

GSIA

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The cover illustration is an extract taken from Henry Lamb's drawing of the Devil's Chimney and Trye's first railway about 1830. The illustration is from David Bick's book *Old Leckhampton* where it is shown in full. The original is part of David Bick's collection and GSIA are grateful for permission to reproduce it here.

EDITORIAL

The Journal for this year, 2001, contains a selection of interesting articles on various aspects of Gloucestershire's industrial archaeology. They might be said to fall into two main categories: mills and canals. David Viner has written on Siddington windmill, a rather more unusual feature in the county's landscape, and then comes Stephen Mills' article on the Sapperton Mills. Two of these were water mills, and the third was a steam powered sawmill. So, we have details on three types of mill to be found in the county. A somewhat different slant on industrial archaeology is to be found in Theo Stening's article on the Cotswold Canals restoration. The second article with canal associations is Joan Tucker's interesting piece on coal pens, no doubt a feature once more common by the side of our canals, and certainly a feature rarely recorded or even noted. Theo Stening has been able to provide more details on the Selsley column, the history and other details of which were included in last year's Journal, and continuing on the subject of stone in a broad sense is Ray Wilson's article on Leckhampton quarries. The other articles, Derrick Hall's work on bus shelters and Penny Fernando deal with somewhat more modern industrial archaeology aspects.

The rest of the Journal includes the usual and interesting reports of the year's visits and book reviews. The activities of the society have continued much as usual, but sadly we have to record the loss of three members who provided so much assistance in their very different ways. Their obituaries are below.

My thanks go to all this year's contributors, and I hope you will enjoy reading their work as much as I have done.

My thanks are due in particular to Ray Wilson, and to Hugh Conway-Jones for assistance with the production of this year's Journal.

Amber Patrick

OBITUARIES

Norman C. Ferry 1920 - 2001

The Society lost one of its most respected and longest serving Members with the death of Norman Ferry on 22 February 2001. He was a founder member and was involved in so many aspects of the Society over the years. Norman was our Chairman between 1978 and 1980. This period included a very important event when the Society hosted the Regional Industrial Archaeology Conference.

His friends were amazed at his tremendous knowledge of the industrial archaeology of seemingly the whole country. This was built up from his extensive travelling as a young man, often on his bicycle. Moreover, he was always pleased to share that knowledge with fellow members

He organised the Spring and Summer Visits programme between 1976-1978. Then in 1979 as a very new member of the GSIA Committee I took over that job from him. What promised to be a very daunting task was made all the more easier by all the help he gave and the warm hospitality received from Norman and Joyce while I 'learned the ropes'.

For many years he provided reports of our lectures and other activities to the local papers which provided valuable publicity for the Society. Latterly, each copy of the Gloucester Citizen was scanned for items of industrial archaeological interest and the cuttings were passed in bundles to me to be photocopied onto better quality paper. Over the years this has become a fascinating archive charting such things as the extensive developments at Gloucester Docks and many other topics. He remained a hard working member of the Committee from 1964 to 1999 and is sadly missed.

John Greene OBE, FRCN 1916-2001

John Greene was born in County Clare, Ireland and came to England as a young man to start what was to be a very distinguished career in the nursing profession. John's work took him to East Anglia, Dorset, Devon, Cornwall and then finally in 1974 he and his wife Betty came to the county when he became Area Nursing Officer for Gloucestershire. He quickly joined the Society, became a member of the Committee, and was our Chairman from 1984 to 1986.

Both John and Betty took a great interest in ceramic tiles. Their research covered a wide time span including the medieval and Victorian periods. However, a particular favourite was the type of brightly coloured glazed tiles that were a feature of many hospitals, particularly children's hospitals. With Betty he published a book on the subject entitled *Brightening the Long Days*.

They were involved in the founding and running of the Tiles and Architectural Ceramics Society. He was also involved in the setting up of a small museum in the early 1980's at Coney Hill Hospital, Gloucester. This museum gave a revealing insight into a century of nursing. It certainly made a fascinating Society visit with John as our guide. Another visit led by John was in 1982 when we saw Victorian tiles at Highnam Church and medieval tiles at Rudford Church. John died suddenly on 1 May 2001. The Society was well represented at a memorial service held at the Friends Meeting House in Cheltenham on 7 June 2001.

