Redditch History Society

NEWSLETTER

February 2024 Volume 5 / Issue 9

February 2024 Newsletter

Hi All,

Our February meeting, which was the first of 2024, was an excellent beginning for our new year.

We had a near record attendance comprising fifty members, five new members and eight visitors, so a total of sixty-three.

However, we had a second record as our five new members included a young family of mother and three home educated children. We have therefore created a new category of ‘Junior’ member at half the normal membership.

Our third record is that we now have a membership of 73, our highest ever.

We had another excellent presentation from Henrietta Lockhart of the University of Birmingham which was entitled ‘Plants preserved for Ever’: Tales from the University Herbarium.

On page 2
These are forthcoming events including our next meeting on Monday 11th March 2024 which is The English Civil War in Worcestershire 1642-1651 by Max Keen. There is also information on other up and coming items of interest in the area.

Pages 3 and 4
Is a report on our presentation on ‘Plants preserved for Ever’: Tales from the University Herbarium given by Henrietta Lockhart of the University of Birmingham’.

On pages 5 to 8
I have continued my series of short articles on the transport systems which were important to the development of the town.

This month it is the canal system which revolutionised the transport of good and materials in the 18th and 19th centuries and predated the railway system. When the difficulty of developing a transport system based on level stretches of water, which was built with the crudest implements, the amazing engineering achievement can be appreciated.
Today, we can’t even build a short stretch of railway!

Take care, stay safe, and look forward to seeing you at our next meeting.

Anthony Green, Society Secretary

e-mail: tony.rhs@btinternet.com
Tel.: 01527 61434

Coming up

Next Meeting
Monday 11th March 2024
The English Civil War in Worcestershire 1642-1651
by Max Keen

This presentation will be a ‘little’ different to our normal fare as Max will be really giving us a performance, dressing as a Civil War officer of the Royalist persuasion and accompanying this with both audio and visual additions.

He will give us an overview of the Civil War, followed by examples, close to home, of how this affected the areas close by.

This should be an interesting event.

Two-Day Conference at University of Worcester

Saturday 6 April and Sunday 7 April 2024.

‘REVISITING WORCESTERSHIRE’S PAST

This is a conference organised by the University of Worcester and Worcestershire Historical Society and runs from 9.30 am – 5.00 pm at St John’s Campus, Henwick Grove, Worcester WR2 6AJ.

To book, please contact: Mrs Joy Morgan whshonsec@gmail.com or 07872 138135

Please note that the closing date for BOOKING is the 16 MARCH 2024.

There is a pdf copy of the conference programme on the WLHF website at:

https://www.wlhf.org.uk/wlhf/wp-content/uploads/2024/02/PROGRAMME-FOR-POSTER.pdf

Afternoon Conference - Worcester Civic Society

Worcester Civic Society are arranging a conference on the afternoon of Monday 11th March in the afternoon in the Guildhall organised by David Hallmark on the topic of the Treaty of Worcester negotiated between Henry III and Llewellyn of Gwynedd in 1218.

Precise details will be issued shortly but we would be interested in hearing from people who would be interested in attending.

There will be no charge,but attendance is by pre-booking only.

In the first instance if you wish to attend,please let the Worcester Civic Society Chairman Phil Douce know at phildouce68@gmail.com and he will ensure you get full details as soon as they are available.

Forge Mill Needle Museum and Bordesley Abbey Visitor Centre

Exhibition: Photographic Exhibition -Wildlife and Nature

Redditch Photographic Society’s exhibition runs until Sunday 3rd March 2024.

In the exhibition members of the Society display a wide range stunning photographs of animals and insects in their natural habitats.

My collage overview can only give an indication of the quality and range of the photographs. It is necessary to be ‘up close and personnel’ to the images to appreciate the details.

For the exhibition, the group have incorporated work resulting from a photography shoot that took place on a summers evening at Bordesley Meadows and Forge Mill.

