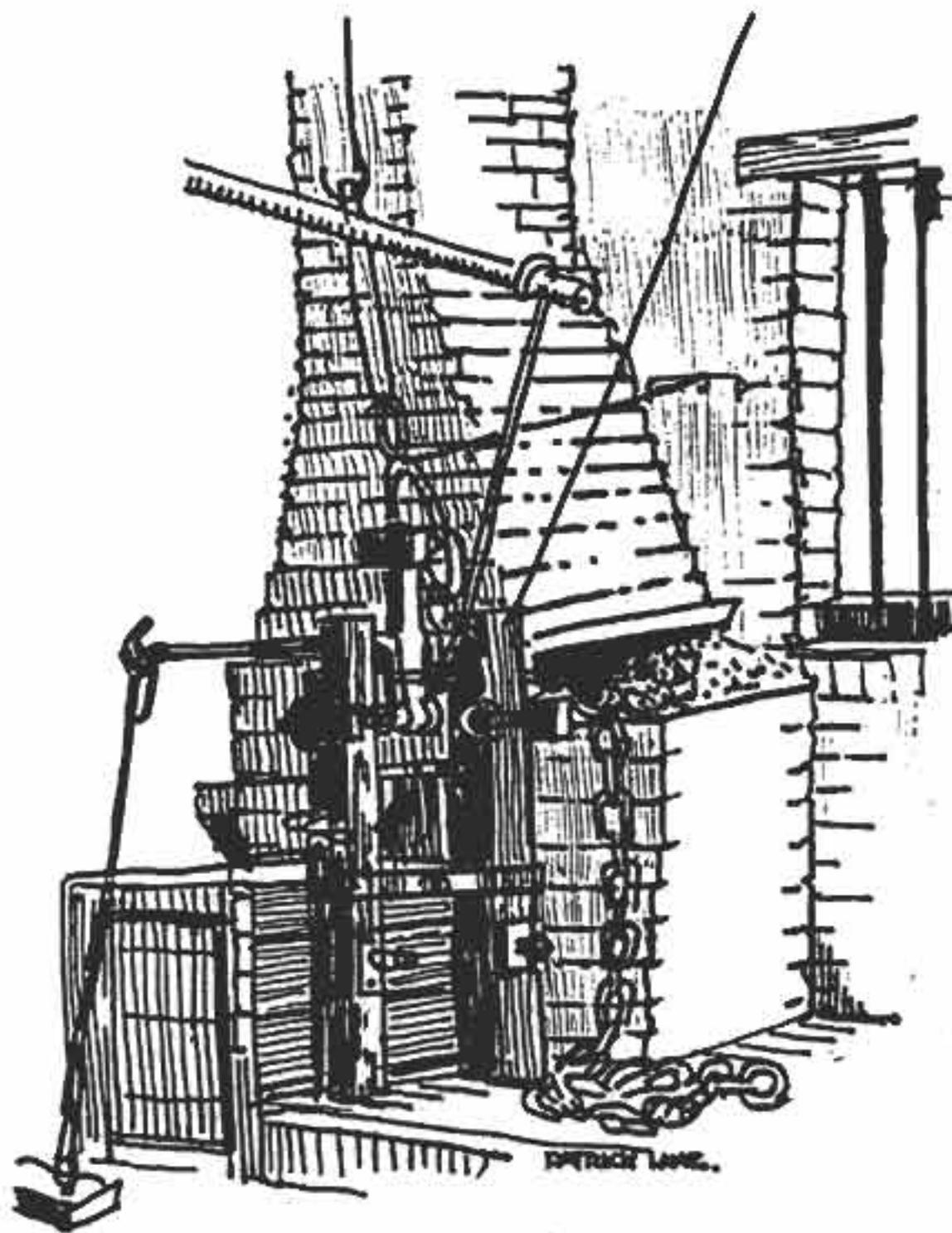


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GLOUCESTERSHIRE SOCIETY FOR INDUSTRIAL ARCHAEOLOGY
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The Aims of the Society:

To stimulate interest in, to record, to study, and where appropriate to preserve items of industrial archaeology, especially in the County of Gloucester.