Patrick Lane TD.

It was with sadness that we learnt of the death of our member Patrick Lane who lived at Solihull. Although Patrick did not live in the County he made very regular visits to the area, and particularly to the Forest of Dean. Patrick was a most gifted artist which benefited the Society. The majority of the line drawings used as cover illustrations for the GSIA Annual Journals between 1971 to the 1997 were drawn by Patrick.

He produced exquisite watercolours and it was common sight at GSIA dinners for the previous year's sketch books to be passed among the guests for them to appreciate what he had captured. Many of these related to industrial archaeological subjects. Patrick was very closely associated with the Avoncroft Museum of Buildings near Bromsgrove. When we paid a Society visit there a few years ago he acted as a very able guide.

Ray Wilson

2001 VISITS REPORT

The Society's thanks are due to Frank Colls who organised a full programme of local visits and two excursions further afield by coach. The following reports have been compiled by Frank Colls with a contribution from Ray Wilson.

Sunday 8th April 2001

Afternoon Walk, Lodgemore and Wallbridge areas of Stroud

Hugh Morrison, GSIA member, kindly agreed to lead this walk and about 20 members and friends assembled at the Stroud Leisure Centre at Stratford Park. We started off by viewing the outside of the recently opened "Museum in the Park" where Hugh is the Registrar. We then proceeded to the Tesco Supermarket which had been built 12 years ago on the site of Stratford Mill, a former cloth mill which was latterly a feedstuff mill operated by Townsends for many years. The mill finally closed in 1984. Leaving Tescos we followed the Painswick Stream to Cainscross Road where we stopped at the same viewpoint of the Wallbridge area as used by the artist of the well-known painting of *c.*1795, now in Stroud Museum, which shows the Thames and Severn Canal and other features. It is a very different view today with no brightly coloured cloth set out on racks on the side of Rodborough Hill. What does survive from the time of the painting is the former Clock Warehouse of Wallbridge Mill which is now incorporated into the Clockhouse Veterinary Hospital near Wallbridge House.

We moved over to the site of Wallbridge Mill of which very little remains today. Here we saw the impressive remains of the viaduct (built *c.*1885) when the Midland Railway branch arrived from Dudbridge. Sadly, the final arches of the viaduct into Stroud Midland Station were demolished in the 1970s for road improvements. Part of the Station Approach from the town is now the only surviving feature of the former station. When the timber station building was opened in 1886 it was described as a temporary building but it survived for almost exactly 100 years before it was demolished. The viaduct arches are now home to a number of small businesses.

For the rest of the walk we explored the area around Lodgemore and Fromehall Mills. The former has buildings ranging from the 18th to the 20th century. Happily it is still used for the production of woollen cloth. However, the products today are billiard table cloth and tennis ball coverings rather than scarlet cloth for guardsmen's uniforms. [See visit report for 20th September 2001]. The scenic mill pond for Fromehall Mill which provides a link between that mill and Lodgemore Mill was admired. At Fromehall Mill we could see that the attractive 19th century stone buildings had been turned over to a variety of business premises. We then walked back to the car park where we thanked Hugh for providing us with a most interesting afternoon.

Sunday 29th April 2001

Coach Trip to London - Crossness Engines, House Mill, and the Kings Cross area

An almost full coach of 42 members and guests set off for a full day seeing sites in the London area. We were grateful to Professor David Perrett of the Greater London IA Society for his knowledgeable assistance both in planning the day and in guiding us around.