More details of this exhibition and future exhibitions in 2024 can be found at

https://www.forgemill.org.uk/web/exhibitions/

February Meeting Report

‘Plants preserved for Ever’: Tales from the University Herbarium
Henrietta Lockhart, University of Birmingham

For our first presentation of 2024, we were delighted to have a return visit from Henrietta Lockart, who, last year, gave us an excellent general introduction on Winterbourne House and Garden, Edgbaston.

This year Henrietta used her expertise to enlighten us on the plants preserved in the University Herbarium at Winterbourne.

An herbarium, which was also known as a ‘dry garden’, is a collection of preserved plant specimens and associated data used for scientific study.

However, as well as actual plant specimens, the collection also includes early photographs, botanical drawings, and correspondence about the formation of the Herbarium which sheds light on the many plant collectors who contributed to it.

At my request, Henrietta supplied me with six images from her wide ranging presentation which I have used to illustrate my description of the talk.

The Victorians were remarkable graphic artists, and created illustrations which exceeded that which can be achieved even with a modern digital camera, and the drawing created by W. Clark, in 1827, of the dandelion (Taraxacum), top right, perfectly shows this.

Henrietta is not a botanist, but an historian, so her main interest in the collection is as a piece of social history and, it is true that the concept of the herbarium, which was at it’s height in the 19th and early 20th centuries, fell out of favour in recent years.

Up until the 1980’s the herbarium lived at Winterbourne, but it was then moved to the University. However, by the 21st century the interest in the collection for botanists had reduced at it was stored in a basement.

Three years ago the collection of 60,000 specimens was moved back to Winterbourne in one day and since that time the task of examining and cataloguing this important collection began.

Examples of the collection include a typical example of a herbarium can be found in the work by S. A. Miles shown by a page from his scrapbook produced in the early 19th century (right middle), and a drawing of Anthyllis vulneraria (bottom right) produced in 1846.

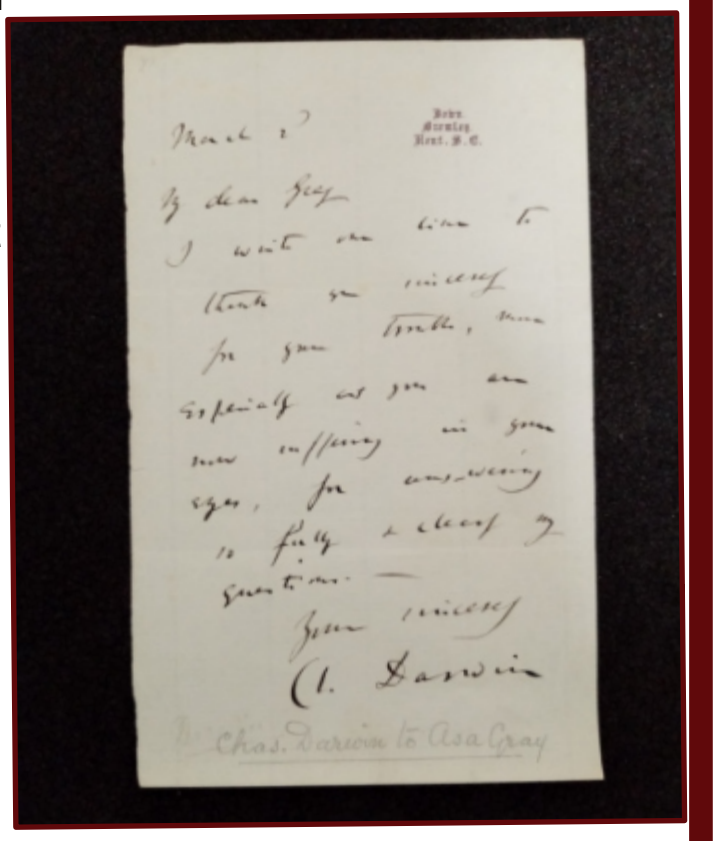
These are not famous people, but amateurs and specialists who devoted their time in documenting the botany of the United Kingdom.

