GLOUCESTERSHIRE SOCIETY FOR INDUSTRIAL ARCHAEOLOGY

JOURNAL FOR 1981
gloucestershire society for industrial archaeology

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The aims of the Society shall be to stimulate interest in, to record, study and where appropriate preserve items of industrial archaeology, particularly in the County of Gloucestershire.

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All the Articles in this Journal are the Copyright of the Authors. The views expressed in the Editorial are not necessarily those of the Committee. The Editor is always pleased to receive articles, reports and suggestions etc. for the Journal. Criticisms will not be taken amiss! But please send in your contributions in good time.
EDITORIAL

Will members please forgive the somewhat late production of this issue of the Journal? I took over the task with some reluctance, and by inexperience is chiefly responsible for the delay. However, the interest and value of the contributions should do much to mitigate any faults in presentation.

The history of the Whitecliff Ironworks is continued in this issue. This provides some fascinating glimpses into the financial problems of an early 19th century capitalist, both with his competitors and also with the workforce of the Forest of Dean, who both proved intransigent to an outside employer and resentful to the point of violence against the immigration of "more reliable" workers from Derbyshire. And in case anyone thought that the decision to invest public money in public enterprises to counter high unemployment was a radical demand of the 1970s the Telford correspondence on the Gloucester & Berkeley Canal will come as a surprise. Also destroyed will be the idea that demands for Government intervention, or take-over by Whitehall, in the case of failing businesses, are phenomena of the second half of the 20th century. History books sometimes give the impression that strikes were both illegal, and instantly suppressed, in the years following Waterloo. Both the two major articles show this to be an erroneous idea: the workforce on both the Canal and in the Forest seem somewhat more difficult and independent than many of our similar groups of today.

We note two important events of the past 12-month. The brighter is the opening of the Northleach House of Correction as an agricultural museum, housing the important Lloyd-Baker collection of farming vehicles and implements. There just wasn't room to include an article on the building this time: it is hoped to have one in the next issue.

The other, less pleasing, event is the decision to impose charges for visiting the County Record Office. This is intended to offset the short-fall in the income of local authorities and to prevent a reduction in the standard of service offered. What effect it will have on the non-professional researcher is hard to estimate. Certain categories will be offered free or cheaper admission; but the principle is a most unwelcome one, and we most earnestly hope that when the present recession retreats, admission will once again be free to the general public.

Gentle Reader! Without your contribution there would be no Journal. It is worth remembering that the publication of work in progress informs others of what is being done, and also gives a polite notice - that someone is doing it - "kee, off the grass"? I hope to get the next issue out rather more promptly. This can only be done if articles etc. are sent in in good time.

Finally, I cannot end without paying tribute to Amina Chatwin who has edited the Journal for 8 years. I can now appreciate the time and effort she put into the work. It will not be easy to follow in her footsteps! (Thanks, Amina!)

Christopher Cox.
The Conference was held on Saturday 11th April 1981 in Worcester College of Higher Education, having last been held there in 1975. The Conference was chaired by Kenneth Hudson of Bath, author of numerous books on industrial archaeology. There was a series of interesting lectures, all well illustrated with slides. The subjects included - "Severn Steamers and Trows", and "Herefordshire Farm Buildings", for which there was twice as much material as time available, maybe a subject to be continued at next year's conference.

There was a lecture on the Coombeswood Interchange Basin and Dudley Number 2 Canal. This canal linked the Black Country with Birmingham via the Lapal Tunnel: this was closed in 1910 when the roof fell in and the site of the canal is now used for other purposes. An end of the tunnel is covered and there is a possible danger of subsidence to houses built over the tunnel.

There was a talk on industrial housing in Avon in the early 19th century, and the last lecture was about railways in South Wales. The speaker's interest in the subject was prompted 10 years ago by someone remarking that there were no coal mines or railways left in South Wales. The speaker realised that this was not true but that he had better photograph them while they were still there. There has been change over the last 10 years and the railway system is but a shadow of its former self, with what were formerly large stations now reduced to halts. Though there has been new industry in South Wales in the last 10 years, this tends to involve goods with a high price to weight ratio, requiring few transport facilities and no railways.

