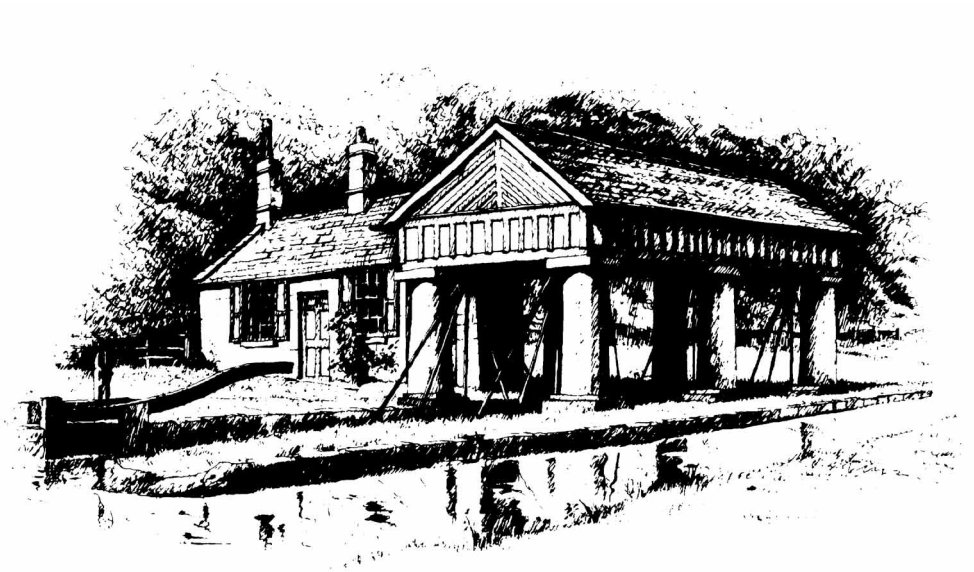
# WEIGH-HOUSE

## THE MAGAZINE OF THE SOMERSETSHIRE COAL CANAL SOCIETY



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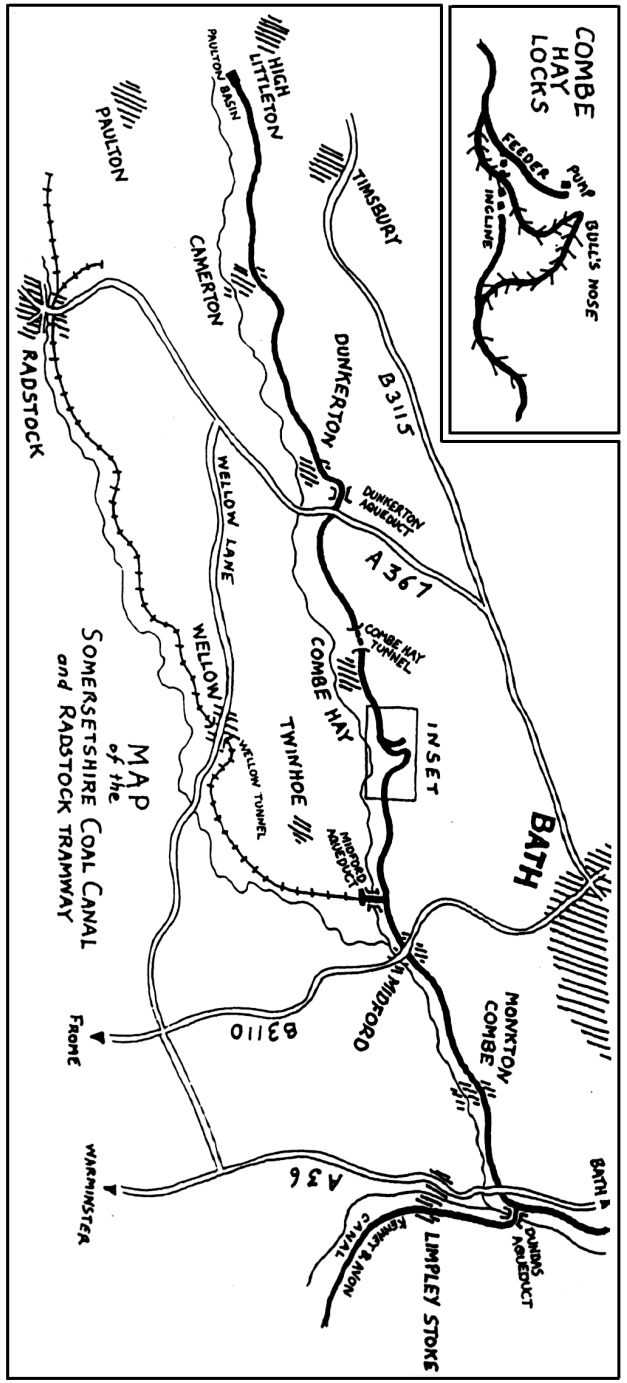


Website: http://www.coalcanal.org

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*Website:* http://www.coalcanal.org



The Somersetshire Coal Canal Society was founded in 1992 to:

'FOCUS AN INTEREST ON THE PAST, PRESENT AND FUTURE OF THE OLD SOMERSETSHIRE COAL CANAL'

The Society became a registered charity in 1995 and now has the Objects:

1) To advance the education of the general public in the history of the Somersetshire Coal Canal
2) The preservation and restoration of the Somersetshire Coal Canal and its structures for the benefit of the public

**********

Registered Charity Nº 1047303
Registered under the Data Protection Act 1984 Nº A2697068
Affiliated to the Inland Waterways Association Nº 0005276
Inland Revenue reference code for tax purposes: CAD72QG

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MEMBERSHIP FEES
(as at 1st June 2003)
£7·50 (Family / Individual) £5·00 (Senior Citizen / Student)
£150·00 (Life) payable by lump sum or four annual instalments

Membership Application Forms are available from
the Membership Secretary, **John Bishop**
73, Holcombe Green, Upper Weston, Bath BA14HY
☎ 01225 428738 *E-mail:* **cesjtb@bath.ac.uk**

*Society Website:* **http://www.coalcanal.org**

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THE VIEWS AND OPINIONS EXPRESSED IN THIS MAGAZINE DO NOT NECESSARILY REPRESENT OR CONVEY THOSE OF THE SOCIETY

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The Editor welcomes any letters, articles, photographs *etc* for inclusion in **WEIGH-HOUSE** and will try to include them in full, but reserves the right to shorten them if space is limited.
Please send articles and correspondence for the next edition of **WEIGH-HOUSE** to:
Adrian Tuddenham 88, Mount Road, Southdown, Bath BA2 1LH
☎ 01225 335974 *E-mail (not HTML):* **adrian@poppyrecords.co.uk**

Sunday 1st September —10:00

**WORK PARTY — Location to be advised**

For further details please contact: *Derrick Hunt* ☎ 01225 863066

Sarurday 14th *and* Sunday 15th September — 09:30 *to* 16:00

**HERITAGE OPEN DAYS**

**Guided tours around the Lock Flight**

*Parking:* Layby near Bridge Farm, Combe Hay

For further details please see website or contact: *Tony Yates* ☎ 07748 113832

**Walks**

These are all circular walks unless otherwise noted. You only need to arrange your transport to and from the meeting point. Any walks marked † tend to be in the form of detailed explanations of short sections of the canal and its relationship with the locality; and, as such, are less suitable for young children.
Dogs are normally welcome (except where indicated) and must be kept on leads at all times.
Check the website for any last minute changes: `www.coalcanal.org`

**Work Parties**

Venues are often arranged at short notice, always check with the contact person listed for that particular event.

