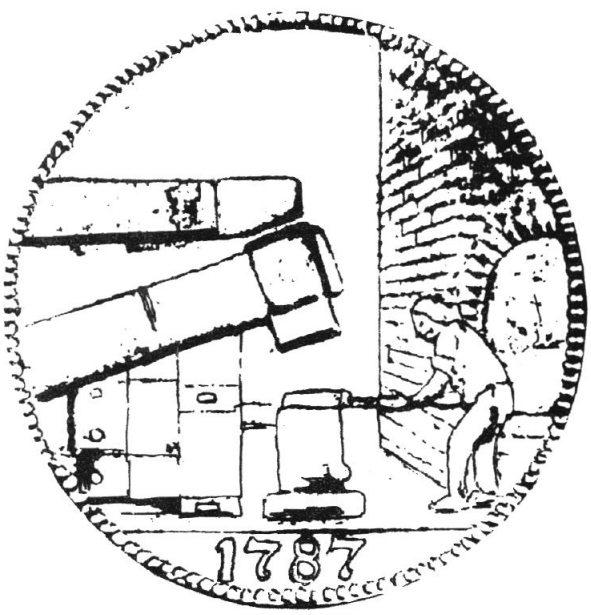
THE JOURNAL OF THE WILKINSON SOCIETY



No. 9 1981

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No. 9 : 1981

C O N T E N T S

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Editor : N.J. CLARKE

THE WILKINSON SOCIETY

The Society was formed in 1972 to meet the demand for an organisation to preserve the material and documentary evidence of Broseley's industrial past. Since an important part in this industrial past was played by John Wilkinson, who lived for a time at "The Lawns", it was decided that the organisation should be known as The Wilkinson Society.

The aims of the Society are :-

(i) to act as custodian of any relevant material and information and to make such material and information available to interested individuals and organisations ;

(ii) to promote any relevant preservation activity and to assist individuals or organisations in such activity where deemed appropriate ;

(iii) to provide a link with the community of Broseley for individuals or organisations undertaking local historical research.

Any available material will be added to the existing collection of Broseley and Wilkinson relics at "The Lawns", Church Street, Broseley. This collection is open to the public on Saturdays and Sundays between Easter and September, from 2 p.m. until 6 p.m., or at other times by appointment.

Administration of the Society is by an annually elected committee. Membership is open to anyone interested in the Society's aims and activities. These activities include illustrated lectures, social evenings, researching and exhibiting the collection, field trips and coach tours. Members are kept informed by newsletters, and this annual Journal presents articles on the history of the Broseley area, John Wilkinson, and industrial archaeology in general.

NOTES AND NEWS

The Year's Activities (1979 - 80)

The seventh Annual General Meeting was held at "The Lawns" on 12th October, 1979. Mr. Ralph Pee was elected Chairman and also agreed to continue as Curator. The remaining officers and committee members offered to continue to serve and were unanimously re-elected. After the close of business Mr. Ralph Pee gave a talk in which he put forward his very interesting views on the reasons for building the Iron Bridge.

The next meeting was on 9th November, 1979 at "The Lawns". Mr. Ernie Harris, of Benthall, gave us his long-awaited personal recollections entitled "Broseley as I remember it" (an occasion postponed from 16th March, 1979, due to a sudden heavy snowstorm on that date).

The joint meeting with the Friends of the Ironbridge Gorge Museum took place at the Severn Warehouse on 13th December, 1979. The entertainment comprised three films, the most interesting being "The Steel Bridge", a film about the construction of a very large modern steel road bridge in the United States.

The annual Social Evening was held at "The Lawns" on 15th February, 1980. The theme was "Things dug up" and the meeting was very well supported.

The next indoor meeting was held at "The Lawns" on 7th March, 1980. Mr.James Lawson gave a most scholarly illustrated talk on "The Work of Thomas Farnolls Pritchard in Shropshire".

The Summer Excursion was once again planned jointly with the Friends of the Ironbridge Gorge Museum. This year it was to the Model Industrial Village of Styal, in Cheshire, and The Anderton Boat Lift, on Sunday 27th April, 1980. All but one of the spare seats on the Friends' coach were taken up by members of the Wilkinson Society, which made the trip financially successful as well as socially and intellectually enjoyable. Our thanks are due to the organiser, Mr. J. Torr.

A Special Event was held on Saturday, 7th June 1980, to mark the Re-opening of the Society's Museum for 1980. The day's programme included morning coffee; talks on John Wilkinson, The Museum, and the Wilkinson Sites in Broseley; lunch; a tour of the sites in the afternoon; and a final discussion session at "The Lawns". 17 members/guests attended what turned out to be quite a successful event.

The Sixth Annual Anniversary Lecture (previously known as the "Celebrity Lecture") was held on 26th September, 1980 at "The Lawns". The speaker was Mr. Ian Lawley and his topic, "Quakerism in Broseley", provided one of the most interesting talks of the season, much appreciated by all who attended.

In addition to the above, officers of the Society held meetings with officers of The Broseley Society (11th March, 1980) and with The Broseley Society , Bridgnorth District Council Planning Staff and representatives of the Ironbridge Gorge Museum (1st May, 1980) to discuss matters of common interest concerning Broseley's heritage.

Other Committee Meetings were held informally during May 1980 to plan the Special Event, and on 14th October, 1980.

Programme of Events for 1980 - 81.

24th October (1980) :	"Recent discoveries at the New Willey Ironworks site" - talk by Mr. Ralph Pee.
28th November :	Eighth A.G.M., followed by a joint meeting with the Broseley Society and an illustrated talk - "Broseley Tiles" - by Mr. Mike Stratton.
17th December :	Joint meeting with the Friends of the Ironbridge Gorge Museum at the Severn Warehouse - film evening.
27th February (1981) :	Members' social evening at "The Lawns"
11th July :	Annual summer outing - joint visit with the I.G.M.T. Friends to Bristol and Bath.
9th October :	"The industrialisation of Broseley, 1570 - 1700" - talk by Dr. Malcolm Wanklyn.
6th November :	Ninth A.G.M., followed by an illustrated talk - "John Rose and Edward Blakeway" - by Mr. Roger Edmundson.
16th December :	Joint meeting with I.G.M.T. Friends at the Severn Warehouse - film evening.

The Journal

Increased production costs have forced us to raise the price of the Journal to 45 pence with this enlarged issue.

Further copies of the Journal and back numbers can be obtained from the Assistant Secretary, Mrs. Freda Spickernell, 11 High Street, Broseley, Shropshire.

Contributions to future issues would be welcome, and should be sent to the Editor, N.J. Clarke, 'Cranleigh', Little Wenlock, Telford, Shropshire.

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THE NEW WILLEY IRONWORKS : A REAPPRAISAL OF THE SITE

The chief significance of the recent finds at the site of the New Willey Ironworks is that they have revived interest in this almost forgotten but important works. Some details of its documentary history have already been published in this journal (1), but little has been published or is indeed even known of the physical layout. Unlike the ironworks at Bersham, no picture has survived. Fortunately, the area has not been developed, and by using the scanty documentary and visual evidence available it is possible to suggest a few details of the original plan.

