BROSELEY LOCAL HISTORY SOCIETY



Journal No. 40 2018

CONTENTS

Editorial						1
Ralph Guest o	f Bros	eley an	d Bury S	St Edm	unds	
(1743-1830).						
by Julie Wright	5					2
William Hazle	dine (1	1763-18	840), a P	ioneerii	ıg	
Shropshire Iro	nmast	ter.			-	
by Andrew Patt	tison					8
Inclined Plane	s, Tra	de Tok	ens and	a Coalp	ort Jug.	
by John Willoc	k					16
Did these wom	en tak	e up th	neir righ	t to Vot	e?	
by Janet Doody	y					29

EDITORIAL

Broseley Local History Society

The Society was originally formed as the Wilkinson Society in 1972 and was renamed in 1997 to reflect its main purpose:

'the research, preservation and promotion of Broseley's unique heritage'.

Meetings are held on the first Wednesday of each month beginning at 7.30 pm, at Broseley Social Club; and annual events include a spring walk, summer outing, and a winter dinner. Members receive a quarterly newsletter and an annual journal. The Society's collection of artefacts is at present in storage, with some items on display at Broseley Cemetery Chapel.

The Society has a web site which contains information about Broseley, copies of the newsletter and articles from previous journals. This can be found at *www.broseley.org.uk*

The Journal

The journal is published annually. The four articles in this issue represent the ongoing research of Society members and others, and we are grateful to individual contributors Our thanks also to Steve Dewhirst for design and typesetting.

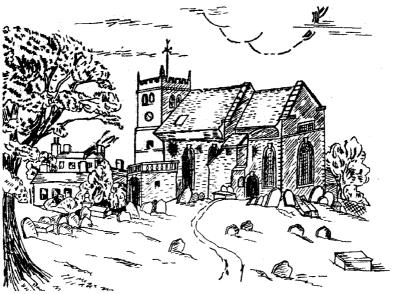
Contributions for the next issue would be welcome and should be sent to the editor, Neil Clarke, Cranleigh, Little Wenlock, TF6 5BH neilclarke19@btinternet.com

Ralph Guest of Broseley and Bury St Edmunds (1743-1830)

by Julie Wright

The Guests of Broseley were a very old family, with the earliest recorded member being one John Guest born in 1522 and buried at Broseley in 1596.¹ Probably the most well-known branch of the Guest family is that of John Guest (1722-1787), who left Broseley around 1763 to take part in an enterprise near Dowlais with Isaac Wilkinson. This John Guest became manager of the Dowlais Ironworks in 1767 and was the forefather of the Guests of GKN fame. His son Thomas (1748-1807) took over the Dowlais Ironworks, but his son John (1750-1824) returned to live in Broseley where he was an ironmaster.

However, around the same time – the mid-1700s – there was another John Guest living in Broseley. John Guest (1704-1777) and Penelope Easthope were my 6 x great grandparents. This John Guest and his sons Charles, John and Alexander were grocers in Broseley and Madeley Wood. John Guest junior operated a grocery business in High St,



St Leonard' was the original parish church in Broseley. It was built in 1716 but demolished in 1843 to make way for the new parish church of All Saint's. (Pencil Sketch on www.broseley.org.uk.)

2

Broseley from around 1769 to his death in 1827. These premises are now the Albion Public House.

John and Penelope's youngest daughter, Frances Guest, married Benjamin Wright, who was the surgeon-apothecary in Coalbrookdale. They lived at Rosehill House next to Abraham Darby III at Dale House; Benjamin Wright was the doctor for the Darby family and was buried in the Quaker Burial Ground at Coalbrookdale.

John and Penelope Guest's youngest son was **Ralph Guest**, who was baptised on 23 January 1743 at St Leonard's, Broseley.

It is quite likely that Ralph Guest worked in the family grocery business as a child. However, a newspaper article from 1824 (quoting from the entry in the 'Dictionary of Musicians' published by John Davis Sainsbury) gives an interesting bibliography and from this we learn that Ralph Guest showed '*a propensity to music*' by the age of six and joined the parish church choir. By the age of only 14 he was apparently the leader of the church choir.²

Around 1763, at the age of 21, Ralph Guest went to London to work and while living there he indulged his love of music and singing by becoming a member of the Portland Chapel Choir. By 1768 Ralph had moved to Bury St Edmunds in Suffolk to work for Henry Bullen who



St Mary's Church is the civic church of Bury St Edmunds and is one of the largest parish churches in England. It claims to have the second longest aisle, and the largest West Window of any parish church in the country Feb 2017. (https://en.m.wikipedia.org/wiki/St_Mary's_Church,_Bury_St_Edmunds)

was an upholder (upholsterer), cabinet maker and auctioneer.³ Within a few years, and certainly by 1773, Ralph had his own business as a cabinet and chair maker. Later newspaper articles show that Ralph was also an auctioneer and refer to his business as being on Abbeygate Street.

Ralph Guest married Sarah Prick at St Mary's, Bury St Edmunds on 27 Jan 1769 and they had eight children, including seven sons. His first wife, Sarah, died on 17 Nov 1789 and was buried in St Mary's churchyard on 22 Nov 1789. Just over a year later Ralph married Mary Stephenson Page (née Cann) on 17 Jan 1791 at Wymondham Abbey, Norfolk.

(Mary Stephenson Page was later to become my 5 x Great grandmother. She was a widow, previously married to James Henry Page, an attorney in Wymondham, Norfolk. Her only daughter, Mary Page, married Ralph Guest's nephew Peter Wright of Coalbrookdale, Shropshire on 5 Oct 1797.)

Alongside his businesses in cabinet making and auctioneering, Ralph Guest found plenty of time to devote himself to music. From about 1795 he was in charge of the St Mary's Church choir and was also instructed on the organ by Mr Frost, the organist of St James' parish.⁴ Ralph was the first organ master of St Mary's in 1796.⁵



In later years Ralph Guest lived at Clopton's Asylum, an almshouse for widows and widowers located in the grounds of St Mary's Church. (Feb 2017)

According to the 1824 bibliography of Ralph Guest, "What had been in early life merely an amusement, afterwards became his sole employment; he relinquished other business, and devoted himself entirely to the organ, and the instruction of private pupils in music."⁶

Ralph Guest gave up his upholstery and cabinet making business on Abbeygate Steet in 1804 and moved to Whiting Street where he continued with his auctioneering and appraising business but where he also set up a Repository for sale, repair and tuning of pianos.⁷

In 1806 Ralph Guest published 'The Psalms of David, for every day of the month'. This was very successful and was followed by a supplement called 'Hymns and Psalms'. Ralph also published many other glees and songs and the local newspapers at the time also refer to many concerts for his pupils and also for his Young Ladies. And in June 1814 Ralph and his Choir of Youths sang a number of songs during the celebratory dinner at the Bury Peace Festival to celebrate the Restoration of Peace following Napoleon's initial defeat.⁸

At least two of Ralph Guest's sons seem to have inherited their father's musical talent. George Guest (1771-1831) was chorister of the Chapel Royal, organist at Eye, Suffolk in 1787, and organist at St Peter's, Wisbech, Cambridgeshire from 1789 to 1831.⁹ His son John Guest was a music master of Bury St Edmunds and in 1802 dedicated a song called "O! Happy hours whilst now I stray" to the Miss Guests of Broseley.¹⁰



Ralph Guest headstone – Feb 2017 The headstone reads: In Memory of RALPH GUEST

Ralph Guest retired from the role of St Mary's Church organist in 1822, at the age of nearly 80! On 10 Dec 1823 his wife, Mary Stephenson Guest, died in Coalbrookdale, Shropshire while on a visit to her daughter Mary, wife of Peter Wright. She was buried on 13 Dec 1823 at Holy Trinity, Dawley.