February Meeting Report cont.....

The interest in the herbarium continued well into the early 20th century before photography removed the need for the painstaking effort required to document the world about us.

It was an ideal project for a school and, that by Gladys Perry in 1920 (top right), is a fine example of such an effort. Gladys, who was at a school in Coventry, did a walk around the area by the school and collected samples of plants which she found. These were described and samples inserted into her workbook. She fully described her walk, and it would be interesting to do the same walk today and see how many of these plants still exist.

An interesting find in the collection was a letter by Charles Darwin (undated) to 'Grey.' (middle right) It was assumed that this was to the botanist Asa Grey. However, with further recent research it now seems to be to John Edward Grey at the British Museum, which allows the letter to be dated and fitted into the chronology of Darwin's communications.



Winterbourne House was the home of the Nettlefolds, later the major manufacturer Guest, Keen and Nettlefolds, and Margaret Nettlefold was an enthusiastic botanist. In 1894 she went on a trip to the Pyrenees and contributed new samples for the collection.

Thomas Cook, the major tour company formed in Victorian times, provided many international tours for enthusiasts.

The collection is very wide ranging, diverse, and included is a collection of thirty sheets of New Zealand ferns. These were mounted by Thomas Cranwell in the 1870s and are remarkably preserved (example bottom right). They are not native British but show the variety and range of the collection.

It is not possible in this summary to describe the breadth of detail which Henrietta described during the presentation. Examples from the collection are shown for visitors to Winterbourne at any time and, with prior notice, Henrietta is willing to give an insight into the full collection for those with a serious interest.

This was a remarkably interesting and entertaining presentation of something which is not obviously of general interest and shows how important is the role of the speaker.

Henrietta showed her enthusiasm for the subject, and this was obviously conveyed to the audience, who gave her a suitable level of applause and many questions afterwards.