Ralph Rees.
HALF-DAY VISITS 1981

The first of the half-day visits took place on Sunday 5 April. Graham Curzon showed a small party of members the considerable progress which had been made at the excavations of a possible furnace site at Flaxley in the Forest of Dean.

A visit was paid to Painswick on Saturday 25 April when Mrs. Colleen Haine gave us a most interesting tour along the Painswick Stream to see some of the many mill sites in that area.

One of our members from Dursley, Mr. David Evans, led a most enjoyable walk in that area on Sunday 14 June. Starting from Maisley’s Works, we followed the river downstream looking at various sites. After a walk through the town and in the vicinity of Lister’s Factory, the afternoon was concluded with a visit to the Cam Hills area.

Miss Amanda Chatwin led two Friday evening walks around the centre of Cheltenham to view the famous ornamental ironwork. Both events were well supported despite rain on both evenings. Members of the Stroud Museum Association joined us on the first of these which was on 19 June. Then on 7th August some 15 members of the public took up the invitation to join the walk.

A social evening was held on Tuesday 7th July. We met at the Coombe Hill Canal where we were warmly entertained by Alan and June Pickens, the owners, who are also members of the Society. Here we were shown the extensive restoration work already completed, and a selection of items from the Pickens’ collection of items of canal interest. This was followed by a walk along the entire length of the canal to the River Severn. From here it was a short step to the Red Lion at Wainlodes Hill where refreshment was taken before we were ferried back by Land Rover to the cars at the canal basin.

Ray Wilson.

VISIT TO THE BLACK COUNTRY CANALS & MUSEUM

The Society paid its first visit to the Black Country Museum at Dudley on Sunday 19th July during a trip led by Harry Townley. The Museum acquired its present site in 1975 and several buildings have been moved there and refurbished and re-fitted as they might once have been. Already completed we saw a chainmaker’s house, a canal boat dock, a Methodist chapel, a coal-fired baker’s, workers’ cottages, and a chemist’s shop. A restored electric tramcar was available to carry us across the site.

After lunch we followed the course of the Wyreley and Essington Canal, starting at its junction with the Birmingham Canal at Horsley Fields. Stops were made at the junction with the old Bentley Canal and at Sneyd Junction, where the B&W Sneyd Yard is situated. In Walsall we walked down beside the 8 Walsall looks to see the link between the Walsall Canal and the Wyrley & Essington.

The final stop was at the junction with the Cannock Extension Canal which was the last important canal built in the Midlands (1858-63). In contrast to the neighbouring canal, it was built remarkably straight and with blue brick bridges, typical of the railway age.

Ray Wilson.
COPPER MILLS IN THE AVON VALLEY 6 June 1981

Having met our leader, Mrs. Joan Day, at the Tog Hill Picnic Site, we went first to Crew Hole on the eastern outskirts of Bristol. There we saw the site of a large copper smelting works, now a tar distillery, before a pleasant walk along the banks of the Avon. After passing a number of walls containing slag blocks, we had a look at the remains of the Conham copper works.

Further east, at Warmley, from the coach we saw William Champion's windmill, possibly for ore-crushing, and the fine stone building with clock tower near the site of his zinc and copper spelter of 1746. Here again we had a walk, this time past an interesting weir gatehouse of slag blocks to see a gigantic statue of Neptune, also of slag blocks, in the grounds of Champion's house.

Back to the Avon valley we visited Swinford Hill, the first known copper rolling mill but rebuilt in 1840 and remains today with a large plaque. From here it was only a mile to our lunch at an old pub in Kelston.

East again to Bath where, at Twerton, we saw the site of a copper battery mill which produced copper and brass wire. Nothing remains today of the mill formerly situated on Dutch Island between the Avon and a cut of 1727 made to avoid two weirs. Near here, but still standing, we passed a fine wool spinning mill of five storeys.