It is interesting to note that Ralph Guest's gravestone faces the opposite way to the neighbouring gravestones, including that of his wife Sarah. The only explanation I can find for this is that sometimes members of the Clergy were buried facing the opposite direction to normal (i.e. with feet to the west instead of the east) so that at the time of their resurrection they will arise facing their flock rather than facing east. Ralph was not actually a member of the Clergy, but possibly being the organist and choir master would qualify him for this rite.

So Ralph Guest was laid to rest some 160 miles from his native Broseley. He rested at peace at St Mary's for over 180 years and that would normally be the end of his story. But in February 2017 I was contacted by the current organist of St Mary's at Bury St Edmunds, Adrian Marple, who was interested in finding out more about the first organist, Ralph Guest. Adrian has since obtained a copy of Ralph Guest's 'Hymns and Psalms' and it is proposed that the St Mary's Church Choir will perform one or more of his hymns in the not too distant future. Thus ensuring his musical legacy lives on.

References

¹ Broseley and its Surroundings, John Randall, 1879.

 2 Extract from Bury and Norwich Post, 15 Dec 1824, findmypast.co.uk – see Annex A below.

³ Op. cit.

⁴ Op. cit.

⁵ https://en.m.wikipedia.org/wiki/St_Mary's_Church,_Bury_St_Edmunds

 $^6\text{Extract}$ from Bury and Norwich Post, 15 Dec 1824, findmypast.co.uk – see Annex A below.

⁷ Newspaper articles from findmypast.co.uk.

⁸ Op cit.

⁹ Oxford Dictionary of National Biography.

¹⁰ Newspaper ref in Bury and Norwich Post 24 March 1802, findmypast.co.uk.

Annex A

The following newspaper article from Bury & Norwich Post, 15 Dec 1824, draws heavily on Ralph Guest's entry in a Dictionary of Musicians' published in 1824 by John Davis Sainsbury, literary agent, publisher and music seller, London:

"As we doubt not that the following memoirs of a very old inhabitant and a native of Bury will be interesting to many of our readers, we extract them from a new work, the Biographical Dictionary of Musicians.

GUEST (Ralph) was born in the year 1742, at Broseley, in Shropshire. At six years of age he began to discover a propensity to music, which he

was able to indulge and improve, by joining a very respectable church choir in his native parish. At fourteen years of age, he pursued with increasing ardour his musical studies, and soon became leader of the choir above-mentioned. At twenty-one he left the country, and through the introduction of a friend obtained a situation in business in London. Here he had determined to relinquish his pursuit, and apply solely to his business; but on attending Portland chapel one Sunday, by accident, his resolution gave way, in consequence of again hearing the music in which he had taken so much delight in his native parish. From this moment he formed a part of this excellent choir, at that time so justly celebrated in the metropolis. He now lost no opportunity of hearing the best public musical performances in London, and after a five years' residence in town, an advantageous offer presenting itself, he became an assistant to the late Mr. H. Bullen of Bury St. Edmund's, in which place, in the course of a few years, he set up business for himself. Here, under the friendly instructions of Mr. Frost, the then organist of St. James's parish, he not only became a performer on the organ, but also greatly improved his musical taste and acquirements. About the year 1795, the choir of St. Mary's church was intrusted to Guest, and when an organ was subsequently erected, he became organist. What had been in early life merely an amusement, afterwards became his sole employment; he relinquished other business, and devoted himself entirely to the organ, and the instruction of private pupils in music. In the midst even of constant employment, he found time to publish "The Psalms of David," arranged for every day in the month, many of the last old tunes being retained, and more than sixty new ones introduced. To this work was prefixed a short introduction to singing and thorough bass. Soon afterwards, he published a sort of supplement to his former work, entitled "Hymns and Psalms," the music to which he adapted and composed. In addition his compositions in sacred music, he has published many songs, which have been well received among his friends."

William Hazledine (1763-1840), a Pioneering Shropshire Ironmaster.

by Andrew Pattison

The story of William Hazledine is virtually unknown today, even in his home town of Shrewsbury. He was, however, a figure of considerable importance in the history of engineering and technology, supplying the ironwork for no less than five world 'firsts'. These are Ditherington Flax Mill, Shrewsbury; the Chirk and Pontcysyllte Aqueducts on the Ellesmere Canal; lock gates for the Caledonian Canal; a new genre of cast-iron arch bridges; and Menai and Conwy suspension bridges.



William Hazledine as Mayor of Shrewsbury 1836. (Shrewsbury Museums Service)

Hazledine's life spanned what is commonly called the Industrial Revolution, Industrial and the Revolution both required and facilitated a transport revolution. The first canal was opened in 1761, and William Hazledine as Mayor of Shrewsbury 1836. Shrewsbury Museums Service] y 1840 there were nearly 4,500 miles of canals, the building of which required huge developments in engineering. Roads, too, developed rapidly in this period, and better roads needed new and better bridges. The increased use of cast iron was beginning to be considered in canal and bridge engineering, but iron technology was in its infancy in the late 1700s. Iron objects could be cast directly from the furnace, but this was

Mayor of difficult to do, and this cast (or pig) (Shrewsbury iron was often brittle and of uncertain purity.

Becoming an ironmaster

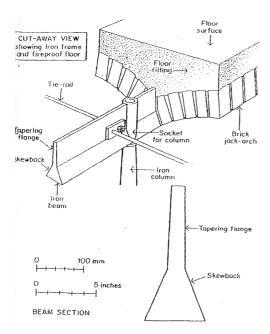
This was the world into which William Hazledine was born. He lived most of his early life at Moreton Forge, a small ironworks about 7 miles northeast of Shrewsbury. His grandfather, father and uncle were millwrights (building and repairing mills), while other relatives ran the forge itself. William was apprenticed as a millwright to his uncle, which meant he had a solid grounding in technical drawing, carpentry, building work, surveying, and controlling the flow of water. From his upbringing he also learned the techniques of producing artefacts in iron and brass. In 1785 he set up his own business in Shrewsbury as a millwright and manufacturer of millstones, and shortly after he went into partnership in a small iron foundry in the town.