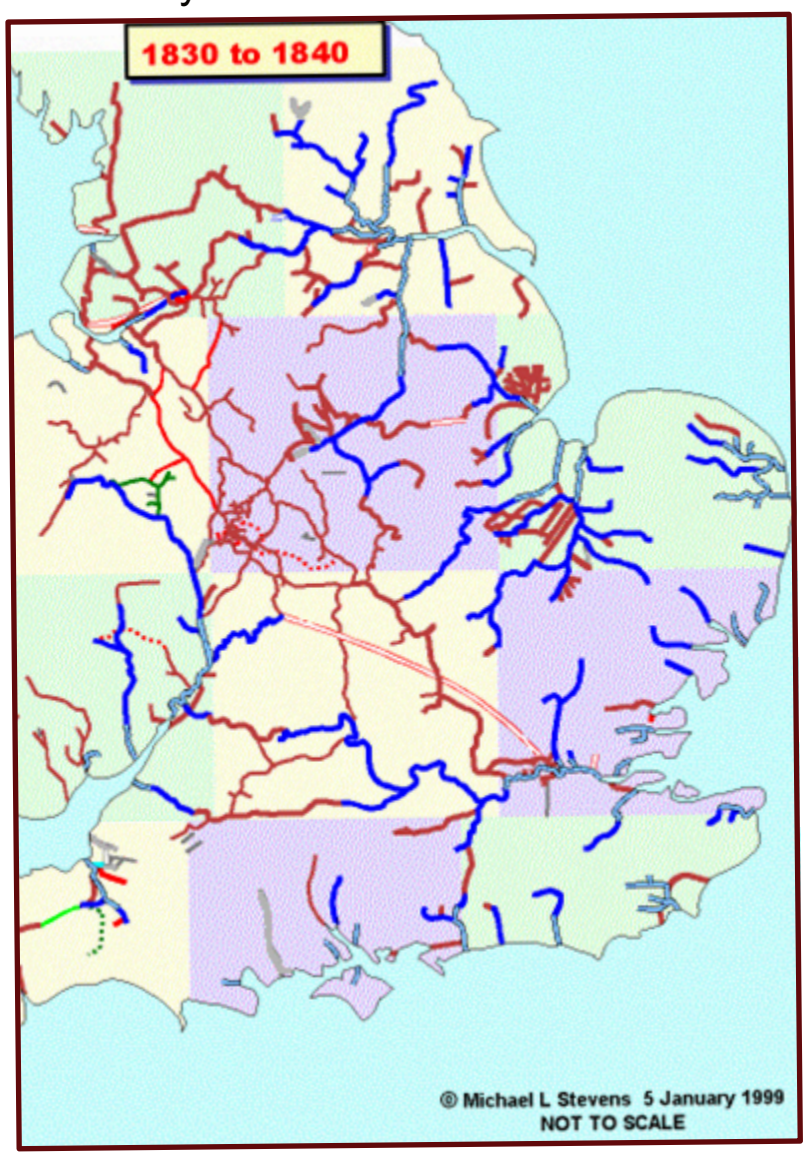
Images

Top: Page from Gladys Perry's school project, 1920
Middle: Letter from Charles Darwin, 1868
Bottom: Silver fern mounted by Thomas Cranwell, 1870s

Redditch Transport System - Anthony Green
The Canal System and Tardebigge Canal

In the 18th Century dramatic changes were made to the transport system to serve the 'Industrial Revolution' in Britain. Turnpike Roads (Newsletter Vol 5/Issue 5, September 2023) created new 'superhighways' which allowed the rapid transport of people and the mail.

However, this was an expensive means of transport and was not suitable for carrying heavy good and materials. To transport six tons in a wagon required six horses and was extremely inefficient and costly.



Above: The canal system in 1830 to 1840

The solution came in the form of canals, which created a 'superhighway' for goods and materials equivalent to the turnpike system for people and mail.

James Brindley constructed the first canal of industrial significance. It was built for carrying coal from the for the twenty-three-year-old Duke of Bridgewater's Worsley pits to sell in Manchester. Such was the success of the Bridgewater canal was that the profits shot up from £406 in 1760 to £48,000 in 1803, thanks to the fact that the canal halved the price of coal in Manchester.

From then on canal construction pressed ahead—both short-haul ones for single purposes and longer trunk canals linking navigable waters. In 1803. ninety out of the 165 canals constructed were designed to serve collieries.

Canals were sanctioned by Acts of Parliament, and financed by incorporated companies issuing shares, chiefly bought by interested local parties costing about £2000 each.
Construction was undertaken by subcontracting separate specialities - viaducts, locks, bridges, junctions, to individual builders, so reducing the risks.

1790 was the start of a decade of 'canal mania' when Liverpool, Birmingham, Bristol, and London were all linked up.

Canal-building provided a transport system which was cheaper and easier, especially for the bulk freight raw materials, such as coal, metals, stone, fireclays, bricks, etc. Canals also made carriage of breakable products, such as ceramics, safer, and so encouraged national markets in such products. The British canal system was an important feature of the Industrial Revolution in the 18th / 19th Centuries.

The canal system grew rapidly at first and became a completely connected network covering the South, Midlands, and parts of the North of England and Wales.

Above: Navvies working on building a canal

The Canal System cont 2/4....

The canal boats could carry thirty tons at a time with only one horse pulling it. This was more than ten times the amount of cargo per horse that was possible with a cart.

Above: The Pontcysylie Viaduct.

The canal system was constructed with the aid of a vast ‘army’ of manual labourers working on these major civil engineering projects. They were popularly known as Navvies. The term was originally coined in the late 18th century when numerous canals were being built, which were also known as "navigations". Although there is a modern view that ‘navvies’ were Irish, in fact they made up only 30% of the workforce, the majority being English.

By about 1840, the canal system had expanded to 4,000 miles (over 6,400 kilometres) in length.

In my view, the canal system is the most difficult piece of civil engineering ever achieved in Britain.