## PROGRESS AT PAULTON FOUNDRY

**A GENERAL VIEW OF THE SITE OF PAULTON FOUNDRY — April 2013**
**The site has been cleared of vegetation and rubbish to allow an archæological investigation.**



# WEIGH - HOUSE Nº 65



## EDITOR'S NOTES

The recent issue of a 'flyer' instead of a full edition of Weigh-House was something I had been hoping to avoid, but the alternatives of leaving members in the dark about forthcoming events or sending out a vitually empty magazine were even worse. Several major articles had been planned, but every one of them hit a snag and could not be completed in time. However, this edition more than makes up for the delay, as it contains three excellent research articles which add significantly to our knowledge and understanding of the S.C.C.

The title of our long-running series "Shareholders of the S.C.C." had to be changed when Derrick Hunt's researches revealed that Richard Bowsher, Clerk to the S.C.C. and one of the key figures in its development, did not actually own any shares in the venture. Perhaps shareholding by Officers was forbidden because it would have created a conflict of interest — do we have any experts on the history of company law among our readers who could confirm this?

Mike Chapman's two articles, as always thoroughly researched and well-supported by documentary evidence, give an insight into two technical aspects of the operation of the S.C.C. which we have not seen explored in this depth before. Whilst it has been quite interesting in the past to discover the layout of the mechanical contrivances of the S.C.C. from their remains, a whole new world is opened up when we start to piece together the day-to-day workings of these devices; especially when we realise that the whole canal and coal mining enterprise of the area depended entirely on the few skilled men who kept these machines working daily throughout the 100-year life of the canal.

**Adrian Tuddenham**

## CHAIRMAN'S NOTES

From my temporary exile in Manchester I am still able to keep in touch with recent events involving the S.C.C and have even managed to contribute to some of them when my health permitted. It seems as though the change in constitution to allow the Society to undertake restoration was the correct decision and was taken just in time to allow us to rebuild a culvert at Paulton Dry Dock. This is something which, a few years ago, we would technically not have been permitted to do. Let us hope that further restoration projects follow on from this one.

A more subtle change in our activities has also taken place: instead of asking landowners if we may undertake work on their land, we are more and more frequently being asked by the landowners themselves if we could come and do some work on their 'patch'. Such is the enthusiasm that some have even become mildly frustrated when our limited resources only allow us to work on one, or at most, two, projects at a time.

If the present improvement in my health continues, I hope to be fit in time to chair the A.G.M., so I look forward to meeting you all there.

**Patrick Moss**

## ANNUAL GENERAL MEETING

**The next Annual General Meeting of the Somersetshire Coal Canal Society**

**will be held on**

**Tuesday 18th June 2013**

**at the Radstock Museum, Waterloo Road, Radstock, commencing 7.30 pm.**

*Please note that there will be no guest speaker this year because of the need to inform members about developments which have taken place*

## NEW MEMBERS

The Society welcomes the following new members:

| | | | |
|---|---|---|---|
| Mr. D. Lee | Paulton | Mr. D. Sumner | Stockport |
| Mr. T. Richardson | Bath | Mrs. S.M. Bransgrove | Southdown |
| Ms. T. Spencer | Clandown | Mr. T. Marshall | Widcombe |
| Mr. J. Goring | Peasedown St.John | Mr. M. Stanford | Chilcompton |
| Mrs. W. Czarnuszewicz | Camerton | Mr. F.R. Freeman | Shoscombe Vale |



## DATES FOR YOUR DIARY — 2013

Sunday 19th May —11:00 *to* 16:00
**OPEN DAY — TIMSBURY & PAULTON BASINS**
**Guided walks around the area**
*Parking:* Paulton public car park *or* top of Hanham Lane *or* near Goosard Bridge (do not obstruct access to the Sewage Works).
For further details please see website or contact: *Tony Yates* ☎ 07748 113832

Sunday 2nd June —10:00
**WORK PARTY — Location to be advised**
For further details please contact: *Derrick Hunt* ☎ 01225 863066

Sunday 16th June —10:00
**WALK — CARRYING COALS TO DUNDAS — 7. Monkton Combe to Dundas**
*Meet:* Brassknocker Canal Centre car park
For further details please see website or contact: *Mike Chapman* ☎ 01225 426948

Tuesday 18th June — 19:30
**ANNUAL GENERAL MEETING**
Radstock Museum, Waterloo Road, Radstock BA3 3EP
For further details please contact: *Derrick Hunt* ☎ 01225 863066

Sunday 7th July —10:00
**WORK PARTY — Location to be advised**
For further details please contact: *Derrick Hunt* ☎ 01225 863066

Sunday 21st July —10:00
**WALK — CARRYING COALS FROM RADSTOCK — 1. Radstock to Writhlington**
*Meet:* Radstock Museum car park
For further details please see website or contact: *Mike Chapman* ☎ 01225 426948

Sunday 4th August —10:00
**WORK PARTY — Location to be advised**
For further details please contact: *Derrick Hunt* ☎ 01225 863066

Sunday 18th August —10:00
**WALK — CARRYING COALS FROM RADSTOCK — 2. Writhlington to Single Hill**
*Meet:* Radstock Museum car park
For further details please see website or contact: *Mike Chapman* ☎ 01225 426948 →

## CARRYING COALS...

Mike Chapman's series of walks "Carrying Coals to Dundas", which followed the route of the northern branch of the S.C.C., has proved so successful that he has agreed to lead some more walks on the same theme. This time the southern branch from Radstock to Midford will be the subject of his explorations. The first walk, in July, starts from Radstock.

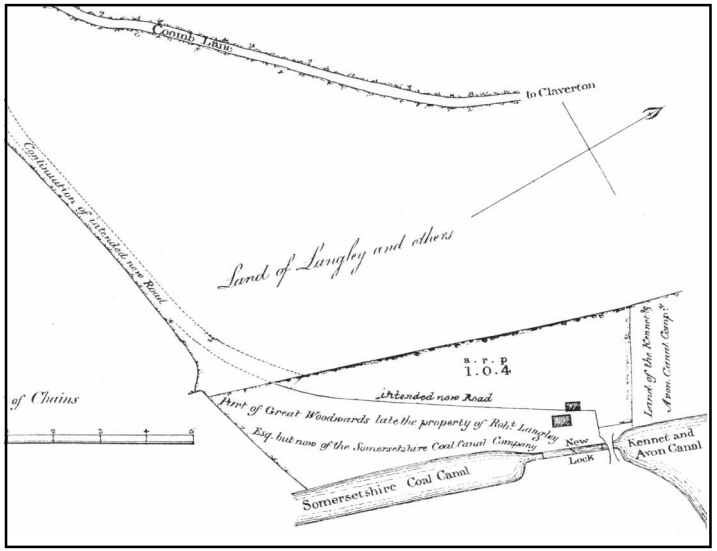



***Fig. 5.***
**DUNDAS JUNCTION as shown on an agreement dated 1823 between S.C.C.C. and Kennet & Avon C.C. to jointly build a road.**

Today the original intention of the new connecting road is less obvious, as it was later cut in two by the Warminster Turnpike road, built in 1833. The lower part still remains as a private trackway from the present main road, but the upper part, from the Monkton Combe junction, has since been adopted as a public slip road between Brassknocker Hill and the main road, the latter replacing the old lane to Claverton which can now only be traced along the hedgerows in the adjoining fields.

**Mike Chapman**

## DIGITISATION OF THE WILLIAM SMITH ARCHIVE

*The Oxford University Museum of Natural History has won a £60,000 grant from Arts Council England to create a digital archive of William Smith, the 'father of English Geology' (1769 - 1839).*

**WILLIAM SMITH'S FIRST GEOLOGICAL MAP PUBLISHED IN 1815**

In 2015 the university will mark the 200th anniversary of Smith's publication of the first geological map by launching "William Smith Online", a digital resource which will give access to the museum's archival collection of correspondence, manuscripts, geological maps and sketches relating to Smith's life and work. The archive contains an extraordinary record of the struggles and achievements of Smith, the son of an Oxfordshire village blacksmith, whose mapping techniques established the scientific methodology for producing geological maps, which continue to this day.