We began at the Crossness Engine House on the Thames near Belvedere on the edge of South East London. The 1865 pumping station is in a corner of the site of the modern sewage

treatment plant operated by Thames Water. The splendid Grade 1 listed building and the four massive Watt beam engines (last operated in 1953) are now in the hands of the Crossness Engines Trust. We began with a talk from Michael Dunmow on the problems of sewage disposal in 19th century London and the great scheme of Joseph Bazalgette to divert the existing main drains, which flowed into the Thames too far upstream for effective dispersal by tidal movement. He constructed a new outfall pipe which intercepted the existing sewers to transfer effluent down to a place where it could be pumped into a reservoir and then discharged into the river at a time when the tide would help it to disperse. The four engines, the largest rotative beam engines in the world, were originally single cylinder but were converted to a triple-expansion layout in 1899. Named Prince Consort, Victoria, Alexandra and Albert Edward, they are on a hugely impressive scale. One of the engines, Prince Consort, is being restored to working order and we were able to see some of the work in progress and to admire the enormous dedication and expertise that the volunteer workforce is contributing. Considerable work is also going into the restoration of sections of the building itself. The highly ornamented structural ironwork is being cleaned and painted to recreate its Victorian magnificence. It was soon time to drag ourselves away from the intricacies of the plant and the elegance of the buildings for a quick look at their evolving museum displays on the wonders of sewage treatment, to thank our hosts and to set off for the next part of the day.

Our next stop was House Mill at Bromley by Bow on the other side of the river and David Perrett both navigated our route and gave us a commentary on some of the features and landmarks we could see along the way. The House Mill is part of the Three Mills site which GSIA visited in 1987. It was then in a poor state and only the exterior was seen, but the River Lea Tidal Mill Trust have done considerable work on restoration of the building structure and parts of the grain handling and milling plant, around which we had a guided tour. The four water wheels were seen although there is much dereliction and some of the drive machinery is missing. Major work is needed to restore the wheels but the Trust is determined to make progress on one of them soon. The tidal principle of the mill was neatly demonstrated by a model in the attractive visitor centre which has been set up in the Miller's House alongside the mill building. We thanked our guides for an interesting session and were soon on our way to the final part of the trip, a walk around the area north of Kings Cross and St Pancras stations.

David explained about the plans to redevelop the area for the new Channel Tunnel rail link terminus before taking us around. This is a complicated area with the Regents Canal winding through, above the Great Northern line and below the Midland line with their various sidings, access roads, yards and warehouses. The huge brick Granary building (1851), with a marshalling yard and goods sheds behind and a canal basin (now infilled) in front, was most impressive. Canal and rail-borne coal traffic was a major activity both for distribution and for use in the Imperial Gas Light and Coke Company works which operated from 1822 to 1907. The remaining gas holder frames, three of which share their support columns and are known as 'siamese triplets', are strikingly grand. Many other buildings were seen, notably the German Gymnasium, designed for the German Gymnastic Society, and Stanley Buildings, a block of 'flats' erected by the Improved Industrial Dwellings Company, both from around 1864. David could have shown us much more in this fascinating area but time was against us and we had to find our coach (not easy in the dense London traffic and the inevitable road works) and be on our way. There was of course time to thank David for all that he had done to make it such a splendid day.

Wednesday 16th May 2001

Visit to Cattybrook Brickworks

Numbers were limited for this visit to the Cattybrook Brickworks near Almondsbury and 21 members and guests were able to attend. We were grateful to Istock Brick Ltd for being able to see the works in operation. Cattybrook is on a much larger scale than works we have visited in the past and the modern factory currently produces 47 million bricks per year. Originally opened in 1864 and linked with railway developments in the vicinity, Cattybrook took advantage of clay excavated for the Patchway tunnel. It later supplied a quarter of the 73 million bricks used in the Severn Tunnel.

We began in the clay quarry and heard about the different colours of clay being excavated, all of the carboniferous shale type. Some other types are brought in to allow blending, and the stockpiling and layering operations are critical to obtain the various grades of clay depending on the brick types and colours being made. Mobile plant is used to handle the clay and to deliver it to the initial crushing and grinding plant where it is reduced to the required particle size. It is then mixed and water is added to give the right consistency – a stiffer mix for extrusion and more water content for hand working. Standard shapes and some irregular shapes are made by an extrusion process but more special shapes are pressed or hand thrown.

