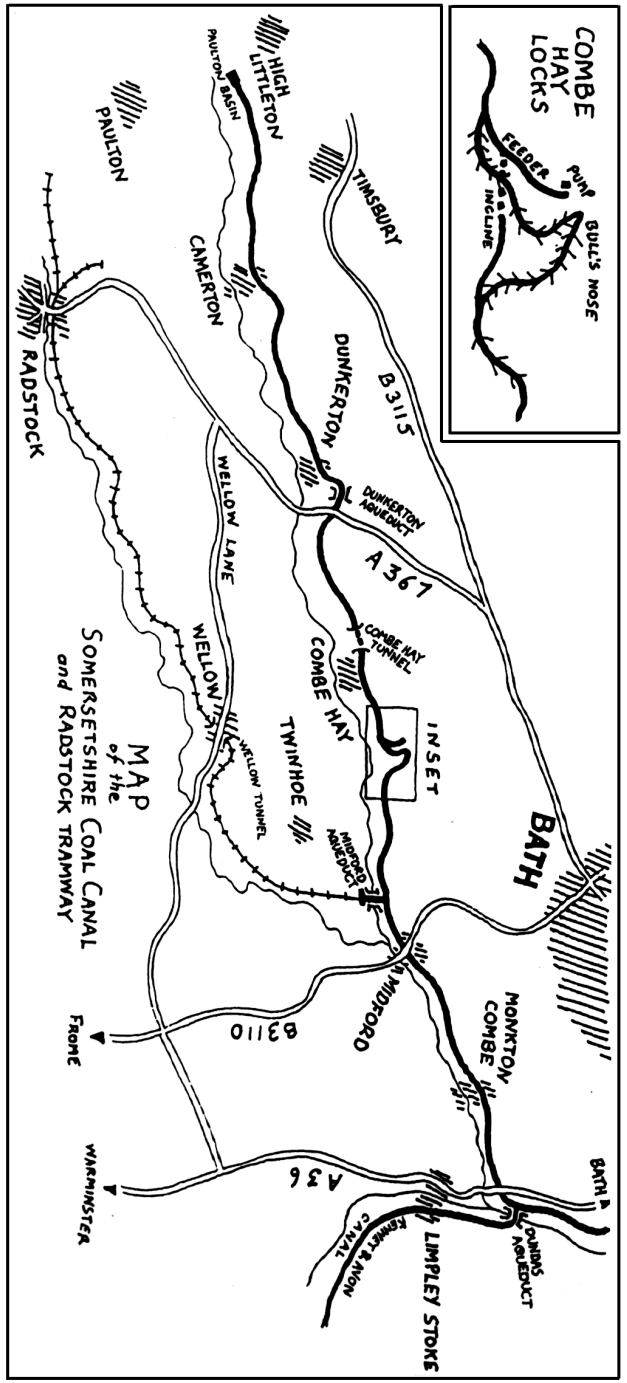
WEIGH-HOUSE

THE MAGAZINE OF THE SOMERSETSHIRE COAL CANAL SOCIETY

№ 74 AUGUST 2018



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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

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MEMBERSHIP

Membership Application Forms are available from
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36, Lower Whitelands, Radstock, Bath BA3 3JW
☎(01761) 433418 *E-mail:* **membership@coalcanal.org.uk**
and on the Society Website: **http://www.coalcanal.org**

The Editor welcomes 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 necessary. Author's guidelines are available at:
http://www.coalcanal.org/wh/guidelines.htm.

Please send articles and correspondence to:
Adrian Tuddenham 88,Mount Road, Southdown, Bath BA2 1LH
☎ 01225 335974 *E-mail (not HTML):* **adrian@poppyrecords.co.uk**

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

Sunday 2nd December —10:00
WORK PARTY — Location to be advised
For further details please contact: *Adrian Tuddenham* ☎ 01225 335974

Tuesday 18th December —10:00
WORK PARTY — COMBE HAY LOCKS
For further details please contact: *Richard Hignett* ☎ 01793 855631 engineering@coalcanal.org.uk

Please note there are no Social Evenings in December and January

Sunday 6th January —10:00
WORK PARTY — Location to be advised
For further details please contact: *Adrian Tuddenham* ☎ 01225 335974

Tuesday 15th January —10:00
WORK PARTY — COMBE HAY LOCKS
For further details please contact: *Richard Hignett* ☎ 01793 855631 engineering@coalcanal.org.uk

Sunday 3rd February —10:00
WORK PARTY — Location to be advised
For further details please contact: *Adrian Tuddenham* ☎ 01225 335974

Sunday 17th February —10:00
WALK — PAULTON AND TIMSBURY BASINS
Meet: Paulton public car park.
For further details please contact: *Adrian Tuddenham* ☎ 01225 335974

Tuesday 19th February —10:00
WORK PARTY — COMBE HAY LOCKS
For further details please contact: *Richard Hignett* ☎ 01793 855631 engineering@coalcanal.org.uk

Thursday 21st February— 19:30
SOCIAL EVENING — SALTFORD BRASSMILL
by Richard Ross
Meet: The Radstock Working Men's Club.
For further details please see website or contact: *Steve Page* ☎ 01761 433418

Sunday 3rd March —10:00
WORK PARTY — Location to be advised
For further details please contact: *Adrian Tuddenham* ☎ 01225 335974

Tuesday 19th March —10:00
WORK PARTY — COMBE HAY LOCKS
For further details please contact: *Richard Hignett* ☎ 01793 855631 engineering@coalcanal.org.uk

Walks

These are all circular walks unless otherwise noted. You only need to arrange your transport to and from the meeting point. Where the distance is not shown, the walks tend to be in the form of detailed explanations of short sections of the canal and its relationship with the locality; as such,they 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: http://www.coalcanal.org for last-minute changes

WEIGH - HOUSE Nº 74

EDITOR'S NOTES

We have been sorely missing the articles which Mike Chapman regularly contributed to these issues, but I am pleased to say that Steve Page has stepped into the breach with a major dissertation on the subject of the Kilmersdon Inclined Plane. Although that was a heavy railway undertaking, Steve's explanation of how it was operated might equally well apply to the many other smaller inclined planes on the S.C.C. As we have no living record to draw on, we can only speculate on how they might have been worked, but the detail in Steve's article gives us a good basis for any interpretation in future.

It has long been regretted that most of our Thursday talks at Radstock were never written up for Weigh-House and a lot of very interesting material may have been lost. We are therefore very grateful to Stuart Fisher for an article based on his talk about the Bristol Junction Canal, which he gave to our members in March of this year. Although the canal was never built, Stuart's research is very valuable in showing us the background to canal planning in those days.