In late 1786 Thomas Telford (1757-1834) arrived in Shrewsbury to rebuild the castle, and Telford and Hazledine soon became friends. Another important new arrival to Shrewsbury was the mason and master builder John Simpson (1755-1815), who moved in 1790 to oversee the building of the new St Chad's Church. The three men, Hazledine, Telford and Simpson, became lifelong friends as well as business associates, creating mutual confidence that would be important in many of Telford's major works.

In Coleham, Shrewsbury, from 1790 Hazledine developed what became one of the largest iron foundries in the country. These works were steam-powered, and used cupola furnaces, first patented by Shropshire ironmaster John Wilkinson in 1794. A cupola is a brick-lined furnace charged from the top with pig (or scrap) iron, coke (or charcoal) and limestone. The coke or charcoal is lit and the temperature is raised by means of an air blast introduced through tuveres. The molten metal is then run off into moulds, either directly or via ladles. (A similar furnace is still working at Blist's Hill Open Air Museum, Ironbridge.) The cast iron produced in this way was of much better quality than before, and the whole arrangement made casting much easier. During this period the new science of metallurgy was beginning to shed light on the nature of iron, and it appears that Hazledine was up to date with these developments. As well as Coleham Foundry, Hazledine also had major ironworks at Plas Kynaston (now in the Country Borough of Wrexham), Upton Forge, near Shrewsbury, and Calcutt's, near Ironbridge.

Ditherington Flax Mill

In 1797 he undertook his first major contract, the supply of the ironwork for the Ditherington Flax Mill, Shrewsbury, now recognised as being the first fully iron-framed building in the world, and hence the ancestor of all skyscrapers. This building was designed by Charles Bage (1751–1822), and its size and complexity are astonishing. It has five storeys, and measures about 177 x 39 ft (54 x 12 m). The internal structure is supported by a grid of cast-iron columns, with 17 rows of three columns along the length of the building. Thus each floor has 51 columns, making a total of 204 columns, and the columns on each floor are of different designs. Each floor has 17 lines of cast-iron beams, each cast



Detail of column from Ditherington Flax Mill. (*Author*)

in two lengths and bolted together in the centre of the building. There are thus 34 separate beams on each floor - a total of 136 in the whole building. Assuming there was originally a window at either end of each bay, there would have been 136 cast-iron frame windows, together with an unknown number of door frames. There are 19 separate roof sections, and each of these is supported by cast-iron trusses. As well as the many cast-iron components, there must also have been many smaller wrought-iron pieces, including door furniture. banisters, and other interior fittings. The whole complex structure needed to fit together like a giant Meccano set, and also to fit precisely with the brickwork.

Recent surveys have provided an opportunity to examine the composition of the ironwork, and samples from various parts of the mill have been tested. These examinations showed that the cast iron had nearly twice the tensile strength of the average for this period.

'A Stream in the Sky'

While Hazledine was doing this work, Telford had become the resident engineer for the new Ellesmere Canal, which was planned to link the Rivers Dee, Severn and Mersey. There was a great deal of debate and uncertainty as to the best way to build the aqueducts needed to cross the Dee and Ceiriog Rivers, as this would require a new approach to cope with the unprecedented height. After much discussion and delay Hazledine got the contract to supply cast iron for the bottom of the Chirk Aqueduct, which was opened in 1802. As this was a success, Telford and his team took the gamble of making the much larger Pontcysyllte Aqueduct with a complete iron trough. The quantity of iron needed was staggering. The 19 masonry piers, up to 126 feet (38 m) high, support

10

18 cast-iron arches, each spanning 53 feet (16 m) and consisting of four ribs, each cast in three sections. This is a total of 216 castings. Similar calculations give a total of 216 'voussoirs', 240 infill plates, and so on – literally thousands of major castings, before all the bolts, fixings and so on are added. The joints were made with flannel soaked in white lead and the whole liberally covered in tar. This aqueduct, opened in 1805, soon became a tourist attraction, and was described by Sir Walter Scott as 'a stream in the sky', adding that it was 'the most impressive work of art I have ever seen'. It has stood the test of time remarkably well, and remains the longest and Highest aqueduct in Britain.



The Pontcysyllte Aqueduct. (Author)

The Caledonian Canal

While Hazledine and John Simpson (the main masonry contractor) were finishing off at Pontcysyllte, Telford was hard at work on the Caledonian Canal, which links the west and east coasts of Scotland via the Great Glen. Because it was designed for seagoing vessels, the Canal was built on a much larger scale than other inland waterways of the period. Telford was forced to use cast iron for the lock gates because of the shortage of oak, and Hazledine supplied 14 pairs. Cast iron lock gates on this scale had never been made before, since the locks were 40 ft (12.2 m) wide and 20 ft (6.1 m) deep. The castings were made at Plas Kynaston, and taken along the Ellesmere Canal to Chester, from where they were transported by sea to the western end of the Caledonian Canal.

'Like a spider's web in the air'

Emboldened by the success of the iron aqueducts, Telford began to design cast iron bridges, and Hazledine supplied the ironwork for most of these. The first small one was on the outskirts of Shrewsbury, and there were several other similar ones built in the vicinity of the town. Two arches from one of these were eventually reused to provide a pedestrian bridge in Telford Town Centre, an elegant addition in a modern setting.



Hazledine's arch ribs reused in Telford Town Centre. (Author)

At the same time, Telford was designing a new genre of large lightweight prefabricated cast-iron bridges with a lattice spandrel arch, described by the poet Southey as 'something like a spider's web in the air'. The first of these was at Bonar Ferry in Sutherland; it was cast at Plas Kynaston, and the locals were amazed when it was erected as a trial at the ironworks. It was then taken to pieces, and the components transported to Chester via the Ellesmere Canal, before being shipped round the north of Scotland to the site, while Hazledine's team travelled overland to erect the bridge. Apart from the challenges inherent in transporting such large structures to such a remote place, the contractors were also exposed to financial risk, since Telford insisted that the work should be done for a fixed sum. Telford needed all his powers of persuasion to encourage his friends Hazledine and Simpson (who constructed the masonry and approach roads) to undertake this work. Indeed, Telford reported that Hazledine was so 'miserable' with the contract he would gladly have relinquished it.