John Wilkinson closed, or gave up, the works in 1804; but they were carried on, possibly as a foundry, by the Foresters until at least 1821 (2), and are shown on Baugh's map of 1808 as Willey Furnace. By 1827 all traces of the works as such seem to have disappeared. They are not shown on C. & J. Greenwood's map of that year. The remaining buildings, substantially as they are to-day, are shown on the 1840 Tithe maps as dwellings. The name 'Willey Furnace' reappears on the 1882 Ordnance Survey map because, by that time, Willey Furnace had been designated as the postal address of the area.

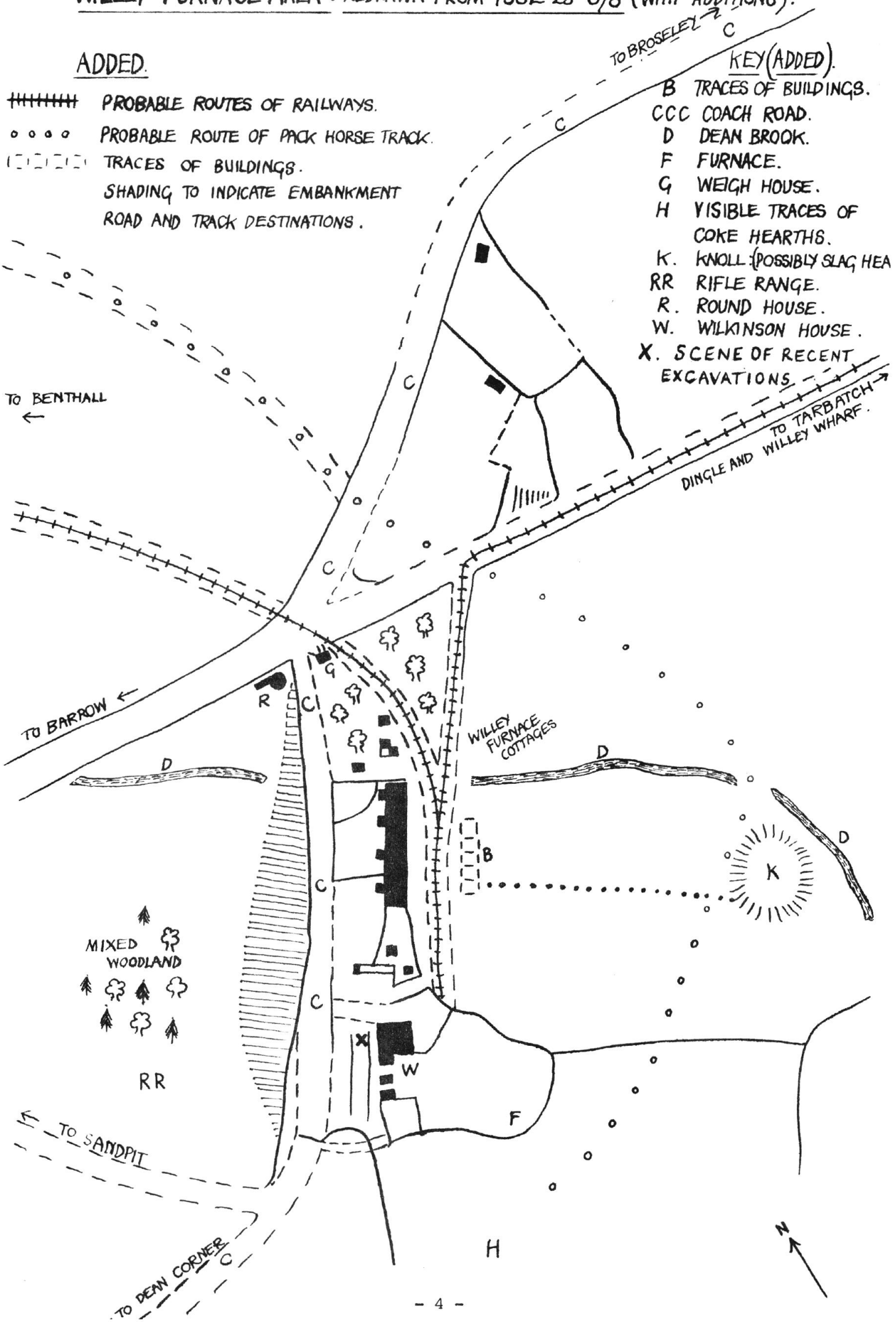
Until 1775, an outstanding feature of an 18th century ironworks was the water supply and storage system. The arrangements made for the storage of water at New Willey were, to say the least, unusual.

There were four pools, two on the Dean Brook itself and two on a tributary. The largest, near the Lodge Farm, was not as large as any on the Old Willey site and the one above this, now obliterated, seems to have been quite small. The two on the tributary, one each side the Barrow Road (these are not those which can be seen to-day near the works), could almost be called tiny. A most unusual feature is that the nearest is rather more than a quarter of a mile from the furnace. No attempt seems to have been made to make use of the sizeable tributary coming from the Deer Leap area, or of a not insignificant supply coming from the south west.

Ignoring the present pools near the works, which can be shown to be incidental, of no use for the purpose, and which are not shown on any early map, there is no trace or record of a mill pond or 'header tank' near the works which could have been used to supply water to power a reasonably sized water wheel. It is just possible that water could have been taken by pipes, or very long leets, from each pair of storage ponds to power a water wheel, but there is no sign of any such like arrangement. We know that the Linley Brook, even with its chain of very large storage ponds, was insufficient to power the Old Willey furnace in dry spells (3), yet here on a smaller brook not only is the water storage system on a much smaller scale but no effort seems to have been made to use all available supplies. Furthermore, as far as can be seen, no natural head of water was provided anywhere near the furnace.

If this is correct, the writer can only suggest that the works were designed to rely entirely on steam power by pumping water from some kind of tank or well over a water wheel, and so back to the tank - a sort of closed circuit water system. The limited water storage facilities provided were presumably considered necessary to make up for losses and to provide water for other purposes. It would be reasonable to suppose that the water would be pumped into some kind of elevated reservoir before passing over the wheel but, perhaps not surprisingly, no trace of any such arrangement can be seen to-day.

WILLEY FURNACE AREA : REDRAWN FROM 1882 25" O/S (WITH ADDITIONS).



(Note : At this time the steam engine was not rotatory and could only be used to pump water, while the rotary motion to operate the bellows of a blast furnace could only be economically provided by using a water wheel. To apply steam power to a blast furnace, the steam engine was used to pump water over the wheel.)

Although possibly an advanced example of its kind, such a system would not have been entirely new. In fact, a growing confidence in steam power can be clearly seen in the arrangements made for blowing furnaces built in the area between 1755 and 1759. At Coalbrookdale, built to operate on a good natural head of water, horse and later steam driven pumps were used when necessary to return water to the storage pond from as early as 1753 (4). At Horsehay (1775), Ketley (1757), and Lightmoor (1758), where the natural water supplies were quite inadequate, steam driven pumps backed by large storage ponds, were provided when the works were built (5).