ADRIAN TUDDENHAM

CHAIRMAN'S NOTES

Welcome to the latest edition of Weigh-House; I am delighted to announce that, once again, we have exciting news. It is fair to say that after a surge of activity three years ago things had gone a little quiet, at least in the public eye; but behind the scenes a few die-hards have been involved in discussions and negotiations as to a practical way forward for the Canal and the Society.

In our submission to Bath &North East Somerset Council (B&NES) for their Waterspace Strategy we stated that our aim is to restore the Canal to navigation between Dundas Aqueduct and Timsbury Basin. B&NES have accepted this and our canal is now included in their strategy; but even for B&NES there is a yawning gap between where we are now and where we want to be. To use an old analogy, it's like trying to eat an elephant: you eat an elephant one slice at a time - the question is, which slice is first.

We have decided that the first initiative needs to treat the Canal as a whole. Whilst we are working and will continue to work on enhancing sections of canal, we want people to understand it as a whole and to connect to all the settlements and communities along its length. Thus we are promoting the *Coal Canal Way*; a waymarked footpath that will link Dundas Aqueduct and Timsbury Basin; to open minds and garner enthusiasm for full restoration. I have had meetings with officers of B&NES who are enthusiastic, and in the next month I will be meeting their Highways Officer to discuss the Rights of Way along the Canal route. B&NES is a powerful ally, for not only has it the political and regulatory power to assist, but as the highway authority it can enter into agreements for permissive paths where there are currently no Rights of Way along the Canal. This is the first step to promote the *Coal Canal Way*, and one more step along the pathway towards restoration.

PATRICK MOSS

NEW MEMBERS

The Society welcomes the following new members:

Mr R. Cambourne	Vobster	Mr S. Chasey	Bath
Mr J. Welham	Penzance	Mr Y. Johnson	London
Mr D. Jackson	Saltford	Ms A. Newton	Chippenham

DONATIONS & SPONSORSHIP

The Society wishes to express its thanks to the following for their generous donations:

Mr P. Collins	Mr D. Dodd
Ms J. Marshall	Mr C. Wimpenny
Mr D. Ahlberg	Mr P. Evans
Mr D. Storey	Mr J. Gould.

DATES FOR YOUR DIARY — 2018

Sunday 5th August —10:00
WORK PARTY — Location to be advised
For further details please contact: *Richard Hignett* ☎ 01793 855631 engineering@coalcanal.org.uk

Tuesday 21st August —10:00
WORK PARTY — COMBE HAY LOCKS
For further details please contact: *Richard Hignett* ☎ 01793 855631 engineering@coalcanal.org.uk

Sunday 2nd September —10:00
WORK PARTY — Location to be advised
For further details please contact: *Adrian Tuddenham* ☎ 01225 335974

Tuesday 18th September —10:00
WORK PARTY — COMBE HAY LOCKS
For further details please contact: *Richard Hignett* ☎ 01793 855631 engineering@coalcanal.org.uk

Sunday 7th October —10:00
WORK PARTY — Location to be advised
For further details please contact: *Adrian Tuddenham* ☎ 01225 335974

Tuesday 16th October —10:00
WORK PARTY — COMBE HAY LOCKS
For further details please contact: *Richard Hignett* ☎ 01793 855631 engineering@coalcanal.org.uk

Thursday 18th October— 19:30
SOCIAL EVENING — STOTHERT AND THE CANAL
by Stuart Burroughs
Meet: The Radstock Working Men's Club.
For further details please see website or contact: *Steve Page* ☎ 01761 433418

Sunday 4th November —10:00
WORK PARTY — Location to be advised
For further details please contact: *Adrian Tuddenham* ☎ 01225 335974

Thursday 15th November— 19:30
SOCIAL EVENING — JOHN PADMORE, 19th CENTURY ENGINEER AND POLYMATH
by Richard Ross
Meet: The Radstock Working Men's Club.
For further details please see website or contact: *Steve Page* ☎ 01761 433418

Sunday 18th November —10:00
WALK — COMBE HAY LOCKS & THE ENGINE SITE
Meet: Layby opposite Bridge Farm near Lock 15, BA2 7EE
For further details please contact: *Derrick Hunt* ☎ 01225 863066 derrickjohnhunt@gmail.com

Tuesday 20th November —10:00
WORK PARTY — COMBE HAY LOCKS
For further details please contact: *Richard Hignett* ☎ 01793 855631 engineering@coalcanal.org.uk

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PUB RE-OPENS

So many public houses have fallen on hard times in recent years, that the closure of the village 'local' is now seen as almost inevitable and often occurs with very little comment. The Packhorse Inn at Southstoke is an exception to this rule, its closure in 2012 was vigorously opposed and a campaign group was immediately formed to press for its re-opening.

After prolonged negotiations, the building and grounds were purchased with the aid of donations and pledges from the local community and the work of restoration begun. The buildings were virtually derelict and the gardens completely overgrown; teams of enthusiasts from the village and Ralph Allen School put in more than a thousand hours of voluntary work in the Summer of 2017 on the gardens alone.

The building itself was practically a ruin, needing major roofing repairs and complete gutting of the interior. In the course of the restoration, a 17th century fireplace was uncovered; this now forms a major feature of the saloon bar. The number of volunteers who have worked on the building runs into hundreds, and donations even included a complete bathroom suite.

By March 2018 the Packhorse was ready to open its doors again, exactly 400 years after it had first opened as a village ale house. As a community pub, it is owned by 430 shareholders and has a lively programme of events organised by a local management team. The diary of events can be seen on their website at:

https://packhorsebath.co.uk

If anyone knows of other pubs near the S.C.C. with interesting stories, the editor would be pleased to hear about them.

CLAVERTON PUMPING STATION

Claverton pumping station is maintained and operated by volunteers under the auspices of the Canal and River Trust. The pump is the ultimate in environmentally-friendly technology as it is powered entirely by the River Avon, which means that it burns no fuel and creates no waste.

The opening days for 2018 are:

Aug 11 *	Sept 15
Aug 18	Sept 22 *
Aug 25 *	Oct 6 *
Sept 8 *	Oct 13
	Oct 20 *

* Running days.

All proceeds go towards the maintenance and improvement of the pumping station, the canal and its environment.

http://www.claverton.org

MEMBERSHIP RENEWALS

Thank you to all who have already renewed their membership for 2018 - your continued support is appreciated. If you have not already renewed for this year, please do so as soon as possible, via the link in our website: **http://www.coalcanal.org** or if you prefer, cheques can be posted to me at the address inside the front cover of Weigh-House.