# OBITUARIES

## DAVID FISHER

21st July 1946 – 21st March 2013

David was a Midsomer Norton lad born and bred. He was a gifted artist, winning many awards and earning his living by drawing and painting. He produced several paintings of the Somersetshire Coal Canal, including a fine pencil drawing of the Radstock basin, and a painting of the Ashman steam locomotive hauling a rake of wagons at Wellow.

He has always had a lively interest in local history and industrial archaeology. He was a member of many local societies and groups, including the Wells Railway Fraternity, the Bristol Industrial Archaeological Society, the Somersetshire Coal Canal Society and the Midsomer Norton Society, of which he was a founder member and the first President. He appeared regularly on SCCS walks and at meetings, last appearing at the meeting at the Working Men's club on February 21st 2013.


He married Brenda Simmons on 23rd July 1969. They made their home in the Hole in the Wall, Church Square, Midsomer Norton, very close to St. John's Church, too close when travelling campanologists were ringing the church bells.

David was a most likeable and attractive fellow with a lovely smile, and will be greatly missed by all who knew him. He is survived by his mother Bettina, wife Brenda, daughter Amy and son Mark , and six grandchildren.

**T.M.P.**

## TIM SAMLER

We have been informed that Tim Samler recently died very peacefully in hospital, less than 24 hours after the death of his daughter Fiona. We send our condolences to his surviving family.

# NAVVYING NOTES

*These are proving to be exciting times for the work parties. Our activities are no longer just confined to tidying up the area around the lower locks, as they have been for some years past, but now are extending to fresh sites over a much larger area.*

The work at Combe Hay has been steadily progressing up the lock flight, with the most recent achievements at Lock 2. Anyone who remembers going on some of our earliest walks and trying to find any evidence for Lock 2 in the hopeless tangle between Locks 1 and 3 will be astonished at the photograph below.

**LOCK 2 RECENTLY UNCOVERED**
**Showing the remains of the bottom and top gates still in place**

Thanks to the heroic efforts of several work parties, we now have a clear view of the best preserved lock of the entire flight. Not only are parts of the frames of both gates still in place, but the metalwork of the hinges is almost intact, the stonework of the forebay floor is almost undamaged and both ground-paddle sluices are in reasonable condition, although missing their metalwork. Careful planning ensured that this work went as smoothly as possible, the first work parties confining their activities to clearing the towpath and lock sides, gradually working in from the pounds above and below. That created a safe working area for Richard Hignett and his chainsaw to tackle the tricky task of safely felling a huge tree which was growing at an awkward angle across the lock and threatening to demolish the stonework around the bottom gates. Finally came the thankless task of barrowing-out tons of accumulated muck,



Whatever the case, it is now becoming clear that although there was a steady increase in coal traffic along the S.C.C. from 1812 onward, there was probably a decrease in the transport of stone owing to the recession in the building trade which lasted until the early 1820s, a factor perhaps in the failure of William Smith's business. This might provide an explanation for the closure of the canal to K&A barges which would have caused an increasing obstruction to the more profitable coal traffic. The reduction in the width of all the S.C.C. bridges on the lower level by the addition of towpath shelves, to ease the passage of narrow-boats, may also have been part of this policy. No great advantage however would have been gained by the saving of water through the narrower entrance lock. With a fall of six inches this would have been negligible.

In effect, this appears to have been a typical example of the Canal Company's policy of always being ready to make alterations according to changes in circumstances. However, when the stone trade picked up in the 1820s, the advantage of building a completely new wharf on the K&A at Dundas was soon recognised, apparently by the Coal Canal Company itself. Very helpfully, Tim Wheeldon has been able to confirm for us, from his deeds relating to the canal property associated with the entrance lock, that by this time the Company had built a completely new road to the lock site from the crossroads between Brassknocker Hill and the lane from Monkton Combe to Claverton [*See Figs. 4 & 5*].

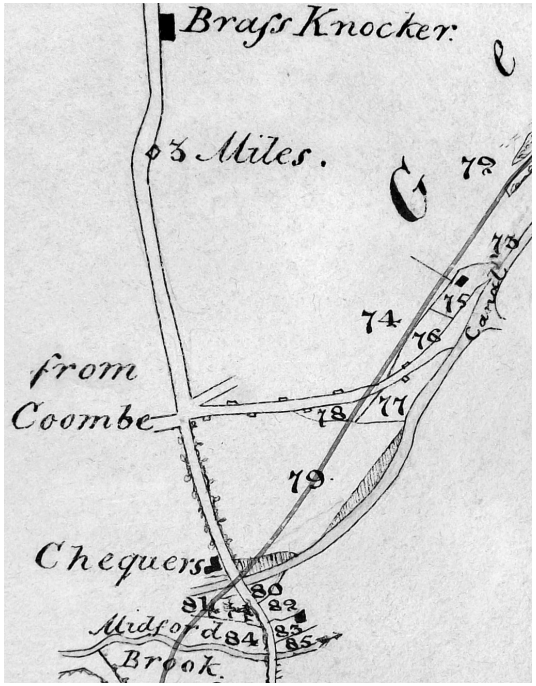



***Fig. 4.*** **DETAIL FROM THE 1833 DEPOSITED PLAN of the intended new Warminster Road, now the A36, which shows the access lane to the canal already in existence, following plot nos.75 (site of Dundas Wharf) to 79.**
***Note that the later Viaduct Inn was then known as The Chequers.***

The circumstances under which land was acquired for the new road, and the motivation for its construction is not yet clear. It would certainly have provided a convenient access to the lock-keeper's cottage. Although the cottage does not appear on the Cruse map of c.1809 (which only shows the entrance lock and bridge), it would almost certainly have been built when the lock was narrowed in 1817. In addition, the new road would allow stone to be brought to a wharf just inside the lock with access to the K&A (although only for narrow boats), the entrance bridge providing access to the available space on the 'wrong side' of the canal. It would also be interesting to know whether Combe Villa (later Claverton Hotel, now Bassett House) on the north side of Dundas Wharf was built at this stage.

However, the deeds show that the S.C.C. Company sold the new road to the K&A Company on 28 November 1823, thereby providing access for a new wharf on the K&A itself. Indeed, it would seem that Dundas Wharf, under private ownership, was already in operation at the time of the sale, as it is listed in 1823 as one of the K&A gauging stations, and it has been estimated that the Acraman crane was installed one or two years later. From here on, it would seem that Dundas Wharf became the sole outlet for Combe Down stone, the only movement along the S.C.C. being for internal use. →

However the early maps do not suggest any suitable turning places or 'winding holes' for full-size barges on the lower level of the canal (except perhaps just inside the entrance lock), nor has any evidence yet been found that any of these sites were equipped with cranes or other wharfside structures. This raises the question whether special 'double ended' craft were needed for this purpose, and may explain a notice published jointly by the S.C.C., K&A and Wilts & Berks in 1801:

> COAL CANAL
>
> At a Meeting of the Committee of the Somersetshire Coal Canal Company, holden at the Christopher Inn, Bath, the 11th day of March, 1801,
>
> A Plan and Section of the Boats recommended by the deputations from the respective Committees of the Kennet and Avon, Wilts and Berks, and the Somersetshire Coal Canal Committees, having been produced:
>
> *It was Resolved*; - That in future no Boats to be hereafter built, should be permitted to navigate on the Upper or Lower Level of the Somersetshire Coal Canal, unless built agreeably to the plan and specifications produced; of which Resolution,
>
> *Notice is hereby given*
>
> Any person inclined to build boats to be navigated on this, or the Kennet and Avon, or Wilts and Berks Canal, may see the plans and specifications, on application to Mr.Bowsher, Bath; Mr.Bennet, Beckington, Somerset; Mr.Whitworth, Chippenham; or Mr.Mills, Stoke-bridge, near Bath.
>
> [March 1801, *Bath Chronicle*]

Unfortunately, what these specifications contained is not known, and may only have applied to coal carriers.