At the Madeley Wood (Bedlam) furnaces (erected 1757-58), where the natural head of water was insignificant, the water wheels were of necessity driven by water pumped from the Severn and dependence on steam power was complete (6). At New Willey (1758-59) this development appears to have been carried a stage further and the possibility of making any use of a natural head of water rejected in favour of a head of water provided entirely by steam power.

This possible explanation of the unusual water storage system at New Willey may well be refuted by future discoveries, but it is difficult to see how a worthwhile natural head of water could have been provided from the Dean Brook and its tributaries, without extensive earthworks which would have been visible to-day.

It is interesting to note that in 1757 Isaac Wilkinson patented a type of iron bellows which could be worked by a natural or steam pumped head of water. In 1759 he was in partnership with Edward Blakeway and others to install his iron bellows at Mefthyr furnace, Dowlais, where the installation was a great success (7). Edward Blakeway, a Shrewsbury draper, was also a partner in the New Willey Company, but so far we have no record of iron bellows being used at the New Willey Ironworks until the Watt blowing engine was installed in 1775.

Because it would be required at the coking hearths and furnace head, it is probable that most of the iron ore and coal for the furnace was brought down the valley leading from the Benthall area by packhorse. The 1882 map shows two tracks from this area, one reaching the Barrow Road near the Round House and works entrance, while the other reaches the road nearer Broseley. There is now little or no trace of the track to the Round House; but the course of the second track is still clearly visible and has been shown by excavation to have been a well worn pack horse track and not, as was thought, the track of a railway (8). This track probably continued across the valley, outside the main works area, to approach the coking hearths and furnaces head from the N.E. of the furnace where there is a much easier climb to the coking hearth level. The short culvert, still to be seen near the bend in the brook, may have been built to carry this track.

There were two routes from the works to the river for the despatch of finished products and to bring in supplies, one via Swinbatch and Tarbatch Dingle to Willey wharf (9), and one by way of the Benthall rails to wharfs near where the Iron Bridge now stands (10). Parts of the graded route over the river terrace to Tarbatch is still to be seen between the works entrance to just beyond the Bridgnorth Road. A gate in the field and a track on the map of 1882

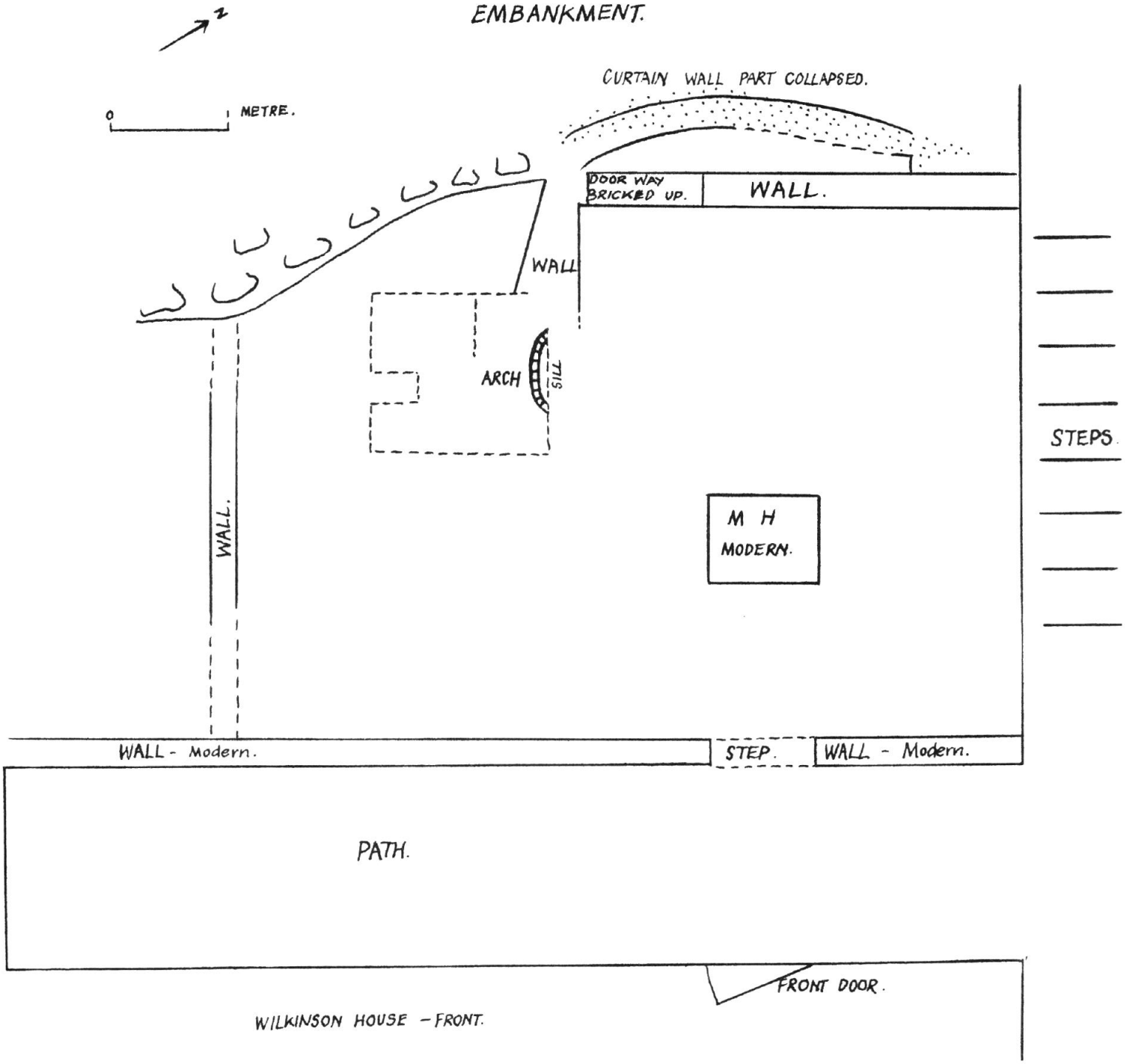
indicates where the railway which followed this route entered the works. The track of the rails to Benthall would almost certainly have followed the track shown on the same map which joins the road near the works entrance.

The exact site of the furnace is still marked by a depression at the top of a steep part of the south bank of the valley, but is only marked on the map of 1882 by a bend in the boundary of the field. To the west of the furnace the valley narrows so that the ground rises from the area in front of the furnace to the area now occupied by the rifle range. The building now known as Wilkinson House, about 50 yards to the N.W. of and in front of the furnace, is built into this rising ground so that the front, facing upstream, is two storey while the back is three storey. Looking at the back, the ground floor or basement is now garages, etc., but may at some time have been part of the living accommodation.

