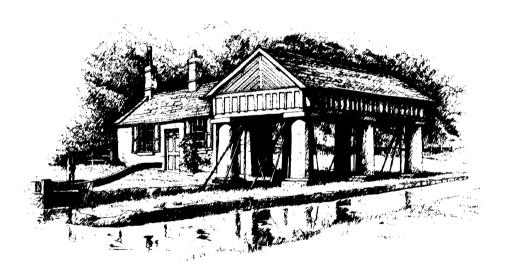
RADSTOCK

WEIGH-HOUSE

THE MAGAZINE OF THE SOMERSETSHIRE COAL CANAL SOCIETY



Nº 59 APRIL 2011

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VACANCIES: PUBLICITYOFFICER, PROJECT OFFICER, EVENTS ORGANISER.

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:

-) To advance the education of the general public in the history of the Somersetshire Coal Canal
- 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

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

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

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 7th August— 10:00

WORK PARTY — Location to be advised

For further details please contact: Derrick Hunt 2 01225 863066

Sunday 21^{st} August — 10:00

WALK —UPPER LOCK FLIGHT AND INCLINED PLANE, COMBE HAY

Meet: Laybys near Bridge Farm, Combe Hay. BA2 7EE

For further details please see website or contact: *Mike Chapman* **2** 01225 426948

Sunday 4th September— 10:00

WORK PARTY — Location to be advised

For further details please contact: Derrick Hunt 2 01225 863066

Saturday 10th & Sunday 11th September— 10:00

HERITAGE OPEN DAYS at COMBE HAY LOCKS & ENGINE SITE

A series of guided tours — See article below

To volunteer your services please contact: Derrick Hunt 2 01225 863066

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 Derrick Hunt 201225 863066

HERITAGE OPEN DAYS — 10th & 11th September

This September the S.C.C.S. joins the hundreds of properties who are opening their doors as part of Heritage Open Days to celebrate England's rich architecture, history and culture. Thousands of buildings of every age, style and function are involved. Many of the places are normally closed to the public, while others usually charge for admission.

With the permission of the landowners, we are throwing open part of the lock flight and engine site at Combe Hay and organising guided tours for the public. Weather permitting, we hope to put on an exhibition underneath the railway arch adjacent to the site of Lock 16.

This has the potential to raise awareness of the Society and increase our membership, but we need a team of members who can act as guides and answer questions from the public. The event is spread over a weekend, so we are looking for volunteers who might be able to spare a few hours to help the Society. If you think you might be able to help, please contact Derrick Hunt on 01225 863066.

http://www.heritageopendays.org.uk

WEIGH - HOUSE No 59 EDITOR'S NOTES CHAIRMAN'S NOTES NOTICE OF A.G.M. .. **NEW MEMBERS** CRUISEWAY STATUS FOR THE K.&A.C. by Alan Whitewick **B.I.A.S. GAZETEER of INDUSTRIAL SITES** BOOK REVIEW — "Queen of Waters" NAVVYING NOTES .. CLEARANCE WORK at the UPPER LOCKS SHAREHOLDERS OF THE S.C.C. — RICHARD CRUTTWELL by Mike Chapman 10 "SKELETON" DRAWING of the MIDFORD WEIGH-HOUSE 12 MIDFORD WEIGH-HOUSE — A HISTORY — Part 2 by Roger Halse.. 14 THE EVOLUTION OF THE COMPOUND-LEVER WEIGHING MACHINE 15 PAULTON and TIMSBURY BASINS — A Press Release 17 OLD PHOTOGRAPHS — BUT NEW INFORMATION (Midford Road Bridge) by Roger Halse.. 18 MENDIP WALK 20 NARROW BARROW .. 20 DATES FOR YOUR DIARY ... 21

EDITOR'S NOTES

HERITAGE OPEN DAYS

Once again I have been placed in the happy position of having to juggle pages around in order to squeeze extra articles into an already well-packed issue. However, thanks to the wide and detailed knowledge of our contributors, the increase in quantity has not led to any decrease in quality or variety.