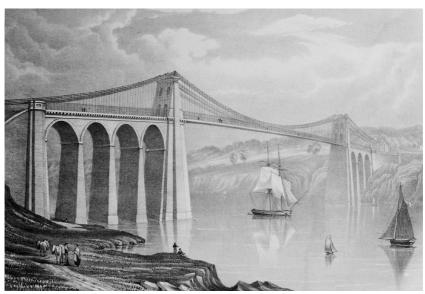
A number of these bridges can still be seen in the West Midlands and nearby areas. They are Holt Fleet, near Ombersley, Worcs; Mythe, near Tewskesbury; 'Waterloo' at Bettws-y-Coed; and Eaton Hall, near Aldford, Cheshire. (Galton Bridge, Smethwick, is of the same design, but the ironwork was not done by Hazledine.) Most of them have been strengthened to cope with modern traffic, but they are essentially the same after 200 years.



Holt Fleet Bridge, near Ombersley. (from an old postcard)

Menai and Conwy Bridges

In the 1820s the building of suspension bridges was in its infancy, and so Telford's plan to build one across the Menai Strait to Anglesey (with a smaller one over the mouth of the Conwy River nearby) seemed rather reckless. The fact that they were such a spectacular success must owe a good deal to the excellence of the ironwork supplied by Hazledine. For Menai alone there were sixteen main chains, each 1,710 ft (521 m) long, which together consisted of 14,960 eye-bars, around 16,000 connecting plates, and 6,000 screw-pins. The chains needed a saddle at each end to allow them to pass over the masonry towers, and then had to be firmly anchored into rock. The saddles consisted of cast-iron rollers with brass bearings, designed to allow for expansion and contraction of the chains with changes in temperature. The chains were anchored by being attached to cast-iron plates, which were then screwed into the bedrock by means of wrought-iron bolts 9 ft 6 in (2.9 m) long. Soon after the ironwork was begun, it became clear that to make all the pieces to the required tolerances would require a completely novel So Telford dispatched his assistant John Provis to approach. Shrewsbury to supervise the testing of all the ironwork. To achieve this Provis (presumably with Hazledine) designed and built a 'proving



Menai Bridge, from a contemporary illustration. (Shropshire Archives)

machine', which was installed at Hazledine's headquarters in Shrewsbury, to which all the ironwork was brought from Upton Forge via the Shrewsbury Canal. After testing, it was sent overland to Weston Wharf in north Shropshire, then via the Ellesmere Canal to Chester, and finally by sea to Menai. Another challenge that had to be overcome was forming the eyes in the eye-bars. Doing this under the hammer could result in irregular eyes with weaknesses where the metal had been worked, so it was decided to drill the eyes once the metal was cold using another specially-designed machine. This work necessitated the installation of a new, more powerful, steam engine which, as well as punching the eyes of both main-chain plates and links, was also able to cut the screw pins and to turn the rollers for the saddles, which each weighed 9 cwt (457 kg).

John Provis kept a meticulous record of all the tests he performed. This was probably the first project for which the materials had been so extensively tested and, considering that the iron was forged using "old" technology, the production of over 35,000 items with a rejection rate of less than 7 per cent speaks volumes for the skill of all those involved.

	No. Tested	Rejected - visual imperfections	Cracked under test	Broke in two under test	No. Sent to site	Per cent rejected
4"x1" bars for chains in tunnels etc	5,032	60	0	0	4,972	1.2
Connectors for ditto	6,238	175	0	0	6,063	2.81
3¼" x 1" main chains	10,476	249	100	47	10,080	3.78
Connections for ditto	13,903	1438	225	90	12,150	12.61
Total	35,649	1922	325	137	33,265	6.69

Results of tests on ironwork for Menai and Conwy Bridge

Conclusion

When Hazledine died in 1840 the railway era had just began, resulting in the decline of the canals and roads. The new railway engineers, such as Stephenson and Brunel, seemed much more glamorous than the likes of Telford and Hazledine, who were quickly forgotten. But many of their works have remained, and we can now appreciate the extraordinary skill and enterprise that these men demonstrated in solving the engineering challenges of their generation.

Further reading

Andrew Pattison, '*William Hazledine* (1763–1840): pioneering iron founder', *Proceedings of the ICE - Engineering History and Heritage*, Volume 167, Issue 3, August 2014, pages 147 – 166, http://www.icevirtuallibrary.com/content/article/10.1680/ehah.14.000 05.

LTC Rolt, *Thomas Telford*, first published 1958, reprinted by History Press 2008.

Neil Cossons and Barrie Trinder, The Iron Bridge, Phillimore, 2002.

Ditherington Flax Mill https://www.revolutionaryplayers.org.uk/ditherington-flax-mill/

Inclined Planes, Trade Tokens and a Coalport Jug.

by John Willock

This is an edited version of a paper that first appeared in Ars Ceramica, No.28, 2012.. – Ed

The rather strange title of this article, featuring seemingly unrelated objects and artefacts, has in fact a common thread running through it. This thread took a little time to unravel, but when disentangled it yielded a very clear indication of how commonplace scenes and items were once used by ceramic painters as sources of artistic inspiration.¹

Some thirty or more years ago I acquired a medium-sized porcelain jug, probably manufactured at the Coalport factory in Shropshire, England,



Figure 1. A Coalport porcelain presentation jug painted with a view of the Ketley Inclined Plane, 1810-1820, 4⁴/₅"(12.2 cm) h. (I.G.M.T. L-155). Image courtesy of Coalport China Museum, (Ironbridge Gorge Museum Trust)

during the period 1810-20 (figure 1). The attraction of the jug was not the exotic bird that graced one side of it, nor the gilded monogram below the pouring spout, but the industrial scene painted polychrome in on the remaining face. I was fairly sure I knew what the industrial scene portrayed, but I could not readily identify the actual source material from which the vignette had been painted. This caused me to think for some time. The solution. when it came. was blindingly obvious, but of course it always is!

The English county of Shropshire, particularly on its eastern flank, was in the eighteenth century a very important coal mining and ironworking area. Because the coal measures were very near to the surface, rudimentary shallow mining had been carried out for centuries, and probably even from Roman times. The area was abundant in all the raw materials essential for the growth of early industry, now defined as the Industrial Revolution. ² Apart from coal and iron ore, limestone was also to hand, essential as a flux in the smelting of iron by reduction in the blast furnace. Additionally, various different types of clays were available suitable for the manufacture of bricks, roofing tiles and pottery. A refractory clay, ideal for furnace linings and the production of saggars for the pottery and porcelain industries, was also found in certain parts of the Severn Gorge.

