and toll house. Three years later the lock gates had been removed and the cottage bulldozed into the lock.

Photo: J. G. Parkinson/Online Transport Archive



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