Starting in 2019, for those who pay by cash, cheque or online, subscription renewals will become due in January for the forthcoming year. This should make it easier to remember and avoid any confusion as to when subscriptions are due. If you pay by standing order, then of course you do not need to do anything, as your subscription automatically renews every year on your chosen date.

STEVE PAGE

SOCIAL MEDIA

Over the last few months we have started to put a lot more effort into Social Media. We have four sites spread over *Facebook*, *Twitter* and *Flickr*. The *Facebook* group allows you to post pictures, videos and strike up a discussion about the Canal. The *Flickr* site has over 150 photos of the Canal, a lot were taken by our own photographer. In all cases search for "Coal Canal" or "Somersetshire Coal Canal". Social Media is a great place to get involved and keep up to date with what is going on in the Society.

MARK SHERREY

DAVE CHURCH

We were saddened to hear of the death of Dave Church, a long-standing member of the Society and a keen supporter of our work on the Canal at at Paulton. He was born in the wharfinger's cottage adjacent to Timsbury Basin and spent his childhood there. In later years he lived in one of the row of cottages near Paulton Foundry, which he rebuilt himself.

He and his wife were keen supporters of the S.C.C.S. and he kept a close eye on our work parties at Paulton and Timsbury Basins, regretting that his failing health prevented him from joining in and helping.

His knowledge of the area was invaluable and he contributed to much of our understanding of the Canal structures. The plan he gave us of the wharfinger's cottage (WH61) was drawn from memory and more recently he identified a puzzling object, which we had recovered from the Intake, as a structure his father had built to make it easier to dip a bucket into the stream (something we would never have guessed without his help).

We shall miss him.

DAVE CHURCH
Checking up on our work at Timsbury Basin

NAVVYING NOTES

After two previous years of construction and rebuilding, the work parties in the past year have had to concentrate on the more mundane tasks of maintenance. This is far less glamourous work than building things, but it is just as important for improving the condition of the Canal.

It was amazing how rapidly Nature had reclaimed the lock flight at Combe Hay; our showcase view up the flight had all-but disappeared in a jungle of new growth. Richard Hignett was determined to keep up a regular maintenance schedule this year, to prevent the job getting out of hand as it had done the previous year, so he planned a series of Tuesday work parties to cater for volunteers who had found Sundays unsuitable. Tuesdays must have been equally unsuitable, because very few volunteeres turned up to the first sessions, although this number has recently begun to improve. Despite such a small work force, the amount of clearance achieved on a good day was most impressive.

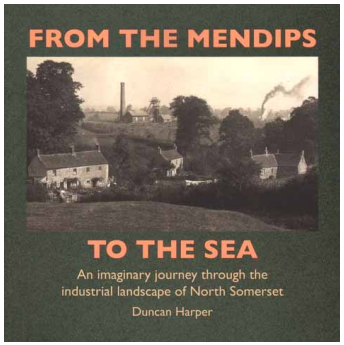
After a promising start, however, our work on Locks 12 and 13 was brought to a halt by fallen trees which blocked the pathway and prevented us getting the Allen Scythe on site. After that, a series of breakdowns dogged our work, with the Allen Scythe needing extensive repairs after – and sometimes during - each work party. By late Spring, the growth in the lock pounds was so high we couldn't see where we were going, but we soldiered on and managed to clear parts of them.

The Paulton work parties also suffered from faltering numbers: one was cancelled because nobody was available to lead it and another because nobody was able to take part. On a more positive note, those that did take place were enthusiastically attended and managed to undertake some good work. The towpath was kept clear of vegetation, partly by our work parties with the assistance of the Allen

THE ALLEN SCYTHE IN USE AT PAULTON BASIN

FROM THE MENDIPS TO THE SEA
"An imaginary journey through the industrial landscape of North Somerset"

The Mendip hills in North Somerset were once the scene of considerable industry, notably coal mining and stone quarrying - the latter continues, but the last coal mines closed during the 1960s. In this most attractive, well written and enjoyable book the author imagines a journey his great-grandfather and grandfather, both born into Mendip coal-mining communities, could have made in the late 19th century, from Holcombe in the west, through Radstock - the centre of the mining industry, up to Bath, and then along the Avon to Bristol and the sea.



104 pages. Around 130 archive photographs of the industrial landscape, contemporary maps and other illustrations. Larger format paperback.

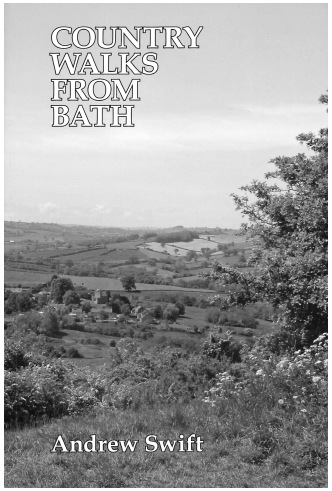
http://lightmoor.co.uk/books/from-the-mendips-to-the-sea/L9990

COUNTRY WALKS FROM BATH

Another gem from the Akeman Press has recently been published. This marvellous book contains much more than just directions and, in my view, set the standard which all walks books should meet. I can do no better than quote from the description on the Akeman Press website:-

"Bath is surrounded by countryside of extraordinary beauty and diversity, much of it little changed since the city's 18th-century heyday. These 14 walks, all of which start in the city centre, explore this fascinating landscape, following ancient holloways and green lanes to visit civil war battlefields, lost pleasure gardens, country pubs, lost canals, iron age hill forts, Roman roads, abandoned quarries and much more. Three of the walks explore the course of the disused railway where *The Titfield Thunderbolt* was filmed over half a century ago, and the final walk tackles the thorny question of whether stone circles once stood on the hills above the city. The book also looks at recent controversies, and explains why local people fought to defend the setting of the World Heritage site.

All the walks come with maps, and there is a section on practicalities, in which author Andrew Swift advises what to take with you. He is an enthusiast for Ordnance Survey Maps, and provides details on which to use. There is information on pubs and other refreshment stops included in the walks. Although the official starting point is in the city centre, Andrew Swift helpfully provides information about public transport for those who prefer to take a short cut to the edge of the city, or cut the walk short.



At £15 it is excellent value for money.

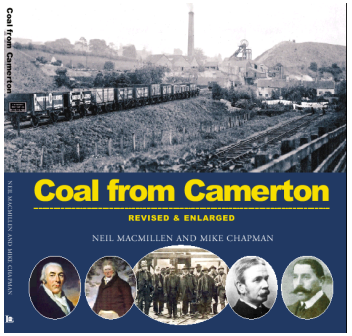
https://www.akemanpress.com/

DJH

BOOKS

COAL FROM CAMERTON by Neil Macmillen and Mike Chapman

This is a much enlarged and updated version of the book of the same title which was published in 1990. The chapters are arranged in chronological order, covering the growth and decline of the coalfield from before 1790 to the present day; with an interesting postscript of local memories and a useful glossary of mining terms. In addition to the coalfield and the pits, the important subjects of canal and railway transport are very comprehensively covered, with due prominence being given to the S.C.C. at the various stages of its life.