Early Railways in Shropshire

To transport these raw materials to the furnaces for processing and to the river Severn for shipment elsewhere, an early and extensive railway system was developed right across the coalfield. They were not of course railways in the modern sense, with steam, diesel or electric locomotives as the means of motive power, working on rails of iron or steel. Dating back in some districts to the early seventeenth century, probably prior to 1608, these were wooden railways of a relatively narrow gauge, with small wagons hauled by horses or human muscle power. Although relatively primitive, these railways provided, from a very early date, the simple but elegant engineering solution of the flanged wooden wheel running on and against an edged wooden rail; the progenitor of all subsequent modern railways. The flanged wheel running against an edged rail was a particularly English and most likely English Midlands answer to the problem of guiding wagons along a fixed track. Wollaton Hall, in Nottinghamshire, is usually credited with having the first documented reference in English to such a railway, in 1604, very closely followed by Broseley, in Shropshire; but which place actually was first is the subject of much academic debate. A transition to cast iron rails did not take place until 1767, when the Coalbrookdale Company started to produce them; they are now generally accepted as the world's first iron rails. These edge type rails were provided with holed lugs to enable them to be secured to the existing wooden rails with timber pegs.³

Early continental European wooden railways, situated in mining areas, were significantly older and developed quite differently to their English counterparts. They also employed a wide variety of guidance arrangements. Perhaps the oldest of these guidance methods was the *Leitnagel*, or projecting iron pin, which was attached centrally to the underside of the wagon, or *Hund*, and engaged in a narrow slot formed by the two adjacent, but not touching, parallel rails. Some of the first areas to use *Leitnagel Hunds* were the Vosges, Tyrol and Lower Hungary, all probably well-established by the sixteenth century. Other parts of the Continent used flanged or channelled wooden rails to guide wagons. Elsewhere, horizontally-mounted wheels or rollers attached to

the underside of wagons were used to act against the vertical faces of the rails. Although displaying considerable ingenuity, one can readily see that the accumulation of detritus and general mining debris between the tracks, particularly when working underground, would have rendered some of these arrangements less than adequate. It was not until about 1775 that the flanged railway wheel finally reached continental Europe; one hundred and seventy years after their first recorded use in the English Midlands. Despite all their shortcomings, a few European wooden railways persisted with traditional guidance methods well into the nineteenth century, by which time the full advantages of the English flanged wheel system must have been patently obvious.

At this juncture it might be of interest to relate that in 1900-1901 my maternal great grandfather, whilst performing his duties as a Chartermaster, discovered some old mine workings at Caughley in Shropshire, not too great a distance from where the Salopian Porcelain Manufactory once stood. From these workings he retrieved a very old

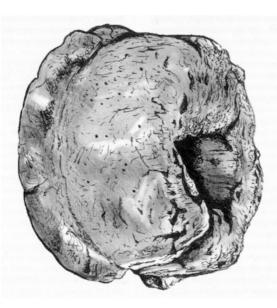


Figure 2. Very early flanged wooden railway wheel, seventeenth or eighteenth century, found at Caughley, Shropshire, 1900-1901. Maximum diameter about 9.5" (24.1 cm). (Sketch by the author)

flanged wooden railway wheel (figure 2). The wheel, made from elm, probably owed its survival to the fact that it had split early in its working life, had been hastily repaired, had split again and then been subsequently discarded. Realising its significance, the wheel was taken into protective custody by my great grandfather! A number of other wheels have also light come to in Shropshire over the vears, but these have either been lost or have just disappeared. Dating techniques are not sufficiently accurate to give a precise age for the wheel, but it is unlikely

to be much later than mid-eighteenth century and could be significantly older than this. Cast iron wheels probably quickly supplanted wooden ones after the Coalbrookdale Company started to cast them in 1729, their superior durability being immediately obvious.

The wheel described above may or may not be unique, but at the very least it is an extremely rare object and could currently be the world's oldest flanged wooden railway wheel. It is described and illustrated in *Early Wooden Railways*, by M.J.T. Lewis.⁴ A number of years ago it was donated to the Ironbridge Gorge Museum. It is not currently on exhibition.

Shropshire Canals and Inclined Planes

Another mode of transport was the River Severn, flowing conveniently through the centre of the East Shropshire coalfield, via the Severn Gorge on its way south, eventually passing through Worcester and Gloucester and onwards towards the Bristol Channel and the sea. Although the River Severn was a natural and important artery of trade in the mid-eighteenth century, it became necessary to construct artificial waterways to service the north eastern side of the coalfield. The main waterways that finally resulted were, in chronological order, the Donnington Wood, Wombridge, Ketley, Shropshire and Shrewsbury Canals (figure 3). Towards the northern end of the coalfield the Shrewsbury Canal somewhat belatedly made a connection with the Birmingham and Liverpool Junction Canal (Newport Branch Canal) at Wappenshall, thus connecting the coalfield canals to the rest of the national network. At its southern extremity the Shropshire Canal ran parallel with the River Severn before terminating in trans-shipment wharves at Coalport. Built in stages, over several decades, commencing in 1765 with Earl Gower's Lilleshall canal (subsequently called the Donnington Wood canal), this collection of waterways utilised a number of engineering features, such as tunnels, locks, aqueducts, vertical shafts and eventually inclined planes to traverse the coalfield. At Donnington Wood itself, for example, the canal had navigable levels right up to the working coal faces. This replicated a somewhat earlier underground canal system, engineered by the famous James Brindley for Francis Egerton, third duke of Bridgewater, to exploit the duke's extensive coal mines at Worsley, situated just outside Manchester.

It was another twenty years before the Donnington Wood canal received further development. This expansion was carried out by two of the most eminent Ironmasters of the Shropshire coalfield, father and son respectively, Richard and William Reynolds.⁵ Perhaps in pioneering terms the most important of these additions was the construction in

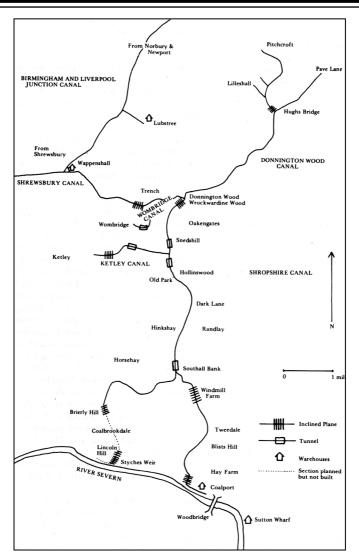


Figure 3. Map showing the canals of East Shropshire, from Barrie Trinder, The Industrial Revolution in Shropshire (London and Chichester, Phillimore & Co., Ltd., 1973), fig. 8, p. 129. The map shows how eastern Shropshire and the River Severn were linked by canal with Shrewsbury, Birmingham and Liverpool. The Ketley inclined plane mentioned in the text can be seen on the Ketley Canal to the left-centre of the map.

(Courtesy of The History Press, proprietors of Phillimore & Co. Ltd.)