Our most interesting visit of the day was to the Saltford rolling and battery mill of 1720 where a trust, under the aegis of BIAS, is steadily restoring the remaining buildings. Particularly fine is the amelting furnace.

The day ended at Keynsham with a look at the remains of Avon Mill, mostly wire-drawing shops, for the site was famous for small gauge wire. Here our secretary thanked Joan Day for a most enjoyable series of visits.

J.N. Crawford.

VISIT TO WARWICKSHIRE, 3 October 1981

For the final visit of 1981 a part of 35 members and friends embarked on the usual berline coach for a tour of the Avon Valley in the heart of darkest and dampest Warwickshire to view a mixed selection of items of I.A. interest.

The first stop and scramble of the day was to inspect the Edstone (or Brearley) Aqueduct, the principal engineering feature of the Stratford-upon-Avon Canal. This aqueduct (completed in 1815) is the second longest cast-iron trough aqueduct in the country; it carries the canal over the valley of the Edstone Brook, later occupied by the G.W.R. Brearley-Alcester branch line and the Stratford-upon-Avon to Birmingham main line, actually built this century. Although its construction and setting are far less dramatic than Mr. Telford's unpronounceable construction over the River Dee in North Wales, this aqueduct deserves better recognition as a major civil engineering work for its time.
At Stratford-upon-Avon the party made a brief inspection of some of the remains of
the river navigation, canal, tramway and railways: a wide range of transport sys-
tems that once focussed on this market town. The canal and river navigations have
been restored fairly recently and there are plans to restore the rail link south-
wards. Meanwhile the tramway and the east-west railway remains slowly decay, while
the northern rail link maintains a somewhat precarious existence, downgraded from
its former main-line status to that of a feeder branch line, but still occasionally
graced by steam traction. North of Stratford-upon-Avon Station the manually operated
signal box survives in regular use, complete with mechanical interlocking frame,
early style block instruments and semaphore signals. The party received a detailed
explanation of the working by the local area inspector. These signal boxes, once a
familiar feature at every station and junction, are now quite rare in the Midland
counties, and the opportunity to visit a box in such original condition as that at
Stratford-upon-Avon is now particularly rare.

The second scramble of the day involved negotiating the ladders out of and into the
special train kindly provided by British Rail to convey our party between the
station and the signal box.

The party then abandoned their coach and embarked on the normal service train for
Leamington Spa; our most recent host the signalman kindly waited till all our
party were aboard before “setting the road”. The topography of the area and the
associated difficulties of the canal and railway constructors and operators were
well illustrated by the climb out of the Avon valley up to the midland plateau via
Wilmcote Bank and the descent back into the valley near Warwick via Hatton Bank.

On arrival at Leamington Spa General Station the brief study of the rebuilding of
the station buildings in the late 1930s, with its distinctive architectural style,
was rudely interrupted by a strident blast from the once familiar G.W.R. locomotive
whistle. Castle Class locomotive “Earl Bathurst” then accelerated vigorously through
the station with one of British Rail’s occasional steam-hauled specials en route
for Birmingham, thus re-enacting a former everyday scene from the mid 1920s to early
1950s.

After lunch at the “Shakespeare Inn” at Harbury, some of the party inspected the
derelict remains of the town tower mill. Then, under the guidance of Mr. John
Selby, all the party travelled to Hillmorton to inspect the maintenance yard on
the Oxford Canal. This yard has a unique and fairly complete set of historic build-
ings required to operate and maintain a once busy commercial waterway: workshops,
a dry-dock, re-circulating pump houses, offices and stables were seen. The passage
of pleasure boats through the adjacent locks, and the 25 kv electric-hauled trains
on the modernised London and Birmingham Railway of Robert Stephenson also aroused
the party’s interest.