We saw the main extrusion plant, fed by conveyors, and it was fascinating to see the continuous slab of clay emerging from the die and being cut into short lengths for feeding into the wire cutting machine. The machinery of the handling system was very impressive with the cut blocks being assembled onto a set of steel bars which were made into a kind of temporary pallet which was then formed into several layers to make a load suitable for handling by fork lift truck or conveyor. These loads are delivered to the drying chambers to reduce the water content to below 1% ready for firing, this taking about 48 hours. After drying the bricks are mechanically set onto a kiln car, carrying 3392 bricks, and assembled into a train of 55 cars which are mechanically propelled through the tunnel kiln in a continuous process. Firing is with gas and takes about 3 to 4 days. As we were shown over the kilns and the handling equipment we were all impressed with the scale of the plant and the fact that it was being operated as a production line. We then saw the final stages of mechanically unloading the kiln cars and feeding the finished bricks onto a conveyor system for final inspection, stacking and packaging. We also had a brief look at a small workshop making special designs by hand, although the drying and firing stages are of course similar. It only remained to thank our guides for a most interesting tour and we must also record our thanks to Mia Heyward who made the arrangements for our visit.

Sunday 3rd June 2001

Gloucester Docks guided walk .

This date was originally planned for a walk in the Cirencester/Siddington area but because of the restrictions over Foot and Mouth Disease this was postponed to 2002. We were grateful to Hugh Conway-Jones for stepping in at short notice to give a guided walk around the docks and 23 members attended.

The story of the docks and their development is well told in Hugh's book *Gloucester Docks - an illustrated history* (Alan Sutton & Gloucestershire County Library, 1984, but unfortunately now out of print). We began by looking at the buildings in Llanthony Road and hearing about their former uses, ranging from a cheese warehouse to a timber merchants. Goat Alley, after the former Goat Inn, was the route of a railway link between the main dock area and the High

Orchard dock. We saw Llanthony Bridge (built in the 1970s) and heard about the original wooden swing bridge and the replacement railway bridge with a road lane, completed in 1862. Moving into the main basin area we saw the small dock office adjacent to the Alexandra Warehouse from where tanker pilots were paid, and Hugh pointed out the names of some of the tankers which plied the canal scratched into the brickwork. Near the two dry docks we saw the original engine house, with the chimney base still prominent, used for pumping water from the Severn to maintain the dock water level. There have always been problems with these pumps transferring much mud into the dock, but the recent modernisation of the pumping plant provides a filtering process to avoid this.

We moved on to the lock and heard that it had only been converted to hydraulic operation in the last year of major commercial traffic on the river. The nearby Severn Quay was still in use in the 1930s for unloading coal. The North warehouse was seen next and we heard about the way it had been separated internally to give lockable sections for the individual merchants who had used it. The 1980s developments which saw the conversion to office use by Gloucester City Council were pointed out as a major stimulus to the recognition of the need to retain the historic character of the dock area and its buildings while creating new leisure amenities and related business and commercial activities. We moved around to the Victoria Basin, often referred to as the Salt Basin because of handling cargoes of salt from Droitwich. We heard about the adjacent Britannia Warehouse which was burnt down in 1987 but, in the light of the new interest in the regeneration of the docks, was in fact rebuilt, partly with the old bricks, to maintain the integrity of the layout and style of the whole area. We finished at the Mariners Chapel and saw some of the old and the more recent stained glass work which plays a part in commemorating people and events associated with the docks and the many years of trading which they supported. The tour had of course brought in many other points of detail too numerous to mention here and it only remained to thank Hugh for giving us a most enjoyable and informative afternoon.

Sunday 1st July

Visit to Bristol Aero Collection, Kemble

About 35 members and guests came along for this group visit. The Collection is housed in and around a large hangar at Kemble Airfield. It was set up to record the achievements and contribution to aviation, aerospace and other branches of engineering of the Bristol Aeroplane Company (and its successors) at Filton and Patchway. The collection moved to Kemble in 1996 and they have assembled a comprehensive set of aircraft, exhibits and displays which portray 90 years of development and manufacture. The early years are covered in photographs, models and artefacts and the exhibits cover military and civil aircraft, engines, helicopters and guided missiles. A large collection of vintage Bristol Buses show the company's other transport interests. After a brief introduction by Rex Canton, members were free to look around as their own interests took them. A 10 o'clock start had been arranged to allow enough time to see everything and several of our party were still there into the mid-afternoon. The range of items on show and the comprehensive displays and photographs which tell many features of the Bristol story cannot be conveyed in this brief report. A visit (or a revisit) is highly recommended. The Collection is run by volunteers and public opening times are limited to Sundays and Mondays from Easter until October. The location is on the A429 about 4 miles south west of Cirencester and you can check opening details by calling 0117 950 0908.