1787 of the relatively short Ketley canal branch, to complete a link between the Reynolds' mines at Oakengates and their ironworks at Ketley. Although small, this canal was very significant as it featured the first successful canal inclined plane in Great Britain. Inclined planes, like lock systems, were designed to raise and lower canal boats from one level to another. The Ketley incline was well conceived in that the preponderance of heavy raw materials, such as coal, iron ore and limestone, descended from the higher canal to the ironworks situated some seventy-three feet below. In other words the incline was almost completely self-acting; heavy loads going down by gravity hauled lighter loads going up. Inclined planes from a canal standpoint had conspicuous advantages. They were markedly less expensive to construct and very much quicker to operate than locks, and they were also economical in water consumption. The incline was completed in 1788.

At Ketley the incline had a pair of parallel iron railway tracks of "L" section secured to the slope, upon which a pair of wheeled cradles ran, each designed to carry a canal tub boat, and linked together by cables and winding drum. The canal tub boat dimensions were approximately 20 ft. in length by 6 ft. 4 in. in breadth and 3 ft. 10 in. in depth, with a carrying capacity of about eight tons.⁶ However, boat dimensions and carrying capacities did vary slightly on other parts of the canal network. A pair of divided lock chambers was situated at the head of the incline, each probably equipped with conventional hinged mitre type gates at the canal end of each chamber. The outer, incline end of both chambers had, it is thought, counterbalanced vertical guillotine type gates activated by geared windlasses. Positioned on a timber structure above the upper lock chambers was a large winding drum, equipped with a brake wheel, friction band and operating lever. Also situated at the head of the incline was a small steam pumping engine.

In operation a loaded tub boat was floated into one of the divided lock chambers at the head of the incline and was secured by ropes or chains to the submerged and tethered cradle. The top canal gate would be closed to seal the chamber. The adjacent chamber of the divided lock would be devoid of water and its outer guillotine gate would be in the raised position. At the bottom of the incline a tub boat would be floated onto its cradle, secured and readied for its journey up the incline. The lock chamber at the head of the incline would be emptied of its water by opening sluices; the water being allowed to drain into adjacent side position the upper cradle, together with its loaded tub boat, would be allowed to descend the railed incline under gravity, possibly being checked occasionally by a brakesman operating a brake lever at the top. Upon reaching the bottom canal, the loaded tub boat would be released from its cradle and floated along a short length of waterway to the ironworks. The ascending empty, or lightly loaded tub boat, would enter the vacant chamber at the top and the outer guillotine gate would be lowered. At this juncture the steam engine would commence pumping to reintroduce the water from the side ponds back into the lock chamber. When the lock was sufficiently full the tub boat would be released from its cradle and floated off into the upper canal section via the open lock gate.

The Ketley inclined plane was very rapid in operation; I have seen figures for the number of hauls per hour which I am not prepared to quote because I am a little dubious about their veracity. However, it must have been a fairly successful venture. This is most ably demonstrated by William Reynolds himself, in a letter to James Watt in

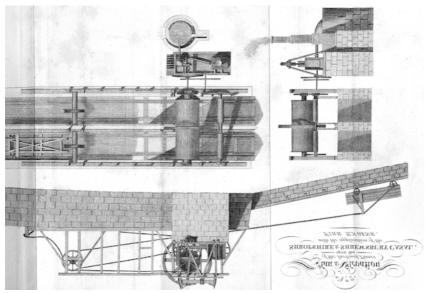


Figure 4: Plan, side and end elevations of an inclined plane on the Shropshire and Shrewsbury Canal, prepared for the engineer Thomas Telford from original drawings by Henry Williams. This engraving does not show the prototype canal inclined plane first used at Ketley, but a later modified form used elsewhere. From Archdeacon Joseph Plymley's General View of the Agriculture of Shropshire, 1813, plate 2, p. 294. (Image courtesy of Peter Coulls.)

1789. He wrote, "Our Inclined Plane answers my most sanguine expectations [and] we have already let down more than forty boats per day each carrying 8 tons - on an average about thirty boats daily and have not yet had an accident".⁷ The major disadvantage was its total dependency upon the self-acting principle, limiting the ascending load to about one third of that descending. Additionally, having to drain and refill a lock would have also retarded the operation. Loss of water due to seepage through lock gates must also have posed problems, particularly in countryside where water supply was always a major concern. To overcome these deficiencies and for the next generation of canal inclined planes, a prize competition was instituted for (the) "best means of raising and lowering heavy weights from one navigation to another".⁸ Eventually the prize was won by two engineers, Henry Williams and John Lowdon. Henry Williams was a particularly able engineer who had formerly worked for the Coalbrookdale Company as an engine erector. Subsequently he became General Inspector and Surveyor of the Shropshire Canal in 1794, and Agent and General Superintendent of the Shrewsbury Canal in 1797.

The winning proposal was essentially a modification of the Ketley incline. Instead of locks at the head of the incline there were to be a pair of parallel chambers, or docks, constantly full of water into which ran two reverse slopes, or sills, at the apex of the incline (figure 4). The steam engine was retained, but its function was changed from that of pumping water to one of hauling the tub boats and their cradles over the reverse slopes into and out of the docks. Additionally and crucially, if a heavily laden boat needed to ascend the incline the engine could be readily coupled to the rope drum to provide the necessary haulage power. The first of these modified canal inclines was probably installed at Wrockwardine Wood, on the northern end of the Shropshire Canal. It had a perpendicular fall of 120 feet to meet the connecting Donnington Wood Canal. Another four inclines on this modified principle were used on the East Shropshire canal system (figure 3). They were situated at Hay Farm, Windmill Farm, Trench, and Hugh's Bridge. A further large canal inclined plane was projected at Lincoln Hill, to connect with the River Severn at Styches Weir, but was never carried into effect.

Inclined Planes were specialised examples of the infrastructure necessary for the successful operation of canal transport systems in areas of hilly terrain and limited water supply, such as those found in parts of Shropshire. Notwithstanding these difficulties, canals became the chief mode of industrial transportation throughout the United Kingdom for many decades - prior to the advent of the steam powered railway locomotive in the early part of the nineteenth century. Although slow, horse drawn canal traffic, using barges and tub-boats, was ideal for the bulk carriage of heavy industrial raw materials over relatively short distances. It was also extremely cheap, because only a small amount of energy was required to move laden boats on the liquid medium of water. A single horse, on a level section of the Shropshire canal network, could haul about a dozen loaded tub-boats; however, upon occasions a train of twenty boats was not unknown. A steersman, walking along the towpath with a pole, ensured that the towed boats followed in an orderly fashion. Thus we have an interesting insight into late eighteenth-century industrial efficiency, typically one hundred tons of industrial raw materials being moved by one horsepower and a man with a pole!