Further variety in the Society's interests is apparent from our Our Diary Dates (*Page 21*), which lists an astonishingly wide range of activities for such a small and well-focussed society. How many other canal societies can boast a programme of distinctly canal-related events which includes a musical comedy, a guided walk to look at prehistoric Mendip and a tour of central Bath?

Adrian Tuddenham

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CHAIRMAN'S NOTES

In my line of business, it is an old adage that you know you will be busy tomorrow if the phone is busy today. Judging by this maxim, the Committee will be busy for some time to come.

We have now booked for Waterways Recovery Group "Bit In The Middle" to return for a work party weekend in November. As can be seen elsewhere in this issue, we have begun discussions at Timsbury that will, in the fullness of time, lead to works on the ground to restore the canal's terminal basins. I'm delighted to be able to say that this has the backing of Jacob Rees-Mogg, M.P. for North East Somerset, who has written in support. Five of Jacob Rees-Mogg's ancestors were shareholders of the Coal Canal Company.

This is the last issue of Weigh-House before the A.G.M. on June 14th. I would bid our members to make every effort to attend, for it is the AGM that gives the committee the mandate to do the work it does. Due process may seem tedious but without due process we can not do what we do. In addition, it is an opportunity for members to meet each other and the committee, and to influence our future direction. I look forward to seeing you all there.

Patrick Moss

ANNUAL GENERAL MEETING

The next Annual General Meeting of the Somersetshire Coal Canal Society will be held on
Tuesday 14th June 2010

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 over the past twelve months.

NEW MEMBERS

The Society welcomes the following new members:

P. and .J Shannon Portishead
Mrs. S. Ross Foxcote
Mr. G. Bean Southampton

DATES FOR YOUR DIARY — 2011

Thursday 14th April — 19:30

SOCIAL EVENING — "NO CAISSON TO ANSWER"

by Jeremy Gibson and Martin Horler

Meet: The Radstock Working Mens' Club.

For further details please see website or contact: Derrick Hunt 2 01225 863066

Sunday 17th April — 11:00

WALK — SKINNER AND THE MENDIP BARROWS

Dr. Jodie Lewis, Senior Lecturer in Archæology, University of Worcester. *Meet:* Priddy Village Green. Bring a packed lunch. Suggested donation £2·00. For further details please contact: *Adrian Tuddenham* © 01225 335974

Sunday 1st May— 10:00

WORK PARTY — Location to be advised

For further details please contact: *Derrick Hunt* **2** 01225 863066

Sunday 15th May — 10:00

WALK — SHAREHOLDERS IN BATH †

Meet: Sawclose, outside Theatre Royal

For further details please contact: *Mike Chapman* **2** 01225 426948

Sunday 5th June— 10:00

WORK PARTY — Location to be advised

For further details please contact: *Derrick Hunt* **2** 01225 863066

Tuesday 14th June – 19:30

ANNUAL GENERAL MEETING

Radstock Museum, Waterloo Road, Radstock BA3 3EP

See Page 4

For further details please contact: Derrick Hunt 2 01225 863066

Sunday 19th June — 10:00

WALK — THE SITE OF THE DUNKERTON PUMPING ENGINE †

Meet: Dunkerton Sewage Works (Below Engine Bridge, Withyditch)

For further details please see website or contact: *Patrick Moss* **2** 07736 859882

Sunday 3rd July— 10:00

WORK PARTY — Location to be advised

For further details please contact: *Derrick Hunt* **2** 01225 863066

Sunday 17th July — 10:00

WALK — TIMSBURY BASIN detailed site assessment †

Meet: Paulton Sewage Works

For further details please contact: *Derrick Hunt* **2** 01225 863066

MENDIP WALK



Dr. Jodie Lewis (identified with an arrow) attracts a large and varied crowd for her Mendip walks, as seen in this picture taken at Priddy Folk Festival last year. See Diary Dates, 17th April

NARROW BARROW



Photograph: Olaf Poril

A NEW DESIGN OF WHEELBARROW

A special slimline version for squeezing between the gates of S.C.C. locks.