Wednesday 11th July 2001

Walk and Social Evening, Newnham on Severn

A fine evening saw 27 members and guests assemble by the riverside car park to be welcomed by four guides from the Newnham Historical Research Group. Although no longer of any industrial significance, Newnham has an interesting past, once being a small port. We began by looking at some of the riverside buildings, many of which incorporate slag blocks possibly from a local copper smelting works. A 1760s warehouse, now the Drill Hall, and the adjacent quay were used for river traffic, with coal and cider being despatched and corn imported. We saw the site of the ferry across to Arlingham, which operated till about 1959, and heard about the proposed foot tunnel (which never came to fruition). The rather grand building, originally Brightlands Hotel from 1908, became a school but has now been developed into flats. Several houses and sites were identified as former public houses, one, the Upper George dating from the 1550s. The Lower George, with its prominent sign "Family and Commercial Hotel" was visible from the railway station which was a little apart from the town. A building which started as a Congregational Chapel School (before a new school was built in 1867) was used for a period as an armoury and is now the Armoury Hall "a sort of 'village hall' although Newnham is definitely a town. The original Town Hall became The Comrades Club, but for some reason is now just The Club. The Library was once the Post Office and Hill Cottage was once a telephone Exchange. Change and adaptability seem to be Newnham's trademark! Much else was seen as we wandered around but our time was soon up and we made our way to the Ship Inn for some welcome refreshment. We thanked our guides for an enjoyable and interesting walk and wished them well in their further research into the history of this fascinating town.

Sunday August 12th 2001

Afternoon Walk Along the Stonehouse and Nailsworth Railway

Seventeen members and friends met on a damp and overcast afternoon in the car park of Egypt Mill Nailsworth. The aim was to explore the line of the railway up to Woodchester looking at various sites of interest along the way. Our guide was Ray Wilson who arranged this walk in place of one planned to look at the mills of the Little Avon River which had to be cancelled because of the foot and mouth epidemic. The present car park is in fact the former goods yard of Nailsworth Station at the southern terminus of the Stonehouse and Nailsworth Railway opened in 1866. Now, with the cattle pens, crane and goods shed long since gone it looks very different to 1966 when it was photographed by our late President, the Rev. W. V. Awdry. However the warehouse bearing the name C W Jones survives and is now used as accommodation for guests at Egypt Mill.

We went past the fire station into Station Approach and up to the former station building. This had been sold by Gloucestershire County Council in the late 1980s and the present owner has carried out a fine restoration of the building. The current task is the rebuilding of the platform. The owner has also constructed a new 'engine shed' in the style of the Midland railway for use as a garage.

We then made our way back to the goods yard and up the slight incline until the passenger level was reached. For some years now the former trackbed has been a very popular cycle trail. Our first stop was at Dunkirk Mills where we were able view two of the three large overshot water wheels. These have been restored as part of the scheme to convert the mill into about 70 apartments. Here we saw the first of the sidings on the branch line.

Moving on we came to Inchbrook where there was plenty to see. First Grove Villa with a date stone of 1887 but shown on the 25 inch OS map of 1885 as Grove Saw Mill. Next we saw the 19th century Dyehouse Mill which is part of the former Newman Hender site and recently acquired by Renishaw, a high-technology company of international renown. Venturing onto the A46 we could see Inchbrook mill which had been worked as a cloth mill by Peter Playne in conjunction with Dunkirk Mills in the 19th century. Crossing the A46 we looked at Pitt Mill a former cloth mill and latterly a farm. Just up from Pitt Mill is the site of Crystal Fountain Mill now being converted into a 'care village' for the elderly.