EDITORIAL

A variety of subjects are covered by the papers in this year's Journal. From my point of view the most important is that by Stephen Mills on Leonard Stanley Tannery. It was a rare survival and the author is to be congratulated on the extent of the recording work achieved and on the fact that at least some of the machinery was saved. It does, however, highlight the fact that a lack of information, combined with other unfortunate circumstances can result in the near loss of a site that was certainly important in the county of Gloucester and probably in a wider context, too. A somewhat happier set of circumstances applies to the subject of Stephen Mills' other paper on Beards Mill and the mender's shop.

The Forest of Dean is well covered by C.R. Bowen's interesting paper on Swallow Holes and Mine Drainage, and by Mr Ellis's paper on Flaxley Abbey Iron Working. It is particularly pleasing to be able to include the latter paper since members of the Society were involved with the investigation of the site.

Transport is covered by Ray Wilson's paper on the GWR Omnibus Services and Garage at Stroud. Ray has given us an excellent background to the building of the garage. He has also kept us up to date on the conservation of Dunkirk Mills. Finally there are the personal reminiscences of Mr Gardner Young on his family's involvement with various industries.

This year sees the Society hosting the annual Association for Industrial Archaeology Conference, which is being held at the Royal Agricultural College, Cirencester. This will give us the opportunity to show delegates some of the sites of the industries which thrived in our County. There will be visits to the Forest of Dean and the Stroud area as well as Gloucester Docks and other sites and no doubt there will be thought provoking discussion at more informal gatherings of delegates. It is an opportunity to promote Gloucestershire's industrial archaeology, so if you are interested in attending or helping please let me know.

Amber Patrick

Our Cover illustration is thanks to Pat Lane who always provides us with such fine drawings. Thanks are also due to G.R. Bannister for typing and to Dr R. Wilson for production.

SUMMER VISITS, 1991

VISIT TO LECKHAMPTON QUARRIES.

Saturday, 23rd March 1991.

It might have seemed to local residents that the riots of Leckhampton Hill were about to be repeated when a large party of about 35 members and friends met in the small car park in Daisybank Road next to Tramway Cottage.

Our guide was David Bick, a long standing member of GSIA who has researched extensively the quarrying operations on the hill and their associated tramways and railways. All of this is fully described in his books Old Leckhampton and The Gloucester and Cheltenham Tramroad, which are thoroughly recommended to anyone interested in the Industrial Archaeology of the area.

In the car park we learnt first of how C B Trye came to inherit the Leckhampton Estate in 1793 and how he opened up quarries on the top of the hill and constructed what were possibly the earliest tramroads in Gloucestershire to serve them. These quarries supplied building stone, walling stone, roadstone, rockery stone and stone for lime burning. We then looked at the two large inclines that were built about 1810 to link the quarries to the new Gloucester and Cheltenham Tramroad at the foot of the hill. It was noticed that the remains of the winding gear at "Bottom" incline still existed though it was more derelict than on our last visit a few years ago. At the foot of "Middle" incline (and back at Tramway Cottage) we heard of the riots in 1902 when a later owner by the name of Dale tried to refuse access to the hill to local people. Tramway Cottage had been built on the right of way and was torn down (only to be rebuilt on the same spot where it stands today).

We struggled up "Middle" incline to the "focal point" which was the base for many of the operations on the hill including the large lime kilns in the 1920's.

From here we did a circuit of the hill looking at the remains of the quarries, tramroads and inclines.

The famous landmark, the Devil's Chimney was naturally of great interest. This is now reckoned to be a quarryman's folly and arose from the construction of the earliest incline.

We also found the very fine line of sleeper blocks which were excavated by GSIA members in 1972 and lie above "Number 4" incline.

Returning to the focal point we took the standard gauge incline built in the 1920's to serve the lime kilns and we were soon back at the cars. Here we thanked David for a most interesting afternoon.

Ray Wilson

VISIT TO CARDIGANSHIRE

Saturday 13th April 1991.

With the organisers still coming to terms with the idea of a 55 seat coach fully booked ten days before the trip (and a waiting list) we set off to meet our friend, member and guide, Ray Bowen near Cardiff.

Although it was a fairly long run to our first stop we were given a very informative description of the industrial past alongside the M4 motorway. It was difficult, looking at the tolerably pleasant countryside on a spring morning, to visualise what it must have been like a century ago with collieries, ironworks, tinsplate works, copper smelters, railways, canals and busy river navigations and terrible industrial pollution.