See Page 7 for details

CRUISEWAY STATUS FOR THE K.&A. Canal

After years of campaigning by the Kennet & Avon Canal Trust, the Kennet & Avon Canal will soon be fully reclassified as a 'Cruiseway,' raising its legal status and securing its future.

Mike Rodd, Chairman of The Kennet and Avon Canal Trust Council, said: "The Trust is delighted to have been advised by British Waterways that they have received confirmation from DEFRA's Parliamentary Section that the re-classification Order to redefine the sections of the K&A Waterway which are presently classified as "Remainder Waterways" as "Cruiseways", will definitely come into force on 18 April 2011. This is wonderful news that begins another chapter of the history of our Trust and our Waterway."

British Waterways (B.W.), supported and cajoled by the Trust and the K.&A. Trade Association, has campaigned for many years to achieve this important change. In the long term, it will ensure that B.W. (or its proposed successor, the "National Waterways Charity") will maintain the canal in its entirety as a fully operational waterway, available for cruising.

In practice, B.W. has been maintaining the waterway as a Cruiseway since the restoration was completed in 2002, with the substantial additional funding required currently coming from direct financial contributions from the relevant riparian Councils (Wiltshire, West Berkshire and Bath & North East Somerset).

For all those who love, play or boat on, or make their living from the waterway, this announcement is the best possible news!!

Alan Whitewick Editor :"The Butty" www.katrust.org

This is excellent news for the S.C.C.S. because it removes one of the potential objections to the funding of future S.C.C. restoration projects.

B.I.A.S. GAZETEER OF INDUSTRIAL SITES

The Bristol Industrial Archæological Society is compiling a revised list of industrial sites and has invited the S.C.C.S. to submit entries relating to the Somersetshire Coal Canal itself and to sites associated with the canal. This is a good opportunity to ensure that the S.C.C. and its associated sites are included and accurately recorded in a document that will be accessible to the public.

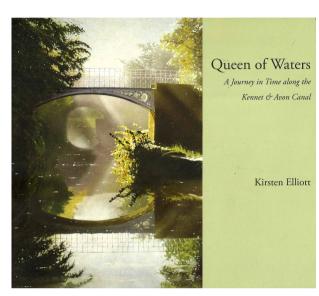
We are looking for a volunteer to take on this project. A User Guide has been produced to help collect the information which B.I.A.S. would like to include in its database and the format in which they would like it to be submitted. Each site needs to be accurately named, described and photographed.

The project is based on the earlier "Guide to the Industrial Heritage of Avon", from the 1980s, but will be much more comprehensive and detailed. That original publication was a pioneering venture, but the S.C.C.S. was not among the contributors because the Society did not exist at the time. Now, with so much more knowledge available, we feel the Society should be a major contributor.

If anyone feels they could take this on, please ring Derrick Hunt to discuss the matter: 01225 863066

BOOK REVIEW

QUEEN OF WATERS by Kirsten Elliott



Paperback. 200pp including 4pp colour laminated card cover. Illustrated with many colour and B&W photographs and historic maps.

Akeman Press, 58, Minster Way, Bath BA2 6RL

01225 310364 www.akemanpress.com Price £20.00 ISBN 978-0-9560989-2-4

Available from Oldfield Park Bookshop and other bookshops in the Bath area, or direct from the publishers

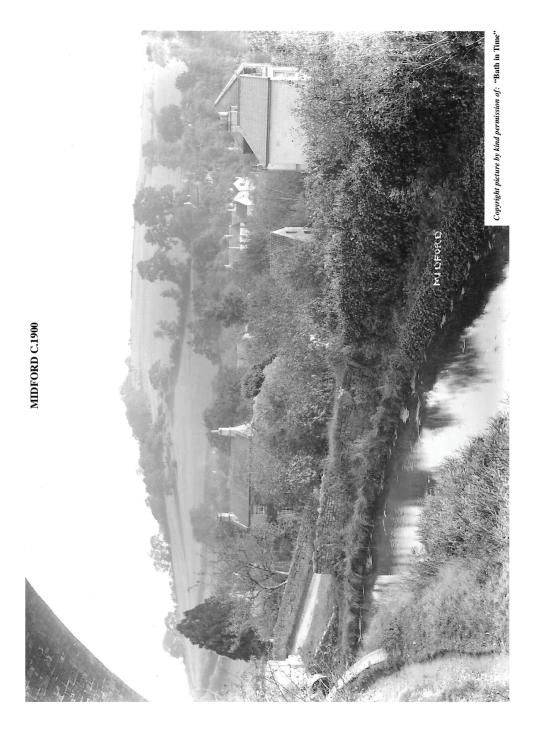
"Queen of Waters" by Kirsten Elliot has achieved the remarkable feat of taking on an overcrowded field of literature and surpassing it all. I am confident that book collectors of the future will regard this book as one of the 'must haves' in their library. "Queen of Waters" combines travelogue and history, text and photographs and sets a new standard for those wishing to write about canals.