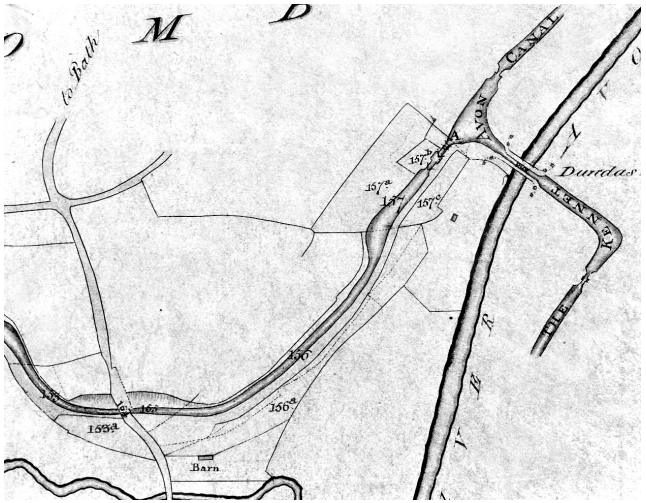



***Fig. 3.*** **DETAIL FROM THE CRUSE MAP**
**showing the stretch of canal between Brassknocker Hill and the entrance lock.**
***Note the widened part of the canal a little way inside the entrance lock, possibly a winding hole, which was later narrowed.***



which was cheerfully undertaken by some of our newer recruits — who must have wondered what they had let themselves in for.

While this was taking place, a second work party was at Paulton Basin, working on the Dry Dock. Richard Fox, who owns part of the canal at Radford Mill, had offered us a day's use of his mini-digger several months ago; but the site had remained flooded throughout the Winter and prevented any work. By April, the ground had dried out enough to bring the machine on site using Richard Hignett's Land Rover and trailer; but at the last-minute this plan was thwarted by a sheared bolt in the Land Rover's engine. Eventually Richard Fox saved the day with his tractor and an agricultural trailer. With Mike Chapman on hand to advise on where to dig and explain anything we might find, the digger set to work.

**RICHARD FOX**
**at the controls of his digger**

Based on our previous experience of S.C.C. excavations, we knew we were looking forward to a long hard day's work with little reward at the end of it. We expected that everywhere we dug with the certainty of finding something, we would find nothing — or at least, nothing like what we intended. Every question we tried to answer would merely result in a plethora of further questions, each more perplexing than the previous one. But, thankfully, things were different this time...

After a few minutes digging where the northern wall of the dock should have been, we found the northern wall of the dock. We followed along the section of eastern wall which we had previously dug out by hand and immediately discovered the curve of the northeast corner and the rest of the northern wall just where we would have expected them. It wasn't until we dug for the drainage sluice that we came across our first mystery, because there didn't seem to be any sign of the sluice. By then it was late on Sunday afternoon; but we all agreed that the work was so fascinating it would be a shame to stop everything and take the kit away, so we arranged to continue our work party on Monday.

By the end of Monday we had found the sluice and a drainage culvert, both of which had been very solidly packed with clay, which is why their locations were not very obvious. The culvert had also been demolished for part of its length. Our final discovery was part of the southern wall, which gave us a good idea of the overall size of the dock — by normal canal standards it was huge and could easily accommodate three boats at a time. We hope to give a more comprehensive account of the dock in the next edition of Weigh-House.

**RICHARD HIGNETT REBUILDING THE CULVERT**

The question of what we should do next then had to be answered. Fortunately there was an S.C.C.S. Committee meeting the following evening and with commendable promptitude it was decided that, landowners permitting, we should undertake a full excavation and leave the dock open as an historic site. The landowners were in full agreement, so work immediately began on rebuilding the culvert to give proper drainage to the dock and a safe crossing point for walkers when the excavation work eventually takes place.

# PERSONALITIES OF THE SOMERSETSHIRE COAL CANAL COMPANY

## Richard Bowsher

*Richard Bowsher was a man of great wealth and status who practiced as a solicitor in Bath.*

In partnership with Edmund Broderip, he was originally Clerk to the Somersetshire Coal Canal Company, and later the Somersetshire Coal Canal Lock Fund. He did not own any shares in the S.C.C., but a "Mary Bowsher" is listed as a shareholder. This raises interesting questions, because Richard Bowsher did not marry his wife Mary until 1810, whereas the shares in the name of "Mary Bowsher" were listed in the Act of Parliament of 1794.

It is worth noting that Edmund Broderip also owned no shares in the S.C.C., but a "William Broderip" of Bristol is listed as a shareholder.

Bowsher, however, did own shares in other canals; at the time of his death, his will referred to:-

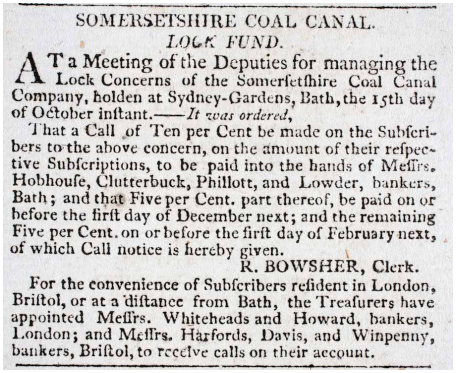
| | |
|---|---|
| Kennet & Avon Canal | 5 shares |
| Glastonbury Canal | 5 shares |
| Regent's Canal (London) | 5 shares |
| Wilts & Berks Canal | 20 shares |

### Biographical Details

| | |
|---|---|
| Born: | 1758 or 1759 |
| Married: | 1810 Mary (Formerly Mrs. Dunbar of Camberwell). |
| Children: | None known |
| Died: | 21 July 1835 London |

There is no mention in the will of his two £100 shares in the Dorset & Somerset Canal. Although he is listed as a subscriber in the D.&S.C. Act of Parliament we do not know whether he actually payed up. If he did, then he lost the money when that canal company failed and the shares became worthless. Thanks to his considerable personal wealth, he survived the banking and property crash of 1793, a remarkable achievement when many others were made bankrupt. He even acted as attorney for fellow developers and architects in their bankruptcy proceedings.

His connections were not confined to the Bath area. He owned the Penrose Estate in Monmouthshire, although we do not know what other connections, if any, he may have had in that area. He was involved with banking in Bristol and was also a member of the Reynolds Commemoration Society; this would have put him in contact with the Reynolds family, which included well-known ironmasters and Shropshire canal promoters.



SOMERSETSHIRE COAL CANAL.
LOCK FUND.

AT a Meeting of the Deputies for managing the Lock Concerns of the Somerſetſhire Coal Canal Company, holden at Sydney-Gardens, Bath, the 15th day of October inſtant.—*It was ordered*,

That a Call of Ten per Cent be made on the Subſcribers to the above concern, on the amount of their reſpective Subſcriptions, to be paid into the hands of Meſſrs. Hobhouſe, Clutterbuck, Phillott, and Lowder, bankers, Bath; and that Five per Cent. part thereof, be paid on or before the firſt day of December next; and the remaining Five per Cent. on or before the firſt day of February next, of which Call notice is hereby given.

R. BOWSHER, Clerk.

For the convenience of Subſcribers reſident in London, Briſtol, or at a diſtance from Bath, the Treaſurers have appointed Meſſrs. Whiteheads and Howard, bankers, London; and Meſſrs. Harfords, Davis, and Winpenny, bankers, Briſtol, to receive calls on their account.