Recently a cannon ball was found in front of the house, just below ground floor level. It was found in a layer of black earth overlying virgin clay, indicating a works floor level. This working level, rising from the front of the furnace, apparently extended as far as the rifle range where traces were visible when the range was excavated some years ago. As it is most unlikely that a working level, running round the house and below the level of the ground floor, would have been established after the house was built, this and other factors indicate that the house was not built until the works had been in operation for some time - that is, not earlier than 1760.

Immediately in front of the house, the ground rises very steeply almost to roof level, to form the high embankment built to carry the coach road about 1790. It was in this embankment, also in front of the house, that the remains of a small building were found. This building, of which only two short walls remained, was at least 11 feet square and may have been larger. This floor, unexcavated, was apparently on the same level as that indicated by the cannon ball. The wall now retaining the embankment had been protected by a rough single brick curtain wall, and a small doorway, thereby made useless, had been bricked up. The door was missing but one hinge pin was still in place and the remains of a wrought iron strap hinge was found. The building had a curious arched extension about 5ft. square at one end and had been white washed inside. The original use of this building can only be a matter of speculation. It obviously pre-dated the embankment and the house, but was in use and deemed worthy of protection when the embankment was built. The whitewash and the extension suggest a conversion to domestic use, possibly as a bake-house, but it is not shown on the O.S. map of 1882.

The original purpose of the main building, Wilkinson House, is also still unknown. It was certainly not built before the works were opened but it can only be assumed that it was a works building built while the works were in operation. The only ground for such an assumption is that it is difficult to see any other reason for such a building in such a remote spot. It is now a very substantial two storey dwelling with an open basement. It is shown on the 1840 Tithe maps as 'House and Garden' but on the 1882 O.S. map as two dwellings and was used as such until quite recently. If built during the period when the works were in operation, so near the furnace and, worse, so near the coking hearths, it can hardly have been built as a 'desirable residence'. It could have been built to house the first Watt engine and blowing mechanism (1775), and if so is of considerable historical significance. Engine houses of that time were, however, usually small and simple. This is a large building with an elaborate cruciform roof. Also, for a blowing engine house, it is a long way from the furnace.



REMAINS OF BUILDING FOUND IN FRONT OF WILKINSON HOUSE - SUMMER 1980.

On the other hand, there are traces of a large arch, which could have been a 'Bob Arch' for a beam engine in the rear wall, and another, not so clear, in the wall facing the coking hearths. The unusual distance from the furnace could have been provided to accommodate the 'Water Bellies', which were built at the time to smooth out the blast from the single cylinder Watt blowing mechanism (11). Finally, if it was not built to house the Watt blowing engine, what was it built for ? All that we can say at present is that it was built some time after the works were opened and may have been built to house the first Watt blowing engine. Although it seemed unfortunate at the time, it is understandable that Mr. Keith Gale, acting as adviser to the Department of the Environment when the property was sold some years ago, could not see his way clear to recommending its protection as a national monument. It is of course a scheduled building and we are lucky that the present owner is interested in its historical significance.

The crenellated Round House was clearly built as an estate lodge, and the small buildings shown nearby on the O.S. map of 1882, and of which traces still remain, would have been keepers' kennels, pigsties and the like. The Round House pre-dates the coach road, as the ground round it has obviously been raised to take this road. It is unlikely that the road to the hall from this lodge followed the same route as the coach road, since before the very high embankment in front of Wilkinson House was built the climb out of the valley there would have been very steep. The estate road is more likely to have followed an easier route to the right. The house is shown as a 'Toll House' on the 1827 and 1840 maps, and it may be that the coach road to Bridgnorth via Dean Corner and Willey crossed the valley at this point to enable it to be used as a toll house.

The very small building opposite the Round House, known locally as The Weigh House, seems to have marked the works entrance. The window or hatch faced the road to the works while the door faced the Barrow Road. It had a fire place and, although it was originally crenellated to match the Round House (12), appears to have been built for works purposes.

The four Willey Furnace Cottages, shown on the 1882 O.S. map and of which two remain, are, like Wilkinson House, split level but in this case merely because the coach road embankment has encroached on one side. On the 1840 Tithe maps, (maps, because the row straddles the parish boundary), the three cottages on the Broseley map are shown as 'House and Garden, also shops under in occupation of one John Wilkinson'. The cottage on the Willey map, nearest the furnace, is shown to be in the occupation of a Sarah Wilkinson. The 1851 census return informs us that at that time Sarah Wilkinson, a widow aged 74, 'Blacksmith Trade', with two sons John and Francis, also 'Blacksmith Trade', were of Willey Furnace and that they employed three others, two Garbetts, nephews, and an apprentice. (A Mr. W.D. Wilkinson of Sutton Coldfield, a descendant of Isaac Wilkinson's brother, is a member of our society).

The two cottages still standing are substantially built and much wider than normal cottages of the period. Their general appearance and the 'shop under' of the Tithe maps suggests that they were not originally built as cottages but as works buildings, possibly pattern shops. A very similar row of buildings, the pattern shops of Onions foundry in Broseley, were also converted into cottages when the works closed. If the Willey Furnace cottages were originally works buildings, no company-built cottages were provided in the Willey Furnace area. In very dry weather traces can be seen of a row of buildings opposite the cottages. These were presumably works buildings demolished when the works closed. They were not shown on the 1840 Tithe maps.

Besides producing cast iron and cast iron objects, the New Willey Ironworks was equipped to bore cannon, steam engine cylinders, pumps, etc., and to produce bar iron. There were three Watt engines. This means that the works must have been quite extensive and probably covered most of the area bounded by the Dean Brook and the steep side of the valley. This area does in fact show signs of having been occupied. The complete disappearance of the works as such between 1821, or later, and 1827 is remarkable and it is noticeable that the 1882 O.S. map, which shows domestic buildings and remains in great detail, shows no trace whatever of other buildings.

It is doubtful if we shall ever have a complete picture of the New Willey Ironworks, but it does provide a fascinating line of research.

Acknowledgements

I am indebted to Miss Anne Turner for a tracing of the 1882 O.S. map and to Mrs. Marilyn Carter for the fair copy of my mutilated reproduction. Information from the Tithe maps and census returns is the result of the not inconsiderable labours of Mrs. Veronica West and Mrs. Susan Perfect. Thanks are also due to Mike and Joan Banks of Wilkinson House for bringing to my notice the happy results of their gardening activities. The drawing of the remains uncovered was prepared by the Ironbridge Gorge Museum Trust.

References

(1) The Journal of the Wilkinson Society, No. 7 (1979), pp. 8 - 12.

(2) Cast iron plaque in Museum reads 'Lord Forester Willey Park Ironworks'.

(3) The Journal, op.cit., p.9.

(4) 'Coalbrookdale 1709- 1966', Coalbrookdale Company Ltd., p.27.

(5) B. Trinder, 'The Industrial Revolution in Shropshire 1973', pp. 34, 36-40

(6) B. Trinder, op.cit., p.39.

(7) Stanley Raves, 'Isaac Wilkinson', Science Museum (1950).

(8) Mr. Robert Machin, Lecture to the Society, June 8th, 1974.

(9) The Journal, op.cit., p. 10.

(10) B. Trinder, op.cit., p. 39.