The book takes the reader on a journey from Reading to Bristol, with side trips on the Wilts and Berks Canal and our own Coal Canal, covering history along the way. One strength is that the travelogue and history don't just cover the canal itself, but include insights into the villages and buildings that are passed along the way. The influence of the canal on architecture in Hungerford is noted; for the parish church was rebuilt in Bath Stone carried by canal. Similary noted is a mural in Swindon depicting the W.&B. canal, along with the subsequent career of its painter, Ken White, who went on to design the logo for the Virgin corporate empire. In such miscellany, the waterways in the book are truly brought to life.

The photographs cover all ages since the dawn of photography; it is telling that some of these aroused the interest of Roger Halse, our Archivist, as they were unknown to him. Many cover the period of dereliction and restoration. My personal favourite shows two horse-drawn narrow boats below Hanham, although the colour photograph of a placard "Down With Canals", shows how society's mindset has changed better than any cost-benefit analysis could.

The section on the Coal Canal forms a very succinct history and takes a reader on a tour of what can be seen, including practical advice on how to follow the route and find various remains. If any member wishes to introduce someone to our canal, or has, themselves, only just discovered it, this is a useful guide.

At home I have two large book cases for my inland waterway collection; one for definitive works and one for the rest. This book is heading straight for the former.



R.P.M.

OLD PHOTOGRAPHS — BUT NEW INFORMATION

One of the pleasurable things in being a collector of SCC photographs (and honorary archivist for the SCCS) is the discovery of new photographs showing the canal, as you never know what is going to turn up.

For a number of years I have been in contact with Daniel Brown, a local postcard collector, and member of the S.C.C.S., who, through his efforts in amassing a large collection of postcard views of Bath, has found many views of the villages and countryside to the south of Bath, through which the S.C.C. winds its way. Many of these views showing the canal have been published in various old photograph style or canal/railway related books and magazines and so you would think are no longer of any new interest to those, like me, who study the canal. However, the discovery of a collection of the original glass plate negatives for some of these well known images has shed new light on some old favourites.

Daniel Brown has managed to copy onto his website, http://www.bathintime.co.uk, the glass plate negatives of views of the S.C.C. taken by Bath-based photographer, George Love Dafnis. Some are new views of the S.C.C. (for example see page 19 of WH 55, page 10 of WH 55) but others are better quality copies of older, previously-known views, which on closer inspection show a little bit more of the S.C.C. than we have seen before.

For example at Midford the S.C.C. goes under the former Somerset & Dorset Railway at a point between the bridge carrying the Bath to Hinton Charterhouse Road and Twinhoe Lane (see page 27 of *The Somersetshire Coal Canal - A Pictorial Journey* by Roger Halse & Simon Castens). The original negative however shows a little bit more: the actual Bath Road bridge on the extreme far left of the view [*See Page 19 opposite*] . Mr. Dafnis would reproduce his photographs on 3 x 6 inch size postcards for sale to local shops, who would then sell them to the tourists visiting the area. In the process of getting the image to fit onto the postcard, parts of the image were cropped — the bridge became part of this process.

Only one other picture showing that bridge was previously known: a very poor quality view of the construction of the GWR branch line through Midford, with the bridge only just visible. Having said that, an earlier view of the area has recently come to light and this will be reproduced in Weigh-House at a later date.