Trade Tokens

Now we turn our attention to the trade token. The Ketley canal inclined plane was so obviously a spectacle, a phenomenon of the coalfield in



Figure 5: Reverse of a halfpenny trade token issued by the Coalbrookdale Company in 1792, with a view of the Ketley inclined plane, 1.18" (3 cm) d. The edge of the token is impressed PAYABLE COALBROOK – DALE AND KETLEY. (Image courtesy of the Ironbridge Gorge Museum Trust)

1787-88 that the celebrated Coalbrookdale Company incorporated an image of the inclined plane on the reverse side of its halfpenny trade token, minted in 1792 (figure 5). The obverse face of the token depicts the famous Iron Bridge spanning the River These two images Severn. therefore complement each other. both illustrating different aspects of the industrial achievements of the Ironmasters and working people of the Shropshire coalfield. Trade tokens, for those unfamiliar with such objects, were predominantly copper and very occasionally brass coins, minted on behalf of companies and businesses throughout the country for the payment of their employees and general trade. They were

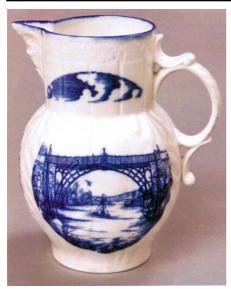


Figure 6: Caughley porcelain cabbageleaf jug with underglaze blue transfer print of the Iron Bridge, designated as Iron Bridge 1 by The Caughley Society, c. 1790, 7.28" (18.5 cm) h. (Photograph Ironmaster, who had ironworking *courtesy of The Caughley Society*)

sometimes, although not always redeemable against official coinage at defined locations. In the late eighteenth century in Great Britain there was an acute shortage of lower denomination copper coinage of the realm, and the government seemed reluctant or powerless to find a solution. This desperate need for useable semi-official currency. especially for the labouring classes, was therefore partially satisfied by trade tokens. Some tokens. particularly those produced by Matthew Boulton at his Soho Mint at Handsworth, Birmingham, were of a surprisingly high and uniform quality, demonstrating both the art and skill of Boulton's die sinkers and the efficiency of his automated screw coining presses.

John Wilkinson, another famous interests in Shropshire, the Black Country, Wales and elsewhere in

Great Britain, issued a number of different trade tokens for the payment of his workforce. Wilkinson went rather one better than the Coalbrookdale token and had his own countenance struck on the obverse face of all his tokens. This was almost certainly to ape the Roval visage of George III, used on official coinage, and as such was highly irregular, if not downright illegal! Nevertheless, these tokens were traded right across the Shropshire, Midlands and Welsh ironworking communities.

The Coalport Jug: Industrial Images on Pottery and Porcelain

Finally, and perhaps most importantly we come to the Coalport jug (figure 1). I cannot now recall when the penny dropped, as one might say, with regard to the source of the inclined plane image. However, it eventually dawned upon me that the painted inclined plane vignette was a very close copy of the Coalbrookdale trade token previously discussed. If figures 1 and 7 are compared, it can be seen that the jug painting reflects the details of the Ketley Inclined Plane headgear, cables and brakewheel, tub-boat, and brakesman figure, as depicted on the trade token. The porcelain painter has actually improved upon the token image in one very important and appropriate way, by adding a background landscape with a wooded slope falling off steeply to the left, indicating that he or she had knowledge of local topography.

I believe there may be at least one other extant Coalport jug bearing the Ketley inclined plane image; but clearly the object is quite rare. Industrial images on pottery and porcelain are relatively uncommon, and as such, become, from a collectors' point of view, far more interesting. Printed scenes of early steam railways do occur fairly frequently on pottery items. Depictions of the Sunderland Iron Bridge feature quite commonly in printed form on Lustre Wares, jugs, mugs and occasionally trays. The Caughley blue and white printed Iron Bridge 1 (*figure* 6) appears occasionally on a variety of Shropshire-



Figure 7: A porcelain presentation mug chimney. The engine features a decorated with a polychrome representa- cistern base, cast iron supporting tion of an early nineteenth-century station- columns, entablature and beam, ary steam engine, John Rose, Coalport, together with associated parallel 1805-1810, 5" (12.7 cm) h. (I.G.M.T. 1979- motion and Watt-type centrifugal 758) The precision of the decoration sug- governor. The style of the engine gests a printed outline and subsequent hand is consistent with the date of colouring. Image courtesy Coalport China manufacture of the porcelain Museum. (Ironbridge Gorge Museum Trust) mug, 1805-1810. The moulded

manufactured porcelain pieces, although the printed Caughley Iron Bridge 2 is very rare, with only one example known at present.⁹

Another item with industrial decoration is a very fine and rare Coalport presentation mug, decorated in polychrome with a stationary steam engine, and which is on exhibition at the Coalport China Museum (*figure* 7). The obverse image clearly depicts a stationary condensing rotative steam engine, complete with wagon boiler, furnace and chimney. The engine features a cistern base, cast iron supporting columns, entablature and beam, together with associated parallel motion and Watt-type centrifugal governor. The style of the engine is consistent with the date of manufacture of the porcelain mug, 1805- 1810. The moulded handle is slightly separated from

the body of the mug by gilded pads, which the late Geoffrey A. Godden notes as a distinctive feature of the mugs manufactured by John Rose at Coalport.¹⁰

To return to the Coalport jug, it is somewhat pleasing to conjecture that about two centuries ago an unknown Coalport artist sat down at the workbench, with a Coalbrookdale trade token almost certainly available as a reference piece, possibly part of his or her pay, and proceeded to paint a very accurate representation of the pioneering Ketley Inclined Plane on the Coalport jug. I think we should all salute that unknown person and express our gratitude for this contribution to ceramic art and industrial history.

Notes:

¹ I am particularly indebted to Kate Cadman, Curatorial Officer, Coalport China Museum, for her kind assistance in the preparation of this article. My thanks are also due to the photographic staff at the museum for providing the excellent illustrations for this article. Finally, I would like to thank Neil Clarke, whose knowledge of the East Shropshire canal system is extensive, for kindly proof-reading the text and making many helpful suggestions.

For a survey of the development of modern industry in the county, see Barrie Trinder, *The Industrial Revolution in Shropshire* (London and Chichester, Phillimore & Co. Ltd, 1973).

John Randall, "Arts and Industries of Shropshire," in The Victoria History of Shropshire, vol. 1, ed. William Page (London, Archibald Constable, 1908), p. 465. John Randall FGS is often described as "Shropshire's Grand Old Man." His contributions were remarkable in many ways, as a local historian, amateur geologist, author of numerous books, pamphlets and articles, celebrated china painter, postmaster for Madeley, Councillor for the Borough of Wenlock and centenarian. John Randall was born in Ladywood, a district of Broseley, Shropshire, in 1810. At the age of eighteen he was apprenticed to his uncle, Thomas Martin Randall, to learn the art of ceramic decoration. After brief periods working at the Davenport and Rockingham factories, John returned in 1835 to his native Shropshire and to the Coalport factory, where he was to decorate some of the finest porcelain for the next forty-five years. Initially, he specialised in the depiction of exotic birds in the Sèvres manner, but later he largely forsook this style of decoration and started to paint birds more faithfully in naturalistic settings. John Randall and his contemporary, William Cook, a fruit and flower painter, were two of the highest-paid artists at Coalport, and their work can often be seen together on some of the most decorative Coalport pieces. Towards the end of his life John Randall compiled the Arts and Industries section of the Victoria History of Shropshire, published in 1908, an achievement of which he seemed to be especially proud.