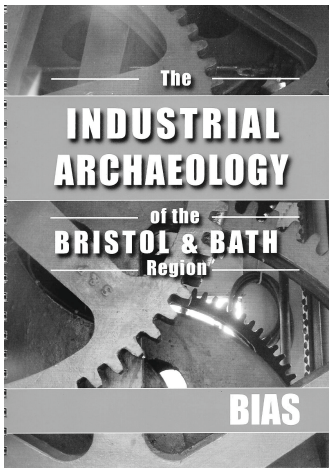
The social side of everyday life in the mining communities is well illustrated and a complete chapter is devoted to relationships between the Rev. Skinner and the colliers. Family histories of some of the the mine owners, promoters and backers are summarised, giving a good insight into way business was conducted in the past.

Based on their previous publications, we have come to expect well-written and comprehensive accounts of flawless accuracy from these authors - this book does not show any deviation from that expectation and is comprehensively illustrated with line drawings and photographs that compliment the detail of the text.

Price £15 from Lightmoor Press: **http://www.lightmoor.co.uk**
also available from bookshops and museums in the Radstock and Bath area.

THE INDUSTRIAL ARCHAEOLOGY OF THE BRISTOL AND BATH REGION

After many years of work - with contributions from the members of BIAS- an updated and greatly expanded version of Joan Day's 1987 gazetteer of industrial archaeology in the BIAS area has been printed. BIAS Chairman Tony Coverdale has collected the numerous updated and entirely new entries.



A thematic approach has been adopted to this review, industry sectors: Banking; Food, Drink & Tobacco; Mining & Quarrying; Metals; Manufacturing; Transport; Utilities. 308 sites of industrial archaeological importance within the four unitary authorities of Bristol; Bath & North East Somerset; North Somerset and South Gloucestershire addressed.

Members of the SCCS will be delighted to see the entries on P97 & 98.

The retail price is £9.95 from the Museum of Bath at Work, Julian Road, BATH BA1 2RH **mobaw@hotmail.com**
Postage and packing is £3.00 extra.
Cheques payable to 'BIAS' please.

https://www.b-i-a-s.org.uk/

DJH

Scythe and partly by Brian Gould and his sons, testing out a new mowing machine. A huge mass of silt, deposited in the Intake tunnel by Winter storms, was cleared in two rather wet and muddy sessions by the troglodyte masochists in our team (we were so lucky to find members who fell into both categories simultaneously).

The weed growth in the Dry Dock has been an on-going problem, occupying far too much work party effort that could be better spent elsewhere and achieving far less than we had hoped for. As an experiment we decided to see if the Allen Scythe could do the job quicker, bearing in mind that getting it into and out of the dock would not be an easy task. Whatever method we used for getting it into the dock, we could reasonably predict that gravity would ensure that it went downwards — what we could not predict was its condition when it got to the the bottom, because it had no brakes. To our surprise and gratification, we found that driving it slowly down some scaffold boards under engine power gave us a controlled approach and resulted in no mishaps. Once the loose stones had been cleared out of the way, the Allen Scythe made short work of demolishing the weeds and left the dock floor looking quite presentable.

We agreed that the best and safest way of getting the machine out of the dock would be the reverse of the way we got it in: simply driving it under its own power back up the planks. As a safety precaution we used two operators, one on each handlebar, well out of the way at the back, to keep it under control but nobody else was allowed anywhere near it. Once again we were agreeably surprised when, after a few faltering slithers, it climbed the planks and arrived safely at normal ground level. For the Summer months when the planks are dry and the weed growth at its worst, the Allen Scythe appears to be the right tool for the job.

ONE OF THE UNEXPECTED BENEFITS OF THE CANAL:
A LOCAL ARTIST PAINTING A PICTURE NEAR THE DRY DOCK

Occasionally we have had to cancel work parties because of bad weather, but this is usually during the Winter; the recent dry Summer weather has now taken a similar toll because of the risk of heat exhaustion in the extremely strong sunshine, which we hadn't had time to acclimatise ourselves to. The main consolation is that the soil conditions have been so dry that they have retarded plant growth, so there is less to cut down. In any case, we aren't intent on destroying all the vegetation as that would spoil the area for walkers and other users of the amenity we are helping to create.

KILMERSDON COLLIERY INCLINE

The recent walk which took at the Kilmersdon Colliery Incline and associated surroundings (see report in WH73) has prompted some thought as to the actual working of the incline itself. Although not directly connected with the S.C.C., its principle was similar to some of those which directly fed the Canal, in that it was a "self-acting" incline i.e. the weight of a loaded wagon descending hauled an empty one up.

So let's take a look at how it worked. The track layout on the incline changed slightly over the years; this is an account of it in its final form, based on photographic and video evidence, as well as personal observations.

The coal was loaded at the colliery screens into standard gauge railway wagons, normally steel-bodied 16-ton mineral wagons. These were pushed (propelled in railway jargon) by a Peckett 0-4-0 saddle tank locomotive (built in 1929, Works No.1788) three or four at a time, from the colliery, across the level crossing, along the track to the top of the incline.

Photograph: **Steve Page**

PECKETT LOCOMOTIVE AT THE TOP OF THE INCLINE

At the approach to the incline, the track split into two, one passing each side of the stone-built winding house, then coming closer together to form two parallel tracks which continued down the incline. Just beyond the point where the tracks split, a siding branched off to the right. This led onto one of the original tipping areas, or batches, but in later years was used for placing wagons out of the way during the shunting operations which took place as part of the procedure for operating the incline.

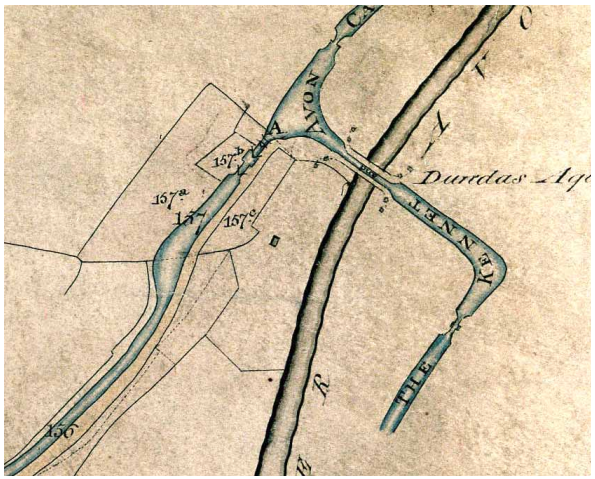
Line 3, shown for the Bristol Junction in Hadfield's Canals of Southern England, is thought out in more detail. It would have run from west of Wootton Bassett down the Brinkworth Brook to Malmesbury, up the Avon to Luckington, made a detour round what is now J18 of the M4, visited Coalpit Heath to collect loads and entered Bristol via the River Frome, the last 700m of which are covered over but can still be passed through by small boat, to the Floating Harbour.