The first stop was at Carmarthen where Messrs Jewson, builders' merchants, allowed us to explore the remains of blast furnaces, rolling mills and tinsplate works dating from 1747 which form the back wall of their warehouses and which were dismantled in 1902.

From there a winding road alongside the partially restored Gwili railway and some narrow lanes took us to the Museum of the Welsh Woollen Industry at Dre-fach Felindre, (part of the National Museum of Wales).

After a quick lunch we were given an excellent guided tour of the displays with demonstrations of the main processes, preparation, carding, spinning (by hand and mule), weaving (on several looms) and finishing. We could also see the slightly more modern equipment of a commercial woollen mill which occupies part of the premises and also several craft workshops. It was a bitter-sweet experience for those concerned with the Stroud Collection of textile machinery showing what could and should be done in Gloucestershire.

Our stay here was all too short and we proceeded to Cenarth Falls on the River Teifi, where there is a newly opened coracle museum and partially restored corn mill. The collection of coracles and similar craft ranging from those found in North America to those from the Middle East was most interesting and very well presented. Unfortunately heavy rain the day before had made the river too dangerous for a coracle demonstration, but we did see the falls in spate.

From Cenarth, with commentaries on industrial relics on the way (ranging back to the Stone Age) we crossed the Preseli Hills to Rosebush. Near this small village there are the remains of a large quarry which specialised in heavy slate products. The quarry provided incentives for a railway (the promoters included the widow of Lord Macauley) which opened up the district and in the complex railway politics of the area and

era pressurised the Great Western Railway to open up Fishguard as their main route to Ireland.

Time prevented all but a couple of the most enterprising from sampling the delights of the hotel built for "the tourists" in the zinc baroque style, which is said to be a social archaeological relic.

We had to proceed as quickly as possible to the M4, and having expressed our thanks to Ray Bowen, arrived home rather late, but very satisfied.

Jim Simmons

VISIT to FROMEBRIDGE MILL EASTINGTON.

Friday 3rd May 1991

The brick buildings and chimney stack of Fromebridge Mill form a familiar landmark to travellers on the A38 road as they pass the Whitminster roundabout. The mill site is recorded in Domesday and it has been a grist mill, a fulling mill, an iron works and a brass and iron wire works.

The visit was arranged courtesy of the White family who have owned the mill for nearly a century. Recently it had been used by an agricultural merchant supplying all sorts of animal feedstuffs. The business closed in June 1990 and the premises were on the market and they attracted the eye of developers. It was therefore an opportune time to see it as the industrial building many of us would like it to remain.

We split into two groups under the leadership of Stephen Mills and Ray Wilson who had visited the site the previous October and taken numerous photographs. We started in the attic of the main block where the grain storage bins are and we saw the grain handling equipment supplied by William Gardner of Gloucester.

On the first floor are three pairs of grinding wheels all powered by a water turbine. They were installed early in the century and are still in excellent working order. The bedstone of a further set was visible set in the floor. This had been powered by the large breast-shot waterwheel that can be seen alongside the mill. Although substantially intact it is no longer in working order. A small extension with the chimney at the south end had at some time housed a steam engine. The gearing from it to drive three further pairs of stones is still in-situ although no trace remains of the stones. The frame bears the name Fielding and Platt (of Gloucester). The construction of the mill is most interesting. The lower part of the wall adjacent to the waterwheel is of stone blocks followed by several courses of large 'slag' blocks and finally topped with brick. The brick built cottages adjoining the northern

end of the mill have slag block quoins. A two-seater 'loo' attached to these cottages caused some amusement.

Finally to end a fascinating evening we looked outside at the wheel, the watercourses, the mill house and the various barns and cottages at the southern end of the site.

Ray Wilson.

VISIT TO EAST BRISTOL AND BITTON.

8th June 1991.

There was small turnout for what turned out to be one of the most interesting outings in recent years. It was arranged by our neighbouring Bristol Industrial Archaeology Society to an area with long history of mining and metalworking with the associated transport facilities.

Starting from Mangotsfield Common, Bob Martin of BIAS and Will Harris of BIAS and GSIA showed us a fine 1913 chocolate factory (threatened with demolition) and a sadly derelict Mangotsfield station in a triangle of disused railways. Short drives and walks then took us to a Cornish pumping engine house, a brickworks with two Hoffman kilns and drying sheds, two collieries and an abandoned length of the original Gloucester and Bristol Railway track. Moving onto the Siston Common area we walked along the tramway, with stone block sleepers, which took coal from Mangotsfield to the Avon, (now a public footpath). This area has also many bell pits, other branch tramways, railways and a keyhole shaped building which housed a horse gin over a mine shaft.