Imagine, producing a transport system based upon water filled channels. They need to be perfectly level, as over a 1mile distance if you are 1 degree out in your construction then the water level will be down by one hundred feet, so more than the depth of the canal. So, it will be full at one end and empty at the other!

Of course, our terrain in not flat, quite the reverse, so how was this managed?

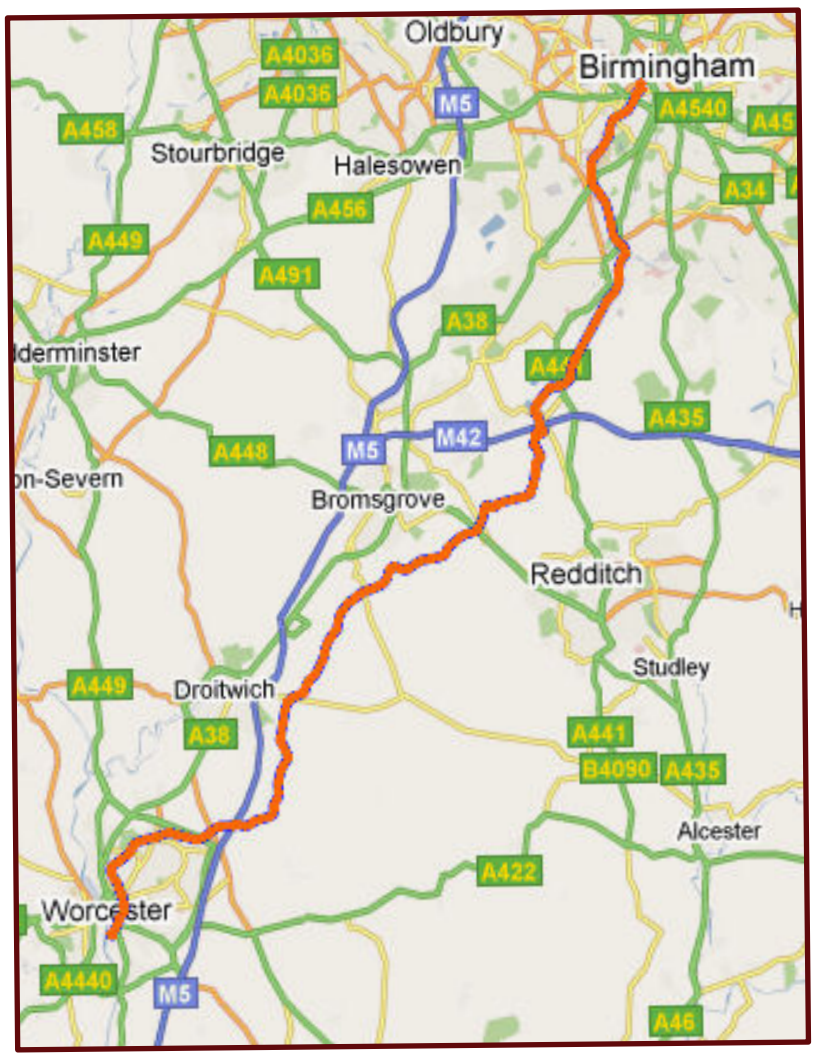
When the grounding was rising, or dropping, in a regular way, locks were used, to keep the actual water at a constant level. However, going down meant that there was a steady loss of water, so a reservoir was needed to keep the canal replenished. There is a good example of this system on the Birmingham to Worcester canal below Tardebigge. Where there was a sharp rise ‘lifts’ were used, where a section of canal, with barge, was lifted from one level to another.

However, where deep valleys or large hills were encountered more dramatic methods were employed.
On the Llangollen Canal, (top) the Pontcysyllte aqueduct, which took ten years to complete, is a fine example of the incredible feats of engineering you can find on the British canal system and is a UNESCO site.
The Huddersfield Canal, linked Ashton-under-Lyne and Huddersfield via a tunnel (right). The tunnel is 5,675 yards (3.2 miles} long. It was the longest, deepest, highest, and most expensive at that time (1810).