The Wiltshire & Swindon History Museum, actually in Chippenham, has a further map of the Bristol Junction by Whitworth. It is dated 1811, after the Wilts & Berks had assured the Thames & Severn they would abandon the proposal, so were they being devious or was this work Whitworth had already been contracted to undertake? It is a large map, over 1.6m long, with a lot of detail although distances are not too accurate when compared with current maps. Did Whitworth survey this all himself or did he plot his route onto somebody else's base map? His line [*Line 4*] follows the Woodbridge Brook to Malmesbury and then climbs the Gauze Brook towards Acton Turville. It deals with the Cotswold scarp by a tunnel and passes Mount Hill on the east side of Bristol on a line which follows current major roads exactly. A considerable length of the M4 has been built close to the routes proposed for this canal. When all the derelict canals have been restored then perhaps we could work on some of the more interesting proposals which never made it the first time round.

STUART FISHER

THE CRUSE MAP

The map of the S.C.C. drawn up by Jeremiah Cruse c.1804, based on an earlier map by William Smith, is a valuable record of the Canal and its tramways; for many years this map has been stored, rolled up, in the cellars of the Bath Royal Literary and Scientific Institution. Recently a plan was put forward to restore it, but when the map was unrolled it was found to need far more work than had originally been anticipated and local resources would have been unable to finance this.

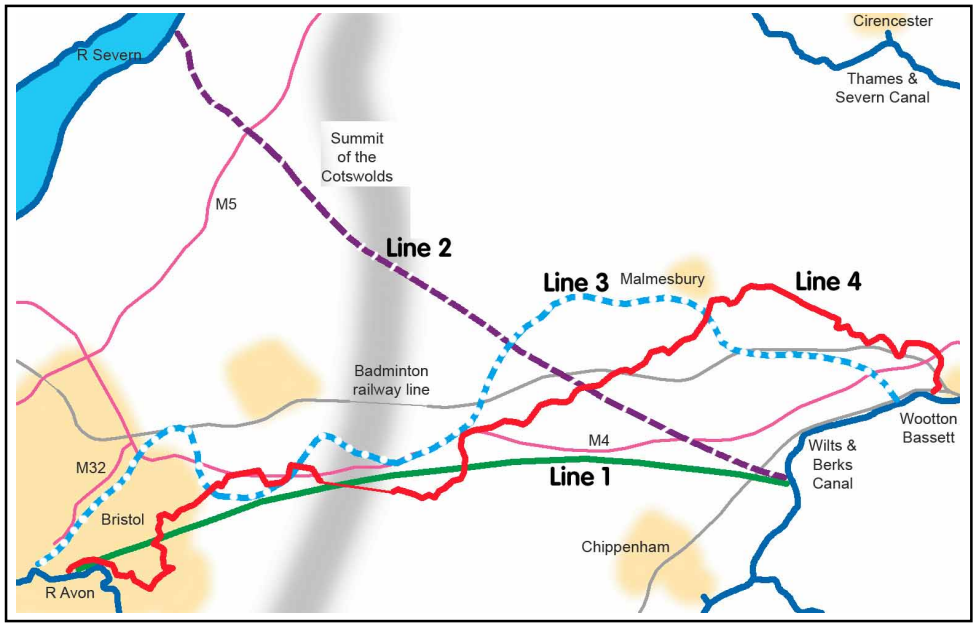


A SMALL SECTION OF THE CRUSE MAP
Showing the junction with the K&A Canal at Dundas

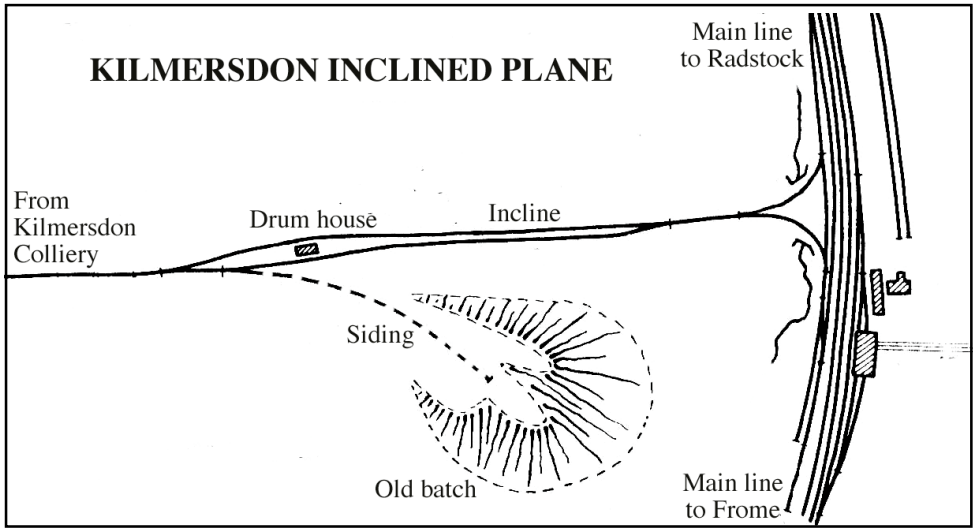
The project has now been taken on by Prof. Julian Vincent of the B.R.L.S.I. who is looking into ways of increasing national interest in the map as a preliminary step towards promoting its eventual restoration. The B.R.L.S.I. has already published a very popular series of booklets on other subjects of local interest, so a booklet which covers the basics of William Smith, the Cruse Map and the S.C.C. in general is a natural first step. Following this, he is considering publishing a book which follows in the footsteps of *The Somersetshire Coal Canal and Railways* by Kenneth R. Clew but includes as much as possible of the extra knowledge which has been gained in the 48 years since that book was published. The S.C.C.S. is fully supportive of these projects.