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⁴ M.J.T. Lewis, *Early Wooden Railways* (London, Routledge and Keegan Paul, 1974), plate 39, pp. 106, 272.

⁵ William Reynolds was connected with the development of the ceramics industry in Shropshire. He had interests in the manufacture of pottery and porcelain, provided financial aid to Edward Blakeway and John Rose for their porcelain factory at Coalport (1795), and in 1800 entered into partnership with William Horton and Thomas Rose in the establishment of a second porcelain manufactory in Coalport. His death in 1803 at the comparatively young age of forty-five robbed the Shropshire coalfield of its most able entrepreneur and inventive mind. It was to have serious and long lasting consequences for the whole of the area.

⁶ Joseph Plymley, *General View of the Agriculture of Shropshire* (London, printed for Richard Phillips, 1813), p. 292.

⁷ Letter to James Watt from William Reynolds at Ketley, dated May 16, 1789. Birmingham Archives and Heritage, Library of Birmingham, MS 3147/3/399/25.

⁸ Quoted in Trinder, *The Industrial Revolution in Shropshire*, p. 131.

⁹ Roger Thornhill, ed., *Caughley Blue & White Patterns* (The Caughley Society, Llandysul, Gomer Press, 2012), pp. 167-168.

¹⁰ Geoffrey A. Godden, *Coalport and Coalbrookdale Porcelains* (London, Herbert Jenkins, 1970), photograph 110 and pp. 46-47.

Did these women take up their right to Vote?

by Janet Doody

The Representation of the Peoples Act 1918 was given Royal Assent on 6th February 1918 and granted all men over the age of 21 and some women over the age of 30 (who held certain property conditions) the right to vote. Polling was held on Saturday, 14th December but counting did not take place until 28th December in order to include those soldiers serving overseas. (The Absent Voters Electoral Books held at Shropshire Archives are an excellent family history source.)

Nationally, the turnout was poor, with just over 50% of those eligible to vote exercising that right, and it was a landslide victory for the Coalition, with Lloyd George remaining as Prime Minister. In Shropshire, boundary changes had created four new constituencies and returned the following MPs: Ludlow, Sir Breville Stanier, Conservative; Oswestry, William Bridgeman, Conservative; Shrewsbury, George Butler Lloyd, Conservative; and The Wrekin, Charles Solomon Henry, Liberal.



A number of ladies did stand for Parliament in this election but only one was successful, the Countess Constance Markievicz: but as she represented the Sinn Fein party, she did not take up her seat. Despite being in Holloway Prison, she was elected to the first Dail Eireann, the Irish Parliament, and was the first woman in the world to hold a cabinet position, that of Minister for Labour of the Irish Republic. The first woman to take her seat in the British House of Commons was Nancy Astor, who was elected а year later representing the constituency of Plymouth.

Charles Solomon Henry



The Ironbridge Gorge Museum recently researched those ladies working in local industries who were eligible to vote. and created an outdoor exhibition. Each almost life-size silhouette represents one of these ladies. The following Broseley and Jackfield ladies are listed, but unfortunately it is not known who they voted for or even if they voted! Are them any of vour ancestors and do you possibly have а photograph of them for the society's record?

Polling Booth

MARY SHAW, (nee Roberts), born 1870 Broseley; married to George Shaw, 1904; 1911, tobacco pipe maker, 6 Harris's Green; no children, died 1940.

ISABELLA EDWARDS, born 1855 Dudley Port, Staffordshire; 1911, widow (husband Richard Edwards was Broseley born), tobacco pipe maker, 6 Cape Court; died 1922..

MARGARET (Marguerite) EDWARDS, born 1864 Broseley; 1911, widow (husband William Henry Edwards), tobacco pipe finisher, 35 King Street, Broseley; died 1932.

ELIZA JONES, born 1848 Broseley; 1911, tobacco pipe finisher, unmarried, living with unmarried sisters Ada, Harriet, Annie and brother Christopher at 41 King Street; died 1929.

HARRIET JONES, born 1853 Broseley; 1911, tobacco pipe packer, sister of above; died 1929.

MARTHA JONES, 1911, tobacco pipe finisher, 42 King Street; married Alfred Jones 1884, son Archibald



Display of silhouettes at Coalbrookdale. They represent the 37 women who gained the right to vote in 1918, out of approximately 160 who were working in the ceramic and iron industries across The Gorge.

MARY (ANN) THOMPSON, born 1856 Broseley; daughter of William and Margaret; 1911, pipe maker,3 King Street; died 1920..

ADA BURNS (nee Jordan), born 1874 Madeley Wood; 1911, tile polisher, 15 Hockley Bank; married John Burns, son Ronald Jordan Burns; died 1931.

MARY ELLEN GALLIER (nee Brown), born 1876, married James; 1911, living with widowed mother, 5 Hockley Road, two children; died 1950.

SARAH HODGE, born 18 Nov 1885 Jackfield; 1905 married Ernest Edwin Hodge; 1911, 184 Salthouses, Jackfield; 1939 Tuckies Field Public House Manageress; died 1943.

JEMIMA JONES (nee Childs), born 1883 Madeley Wood; married 1903; 1911, 74 Lloyds Head, Jackfield; died 1931

LAURA JONES, born 1883 Jackfield; 1902 married Joseph Jones; 1911, five children, 20 Ladywood; died poss. 1924.

ELIZABETH PERKS, born 1875 Broseley; 1905 married George Perks; 1911, one child, 223 The Tuckies Hill; 1939 15 Hockley Road,

ADA POOLE, born 30 Oct 1881 Broseley; married Thomas William Poole; 1911, 243 The Werps; 1939, 21 King Street; died 1949.

ANNIE POOLE, born 5 Feb 1877 Benthall; 1911, 192 Severn Terrace, Jackfield; one son, William Henry; 1939, Mosaic worker retired, 192 Salthouses, Jackfield; died 11 Dec 1948 at 34 Coalford Road, Jackfield.

BRIDGET SHAW (nee Quinn), born 1865 Broseley; 1886 married Thomas Shaw; 1911, two children, 4 Chapel Road; died on 11 Sept 1926 at 13 Hockley Road, previously Fiery Fields.

There were of course many other women in the Broseley area who were entitled to vote during this election, and they can be identified in the Electoral Registers held at Shropshire Archives.