(11) Diagram, New Willey blowing mechanism, Boulton & Watt Collection.

(12) Ex.inf., Mrs. C. Dyas.

RALPH PEE

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THE BROSELEY ANTI-FELONS, Part 1.

"The Anti-Felons" was the name by which they were popularly known. Their full title was "The Broseley Association for the Prosecution of Felons". They were one of many such associations existing in the 18th, 19th and well into the 20th centuries, which originally had the sole purpose of bringing petty criminals to justice. They flourished in the days prior to the compulsory establishment of borough and county police forces.

In his "Portrait of an Age : Victorian England", G.M. Young says that in 1840 there were in England "five hundred associations for the prosecution of felons; but there were no county police; and the mainstay of the public police was not the (parish) constable but the yeoman, and behind the yeoman, though cautiously and reluctantly employed, the soldier".

More than one Shropshire town had its Anti-Felon Association. Ludlow had one, rivalling Broseley's in its long years of existence. There was one in Louth, Lincolnshire. George Eliot, in "Scenes of Clerical Life", writing of the 1830 period, has a farmer, Mr. Hackit, "presiding at the annual dinner of the Association for the Prosecution of Felons at the Oldinfort Arms", in the Nuneaton area. Arnold Bennett writes in "These Twain" of an architect living in the Five Towns during the late 19th century: "Osmond Orgreave had never related himself to the crowds. He was not a Freemason; he had never had municipal office; he had never been President of the Society for the Prosecution of Felons".

But between the days of Hackit and Orgreave Anti-Felons everywhere were more concerned with the pleasures of social gatherings than with the pursuit of justice.

Nevertheless, in recent years there has been something like a revival of the activities of the original Anti-Felons. The prevalence of theft of cattle and sheep has caused farmers in some parts of the country to act independently of the police. In December 1978, for example, farmers in Dorset banded together, each subscribing £5 annually in order to finance a system of payment for information leading to the arrest of sheep and cattle rustlers.

Precisely such a system of rewards was fundamental to the formation of the Broseley Anti-Felons. Members of the Association were owners of various kinds of property; a house, an estate, a mine, a quarry, a farm, craft on the river, an iron-works, a pottery, a shop or a public house. They each paid a membership fee and an annual subscription, and the money subscribed served to provide rewards for information leading to the arrest and successful prosecution of persons responsible for thefts and acts of damage to property. The money was also to be used to pay lawyers' fees.

There was a fixed scale of rewards, payable after conviction of the felon. In 1837, a reward of 5 guineas was offered in cases of burglary, highway robbery, arson, stealing horses and cattle; 2 guineas when pigs, poultry, hay, straw had been stolen; one guinea in the case of theft of timber, gates, fencing, of fruit and vegetables, and in the event of wilful damage to wagons, ploughs etc.; *"or any kind of felony whatsoever"*. In 1860 the same scale of rewards applied as in 1837.

In 1860 membership of the Association was *"general for any person living within the several parishes of Broseley, Benthall, Madeley, Willey, Linley, Barrow and Posenhall"*; the Association provided *"Protection on property*

lying within the said parishes. Membership fee was one guinea, the annual subscription 5 shillings.

The Rules and Articles of the Broseley Association, including the scale of rewards, were publicly displayed, as were handbills relating to specific offences and offering appropriate payment for information. One such handbill, dated October 14th, 1914, was referred to by Mr. I.J. Brown in his article on page 4 of the Society's Journal No. 8. The felon was there described as *"some evilly-disposed person"* who had damaged equipment in a Benthall mine-shaft.

A more recent handbill (undated) and one of more general application, reads :

"ONE GUINEA REWARD"

"The above reward will be paid to anyone giving such information as will lead to the conviction of any person or persons trespassing upon or damaging this property."

W. E. PRICE
(Secretary - Treasurer, Broseley Association for the Prosecution of Felons)

Arthur Meredith, Printer, Broseley.

The Broseley Anti-Felons wound up their affairs at the Lion Hotel, on July 30th, 1959. No such precise knowledge, so far as I am aware, is available about the Association's beginnings.

Two minute-books have survived, the earlier one opening on page one, with an account of a meeting of Members held on October 9th, 1789, with a rough draft of proceedings written on the fly-leaf facing page one. It is apparent that the Association was already a flourishing concern; indeed there is later evidence that it existed in 1775.

The entries in the book are mostly clearly written, but there are some words which I could not decipher; and the spelling is variable.

The 1789 meeting was *"Held at the House of Mr. John Cleobury at The Fox Inn in Broseley.*

Presant :

Mr. Thos Mytton	*Mr. Jno. Onions*
Jno. Morris	*Tho. Baker*
Jno. Rose	*Ben Haines*
Jno. Perry	*Fr. Baker*
Elias Prestwick	*Saml. Seale*
Mr. Jno. Morris (junior)	*Ed. Owen*
Mr. Tho. Bryan	*Jno. Guest*
Jno. B. Corbet	*Jno. Boden*
Geo. Hartshorne	*J. Cleobury*
Jno. Weaver	*Ch. Guest*

Agreed : That Mr. John Rose be paid four shillings for the expence of a serch warrant for serching after persons suspected of stealing six geese the same to be paid by Mr. J. Guest, Treasurer.

That this Association be advertised in the Shrewsbury Cronicle immidiately after each meeting setting forth the several rewards to be paid for the different Felloniss and misdemeanours and that a copy of the said advertisement be published in two Hand Bills. By order of the Meeting. Jno. Guest."

Some well-known names appear in this list of members. The Guests are probably the most famous. They belonged to an old Broseley family, and for many years were prominent iron-makers and coal-owners. Randall mentions a John Guest who was born in Broseley in 1522, and had a son Andrew who was buried there in 1609. A branch of the family established itself in South Wales at Dowlais in the mid-18th century and laid the foundations of a great industrial firm which developed into to-day's G.K.N.

Charles Guest was a trustee of the turnpike road running through Cuckoo Oak, where the principal toll house stood. He was a subscriber to the building of the Preens Eddy bridge at Coalport; and he and John Guest also subscribed to the building of the Iron Bridge. John Guest "paid half the cost of the Birch Meadow Baptist Chapel, Broseley, in 1801" (The Industrial Revolution in Shropshire, B.Trinder, p.201), and he and John Onions were buried in the Chapel graveyard.

The Morris family had an interest in limestone quarries in the Wyke-Tickwood area. Thos. Bryan had a half share with William Reynolds in the Tuckies estate at Jackfield. John Onions was an ironmaster with interests in the area and for many miles around. He was a partner with William Banks and with Francis Blithe Harries of Benthall Hall, in the Benthall Ironworks. Edward Owen was a barge-owner. The Hartshornes , the Corbets, the Barbers were coal-owners. Samuel Seale was the parish constable at Willey.

Thomas Mytton was a lawyer. At a meeting of the Association on September 30th, 1791 it was resolved by the members present that he should be *"the only person in his profession that shall commence proceedings in Law against any person or persons that shall commit any depredations upon the property of any one of them or their servants"*. Later, in the 19th century, the Association was to carry this "closed-shop" attitude to extremes.