**CUTTING FROM BATH CHRONICLE**
**Showing Bowsher's wider connections to banking in Bristol and London**



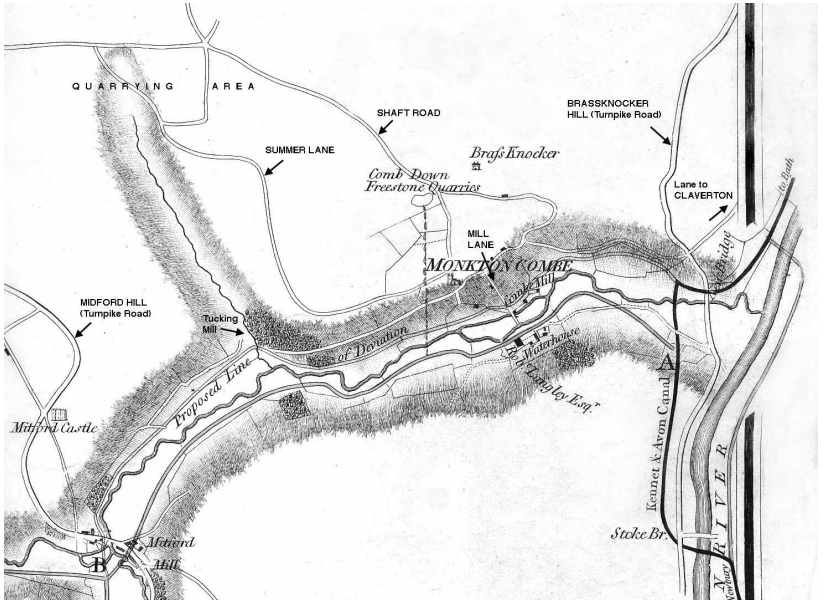



***Fig.1.* DETAIL FROM RENNIE'S 1793 MAP (ANNOTATED) OF THE PROPOSED LINES OF THE CANAL showing the tramway link from Mount Pleasant Quarry and local access roads.**
***Note that the Brassknocker Inn is in the wrong place.***

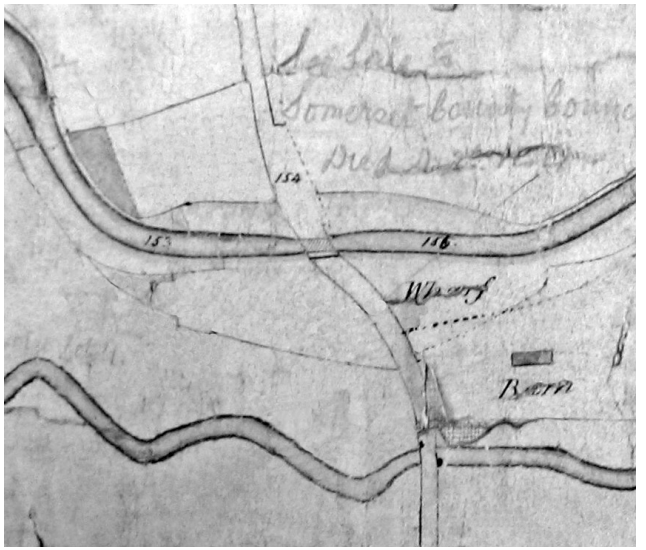



***Fig. 2.* DETAIL FROM THE PRE-CRUSE MAP showing Brassknocker Hill and the canal crossing. The area of the present Canal Amenity Centre is marked 'Wharf'**

→

# A NOTE ON STONE CARRIAGE ON THE S.C.C.

*The following reference to the entrance lock of the Coal Canal was kindly sent to us by David Pollard during his research into the transport of Bath Stone by canal:*

Bath 25 September 1817.
Mr Thomas reported that the Coal Canal Company have a resolution that the entrance lock of the canal at Dundas Aqueduct shall be rebuilt and made wide enough only to pass 25 Ton Barges which will prevent Kennet and Avon Barges from loading stone on the Coal Canal as they have been accustomed to for many years back.
*TNA RAIL 842/32 Kennet & Avon Canal; Western Sub Committee Minutes. p.22.*

Mention here of the carriage of stone from the Combe Down quarries on the S.C.C. by K&A barges led, once again, to some discussion of the function of the lower level of the canal. That a profitable carriage of stone on the lower level was anticipated from the beginning is indicated on Rennie's 1793 map [*Fig. 1*] of the proposed route which shows a tramway (never built) from Mount Pleasant quarry to the canal a few hundred yards on the west side of Monkton Combe village. It is also evident that the canal was made just wide enough for K&A craft, as initially there was no direct road or rail access to the K&A itself from Combe Down in the immediate neighbourhood, whereas there were three sites served by roads (and one later by tramway) suitable for wharfs on the S.C.C., i.e.

1. Midford, adjoining the turnpike road to Hinton Charterhouse - later site of the Weigh-house. Although accessible via Odd Down and Midford Hill, it was the longest way round (probably incurring a higher road or canal toll) and would therefore have been the least suitable.

2. William Smith's later stone wharf at Tucking Mill, with tramway from Summer Lane, built about 1812. Although there is no indication that Smith's tramway was used by any of the other quarries in the area beside his own partnership, this could have been a useful additional asset. However, if the narrow stone arch bridge still visible at Tucking Mill was what William Smith proposed to replace the original drawbridge about the time when the tramway was built, he was evidently not expecting K&A barges to reach this far.

3. Mill Lane in Monkton Combe village, adjoining 'Canal Cottage'. Although a somewhat constricted site, this was the shortest route from the quarries, accessible via Summer Lane or Shaft Road. However, this too would have been impeded in 1811 after the erection of the narrow iron footbridge made at Paulton.

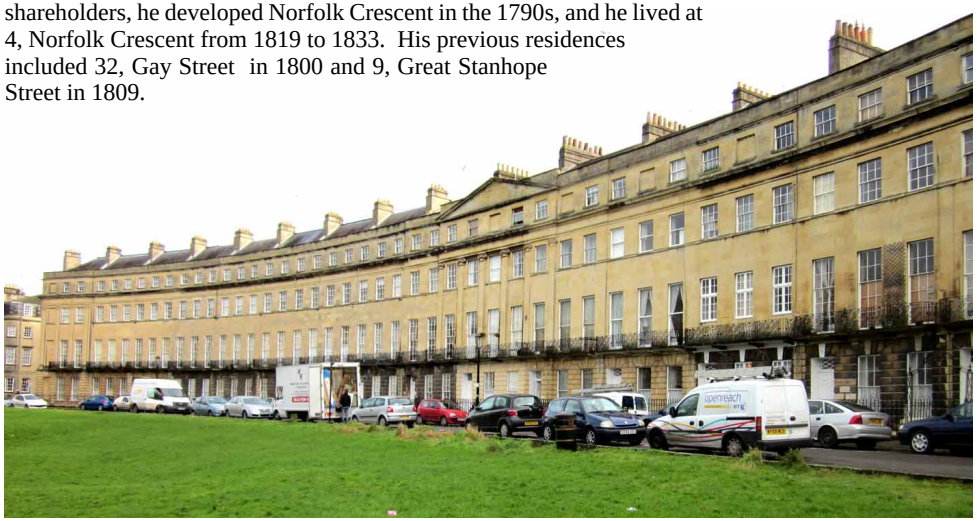
4. Brassknocker Hill (present site of the Canal Amenity Centre) adjoining the turnpike road to Bradford. It is identified as a 'Wharf' on the early Coal Canal map [*Fig. 2*] (but not on the Cruse map [*Fig. 3*]) and was probably used by the Canal Company during the construction of the canal. This seems the most likely mooring for K&A craft, being the nearest to the K&A itself, and also accessible by road through Monkton Combe village. This route would almost certainly have been preferred to the one down Brassknocker Hill, not only to avoid the perilous descent, but also the toll-bar which then stood at the summit.

The Cruse map and other sources show there was no road access to the entrance lock until much later, and the adjoining canal sites, either on the S.C.C. or K&A could therefore not serve as a wharf.



In the Bath area, Bowsher was the promoter of the Bathampton stone export business, employing William Bennet to design the incline, both being already well-known to each other during the building of the S.C.C.