Canals revolutionised transport of heavy goods and materials and continued to have an impact even after the expansion of the railways.

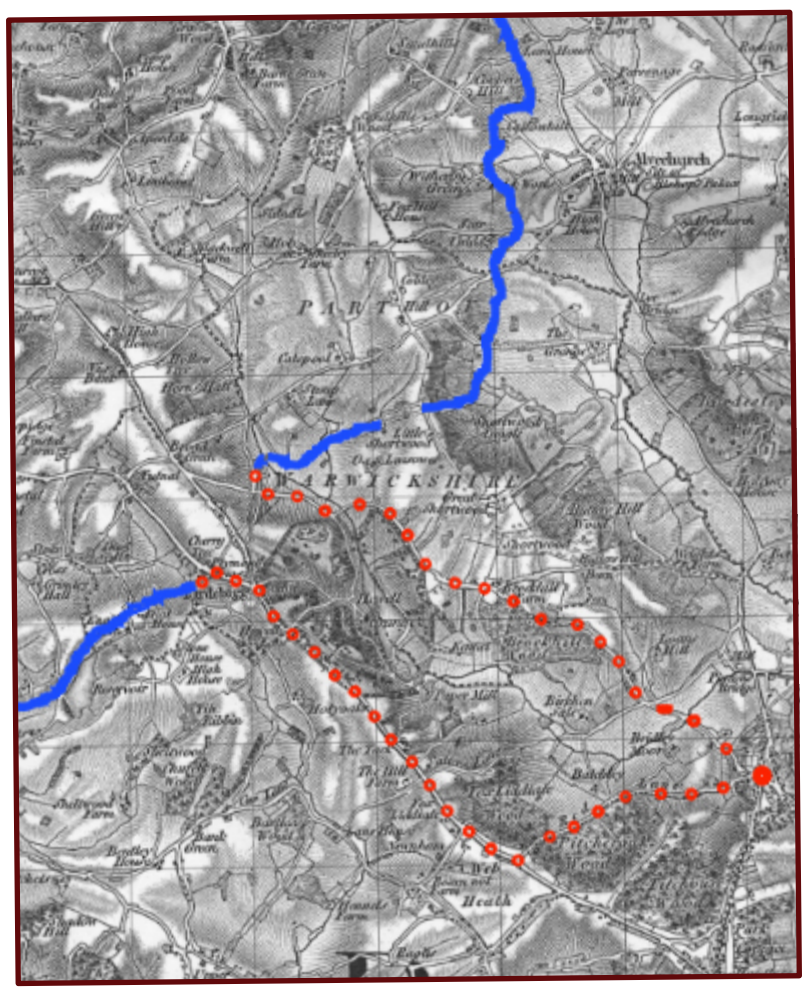
Above: Standedge Tunnel Entrance
Marsden, West Yorkshire

The Canal System cont 3/4.....



Above: The route of the Birmingham to Worcester Canal

Below: The roads used by Redditch manufacturers to access the 'old' and 'new' wharfs.



The Birmingham to Worcester Canal.

Work began on the Worcester to Birmingham Canal in the late 18th Century and the route from Birmingham reached the Tardebigge Old Wharf in 1807 without the use of locks.

It took six years to complete the Tardebigge tunnel (580 yards) to the New Wharf and the route to Worcester was finally opened in 1815.

It had taken 24 years and cost more than three times the original estimated cost.

This was due to the difficult terrain requiring the construction of three major tunnels and fifty-eight locks. The route of the canal is shown on the map.

Canal tunnels were built without towpaths, so a tunnel keeper or the boat owner would unhook the boat's pull horses and lead them up and over the hillside to the tunnel's far end and the barges had to be 'legged' through the tunnel.
Legging is the act of moving a narrowboat through a canal tunnel, while lying on your back either atop the boat or—as was most common—on a plank jutting out across its bow at both sides and walking along the tunnel's roof or walls. It usually requires two people, one on either side of the boat. It was an actual profession during the Industrial Revolution.