The Prestwich family were vintners. Early in the 19th century they left Broseley for London where their trade flourished. Joseph Prestwich married Catherine Blakeway in 1809 in Broseley. They had a son Joseph who became Professor of Geology at Oxford and was the author of a well-known work on "The Coalbrookdale Coalfield". After the departure of the Prestwich family for London their business in Broseley was taken over by the Listers.

It is tempting to identify the John Rose who was robbed of his geese as the John Rose who founded the Coalport porcelain factory. However, at the most he can only have been a relative, for the latter John Rose was born (at Barrow) in 1772 and was unlikely to have been a member of the Anti-Felons at the age of 17.

After the meeting held in October 1789, the next one reported at The Fox Inn was on March 26th, 1790, at which the firm of Banks & Onions with works in Broseley and Benthall, was admitted to the Association in joint membership. It was agreed also that a future payment of one pound eleven shillings and sixpence be made for dinner at The Fox Inn. This was presumably the total cost of the meal for the whole company.

On April 1st, 1791 at the next meeting recorded, again held at The Fox Inn, Mr. Samuel Seale, the Parish Constable of Willey, *"produced a number of keys and three Chissils which he found in the house of Mr. Matthew Morris of the Parish of Willey in execution of a serch warrant on his house and it being represented to this society that Mr. Richd. Wilkes of Linley a member thereof can prove one or more of the same keys his property"*. It was resolved *"that the Treasurer (John Guest) be requested to wait upon Mr. Wilkes and recommend to him immediately to prosecute the offender if he is in possession of any*

profe which may be the means of conviction".

At a meeting held on May 11th, 1792 it was resolved Mr. Seale be paid expenses incurred in prosecuting Sarah Moore and Edward Howels in separate actions, the nature of the offences going unrecorded. There is a reference to a disallowed claim for expenses from a Mr. Morris; Mr. Thomas Wilkinson, submitted a bill for prosecuting John Martin; a Mr. Morris was to be paid £ 6. 13. 8. *"for his activity in bringing forward a prosecution against Elizabeth Brazier".* This last case must have been a serious one in view of the size of the reward, but no details are given in the Minute Book; they doubtless could be found in legal records if these have survived.

There were meetings of the Association in April 1793, October 1793, October 1794. On the last occasion a Mr. Bennett submitted a bill for prosecuting John Peach and this it was agreed *"be alowd, also that his man Thomas Merrick be alowd 10/6d for taking him".*

In March 1795 Mr. Bernard Colley was paid seven shillings for handbills and for the constable's expenses *"aprehending George Egerton".* In the following October Mr. Mytton was allowed four pounds nineteen shillings for the conviction of George Egerton. Again, the nature of the offence is not stated.

On April 1st 1796 Rob. Mills was paid 6/9 *"for aprehending John Wheeler's aprentice for stealing bricks"* and it was agreed that *"J. Holmes be paid 2/6 for being the active person in the business in order to bring him to justice".*

Thomas Mytton was succeeded as the Association's solicitor by Mr. Prichard at a meeting held on March 31st 1797. Prichard was required to go into action at once on the application of a Mr. Simkis to prosecute Mary Roper who had stolen his window lights.

At a general meeting held on March 28th 1800 the Association's Treasurer must have expressed some concern about members who were defaulting on the payment of subscriptions. It was agreed *"that the Treasurer be directed to send to every member of this society who is at present in arrears to pay the same; and in case of refusal - that the Treasurer be directed to prosecute such person for the recovery of such arrears in the Court of Requests at Broseley - and in case of Nonsuit that the expences of the same be defrayed by the Society".*

It is clear from a minute dated March 26th 1802 that the Association's meetings were not held haphazardly or only when there was business to transact. It was resolved at this meeting that the Society should meet on the second Thursday after Michaelmas and on the first Thursday after Ladyday.

At the meeting held on September 30th 1802 it was agreed that Mr. Prichard's bill be allowed *"for the different prosecutions, except Mr. Collins' journey to Posnal to examine Eliza Ray".* Another tantalising reference to an event about which we are left completely in the dark.

From 1802 up to 1820 entries in the first of the two surviving minute books contain little of interest for us. John Guest was still Treasurer and the minutes are still in his handwriting. But he had not much longer to serve the Association. New names appear in a list of committee members appointed at the 1820 spring meeting, alongside one or two old ones. The Anti-Felons functioned much as before, but changes were to appear in the following thirty or so years which were due to events in the country at large.

JOHN CRAGG

Part 2 of this account of the Broseley Anti-Felons will appear in the next issue of this Journal.

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THE IRON BRIDGE AT WAR

Erected at the time of a distant war in the 18th century, remote from the centre of the major European war of the 19th century and untouched by the first global war at the beginning of this century, the Iron Bridge first 'saw action' some 40 years ago. In this personal account of the incident, RON MILES conveys the war-time atmosphere of the period and reminds us that our famous bridge almost did not attain its bicentenary !

To me it seems like only yesterday, and yet the following event took place when I was just 11½ years old. It was a dull and slightly damp Saturday morning, the ninth day of November, 1940. The War was just warming up and we had all been warned to expect the enemy at any time. Little did I realise that before noon on that fateful day I would come face to face with the dreaded Nazis.

We lived at 57 Lloyds Head, Jackfield. The house is still standing: it is situated almost exactly one mile downstream from the Iron Bridge, and is about 40 yards from the river bank on the Broseley side of the river. Our garden was in front of the house, which itself faced up river towards Ironbridge. I was sent out to play that morning in the garden. I was completely alone and as far as I can recall was amusing myself by chopping sticks for the fire, for our house, like most others of that period, contained a cast iron grate made at nearby Coalbrookdale. About two and a half miles upstream from our cottage stood Buildwas Power Station. It was painted all over with camouflage and was guarded by Lewis guns atop of it and anti- aircraft guns in the meadows and on the hills around it.

I had recently left Jackfield village school and was now attending the new senior school at Hill Top, Madeley. Partly from leaflets issued at school and partly from reading the Wizard and Hotspur comics, I was fully acquainted with aircraft identification and could tell exactly one plane from another, both British and American. I was also familiar with the design and shape of several German aircraft, although at that time I had yet to see one. The nearest I had actually been to German planes was to hear them at night as they flew very high on their way to their bombing missions over Liverpool and Manchester. Little did I realise that I was about to put my knowledge to the test.

At that time the sky was full of planes every day, I found them all quite fascinating and would always run out of the house at the sound of one passing overhead. I could even tell just by their distinctive engine noises one plane from another. Suddenly, I heard the sound of an aircraft approaching. The sound was coming from the direction of Coalport, or down river, and as it was quite loud I knew before seeing it that this plane was flying extremely low, and also that it was not a sound that was familiar to me. The noise got louder and I slowly turned towards the direction that it was coming from, which was to my right; and there suddenly, at no more than 700 feet and following the course of the river up-stream, was this German bomber, a "Junkers 88". The first thing I saw was the marking of a black cross on its side and the swastika on its tail. I must have been rooted to the spot, but my eyes turned to follow its progress.