Other photographs in the Dafnis collection have revealed the accommodation bridge at Midford on a postcard showing a steam crane being used in "Making New Railway, Midford", and a very weeded up and disused canal cut in "Making New Railway, Monkton Combe". Both the postcard size reproductions had cropped out these areas but the original glass plates have once again revealed the 'missing' canal.

Roger Halse

NAVVYING NOTES

The work parties have been progressing down the lock flight from Lock 5, uncovering views which have not been seen for years. Meanwhile, the landowner has been undertaking clearance on a much grander scale on other parts of the lock flight.

Following on from the spectacular B.I.T.M. work party weekend in November of last year, the Society's own work force has been making steady progress with initial clearance work in the area around Locks 6, 7 and 8. The locks, and the pounds between, them have become filled with impenetrable jungle over the years and have reached the stage where they are beginning to disappear from view. The conditions are reminiscent of those at the lower locks, when we first started work on them about 10 years ago; with plenty of old dried fallen branches to get the bonfire going and large rotten trees to fell and cut up. The result was some of the biggest bonfires we have had in years—on one occasion we had to stop adding material to the fire because the heat made it difficult to approach.

With such big fires, great care is needed to ensure safety. A spark must have landed on John Ditcham's jacket, which had been left on the canal bank nearly 15 feet from the fire; thanks to our constant vigilance, the lining was only half burnt away, instead of the whole garment being consumed. John told us afterwards that he had previously been considering whether to dispose of the jacket in the fire at the the end of the day anyway, but our action had decided the matter and he would be keeping it.

Compared with the leisurely pace of some of our work parties, the progress has been rapid; and this has been helped by several new members who have recently joined us. However, even more rapid progress has been made by the landowner himself, who decided that the best way to tackle the tangle of undergrowth above Lock 5 was with a machine. We didn't see the machine in action, but the aftermath of its work was very visible. We were astonished to find that the top of the inclined plane had been partly cleared, as had the towing path around Locks 4 and 5, several of the pounds and the Upper Reach from Lock 1 to the point where it is infilled near Caisson Cottage. Pictures on Pages 8 and 9 show some of the views brought to light by this clearance. Judging from the results, the machine must have been similar to the 'flail tank' which was used for minefield clearance during the Second World War; it had cleared in a short period of hire, an area that would have taken our work parties many months.

Obviously the lock chambers are far too fragile for such a machine, so there is still plenty of handclearance work which should keep us busy for years to come. Many of the locks in this part of the flight contain the remains of gates which are of an unusual construction, having had wooden-frames clad with metal panels, something which is almost unknown on British canals. This, alone, makes them worth preserving if at all possible. Even more importantly, it is very likely that these are the oldest surviving lock gates in the world, so they definitely need to be treated with respect.

This then presents us with something of a dilemma: the remains of gates have been left in a nearly-closed position, which almost blocks-off the bottom of the lock, but they are far too fragile to consider moving. Whilst a reasonably agile individual has no difficulty squeezing through the gap, it is impossible to get through with a normal wheelbarrow, so removing the large amount of debris which has accumulated on the lock chamber floor over many years is going to be a difficult task. Various suggestions are being considered, such as hoisting the material out of the top of the lock, or adapting a wheelbarrow to fit the gap between the gates. A prototype of the 'Narrow Barrow' was due to be put into service early this month, but tests have revealed a hitherto-unsuspected stability problem which can occur if the operator fails to reach sufficient speed for the front wheel to generate the required gyroscopic force. [See photograph on Page 20].

CLEARANCE WORK AT THE UPPER LOCKS



Above: The Top Reach Below: The lower entrance of Lock 3



PAULTON AND TIMSBURY BASINS A Press Release

Paulton Parish Council's Community Plan recommends regeneration of the area which includes Timsbury and Paulton Basins, the terminus of the Northern branch of the S.C.C. The Council has recently contacted the S.C.C.S. with a view to getting the process started. As a preliminary step, the S.C.C.S. issued the Press Release below:

Landowners of the Timsbury and Paulton Basins, which formed the Western terminus of the Somersetshire Coal Canal, have given their permission for a survey to look into the long-term prospects for the area.