In partnership with Thomas King and Charles Spackman, who were S.C.C. shareholders, he developed Norfolk Crescent in the 1790s, and he lived at 4, Norfolk Crescent from 1819 to 1833. His previous residences included 32, Gay Street in 1800 and 9, Great Stanhope Street in 1809.



**NORFOLK CRESCENT, BATH**
**Bowsher lived at Number 4**

SOMERSETSHIRE COAL CANAL

NOTICE is hereby given, that at the General meeting of the Proprietors convened and held at the York-houſe, Bath, on Wedneſday the 3d day of June inſtant, purſuant to the Act, a ſufficient number of the Proprietors not attending either in Perſon or by Proxy to appoint a new Committee, ſuch meeting was adjourned to that day three weeks; and the ſeveral Proprietors are accordingly requeſted to attend ſuch adjourned meeting at the York-houſe, Bath, on Wedneſday the 24th day of June inſtant, at 12 o'clock at noon, for the purpoſes mentioned in the Act.

*And Notice is hereby further given*, that if at ſuch intended meeting there ſhall not be preſent by two o'clock in the afternoon, ſo many Proprietors either in Perſon or by Proxy, as are intitled to 410 ſhares in the undertaking, every Proprietor who ſhall not be preſent at ſuch meeting, will forfeit to the Company of Proprietors five ſhillings for each ſhare he, ſhe, or they may be entitled to therein.

Forms of Proxies to ſuch Subſcribers who cannot conveniently attend, may be had of the Solicitors.

Bath, June 6th. BOWSHER and BRODERIP.

OAK SLEEPERS for RAIL ROADS.

PERSONS willing to ſupply the Committee of the Somerſetſhire Coal Canal with 7000 beſt Heart of Oak Sleepers—four feet ſix inches long, from eight to nine inches broad, and three inches thick, to be delivered on or before the 21ſt of December next, at Briſtol, Bath, or at Timſbury in the county of Somerſet, about eight miles from Bath, are requeſted to ſend propoſals for ſupplying and delivering the ſame as above, ſealed up, and addreſſed to the Committee, on or before the 23d day June inſtant, at the Office of

BOWSHER and BRODERIP.

Bath, 3d June, 1795.

*Canal Cutting and Maſonry, and Rail Roads.*

SOMERSETSHIRE COAL CANAL.

THE Committee will meet on Tueſday the 23d day of June inſtant, at the YORK-HOUSE, Bath, at eleven o'clock in the forenoon, to receive Propoſals from any Perſon or Perſons deſirous of contracting for cutting, embanking, puddling, and completing that part of the Canal, from Paulton Engine to or near a place called Hopyard, in the pariſh of Camerton, being in length near Two Miles and one Quarter; and alſo from Radſtock to Peglinch, in the pariſh of Wellow, one Mile and Half—for building the ſeveral Road and Occupation Bridges; and alſo for framing and laying out the propoſed Rail Roads from the different Collieries to the Canal, being in the whole about Seven Miles.

Plans, Sections, and Specifications, are left at the Solicitors Office, Bath, and the Lines of Canal and Roads may be received by applying to Mr. SMITH, Surveyor, High-Littleton, near Bath.

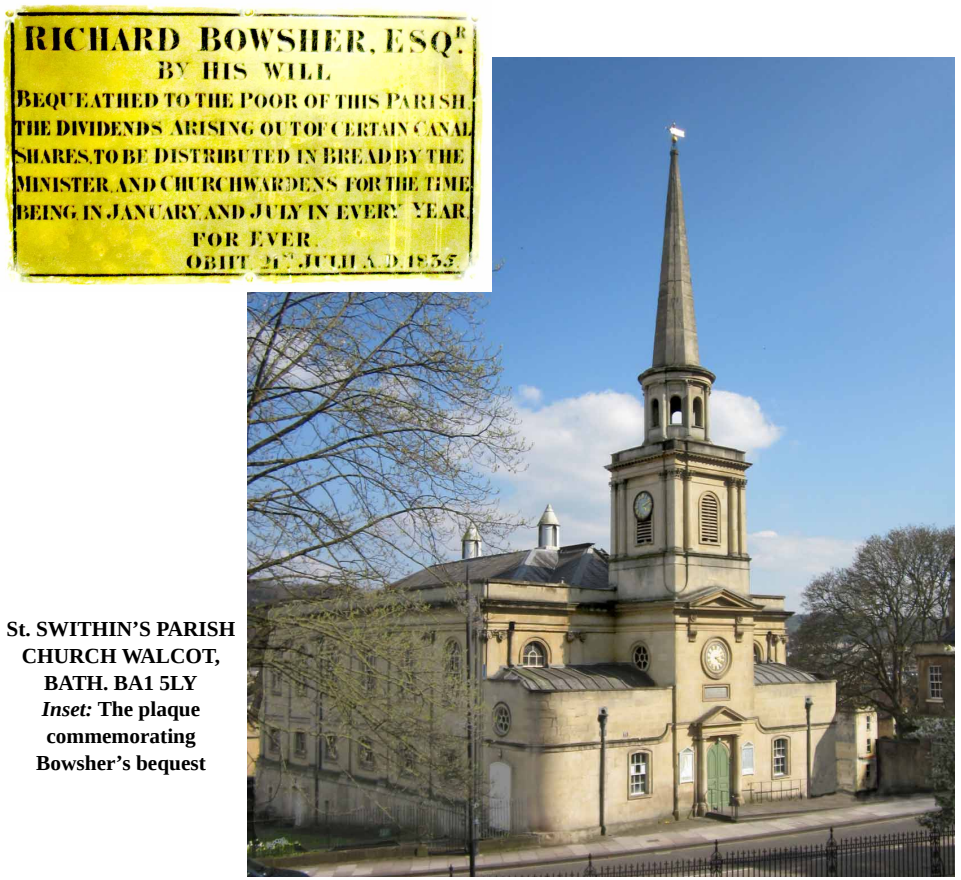
BOWSHER and BRODERIP.

Bath, 3d June, 1795.

**CUTTINGS FROM BATH CHRONICLE**
**3 June 1795**
**Showing Bowsher undertaking the duties of the Clerk to the S.C.C. Company, publishing notices and invitations to tender.**

→

Richard Bowsher died on 21st July, 1835 at the residence of John Routh, esq., Cumberland Terrace, Regents Park, aged 77 yrs. There is a plaque in St Swithin's Church, Walcot, Bath , but no portrait of Bowsher has come to light.




**St. SWITHIN'S PARISH CHURCH WALCOT, BATH. BA1 5LY**
***Inset:* The plaque commemorating Bowsher's bequest**

*Acknowledgements:*
Mrs Denise Chantry, Bath for the original research & will
Bath Record Office, The Guildhall, Bath www.batharchives.co.uk
Clare Reddaway for the information regarding the plaque in St Swithin's
Daniel Brown www.bathintime.co.uk
Mike Chapman for providing the information on the Bathampton Tramway

*Further Reading*:
"Somersetshire Coal Canal & Railways" Kenneth R. Clew
http://www.stswithinswalcot.org.uk

**Derrick Hunt**



August 1813:
STEAM ENGINE

To be **SOLD**, remarkably cheap, a very Compleat and almost New STEAM ENGINE, with a 60-inch Cylinder, (upon Bolton and Watt's principle, single power), a Cast-Iron Beam, and two square Boilers: Also, a quantity of 14-inch and 11-inch Pipes for Pumps, two Capstans, and Capstan Ropes; lying within 2½ miles of a Navigable River, communicating with the Bristol Channel, and with Canals to almost all parts of the Kingdom.

For further Particulars, apply to WILLIAM HILL, Engineer, Combhay, or by letter, directed "Coal Canal Office, Mitford, near Bath."