We ate lunch in the grounds of Champion's brass and zinc works at Warmley and had a quick look at the various remains; the Neptune statue is most startling and the grilled-off underground grotto tunnels were very tempting.

In the afternoon we went to the Golden Valley Colliery site near Bitton. For eight or nine years a group of dedicated BIAS members led by John Cornwell have carried out some real hands-on archaeology. First they restored and demonstrated a 35 foot high ventilating chimney over the upcast shaft. They then moved onto the Old Pit (dating from the end of the eighteenth century) and later used mainly for pumping from the colliery and abandoned about 1898. Here an area of several hundred square yards has been cleared of debris, fill and vegetation (over fifteen feet deep in places). Much of the fill spoil was tipped in the old waterlogged shaft (8 feet by 5½ feet and originally 980 feet deep).

The work has uncovered a cobbled yard and the foundations of the winding engine and boiler house; unusually this engine

seems to have had facilities for driving underground haulage by means of chains down the shaft. The pumphouse on the other side of the shaft has also been cleared and this has the bases of for two separate boilers, one haystack and one egg-ended.

Work is now in hand on detailed examination of the exposed remains and consolidation of the structures. These sites are a credit to BIAS and provide a most remarkable example of what can be done by an amateur society.

Jim Simmons

VISIT to THE KENNET AND AVON CANAL.

Sunday 30 June 1991

The completion in 1990 of the restoration of the Kennet and Avon as a through waterway gave the impetus for a return visit by the Society after an interval of several years. We chose two of the major pumping installations and the biggest civil engineering feature for the itinerary and to add a little variety we included a very fine tower windmill. The leaders were Jim Simmons and Ray Wilson.

Our party of 45 first visited Claverton Pumping Station where we saw the very large waterwheel driving beam pumps to lift water 50 feet from the River Avon to the canal. The group responsible for the installation opened early especially for us and we were able to see the massive machinery started up. We also enjoyed looking at the ancillary equipment that was on display.

Lunch was taken at the Canal Wharf at Devizes. The former canal warehouse remains and has been converted into a theatre. The Kennet and Avon Canal Trust have their shop and displays here which some of the party visited and perhaps took a gentle stroll along the towpath. Since we were so close to the fine buildings of Wadworths Brewery others decided to seek the famous products of that establishment.

Leaving Devizes we travelled the 16 miles eastwards to Wilton, the only workable windmill in Wiltshire. The brick tower mill was built in 1821 on the 550 foot contour line. It fell into disuse about 1920 and had become near derelict by 1971. It was extensively restored a few years ago and is now in the care of the Wilton Windmill Society. For safety reasons the mill was not working at the time of our visit but it meant we were able to go all over the mill with the benefit of the specialist guides who had turned out for us.

It was a very short journey to Great Bedwyn where we visited the Crofton Pumping Station whose magnificent beam engines were

'in steam'. The one of 1812 by Boulton and Watt is considered to be one of the oldest working steam engines in the world. The other was built by Harveys of Hayle in 1845.

Our final stop was at the foot of the Caen Hill flight of locks. In two miles 29 locks are needed to bring the canal up to the height of the cutting through Devizes. We could see the vast amount work that had been necessary re-excavating the side pounds and replacing the massive gates. From here it was but a short ride back to Gloucestershire.

Ray Wilson.

KEMMETT CANAL WALK.

Sunday 21 July 1991

About 24 Members gathered at Upper Framilode on the bank of the River Severn ready for a 'canal walk'. This was not to be along the line of the Stroudwater Canal which joined the Severn here, but it was our intention to trace the route of the even older Kemmett Canal. We were very pleased to have as our guide, canal historian, Michael Handford who is also a GSIA Member. As the author of various books on the Stroudwater Canal he has also researched extensively the often forgotten Kemmett Canal.