Returning to the A46 we stopped off at Merrett's Mill with its late 19th century blue engineering brick building of 1888, near the road, and the older stone buildings to the rear. Among these survives the two storey porch bearing a datestone 1672 from the millowner's house. Back on the cycle trail for the last time we swiftly covered the final half mile to bring us to the cars at South Woodchester. Here we thanked the leader for finding so much to show us and agreed with his suggestion that we should continue the exploration of the line at some future date.

Sunday 16th September 2001

Coach Trip to South Wales

Visits to South Wales have been a regular feature of GSIA's activities over the years with our last one in 1997. Today's trip was centred on Pontypool and the valleys to the north and we were again grateful to Robin Williams and his colleagues of the Oxford House IA Society for arranging a full and varied day and for showing us around. There were some residual restrictions because of the foot and mouth epidemic but this only affected a small part of the planned route. After a brief look at the highly ornamented iron gates to Pontypool Park (made in Abergavenny), recently repainted but showing signs of their age, we moved on to the canal basin at Pontymoile. We heard about the development of the Monmouthshire Canal (from Newport) and the Brecknock and Abergavenny Canal which were eventually linked at Pontymoile in 1813. Developments in the area were related to the production and transport of coal and iron, and we saw two small tunnels under the canal, one for a tram road and one for a leat from the Afon Llwyd which supplied water power to an iron rolling mill. The adjacent aqueduct over the Llwyd was especially impressive. Canal traffic declined with the rise of the railways and we heard of the development of the network of nearby sidings and yards which were used to handle steam coal for admiralty use, as far away as Scapa Flow.

We headed west along the road which followed the course of the railway which was built over the route of the canal branch to Pontnewynydd (the original destination of the Monmouthshire Canal). On the way Upper Race and Lower Race were pointed out as the sites where ironstone was extracted by scouring. A short uphill walk then took us to Glyn Pits where coal was originally mined from outcrops but which was developed with shafts to get at the coal seams about 600 feet below. The colliery started in 1840 and worked till 1932. The surviving engine houses and other structures are in a precarious condition but, with care, we were able to see a lot of the remains. At the top of the winding shaft we saw the drum with some of the flat plaited rope still in place, and parts of the winding engine which had hand operated valve gear. The other engine house had a beam engine with a crank arrangement linked by long pivoting levers to a series of vertical rods which went up and down through the second shaft to the pumps. Made of both timber and iron, we could see the massive scale of these parts but much of this equipment was half buried. The pumps were replaced by electric pumping in the 1920s and this system was operated till the 1950s for drainage of adjacent pits.

Our next stop was the British ironworks site at Talywain, and we were able to get the coach along a broad track within a wide tunnel through a massive railway embankment to get close to the site. This has a few derelict buildings amidst the wasteland of low spoil tips and rough ground strewn with a great deal of rubbish. But it was a busy iron works from about 1820 to the 1880s and we could see the remains of the beam engine house which powered the furnace blowers and the base of a large chimney stack. The iron ore was plentiful but of low quality and we were able to see odd chunks amongst the rubble.

After a brief stop at The Globe Inn we proceeded to the Varteg view point on the western side of the valley heading towards Blaenavon. We saw the route of a steep incline used for lowering coal trucks from the tram roads near the many collieries on Mynydd Varteg down to the valley floor. It was then on to the Blaenavon iron works where John Evans was waiting to show us around this famous site, just part of the area which now has World Heritage status. While some structures are no longer in place, there is an enormous amount still standing. We began in the exhibition area where photographs and displays show the history and development of the site and tell of the lives of the people who worked there. Some excellent models give a graphic view of the iron works as it would have been when going at 'full blast'. Various restoration and research projects are in hand but we were able, with hard hats, to walk around a good deal of the site and see the blast furnaces and other structures at close hand. John Evans gave us an excellent commentary on the restoration projects and on the work involved in iron production and casting. After thanking John for an interesting visit it was time to leave. We returned through the Clydach Gorge and a brief stop was made to look at the impressive remains of the furnaces. After thanking Robin Williams, Tony Jukes and their colleagues for their kind assistance in giving us a splendid day, we had to head for home.