Two hundred years ago this area was a hive of industrial activity, where coal from the surrounding pits was loaded onto boats for transport to markets across southern England. When the coal ran out and the pits closed, the canal was left to become derelict; many interesting pieces of industrial archæology were just abandoned and their remains are still scattered across the area waiting to be rediscovered.

The canal basins feature in the Paulton Parish Council's Community Plan, which recommends regeneration of the area. As a starting point for this process, the Council has recently been in discussions with the Somersetshire Coal Canal Society, which was formed in 1992 to protect the remains of the canal and has been a partner in other restoration projects centred on the canal structures.

In volunteering to be the lead organisation for this project, the S.C.C.S. will initially be responsible for conducting a survey into the physical remains of the area and for gathering information from local residents who may have recollections or stories which will add to the knowledge of the site. The survey will be the first step in preparation of a feasibility study, leading to a full project plan which can then be used as the basis for long-term funding applications.

Project manager, Derrick Hunt, said; "We would like to hear from people who have memories of the area or whose families may have handed down photographs, documents or even pieces of equipment which might shed more light on the industrial activities around the Paulton and Timsbury Basins". Derrick can be contacted on 01225 863066 or by e-mail at: derrick johnhunt@btinternet.com



TIMSBURY BASIN — 2002 Mike Chapman leads an S.C.C.S. walk

8 Weigh-House 59 Weigh-House 59

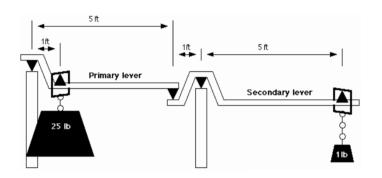
By compounding two levers with ratios of 5:1, a system with a ratio of 25:1 can easily be achieved.

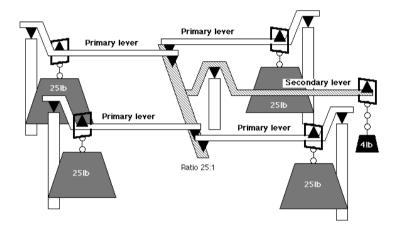
The combined weights of several heavy objects can be measured by using multiple primary levers all adding their forces to a single secondary lever.

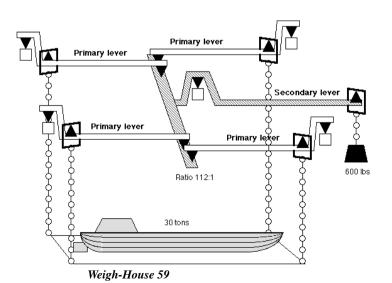
That is not particularly useful as it stands, but it leads on to one of the most common uses of a compound lever system, which is to measure the total weight resting on a platform by combining the unequal weights measured at each of its four corners.

This is the principle on which the machinery of the Midford Weigh-House was based. No matter how unevenly the boat was loaded or where it came to rest on the cradle, the total weight would be accurately measured.

The drawing on P12-13 shows this in more detail.









The towing path around Lock 4 — Above: looking Southwards, Below: Looking Northwards



Weigh-House 59

SHAREHOLDERS OF THE SOMERSETSHIRE COAL CANAL

Richard Cruttwell (1747-1799)

A leading printer and publisher in Bath.

Biographical Details

1747

1799

Bath

Berkshire

Anne Shuttleworth

Richard Shuttleworth Thomas Macaulay

John Francis Edward

Clement Wilson,

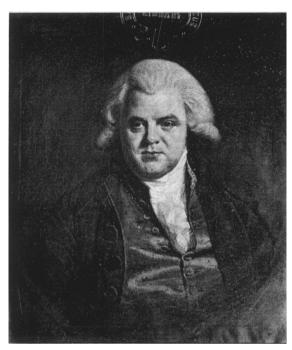
Elizabeth Grace

Born:

Died:

Family:

Married: 1772



RICHARD CRUTTWELL A portrait by Thomas Beach

house nearby at No.1 Westgate Buildings.