The canal was only three miles from Redditch and was to play a significant role in the development of the town. Redditch used initially the Tardebigge Old Wharf as this was the first to be constructed and later both the New and Old Wharves were used.

It was more efficient and less costly for Redditch manufacturers to use the canal rather than low grade road transport.

The tunnel had an advantage for Redditch manufacturers as barge owners could load/unload at the Old or New Wharf for Redditch and return the way they cam, thus avoiding the tunnel.
So there were two principal routes from Redditch to the canal which was via Brockhill Lane to the Old Wharf and via Red Lane (Bromsgrove Road) to the New Wharf. (see left).

It was vital for Redditch manufacturers as they were able to bring in coal, steel and other raw materials and export manufactured goods by this route.

The Canal System cont 4/4.....

The canal was a major boost for Redditch manufacturers as they were able to bring in coal, steel and other raw materials and export manufactured goods by this route.

The Tardebigge Locks or the Tardebigge Flight (below) is the longest flight of locks in the UK, comprising 30 narrow locks on a two-and-a-quarter mile (3.6 km) stretch of the canal.

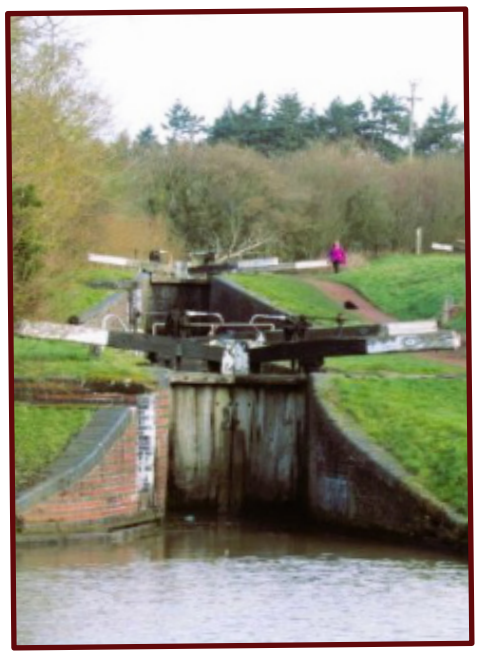
It raises the waterway 220 feet (67 m) and lies between the Tardebigge tunnel to the North and the Stoke Prior flight of six narrow locks to the South.

The flight also includes the Tardebigge Reservoir, which is provides a source of water to replace the large loss from the canal due to the downward movement from so many locks.

This method of transport was of importance to Redditch for nearly fifty years, from 1807 to 1859, as this was the date when the railway arrived in Redditch and made the canal less competitive.

Above: The new wharf in 1920

Below: The new wharf in 2013



Part of the Tardebigge Locks

In Britain, by the 1830's, railways had become the most important means of long-distance transport.

However, the spur from Redditch to the main line at Barnt Green did not open until 1859, and the extension on to the mail line at Ashchurch until 1864.

The canal network started their decline because the canals could not compete with the new, faster, and cheaper steam trains that could efficiently carry raw materials, finished products and, critically, people.

So, the railway effectively replace both the canal system, used for transporting good and materials, and the turnpike system, used for transporting people and mail, into one unified and efficient system.

The Fall and Rise of the Canal Network

The canals continued their decline but had a brief revival during the Second World War.

However, this was short lived, but, although the commercial decline continued after the end of the war, recreational use gradually increased as people had more leisure time and disposable income.

In 1946 a group called the Inland Waterways Association was formed to campaign for the conservation, use, maintenance, restoration and sensitive development of British canals and river navigations.

Notable founding members included L. T. C. Rolt and Robert Aickman.

Their work helped revive interest in the UK's canals.

British Waterways, which has the role of running the canal system came to see the economic and social potential of developing the system and has encouraged recreational use.

This has moved the canals from an historic relic of our Industrial Revolution to the point where they are a major leisure destination.