The leader of the enterprise was John Kemmett, a Tewkesbury ironmaster, and work on the canal started about 1759. It relied on making the River Frome navigable from the tailrace of each mill to the next mill pond downstream. At each weir a crane was installed to transfer the containers between boats on the different levels. This avoided the the loss of water through locks. The original intention was to construct this navigation as far as Stroud but the early stages were not successful and the scheme was abandoned in 1763 when it had perhaps reached near to Stonehouse. It is thought that some of the stretch near Framilode utilised the efforts of Richard Owen Cambridge who had made a length of the Frome navigable about 20 years earlier.

Our first task was to arrange for most of the cars to be taken to be taken to the end of the walk near Stonehouse. That accomplished, we set off for our first stop at the site of Framilode mill where the method of transferring the cargo could be explained. The route took us past Whitminster mill site and Fromebridge Mill which still exists. The line of the Kemmett Canal is most easily seen as a straight cut for much of the route between Fromebridge and Churchend Mill. The meandering former line of the River Frome it replaced can still be seen in the the field after more than 200 years.

At Churchend Mill we were able to see the best surviving example of the bank and lower basin of the transfer system. Here we left the line of the Kemmett Canal in favour of the Stroudwater Canal. From Pike Lock (and the old turnpike house) it was only a short walk to where the cars had been left near Blunder Lock. It was fitting that we should thank our leader for a most interesting walk at one of the interpretation boards recently erected by the new Cotswold Canals Trust.

Ray Wilson.

SOCIAL EVENING A WALK AROUND DURSLEY.

Thursday 15th August 1991

The annual Social Evening attracted a good turn out of 25 Members, their families and friends. As ever, our intention was to take a broad look at one of the local towns and not concentrate solely on industrial archaeology. We were fortunate to have as our guide our member David Evans. David is equally at home with both the local history and I.A. of the town having published the histories of the firm of R.A. Lister and the Pedersen cycle together with several books of old photographs of the district.

We met in the Castle Street car park and started by looking at the Market House and Town Hall of 1738 which surprisingly has a statue of Queen Anne (1665-1714) in a niche. We then heard about the Church whose spire and tower much of it medieval fell down at the end of the 17th century. The tower was largely rebuilt in 1709. Moving on down Long street we disappeared into little alleyway where much older building construction was visible behind the later facade. Lower down we saw Raglan house which bears a plaque indicating that it was once the home of Mikael Pedersen an inventor and the creator of the cycle that bears his name.

At the bottom of the hill we looked at the Priory which dates back to the 16th century. Until recently it was part of Listers whose factory stretches some half a mile in extent to the west. Opposite it was noted that the modern buildings of the Gazette printing works stand on the site of Champions carpet weaving factory known as the Reliance Works.

We learnt with horror the procedure at the baths where the water was changed only weekly and how the more affluent got first use of the water each week. At Broadwell we heard that this may be the oldest part of the town. The ancient building nearby (now the vets) was noted for the strange assortment of windows it contains. Students of large prefabricated water tanks were pleased to see one with the characteristic panels indicating it was made by Braithwaites of Newport.

At Boulton Lane we inspected the site of Elvys Brewery and saw where flats had been recently built on the site of Bymacks furniture Works which itself was on the site of Champion and Hall carpet works at Boulton Mills.

Making our way back to the centre town we thanked our guide for an excellent and varied tour. Most of the party then continued the Social Evening in the Old Bell Hotel.

Ray Wilson.

VISITS to KILCOTT MILL and COALEY MILL.

Saturday 31 August 1991

This year we resumed the pleasant Society tradition of visiting privately owned mills on a Saturday morning by kind permission of the owners. We were making a return visit after a gap of several years to two of the most interesting small mills in the area. There were about 20 in the party.

We started with a visit to Kilcott Mill which lies about half a mile to the east of the village of Hillsley. This most attractive stone built mill was extensively restored in the 1970's by a then GSIA member Wilfrid Medlam (see GSIA Journals for 1978 and 1981). We were welcomed by the present owners Mr and Mrs Tim Hayes who are to be congratulated on keeping the mill in working order and grinding corn again on special occasions.

We split in groups and were shown all aspects of the mill, the delightful grounds and extensive mill pond. The large waterwheel is approximately 18 feet in diameter and is pitchback. It was started up for us and soon a steady supply of flour was being produced for us to take away and use for our home baking.

We moved over to the village of Coaley and were met by Osman Goring who purchased Coaley Mill in the early 1960's. It had been a fulling mill in the 16th century and then from about 1744 until 1944 fine quality spades and shovels and various types of edge tools were made here. Mr Goring now runs a water power and general engineering business on the site. He rebuilt the old mill house for his own use and erected a new mill building where until a few years ago he produced stone ground flour using a small electrically driven mill.