Before you could count three, it was level with the Bedlam furnaces and its speed

was not excessive. I watched totally hypnotized by it, and saw to my amazement that its bomb doors were opening, and out fell three bombs in what was known as "a stick". This meant that as they fell each bomb was not directly above another. The bombs soon disappeared from my sight. I estimated that as they started to leave the plane it was right above the Iron Bridge, in fact, directly over the two smaller arches of the bridge. I was still rooted to the spot, and a second or so later I saw a huge orange coloured flash, just in front of Patins Rock on Benthall Edge, and again a second later heard a loud noise that I can only describe as a "crump".

The street in front of our house had until that time been deserted and then, as if by magic, it became full as people started to emerge, one after another, to see what had caused the big bang. I immediately informed my mother that it was a "Jerry" plane and that it had dropped three bombs at Ironbridge. She quickly dragged me into the house informing me that it might come back and drop more bombs on us. I stood in the doorway listening to all the different theories that were being aired by all the neighbours. Some people suggested land mines and others said maybe it had got Buildwas Power Station; others thought the plane had crashed. My mother told me to stay indoors, but I knew quite clearly where my duty lay. This was the first time I had come into contact with the enemy and my job was to obtain proof to show the lads at school on Monday morning. All I needed in the world that day was a fragment of one of those three bombs. The evidence I needed was shrapnel.

As my father was away at the War, I felt a certain duty towards my mother. So for the rest of the day I stayed at home as she requested and contented myself by giving eye witness accounts of the bombing to all the neighbours and especially to the other boys in the vicinity. I knew that by Sunday morning the heat would be off and hopefully my chance would come to achieve my new found ambition.

Sunday morning was still dull, and by then we had heard stories that the bombs had gone off on Benthall Edge, a place I knew like the back of my hand. Rumour had it that the whole of this area was sealed off by the police and air raid wardens. We also heard that the Wharfage was littered with broken bits of trees and spattered with mud; and that windows there were shattered, including one in St. Luke's Church. A fairly strong rumour going about was that only two bombs had exploded on Benthall Edge and one had supposedly landed in the river and not gone off. This of course was a possibility, especially in view of the fact that the three had left the plane in the grouping of two slightly left of the other. Another rumour was that a Mr. Finch was at work with horses near the railway bridge at the foot of Benthall Edge, very near to the site of the explosion, and that one of his horses was wounded, if not killed. Finally, information was received that the bombs had actually fallen right on top of a dynamite store situated at the foot of the inclined plane that ran down from Patins Rock.

All this information only served to impress on me the urgency of getting the lads together and making an on the spot investigation. And so on the Sunday afternoon we made our way to Ironbridge Railway Station, which was the entrance to Bower Yard, which was itself the gateway to Benthall Edge. We found our path was well and truly barred with huge notices proclaiming "Danger - unexploded bombs". The sight of policemen in steel helmets served to put us off our planned expedition, so we spent the afternoon on the nearby station platform counting our halfpennies to see if we had enough money between us to obtain a packet of two Kensitas cigarettes. (The name of this railway station, by the way, was "Ironbridge and Broseley").

One whole agonizing week was to elapse before we had another chance to visit this spot, but by then we had thought up a plan of making our approach to Benthall Edge by way of Benthall itself, the long way round. About four of us made the trek downhill through the wood and we eventually arrived at the huge crater that the bombs had made. It was on a slope and just above the brick dynamite hut with its now buckled steel door. The crater was just about large enough to take a normal sized cottage. The trees each side of it were shorn bare of bark and branches and we were soon at work digging furiously to see who would be first to obtain the much sought shrapnel. We discovered several chunks of it, the thickest being about ¾" and the largest in size about four inches by five, very jagged and the surface being slightly milled. The eldest of our company, a boy named Tom Roberts, who lived near the Robin Hood, kept his pieces for some years and mounted them each side of his mother's fireplace, displaying the date that he had discovered them and the letters "H.E.", high explosive. I often wonder if he still has them. You could see the scarred trees from across the Wharfage for many years after, until finally nature healed the wounds.

There were, of course, several other eye witnesses to this historical event and naturally reports varied slightly. People who were at Hill Top, Madeley, thought that the plane was over Broseley, and people in that town were sure it was over Madeley. Two eye witnesses whose names I recall were Mr. Len Beeston, who saw it from Madeley Wood, and Mr. Charlie Bagley, who saw it from Coalbrookdale, where he lived. The latter described the path of the plane as making a slight arc towards Benthall Edge. It was rumoured afterwards that as the plane approached the Power Station the Lewis guns were trained on it but could not actual fire because the ammunition for the weapons was locked away for security !

Mr. Hayward, who was landlord of the "Swan Hotel", also remembered the big bang. He was in the bar at the time and the bombs fell directly opposite his place, shattering some windows and almost lifting a wooden door from the floor. He also recalled that thirty tiles were broken on his roof and that the blast caused a clock on the wall of the bar to fall off its nail and become wedged behind a bench seat. He calmly put the clock back on the nail and was delighted to find it still ticking happily away. He used to point at it from behind the bar occasionally and say to customers, "Even old Jerry couldn'a stop that old clock".

But what of the plane itself ? It was, after all, a daylight raid and there was an American Air Base at Atcham. Well, it was said that the plane was not shot down but got clean away. It was spotted flying towards Shrewsbury because that town had been warned by telephone to look out for it. It was then reported to be heading for Whitchurch and it is said that near there it dropped one more bomb in an attempt on a petrol storage dump, which it also machine-gunned. The bomb dropped harmlessly in a farmer's field neatly emptying a duck pond.

The raid on Ironbridge was reported to be the second of three alternative Saturday morning raids. The first one, two weeks before the one I experienced, was when an enemy plane was seen approaching the Sugar Beet Factory at Allscot, near Wellington. Some little time before the above raid, the Germans also dropped 300 incendiary bombs on and near the Gitchfield Tileries just down river from Coalport Bridge. This was a night raid and I have seen the "Certificate of Courage", signed by Winston Churchill, which was awarded to a Mr. George Gough of Coalport, who gallantly lifted a live incendiary bomb from the roof of the tileries at the height of the raid, whilst fires were raging all round him. He did this by running up special cat-walks that were in position specially for the purpose.

Summing up the raid that I saw take place, it is interesting to note that had

that German pilot released those three bombs (probably 500 pounders) just a few seconds earlier they would almost certainly have destroyed the famous Iron Bridge. It is highly improbable that it would have been repaired, as test borings had already been taking place regarding a possible new one.

RON MILES

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ANOTHER TIME ... ANOTHER WAR

In a paragraph headed "Sympathy with our Gallant Soldiers", *The Bridgnorth Beacon and South Shropshire Advertiser* of 9th December, 1854 informed its readers that a lady in our neighbourhood was sending a quantity of Broseley pipes to our brave soldiers in the Crimea.