The day concluded with a visit to Chesterton Windmill. Here Mr. Geoff. Fuller,
the former Assistant County Architect and person responsible for the restoration
of the mill, led the last scramble of the day up the access ladder into the mill.
Chesterton Windmill with its unique arched tower was restored some 12 years ago
and rather set a fashion for mill restoration. Our guide gave a detailed descrip-
tion of the mill, interesting in that it was given from an architect’s viewpoint
rather than the usual description of an engineer or millwright.

After the coach had returned Mr. Fuller and his access ladder home, Geoff. travelling
in the coach boot balancing the ladder much to the surprise of following motorists,
the party returned to Cheltenham and Gloucester via Stratford-upon-Avon with the
occasional muttering about getting fit next time for John Foley’s mountaineering
expeditions.

John Foley.
LYDNEY, CHEPSTOW, and the ANGIDDY VALLEY. 28 June 1981.

We were lucky with the weather for the trip, led by Stan Coates, on June 28th. He found Bullo Pill a quiet retreat by a few cottages; difficult to believe that in 1815 it was geared to ship out a thousand tons of coal and stone daily.

Lydney harbour, with beautiful views over the Severn, and the skeletal ribs of old sunken barges, marking the route to the lockgates. In the second half of the 17th century the River Severn changed its course and left boatbuilding Lydney a mile from the river. A dock basin with lockgates and a canal were opened in 1813, though the outer harbour was not completed until 1821. Coal, stone and iron were the chief exports, and there was a thriving trade in china clay brought in as ballast and re-shipped up the Severn to the Potteries. The remains of coal stai-
thens were observed and a plywood factory which originated during the last war manufacturing wood for aircraft construction.

At Chepstow we examined the cast-iron bridge of 1815 designed by John Rastrick; then walked along the river where most of the old industrial buildings had been removed, leaving little more than old slipways leading down to the water. Chep-
stow castle made an attractive backdrop for a picnic lunch.

In the afternoon the coach took us up the banks of the Wye to Tintern and the Angiddy Valley. This delightful rural area, where every cottage garden seemed burgeoning with enormous colourful flowers of every hue, was once an industrial conurbation of some importance. A wireworks was established in 1566 with the intention of producing brass wire. It seems to have proved impossible to produce this to a satisfactory specification, but iron wire was made here for over 300 years. Water power was used for the purpose of wire drawing for the first time in England and Wales and a further branch of the works established at Whitebrook about 1600.

We walked from above the upper forge ponds, following leats and mill sites, down to the valley to the remains of the blast furnace, recently excavated along with the remains of associated buildings.

Stan gave us a wonderful day out, full of interest, in delightful surroundings.

Amina Chatwin

VISIT TO THE FOREST OF DEAN 12th September 1981.

On Saturday 12th September 1981 Ian Parsons led 3C members in cars on a clockwise tour through the southern part of the Forest of Dean. Sadly, the first site was the Flaxley Furnace excavations (SC 693151) started by our late committee member, Graham Curzon, and now being continued by Mr. Ellis and helpers, who showed us the discoveries partly described in the GSIA News Sheet for February 1981. Sadly again, it was not possible to visit Gun's Mills (675139) because it was, and still is, up for sale. Thanks to the Glos. Council's caretaker, who had done a magnificent job cleaning out, it was possible to examine the cells wing in the model prison of Sir J.C. Paul at Littledean (674137). Thanks again, to Messrs. James Joiner & Sons Ltd., the party was shown the outside of the last working engine house in the Forest, at Lightmoor Colliery (641121) and we were told about the colliery and coal mining in the Forest by a member, Graham Field, who had returned to the Forest from Kent for this visit.