Richard Cruttwell was baptised in 1747 in Wokingham, Berkshire, third son of William and Elizabeth Cruttwell and, following his eldest brother, also William, was apprenticed at the age of 14 to John Carnan, printer of Elliot's Court, Old Bailey, London. In 1764 William moved to Sherborne to publish the Sherborne and Dorset Journal newspaper, and in 1768, after becoming a member of the Stationers' Company, Richard likewise moved to Bath where, thanks to a legacy from his great-uncle, he was able to purchase the Bath Chronicle established six years earlier by Cornelius Pope. There were no printers in Bath until about 1730, and the first local newspaper (The Bath Journal) was not produced there until 1744, by Thomas Boddely from premises in Kingsmead Street. These were situated in the new 'business quarter' of the town (inhabited by such entrepreneurs as Charles Spackman, discussed in our previous issue), and it was probably for the same reason that Richard Cruttwell first occupied a

THE EVOLUTION OF THE **COMPOUND LEVER WEIGHING MACHINE**

A simple see-saw can be used for comparing two weights. If the two arms are of different lengths, a lighter weight can be balanced against a heavier one.

This system is unstable because the weights are higher than the pivot. It is also inaccurate because the effective distance of the weights from the pivot varies with the shape of the weights and cannot be accurately measured.

system becomes stable. No matter what shape the weights are, they will hang so that their centres of gravity are directly below the chain anchors, so the ratio of the two levers always remains constant.

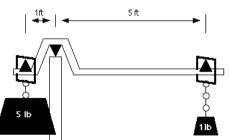
The friction of the pivot is a source of inaccuracy, even with a high quality bearing, it will affect the measurements to some extent.

Replacing the pivot bearings with 'knife edges' will give much greater accuracy. The balance beam is cranked so as to bring the knife edges into line and keep the system stable.

By hanging the weights below the pivot, the

This system has the potential for great accuracy but becomes clumsy if a high ratio is needed to allow large heavy objects to be balanced with reasonably sized weights.

That is where the compound lever system becomes advantageous as it gives larger multiplication ratios in a smaller space than the equivalent single lever.



MIDFORD WEIGH-HOUSE - A HISTORY Part 2

Continued from Weigh-House 58

The Weigh-House was probably sited at Midford as every boat had to pass this point, both those carrying coal on the "Dunkerton Canal" line from the Paulton, Timsbury and Camerton group of collieries, and the boats loaded at the Midford Wharf with coal carried along the Radstock tramway from the Radstock collieries.

The S.C.C. Company would weigh every boat empty, and record its weight in a register kept in the toll collector's office. When a loaded boat was weighed this empty weight would be deducted from the total figure giving the net weight of the cargo and the toll due to be paid. It is not known if every boat that passed through Midford was weighed, but a rough calculation based on the annual amounts of tonnage carried on the S.C.C, divided by an average capacity of 25 tons per boat, would give approximately 20 boats per day.

The Weigh-House was thought to have been still in operation in 1894 when the S.C.C. was put up for sale with the prospectus listing under the heading of "NINE CAPITAL STONE BUILT COTTAGES" a . . . "Toll House, with machine for weighing the boats". As history tells us, the canal was not sold and kept trading until November 1898 when the pumping engine at Dunkerton ceased working. The last boat passing through the canal in May 1899. It is probable that, in the later years of the canal's life, the weighing machine was not used due to the limited amount of water in the canal.

Following the acquisition of the S.C.C. by the Great Western Railway, the former toll collector's office, adjacent to the weighing machine, was thought to have been used as a contractor's office when the Camerton to Limpley Stoke Railway was under construction between 1904-1907. In 1914 the G.W.R. sold the Midford Weigh-House . . . "when it was dismantled the pillars were purchased by dealer, who to his dismay, had to cut them up because of their massive size, to enable him to cart them away" (Robin Atthill *The Curious Past* 1955). The arm of the canal leading to the Weigh-House was converted for use as a cesspit (*The Engineer*, Volume 107,1909). The office was converted to a two storey private house that still stands today, although greatly extended and modernised. All that remains today are some of the coping stones from the lock over which the machinery stood, along with a couple of the stone plinths upon which stood the pillars supporting the machinery. Please note that site is now private property.