The Thames & Severn Canal and Stroudwater Navigation had had a monopoly on coast to coast traffic in the south during the canal mania from 1789 but that was to change in 1810 with the completion of the Kennet & Avon and Wilts & Berks. As well as carriage of goods for others, the Wilts & Berks had coal and stone mining interests in the Forest of Dean but could not easily transport their products home. A pamphlet by John Disney, whose family owned one eighth of the shares of the Thames & Severn, explained to fellow shareholders what had resulted. The Wilts & Berks had proposed the Severn Junction Canal, now the North Wilts Canal, to link the two together between Latton and Swindon. This would reduce traffic between Latton and Lechlade but would increase traffic west of Latton as the Thames above Abingdon could be then avoided. At the same time they proposed the Bristol Junction Canal from their line at Foxham to Bristol [*Line 1*]. The Thames & Severn were strongly opposed to the latter but accepted the Severn Junction on being assured that the BJC would be dropped.

However, somebody from the River Thames turned up at a Thames & Severn meeting in 1810 and stated that the Thames was to be improved from Lechlade to Abingdon. This would help Thames & Severn traffic at no cost to themselves and not result in any loss of traffic east of Latton so they withdrew from the Severn Junction proposal. The Wilts & Berks were incensed and not only reinstated the Bristol Junction but also a line from Foxham to Berkeley [*Line 2*] to link up with the future Gloucester & Berkeley Canal. These two lines were simply schematic on Disney's pamphlet and ignored the problem of negotiating the scarp slope of the Cotswolds or Mount Hill to the east of Bristol. Line 2 lacks water supplies and would surely encourage boats to go south onto the Kennet & Avon to get to the Thames at Reading, thus losing the Wilts & Berks much of its traffic east of Foxham, the greater part of its length, so it would have been rather a hollow threat. Disney had the Commons library searched for the relevant enabling bill for the Thames work but it did not exist. The Thames had lied to them. When the dust had settled, the two canal companies returned to their previous agreement, having lost a year in presenting their own bills.

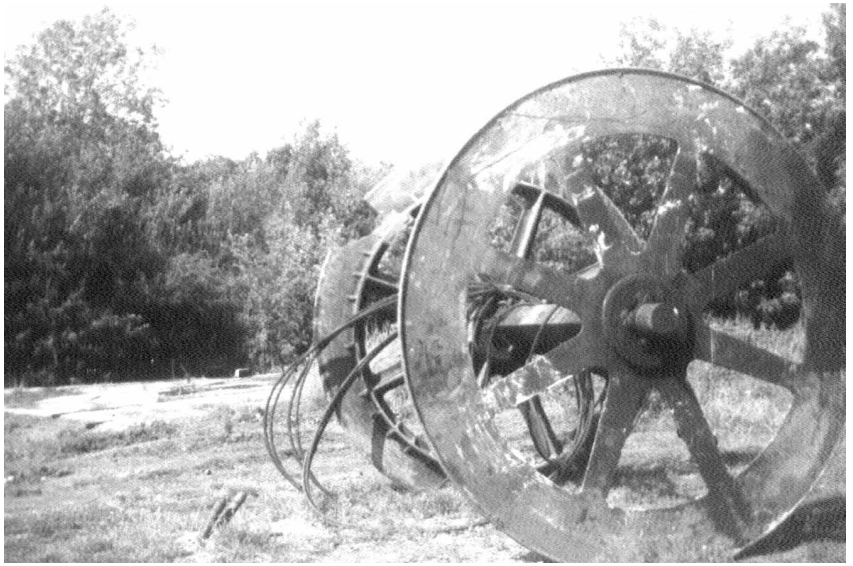


MAP OF THE FOUR PROPOSED CANAL ROUTES



PLAN OF KILMERSDON INCLINE

Inside the winding house the steel haulage cables were wound around a drum in such a way that as the drum revolved, one cable was wound in as the other paid out, and vice-versa when the drum revolved in the other direction. From this it will be seen that loaded wagons had to descend the incline alternately using the left- and right-hand tracks. (Some accounts erroneously state that loaded wagons always descended on the left-hand track).



Photograph: **Steve Page**

THE REMAINS OF THE WINDING DRUM — July 1975

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The two cables led out of the winding house, one just above ground level and the other just below, then, supported on pulley wheels, diverged from each other across the ground until they reached the centre of their respective tracks at the top of the incline. Here the railway tracks were set in concrete for stability, sloping very gently towards the incline. The incline operator stood in the narrow space between the two tracks, where levers were provided for controlling the speed of the winding drum. Each track had a wheel-stop, consisting of a section of H girder hinged at one end, with a short operating lever; this would be swung across the rail to prevent a wagon running away down the incline. In case this did happen, another lever between the tracks operated catch points part way down the incline in order to derail a runaway wagon into the soft ground before it got too far.

Photograph: **Steve Page**

THE OPERATOR'S VIEW AT THE TOP OF THE INCLINE
The brake and catch-point levers are in the foreground, with the cable running over a pulley wheel at the crest of the slope towards the right.
On the extreme left is the wheel stop and its operating lever.

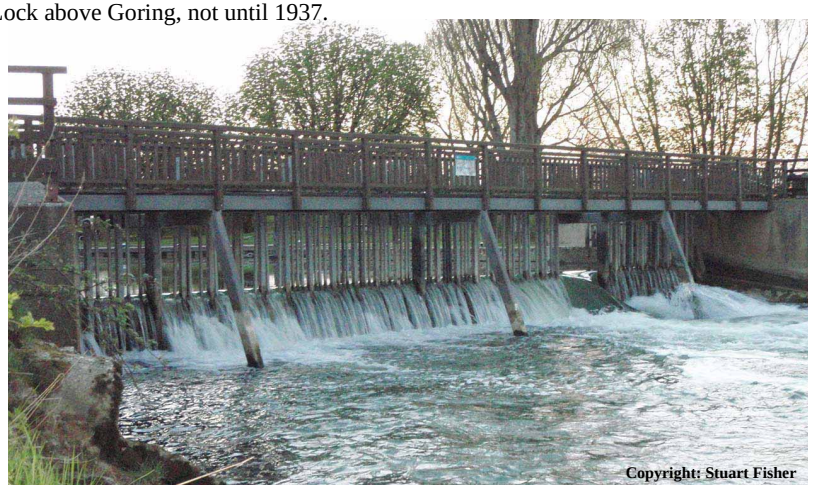
As the train of loaded wagons approached the incline it would proceed onto whichever track an empty wagon had last ascended; the hand-operated points would have been left set for this route, and this is where the "short" end of the cable would have been left. With the first loaded wagon placed on the slightly sloping track immediately prior to the incline, uncoupled from the rest of the train (and with the wheel-stop in place to prevent it rolling over the top) the operator would lift the end of the rope and attach it to the coupling of the wagon. He would then stand between the tracks by his levers, and using the communication apparatus provided, signal to his colleague at the bottom of the incline, that a loaded wagon was ready to descend.