R.PEE

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'FIRST IRON BOAT', HELTON TARN : PRESS RELEASE

In September 1979, the Windermere Steamboat Museum initiated a search for the 'first iron boat' at Helton Tarn.

The boat was reputed to have been built in 1750 under the auspices of John Wilkinson, to carry peat from Helton Tarn down river to his foundry at Castlehead. The boat was in use for only a short time, probably because peat was an unsatisfactory form of fuel for the furnace. Wilkinson had even built a short canal for the boat, which may have been built on the lines of eighteenth century canal barges. If so, then the dimensions of the boat would have been about 10' x 6', with squared ends and weighing 3 - 5 tons.

Local reports placed the 'first iron boat' in Helton Tarn. The search for the boat was made possible by the kind permission of Capt. Stanley and Mr. Cavendish and the patience of their farmers.

A proton magnetometer and an underwater version were used (loaned to the museum by Professor Hall of Oxford). The magnetometer measures any disturbances in the earth's natural magnetic field, which iron can affect locally, up to 15 metres. The search took place over a period of six months, following a regular grid pattern. The tarn and surrounding area were scanned but unfortunately results proved negative.

WINDERMERE STEAMBOAT MUSEUM,

May 1980 .

(The significance of this report and other evidence relating to Wilkinson's iron boats will be examined in the next issue of the Journal. Ed.)

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SEVERN BARGES : CORRESPONDENCE

Ron Miles, Jackfield, writes (June 1980)

"Having lived alongside the River Severn for nearly fifty years, I was most interested in the information in recent Journals about the barges that are still lying in the river directly opposite the Coalport China Works.

The information I have was obtained from a Mr. George Harrington who at the time, 25 years ago, was living at the Tuckies, Jackfield. He told me that they were called lighters and were to do with barges, although he could not remember their actual use. He was over eighty at that time and informed me that they were filled with stones and rubble and sunk at the same spot by the G.W.R. Company to help prevent subsidence of the bank of the river between the Werps and Preens Eddy Jackfield. They were put there about 86 years ago and have never moved from that spot which, as stated, is opposite the China Works. I took pictures of them when they became visible during a very dry summer in 1958 and had one of the shots and a small article published in the Express & Star that year. I also measured one of them and found it to be 35 feet in length and six feet wide.

Mr. Harrington was the owner of a photograph of a very different river craft: this was the last barge, "William", photographed at the Werps just above the General Gordon pub. He was pictured on that barge as a small boy. He loaned the photo to me and that is how it finally came to be widely published over the years.

Regarding the area near the Half Moon pub, Jackfield, where the lighters certainly were never used: yes, there are iron piles here and they too are in the same position as they were placed in about 1936. They are on the opposite bank to the pub and some way upstream. They were placed there in connection with a case that went all the way to the House of Lords. It was nothing whatever to do with Jackfield but quite a lot to do with the area directly fronting the river at the site of the Lloyds Beam Engine. A local firm extracted minerals at this point from slag put there many years previously by the Madeley Wood Co. from Blists Hill. They caused the main Ironbridge to Coalport road to be seriously undermined by their action and the piling was carried out, I believe, at their expense to try to remedy their mistake. The piling has worked very well, hence the Lloyds school (closed 1927) still being used as a dwelling for two families to this day.

The General Gordon, by the way, was the twelfth pub in our village, if you started at the Station Hotel, which is also in the parish."

Richard Barker, Borrowash, writes (July 1980) :

"May I comment on three items in Journal No. 8 (1980) on the subject of barges.

1. Mr. Waterhouse raises the possibility of a Wilkinson connection for four barge names, (p. 15). They are derived from a source which cannot prove or disprove the case - the Customs Registers - but which show that all four were first registered (i.e. were to trade beyond Gloucester, if their first owners were based in Shropshire), perhaps on change of ownership, in the period 1805 - 9 : three in the period 17th April - 29th July 1805 ; the "Joseph" alone in 1809. That may be pure coincidence in relation to Wilkinson's death in 1808.

However, the evidence of the names alone is flimsy. "William" is too common to be significant, and even "Brothers" and "John and Mary" each occur at least four times in the Severn and Wye Registers over a longer period. Clearly we

need the missing 1795 (Admiralty) Registers, such as survive for Staffordshire. Until then the matter is pure speculation.

Incidentally, John Jones, builder of the "Trial", was surely a blacksmith.

2. Coalport Barge Graveyard, (p.11). If the vessels examined by the divers are some distance downstream of the site of the "pontoons", might they not be different vessels altogether ? I ask because my own observations in 1974 convinced me that two vessels accessible from the bank in that general area were without doubt wooden canal narrow boats - length, beam, scantlings, form of bow and stern. They were also in a neat row with the traces of ironwork of two other vessels : they had all been deliberately placed there and two were intact, albeit eroded. They had certainly not been moved by the river in flood.

I also suspect that the general purpose in that section of the river is more likely to have been to confine the channel and increase the depth in the rapids - assuming that they were placed in the last century. There is every chance that the hulk of the old Coalport ferry could survive, if there are indeed eight vessels : IGMT photograph A 1481 suggests the possibility, for example. We have a surfeit of local rumours about sunken barges in the area : have the divers' actual findings been recorded ? (Findings recorded, but not yet published - Ed.)

3. The crux of the matter of sails on Shropshire barges (p.17-18) is our expectation of what is likely. In the age of the motor car we have forgotten what a boon a river navigation was, and the lengths to which society would go to move barges on seemingly impossible waters.

Above Gloucester sails would tend to become auxiliary : the rig could not be used to sail under bridges going upstream, or round meander bends, for example. They could nonetheless be the principal motive power, depending on wind strength and direction. (I imagine that a wind rose for bank level in the Gorge area might be very revealing - rather different from that in the surrounding plains, with a natural funnelling into the most useful directions ?)

The greatest issue between Ralph Pee and myself is that of free sailing downstream (wind direction permitting), which he cannot accept as possible. Pictorial evidence abounds, however crude; documentary evidence exists for other rivers. I have a recent photograph of Portuguese rabelos sailing hell-for-leather round a sharp bend in a rocky stretch of the Douro much like the Jackfield rapids, for example. They are much the same size as our barges, fully laden, a mere boat's length apart, too, and have foam around their bows. It is not the case that these things could not be done : merely that we have forgotten how, together with most other details of the navigation in practical terms.

If we reject sails, what is left ? Laden barges moved downstream during freshes in the river : could even horses reliably and safely tow fast enough to give steerage way in those conditions ? The risks of a fouled towline (to mention but one possible hazard to boat and men and horses) are to my mind not preferable to the risk of grounding under sail alone. Who opened the field gates along the towpath, what happened when other barges, or bridges, were passed ? I think it is clear that the motive power was aboard the barges going downstream - sail, pole and sweep. More pertinent than the question of how the sails were then used is that of what was used as a brake. (I know of no evidence at all for the Severn, though other navigations used drag-chains). The questions are endless.

Incidentally, a square sail need not be so "simple" in any derisory sense : the ancients found it fairly versatile, and it survived to the end in Shropshire."

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