Throughout the country, only four weighing machines are known to have been built, the first on the Monmouthshire Canal at Newport, the second at Midford, the third on the Glamorganshire Canal at Cardiff and the last on the Thames & Severn Canal at Brimscombe Port near Stroud. The Glamorganshire Canal machine still survives although now sited in a disused lock at the Waterways Museum at Stoke Bruerne, Northamptonshire. If you are passing it is well worth stopping to have a look at it.

Roger Halse

Although there was not then a great profit to be made from local newspapers, it enabled an enterprising printer like Richard Cruttwell to establish himself as a general printer/publisher, producing popular tourist material such as William Taylor's annual *Bath Guide*. In 1772 he married Anne Shuttleworth, daughter of Rev. Digby Shuttleworth, rector of Oborne near Sherborne. They had five children; Richard Shuttleworth, b.1775; Thomas Macaulay, b.1776; Clement Wilson, b.1780; John Francis Edward, b.1793; and Elizabeth Grace, b.1795. Next door lived Thomas Beach, the painter, who later took portraits of both Richard and Anne in 1789.

In 1775 Cruttwell moved his business to a house on the corner of St James's and Weymouth streets (now occupied by Marks & Spencers) and it was here that his business developed and prospered. He became a freemason, a churchwarden of St.James's parish, the owner of the Talbot Inn adjoining his premises in Abbeygate Street, and (significantly) a founder member, in 1777, of the Bath & West of England Society. He became the Society's printer for all their transactions, together with the works of its founder, Edmund Rack, and would have met many of his clients, such as John Billingsley, at their meetings. It was Crutwell, for example, who printed Billingsley's *General Views of the Agriculture of Somerset* which include the famous diagram of the Caisson Lock. Other 'men of science', such as the reputed Bath physician William Falconer, also made use of his services (*Essay on the Bath Waters*, &c, 1770-1782).

Most of his productions however were of a literary nature, often by notable authors of the day. These included the historians Catherine Macaulay, then living in Bath (*History of England*, 1774-1778 - Cruttwell's second son Thomas was named after her); John Collinson (*History of Somerset*, 1791), and Rev. Richard Warner, curate of Cruttwell's own parish of St.James's (*History of Bath*, completed 1801). Poets included Robert Southey of Corston (*Poems*, 1795), and the guests of Lady Miller of Batheaston (*Poetical Amusements at a Villa near Bath*, 1775-1781). Religious works naturally also featured, such as the translations and sermons (1792-1799) of Rev.Richard Graves, rector of Claverton and tutor of John Skinner of Camerton; and The Bishop Wilson *Bible* and tracts (1785), edited by Cruttwell's second eldest brother Clement, surgeon and clergyman. Cruttwell's third son was named after these two, and later became a clergyman himself.

When Cruttwell died after a long illness in 1799, he bequeathed two shares in the K.&A. each to his sons Thomas and Clement; one share in the S.C.C. each to Elizabeth and John, and shares in the Stationers Company to his wife. The business was continued very successfully by his eldest son Richard, whose most interesting product from our point of view was the printed Lock Fund Certificates for the S.C.C. Richard was duly appointed a Bath Commissioner for Improvements (c.1800), and ran a Stamp Duty Office in Bath under Government contract. From 1810 he branched out also into road haulage on the Bristol-Bath-London route, running the firm from premises in Swallow Street and Abbey Green (today the Crystal Palace public house).

The second son, Thomas Macaulay Cruttwell also achieved success, as an influential solicitor for many notable people and development projects in and around Bath. These not only included John Skinner, but also The Batheaston Coal Company, whereby he became a personal acquaintance of William Smith. There is an interesting letter of 1807 from Thomas among the Smith archives concerning local political business in which he asks as a post-script 'Will you be so obliging as to grant Permission to me & two friends to angle in your Pond?' - evidently Tucking Mill lake.

Richard Cruttwell was buried in his local parish church of St.James's, just opposite his printing works, but this was burnt out in the Bath Blitz and demolished, together with his own houses, in about 1960 to make way for the Marks & Spencer and Woolworths stores.

Mike Chapman

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