THE BRISTOL JUNCTION
and other non-canals

Canal mania resulted in many interesting proposals which never saw the light of day. In the Southwest these included the Bristol Junction from the Wilts & Berks to Bristol, bypassing the Kennet & Avon; a line from Pewsey to Salisbury; a connection from Newbury to Basingstoke and the Western Junction from Abingdon to Aylesbury, completing a direct line from the Somersetshire Coal Canal to near the summit of the Grand Junction over the Chilterns.

Most frequently, however, these proposals were intended to bypass the Thames, which was in a poor state. Such proposals included lines from Kempsford or Lechlade to Abingdon or Wallingford, Reading or Sonning to Monkey Island or Isleworth and even the Hampton Gay Canal which would have run from that village on the Oxford Canal to Isleworth, missing out the entire non tidal Thames.

A usual route from Abingdon to London was to go up the Thames and the Oxford Canal to Rugby and then down the Grand Junction, two or three times as far as going down the Thames but avoiding the risk of spending a month or two sitting on the bottom, waiting for water. Even the Lord Mayor's barge grounded at Clifton Hampden on a journey back from Oxford. There was continuous dispute between boat owners and the millers over water and there must be some sympathy for the latter. Before the days of pound locks, water was controlled by paddle and rymer weirs. A series of poles, each with a wooden blade on the end, were built up in layers to form a weir, probably not particularly watertight. When a boat came down, part of the weir was dismantled, the boat shooting the gap. Too big a gap wasted water and effort. Too small a gap would result in damage to the boat or the weir. Approach was not helped by the rudder's being ineffective with the boat travelling at the speed of the water. The tow rope had to come off neither too early nor too late and then be reattached to the boat moving in the weirpool. The fatality rate was significant among lock keepers, never mind boat crews. Coming upstream was even more wasteful of water and effort as a team would need to winch the boat up using a capstan with the risk of rope breakage. The last of these weirs to be retired from use by a pound lock was at Hart's Lock above Goring, not until 1937. →

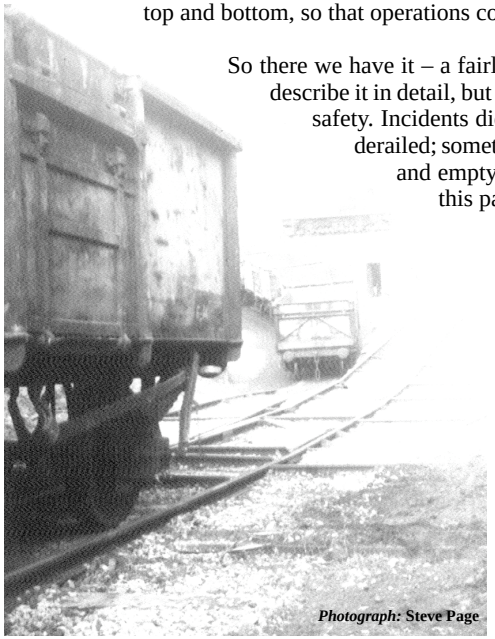


NORTHMOOR — THE LAST REMAINING PADDLE LOCK ON THE THAMES
Now with a pound lock alongside

Then a swift kick to remove the scotch and the loaded wagon would roll, under the effect of gravity, into one of two parallel sidings, its progress sharply (and noisily) halted by coming into contact with wagons already there. At the end of each of these sidings was a very substantial stop-block, made from steel girders, and far more robust than would normally be found at the end of a siding. When the sidings were full, the loaded wagons would be removed by the B.R. diesel shunting locomotive and formed up into a train ready for a larger locomotive to take to Portishead Power Station.

A small hut was situated in the triangle of tracks at the bottom of the incline, to provide shelter from the rain. Lighting columns were provided on the incline, and beside the tracks at the top and bottom, so that operations could continue during the hours of darkness.

So there we have it – a fairly complex procedure, especially when you try to describe it in detail, but this was carried out many times daily, in complete safety. Incidents did occur from time to time – wagons occasionally derailed; sometimes the points on the incline failed to set properly, and empty and loaded wagons met on the same track. How this particular situation was resolved I do not know!



Photograph: **Steve Page**

A DERAILMENT
AT THE BOTTOM OF THE INCLINE

Closure

Kilmersdon Colliery closed in 1973. The tracks were removed from the incline and its approaches, and Nature gradually reclaimed the route. However, there are still a few traces of this fascinating operation to be found in situ. The site of Kilmersdon Colliery has all but disappeared beneath housing developments and an industrial estate, but the level crossing in Haydon is recognisable, with the "home-made" level crossing gate still in situ. Odd wooden sleepers still remain here and there along the trackbed leading to the top of the incline. Here are to be found short lengths of railway track, set in concrete, along with remains of the wheel-stops.

At the bottom of the incline, the retaining wall separating the sharply curved empty and loaded tracks, is slowly crumbling away in the undergrowth. Finally, at the end of the sidings are remains of the stop-blocks, no longer required to noisily arrest the progress of heavy wagons of coal. All is now silent, except for the chirping of birds in the trees, as this once busy industrial setting slowly returns to Nature.

References and further reading:

Through Countryside & Coalfield, Mike Vincent; Oxford Publishing Co.
Wilts & Somerset – A Railway Landscape, Duncan Harper; Millstream Books.
Sabotaged & Defeated – A Final Glimpse, Jeffery Grayer; Noodle Books.
The Bristol – Radstock – Frome Line, Colin G. Maggs; Oakwood Press.
Memories on the Somerset & Dorset, Terry Nicholls; B&R Video Productions Vol.77.

Local historian Andrew Linham's own films, which he presents to the public from time to time.

STEVE PAGE

Track Layout

The gradient varied over its length, but averaged about 1 in 6. The double track continued down the incline for just over half its length; to enable empty and loaded wagons to pass each other. Part way along the double track section, each track was provided with a catch point, for use as described above. On the double track section, the haulage cables were supported on rollers set between the rails (in the "four-foot"), but not on the lower section, where the cables needed to move laterally.

Where the double track became single, the right hand track (looking down the incline) curved towards then joined the left hand track, which remained straight. The points were changed by the wheels of a descending wagon as it passed through, as follows: in a cycle the ascending empty wagon would be first to pass over the points, taking the direction they were set in by the previous descending loaded wagon. Next the descending loaded wagon would push through the points, resetting them in position for the next ascending empty wagon. To ensure the points stayed properly in position, the point blades (or switches) were connected to a lever, which rested at an angle of around 45 degrees, and had a heavy weight attached near the top. As a descending wagon pushed through the points, the lever was lifted over-centre to lie at 45 degrees the opposite way.