*Cornwall Gazette.*

At first glance, this appears to refer to the Combe Hay Engine, being a Boulton & Watt model with iron beam, but the rest of the specifications do not fit. The engine offered for sale has a 60-inch cylinder with two boilers, whereas the Combe Hay engine had a 52-inch cylinder with only one long boiler – the latter confirmed during our archaeological investigations. Unlike the other adverts, its site is not stated as 'standing on the banks' or 'near' the canal, nor is there any suggestion of canal transport. Also, though described as 'very compleat' and 'almost new', there is no mention of what work, if any, it had done.

Fortunately, our attention was drawn by Derrick Hunt to another engine in the neighbourhood, detailed by Daniel Brown in his account of 'The Batheaston Coal and Mining Company 1804-1813 - A Fruitless Attempt to find Coal in Batheaston' (*BIAS Journal* 37, 2005). Both William Smith and William Hill had been involved in this venture which, owing to the large amount of water encountered, required two steam pumping engines; a 30 hp Hornblower compound engine, installed in 1805 (probably acquired second-hand from Radstock Middle Pit – only two of these are known to have been used in Somerset) and a more powerful 80 hp Bolton and Watt engine purchased in 1807 (said to have been 'at an expense of above two thousand pounds', although no record of it has been found in the Birmingham archives).

In March 1813 it was officially announced that no coal could be found at Batheaston, and between May and June advertisements were run weekly in the *Bath Chronicle* for the sale of the two engines and other equipment, during which William Hill was named as the on-site contact;

5 May 1813
Capital STEAM ENGINE

TO be SOLD at BATHEASTON, near Bath, a Capital Eighty-Horse Power STEAM-ENGINE, on Boulton and Watt's principle, with a 60-inch cylinder, cast-iron beam, and two wrought-iron Boilers; made by Onions, of Colebrook-Dale.

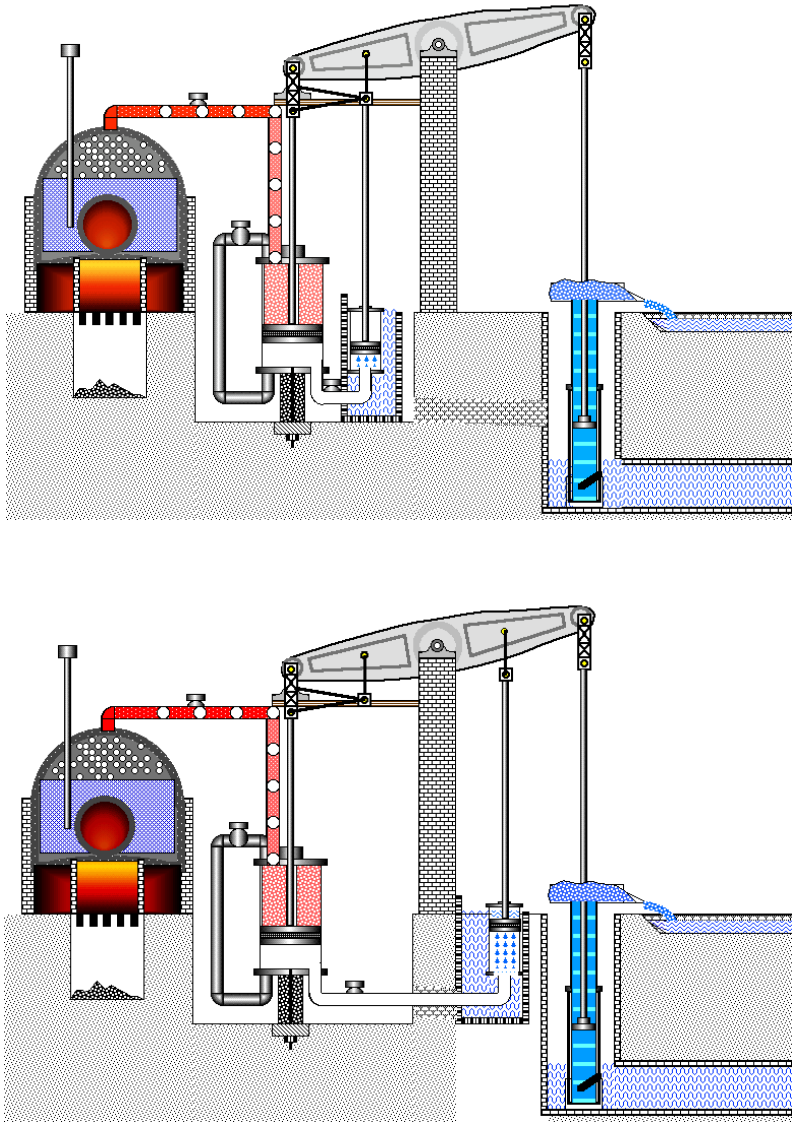
Also, a Round BOILER, calculated for a 30-horse power Engine; and a 27 and a 21½ inch cylinder; and several 14 and 11 inch pipes; and sundry articles, consisting of gins, capstans, cables, pit-ropes, capital 24-fold and other purchase blocks, Iron pit wheels, &c, &c. Also about 100 fathoms of Boring rods.

For a view of the articles on sale apply to Mr.George Baker, of Batheaston; and for the price of the Steam Engine, &c. to Mr.T.M.Cruttwell, solicitor, Bath.

N.B. Batheaston is only three miles from water carriage communicating with Bristol.

Since the details in William Hill's advert in August are virtually the same, it is evident that, even after his appointment as canal engineer that month, he continued as agent of the Batheaston Company for the sale of the Boulton and Watt engine (an auction in July having failed to find a buyer), and that his advert did not refer to the Coal Canal at all.

Mike Chapman



**BOLTON AND WATT ENGINES COMPARED**
**showing "inside condenser" design above and "outside condenser" modification below.**

## The 'Mystery Engine'

However, another advertisement by William Hill, not long after he was taken on as resident engineer, raises some difficult questions:



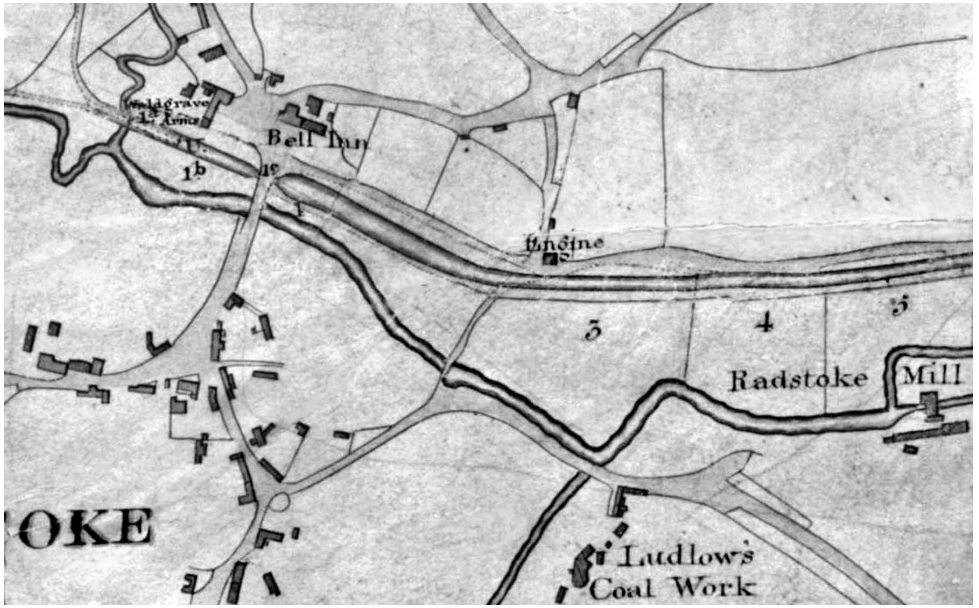
# A NOTE ON SOME STEAM ENGINES ON THE S.C.C.