A short stop was made at Camp Mill, Lower Soudley (665105) to see this building, which will become the Forest of Dean Museum-Heritage Centre. On to Lower Soudley Furnace near the Haie Tunnel, originally driven by the Forest of Dean Tramroad in 1809 (665102), the procession of cars then continued down the scenic Soudley Valley to Blakeney, and under the Purton Steam Carriage Road's unusual railway viaduct of 1830 (671049). The Annexe Inn at Lydney made the party welcome for lunch.
Afterwards, up to the Cannop Stone Works which were - surprisingly - working. Graham Field guided the party up Bixslade to see the remains of coal shafts and a Free Mine in use. A short trip by car and a walk down the former Severn & Wye Railway Coleford Branch past coal shafts to the S & W Tramroad perfect curved tunnel into Point Quarry (593084). After the fund-raising and news generally, it was satisfying actually to stand at the base of Whitecliff Furnace (569103) and examine the restoration to date. Further down the valley the Redbrook Incline Bridge (537103) was well worth a detour. This carried a branch from the Monmouth Tramroad down to Redbrook Tinplate Works. A longer drive back, and just before rain ended a really sunny day, the extensive Free Mine near the Royal Forest of Dean Grammar School made a satisfying conclusion.

Ian Parsons.

MAJOR IRONWORK COMMISSIONS

Two major ironwork commissions have gone to west country smiths in the past year. Gates to the Treasury in St. Paul's Cathedral and gates to the Prince of Wales' new home in Gloucestershire.

It was decided in the Spring of 1981 that the wedding present to be given to the Prince and Princess of Wales by the people of Tetbury, should be new gates for nearby Highgrove House. Five local craftsmen were asked to provide designs, and the royal couple selected the work of Hector Cole of Great Somerford, Wiltshire. Highgrove is an 18th century building, and Hector Cole is a smith who works in the tradition of the past; much of the inspiration for the gates has come from forms used by the great smiths of the late 17th and early 18th centuries. The ribbon scroll, blown over leaf, and now rarely used, seed pod, all find a place in the elegantly restrained creating of the gates. Equally, the clear cut simplicity of the design places it very much in our own time; while unusual textured surfaces on ball forms, produced by integral forging of the shape, are essentially a modern element.

The gates were completed in November. That was also the month when the new museum and treasury in the crypt of St. Paul's Cathedral were officially opened by the Duchess of Kent.

With the help and encouragement of the Crafts Council, four craftsmen were invited by the Dean and Chapter of St. Paul's Cathedral to submit designs for gates to guard the Treasury; James Horrobin, David Watkins, Stuart Hill, and Alan Evans. It was the design of Alan Evans of Whiteway, near Stroud, Glo's., that was chosen. He produced a brilliantly conceived strong barrier, with all the natural grace of a web hung across a cave mouth. That the gates are not suspended from hinges, or in any way attached to the walls, but pivot each on its own axis, from floor to ceiling, adds to the magical quality of the structure. An important element in the inspiration of the design were the curves of the vaulted ceiling above, which now find a reflection in the arcing steel bars below. Made from mild steel plate and bar which has been cut, forged, welded and rivetted, the surface was then shot-blasted, wire-brushed, and finished with lacquer, producing a surface as softly mellow as old silver.

Amina Chatwin.
Readers will have noticed that David Kusnet, a main character in the article "Dear Kusnet" also appears briefly in the Telford correspondence on the Gloucester & Berkeley Canal. Also mentioned in that second article, as an inexpert engineer, is Denis Edson, who was the (competent) road engineer for the Nailsworth Turnpike Trust in 1780-81 (see the Journal for 1979). The most eminent member of that Trust's Committee was Sir George Chesiphoria Paul, who was the person chiefly responsible for the building of the new, reformed prisons, one of which — at Northleach — was opened in 1981 to house the Lloyd-Baxter Collection of Gloucestershire farm vehicles and implements. (It is hoped to have an article in the next issue of the Journal about the Northleach House of Correction.) These are links across different articles. Readers will perhaps forgive me if I mention another link, this time in space, as in the article on the Gloucester engine in Scotland, an area about the size of Wales. In June 1942 my unit of the Royal Signals took over the Army communications in Assam in NE India, an area about the size of Wales. The first thing I saw was a little Lister's motor truck at Lumling. The first thing I saw was a little Lister's motor truck hauling trolleys about the platform. A long way from Gloucestershire, and from home, and how welcome!