We started our tour by looking at the mill pond and extensive watercourses which once supplied two waterwheels and two turbines. We saw the Ossberger cross flow turbine (German manufacture) installed some years ago by Mr Goring and now the provider of nearly all the electrical power consumed by his

business and household. We also saw prototypes of small hydropower installations for use on low head sites both here and abroad. The visit concluded in the Goring's kitchen where we saw an electrically powered 'Aga-type' cooker he has developed with all the expected facilities yet it simply plugs into a 13 Amp outlet.

At each of the mills our hosts were thanked for giving up their Saturday morning to give us such fascinating tours.

Ray Wilson.

VISIT TO WORCESTERSHIRE: Forge Mill Redditch, Whitley Court
and The Wobley Wheel.

Sunday 29 September 1991

Over 40 Members and Friends joined the final coach visit of the season. It was a pleasant outward journey via Bishops Cleeve and Evesham. The decline in recent years of the market gardening and fruit growing industries in the 'Vale of Evesham' was very noticeable. Many of the old orchards have been "grubbed up" and with much of the very fertile vegetable growing land have been turned over to cereals.

At Redditch we went straight to the National Needle Museum at Forge Mill. This had been an iron forge about 1700 but by about 1730 it was converted to needle scouring. A process which continued here commercially until 1958. The main brick buildings which now house the museum are believed to date from about 1828. Heavy rain forced us to abandon our intention of looking over the Bodserley Abbey archaeological excavation in the adjacent field. The monks had a very early metal working mill. The curator, Barry Mead, gave us instead an excellent slide show in the 'schoolroom' so that in fact we saw more of the finds than are now visible on the site. In the museum are exhibits depicting all the major processes such as annealing, sharpening, making the 'eye', scouring and polishing.

Particularly interesting are the displays of many kinds of needles for all sorts of uses. A great variety of fish hooks were also on display. The manufacture of which is closely related to the needle industry.

We took lunch here and then moved on to the village of Great Whitley. Here we visited the magnificent ruin of Whitley Court, once the home of the Foleys who were great ironmasters. The building suffered a major fire in 1333 but even more damage was done by 'vandals' who plundered the stone for building purposes. We went into Great Whitley Church which is famous for its stunning 'Rococo Style' interior decoration.

By way of a complete contrast we finished with a visit to the nearby Wobley Wheel. This is a huge private collection of agricultural and domestic by-gones. Mr Geoffrey Freegard has spent his lifetime collecting and restoring such items and disposing of some to collect more. The result is that he has many items of great rarity and interest. These include all sorts of farm carts, vehicles, several gipsy caravans, early washing machines, various models and a lot more.

Sadly the future of the collection is under threat. It is laid out in two or three fields and Mr Freegard does not have planning permission to open it to the public or retain the caravan he currently lives in on the site. Hopefully some solution will be reached as inevitably some items are deteriorating and it would be a great loss if they are not preserved by some means or another.

We returned by way of the M5 and so ended a most varied day which was led by Ray Wilson and Jim Simmons.

Ray Wilson.

AYLEFORD - SOUDLEY WALK Forest of Dean.

Sunday 13 October 1991

Once again there was a very good turn out of about 30 for another Autumn Field Visit in the Forest led by GSIA Member and Curator of the Dean Heritage Museum, Ian Standing.

This year we met at Aylesford on the Blakeney to Soudley road. The aim was to walk the 3 miles following the course of the Forge brook up to Soudley. After a brief introduction to the I.A. and landscape history of the area we left the road and soon came across an old stone cider mill and a massive stone cistern. As we followed the valley floor we had pointed out to the sites of former corn mills, wireworks, forges and the remains of their associated watercourses. At Two Bridges a small cast iron datestone of 1856 was noted on the stone parapet of the bridge.

We finished at Soudley Furnaces which were owned at one time by the Great Western Iron Co. Some time was spent comparing the massive stone retaining walls and abutments that have survived with some old photographs of the works. Here we also saw the western end of the Haie Hill tunnel of 1809 which once carried the Bullo Pill Tramroad and was later enlarged to carry the broad gauge. The meeting was concluded by thanking our leader for another very interesting afternoon.

Ray Wilson.