*During his research, Dave Pollard has come across some early newspaper advertisements which throw new light on the use of steam pumping engines on the canal:*

## Radstock

The following advertisement, for example, provides a clearer picture of the situation on the southern branch of the canal, where a supply of water had become increasingly difficult to obtain:

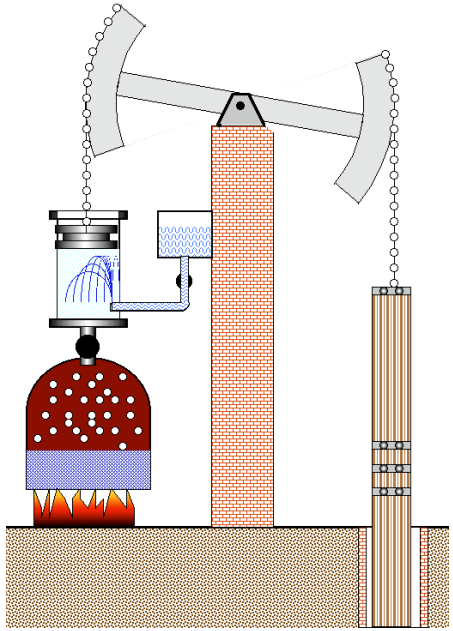
> May 1815
> STEAM ENGINE, &c.
> To be **SOLD** by Auction, by Mr.THOMAS CRUISE, at the Waldegrave Arms Inn, Radstoke, on Thursday the 1st of June next, at two o'clock in the afternoon, a capital STEAM ENGINE, of thirty-horse power, now standing near the canal at Radstoke, eight miles from the city of Bath. – And a pump of 10 fathoms, 16 inch shides, with buckets and clacks.
> Also, Two CRANES, capable of lifting three tuns each, now standing at Twinny Basin; a considerable quantity of old broken Cast-Iron Rails and Gang Waggon Wheels; and the Timber Work of sundry bridges now standing on the Radstoke line of canal.
> The power of this Engine is capable of being increased by the addition of an air pump, &c. The boiler is a round one, 14 feet in diameter; and the beam is wood, with arch heads. It is in good repair, having been worked but two summers.
> For further particulars, apply at the Somerset Coal Canal Office, Bath; or to Mr.Hill, of the Caisson, near Combhay; and for a view of the engine, &c. at the Waldegrave Arms Inn, Radstoke aforesaid.




**THE ENGINE HOUSE NEXT TO THE CANAL AT RADSTOCK**
**as shown on the Cruse map, not far from the Waldegrave Arms where the auction took place.**

The Cruse Map shows the engine-house at Radstock (in what is now Waterloo Road) about this time, but the advert particularly refers to an engine installed there in 1813 ('having been worked but two summers'), the same year, incidentally, as William Hill's appointment as canal engineer. This engine is mentioned by Hugh Torrens in his study of William Smith's contribution to the development of hydrogeology, where it is pointed out that the southern branch of the canal was supplied by substantial aquifers (reservoirs of water) in the geological strata below it, an idea which almost certainly came from William Smith. Unfortunately these aquifers soon became exhausted when tapped by the engine, and instead of filling the canal, drained it off, thereby defeating its purpose. Since this could only be remedied by puddling the whole canal, the decision was taken to dispense altogether with the waterway (and with it, the engine) in favour of Hodgkinson's tramway along the towpath, opened only a few months after the auction.

The engine itself was certainly less sophisticated than the one at Combe Hay, with wooden beam, arch heads and 'haystack' boiler, probably of the Newcomen type. It was also less powerful, and appears to have been similar to the engine at Withy Ditch which also had a lift of only sixty feet. The two cranes at Twinhoe basin, for the transhipment of containerised coal, and the 'considerable quantity' of scrap iron suggests that the temporary tramway between Twinhoe and Midford was fairly well used and ran on rails until replaced by Hodgkinson's plateway. Evidently the canal bridges, no longer necessary, had already been dismantled and replaced with level crossings.



**DRAWING OF A NEWCOMEN ENGINE**
**Showing a 'haystack' boiler and a beam with arch head ends.**

## Combe Hay

The suspicion that the pumping engine above the lock flight at Combe Hay was only used intermittently has recently been confirmed by a description in *The improved Bath guide, or picture of Bath and its environs,* published by Wood and Cunningham in c.1809, which provides the reason:

> 'Leaving the Kennet and Avon Canal to the left we follow the delightful course of the Somersetshire Coal Canal, which brings us to the vale of Midford ... Finding a scarcity of water, from leakage and other causes, the proprietors have erected two powerful steam-engines, one here (Combe Hay) and the other at Dunkerton. The latter of these is perpetually lifting the contents of a brook sixty feet in perpendicular height, which it discharges into the canal, and generally supplies the deficiency of water during a considerable part of the dry season; but it is at times found insufficient for the purpose, when recourse is had to the former, which raises the water from another source about one hundred and twenty feet.'

However, the following two adverts suggest that, after nearly 20 years of use, when it was approaching its first major overhaul, this engine was considered more than was necessary, having 'done but little work': →



July 1822:

EXCELLENT STEAM-ENGINE. TO BE SOLD By Private Contract

A Complete Single-Power Bolton and Watt's STEAM-ENGINE, with a Steam-Case Cylinder, now standing on the Banks of the Somersetshire Coal Canal at COMB-HAY, near Bath. The Cylinder is 52 inches in diameter, working an 8-foot stroke, with an Iron Beam attached to a 22-inch Pump, 46 yards in depth. The Engine was erected a few years since by Messrs.BOLTON AND WATT, on the most improved principle, and at a very great expence, under an ample warranty as to its competency.

For a view of the Engine, and further particulars, apply to Mr.W.HILL, Engineer, Comb-hay: and if by letter (to be *post-paid*), addressed to him at the Canal-Office, Midford, near Bath.

*Royal Cornwall Gazette*

We are informed that this advert also appeared about the same time in *Felix Farley's Bristol Journal*. With minor alterations it was repeated in the following year, in the *Bath Chronicle*:

March 1823

STEAM ENGINE

To be **SOLD**, a complete **STEAM ENGINE** for Pumping Water, of 50-horse power, with a steam-cased cylinder, and an iron beam, working an 8-foot stroke, attached to a 22-inch pump, 46 yards deep, now standing on the banks of the Somerset Coal Canal, at Combhay, near Bath.

The above Engine was erected a few years since by Messrs. Bolton and Watt, and has done but little work; will be sold with or without the pumps – For further particulars apply to Mr.W.Hill, engineer, of Combhay, if by letter, post-paid, directed to his Canal Office, Midford, near Bath.

*Bath Chronicle*

The specifications given here agree well with the originals stated in the Boulton & Watt archive, i.e: 52in cylinder with 8ft stroke; 1ft $9^{3}/4$in pump bore, lift 135ft (rated at the time at 57.6 hp, to raise 5,000 tons of water in 12 hours). It also implies that the pump-work could still be useful, perhaps in the case of a more economic engine being considered. Cornwall, of course, was always in need of useful steam engines, but we do not know if a sale was made, and the second advert suggests that it was not attracting buyers. It is therefore quite possible that it was not sold, but merely overhauled and kept working with the addition of an external condenser and other improvements. In which case it may still have been this engine (dismantled when its second major overhaul was due about 20 years later) that was installed at Withy Ditch when the pumping station there was enlarged for a second engine around 1840.

During our excavation we found that the back-filling of the condenser drain tunnel (from condenser tank to well) appeared to have been done from outside the engine house *via* a large hole in the ground. This suggests that the condenser tank had been installed outside the engine house by the time the pump came to be moved to Dunkerton (B&W's original plan shows it inside). Crofton has a record that their condenser was relocated 'outside' when the wooden tank was replaced after approximately 25 years. (Having an 'outside' condenser significantly improves the efficiency of the engine because it produces maximum vacuum at the point in the stroke when it can deliver the greatest effect.)

The advert also shows that William Hill, although resident at Caisson House, actually conducted canal business at 'his Canal Office, Midford'- possibly the building by the main road which later became the toll-keeper's house after the Weigh-house was erected there in 1831.

→