Continuing down the incline, the single track immediately split into two. This point was permanently "sprung" by means of a horizontal weighted lever. When an ascending empty wagon pushed through the points, the lever was lifted slightly, but would always fall again after the wagon had passed through, and thus a descending loaded wagon would always be directed onto the right-hand route. Both tracks then curved sharply away from each other through 90 degrees.

Method of Operation

[See diagrams on pp. 12-13].

A raft of empty wagons would be propelled along a siding leading from the goods yard of the former G.W.R. station at Radstock. This siding dipped slightly into the sharp curve at the bottom of the incline. This curve was of such a small radius that a workman would use an oilcan to dribble oil onto the rails to reduce friction between the wheel flanges and the rail. The wagons would then be uncoupled from each other, then immediately recoupled using a semi-circular link and a pin to join together the outermost links of the 3-link couplings on adjoining wagons. This was called "Dee-ing them up" as with the pin in place, this temporary coupling resembled a capital letter "D". The pin had a short length of rope attached to one end; its purpose will soon become clear.

The steel haulage rope would be attached to the coupling of the leading empty wagon, and when he received the signal that a loaded wagon was ready to descend, the workman would grasp the rope attached to the pin of the temporary coupling between the first and second empty wagon. Up at the top, the wheel stop would be swung to one side, and as the loaded wagon began to descend, the haulage rope would become taut as the raft of empty wagons was drawn towards the bottom of the incline. Walking alongside the empty wagons, the workman would choose the right moment to pull out the pin, and thus release the leading empty wagon to ascend the incline.

When a loaded wagon arrived at the bottom of the incline, it would be directed onto the previously mentioned sharply curving track, which was at a higher level than where the empties would be waiting, separated from them by a retaining wall. It would be brought to a halt by the brakes acting on the winding drum at the top of the incline. A wooden wedge (or scotch) would be jammed between the tread of the wagon wheel and the top surface of the rail, to prevent any further movement. The haulage cable was then unhooked, and the end thrown down over the retaining wall to land on the track in front of the next waiting empty wagon.

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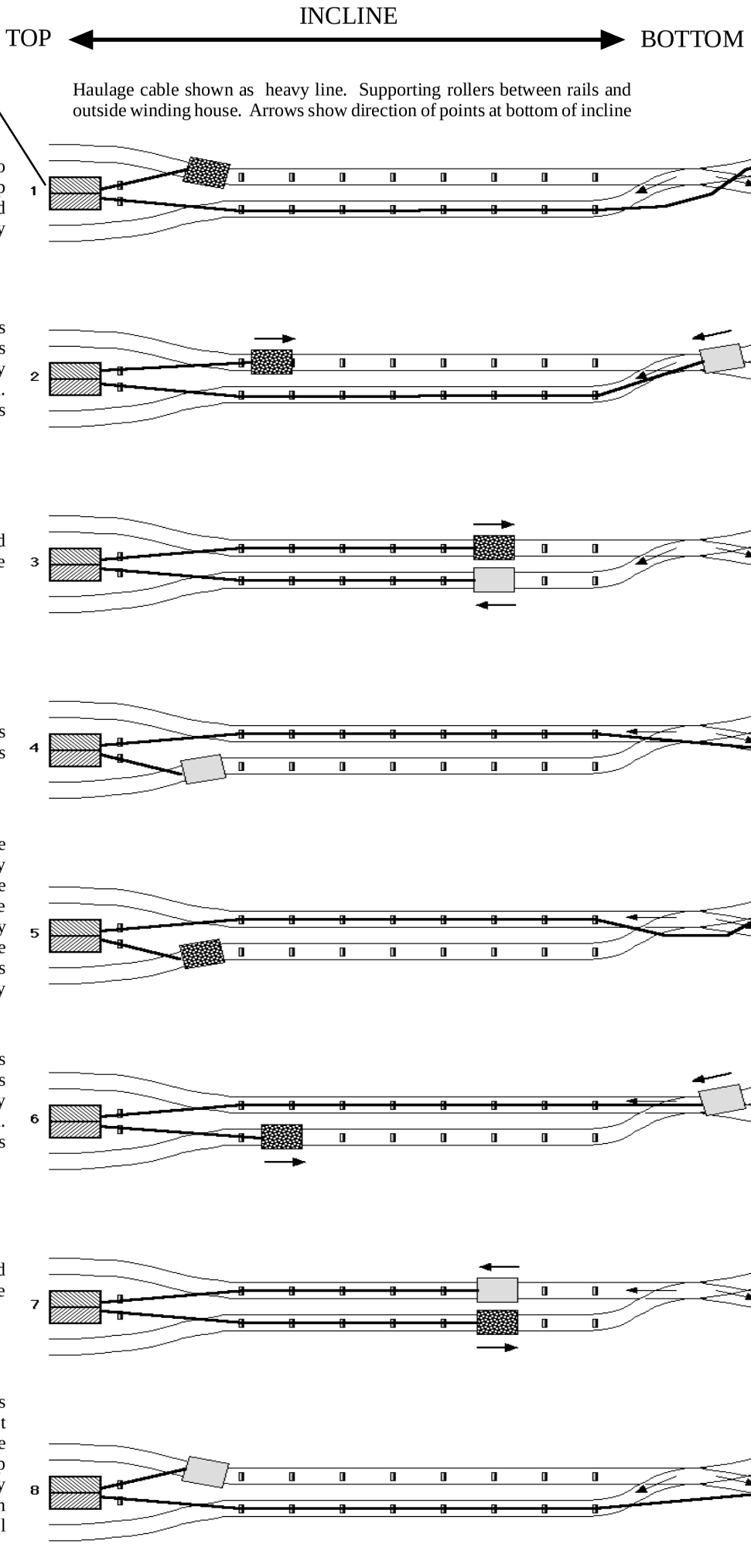

The cable is attached to a loaded wagon at the top and thrown across and attached to an empty wagon at the bottom

The loaded wagon starts to descend, the slack is taken up and the empty wagon starts to ascend. The next empty moves into place

The empty and loaded wagons pass on the double track.

The loaded wagon re-sets the points as it passes through

The empty wagon at the top has been replaced by a loaded wagon. The loaded wagon at the bottom has rolled away into the siding. The cable has been thrown across and attached to the empty wagon

The loaded wagon starts to descend, the slack is taken up and the empty wagon starts to ascend. The next empty moves into place

Weigh-House 74

The empty and loaded wagons pass on the double track.

The loaded wagon has re-set the points as it passed through. The empty wagon at the top will be replaced by another loaded wagon and the sequence will start all over again.

OPERATION OF THE KILMERSDON INCLINED PLANE