Thursday 20th September 2001

Evening visit to Millikens at Lodgemore Mill

I am grateful to Ray Wilson for making the arrangements for this visit to Lodgemore Mill, now occupied by the Milliken Company of the USA. Numbers were limited and the lucky 20 assembled outside the elegant 18th century clothier's house which is now used for offices and other purposes by the company. Parts of the old mill buildings are still used for modern production and we were taken around to see some stages of the cloth finishing processes.

The two main products are high quality cloth for billiard, pool and snooker tables (BPS), and tennis balls, with much of the output being used for top class competition games in these sports around the world. The basic woollen cloth is woven at Cam Mills and we saw the first stage of inspection when it is carefully checked by hand and eye, a painstaking but essential step. We saw the modern fulling equipment in operation where lengths of cloth are mechanically pounded until the thickness and texture is of the required standard. After dyeing to the required colour, the BPS cloth then goes into a series of treatments which raise the fibres (or nap of the cloth) and then cut them to a precise length on a machine which has been compared to a rotary lawnmower in its method of working. The intricate machinery is large enough for rolls of cloth over 6 feet wide to be processed. The cutting rollers are precisely positioned to achieve a consistent surface and the feel of the nap on the finished cloth, smooth in one direction but resistant in the other, is much appreciated and exploited by the top professional players. The quality is unlikely to be found on the pool table of your local pub!

The tennis ball cloth goes through a similar process, again with quality and consistency the aim. Samples of the tennis ball cloth are press cut into 'figure of eight' shapes and two shapes

are stuck onto a rubber ball so they interlock to form a sphere, i.e. a tennis ball. These are placed in a machine which repeatedly hits the balls to test the final quality. The finished cloth is despatched for ball manufacture elsewhere.

After our tour of the plant we had an interesting talk from Graham Cropton, the training officer, on the history of the mill including some film clips of the earlier period of the mill's life. We had the chance to see parts of the office area of the clothier's house, now modified for modern use, and saw a display of photographs, pictures and posters some of which portrayed the period when the mill was owned by J. S. Strachan in the late 19th and early 20th centuries. We had had a fascinating evening and it only remained to thank Chris Poole, the manager, and Graham Cropton for allowing us to visit the mill and to gain some understanding of the fine cloth finishing work that they do.

Sunday 7th October 2001

Afternoon walk, Somerset Coal Canal

About 20 members met at the canal basin on the Somerset Coal Canal near Limpley Stoke for this guided walk by GSIA member Will Harris. It was a very wet afternoon but everyone was sufficiently clad, booted and enthused enough to set off on the first of a series of walks linked by car journeys to cover the intended sites. The Somerset Coal Canal, in the Cam Valley south of Bath, was opened in 1798 to enable Somerset coal to be carried down to the Kennet and Avon Canal near Dundas Aqueduct. It closed in 1898.

We began by seeing the impressive Dundas Aqueduct on the Kennet and Avon Canal and then walking to the adjacent entrance to the Coal Canal itself. This was originally built as a broad lock but was modified to the narrow standard in about 1820, partly as a water saving measure. The lock now serves as the entrance to a short stretch of moorings and is spanned by a modern lift bridge. We continued by car, close to the now indistinct course of the canal, to the site of Tucking Mill and a canal wharf. A plaque on a cottage refers to William Smith "Father of English Geology" (1769-1839) who lived here for a time. Smith was involved in the canal construction as a surveyor but was dismissed in 1799 after several arguments with the company. He went on to establish the principles of rock stratification but the plaque to "Strata Smith" is also noteworthy as being placed on the wrong cottage!

It was then on by car to Midford to see the start of the Radstock Branch of the coal canal, entered by an aqueduct over Cam Brook. We approached this by a walk along the course of the main canal to see the results of recent restoration work on the aqueduct. The restoration project is being managed by the Avon Industrial Buildings Trust under a special project with its own fundraising programme and the use of contractors. The work has been much hampered by flooding and many setbacks but the project members are determined to complete the restoration of the structure to its former splendour. [The work was completed in November 2001.] The tale of the Radstock branch with its temporary tramway section and various setbacks leading to its eventual decline is another story. We continued by car to the final short walk of the day in the Combe Hay area. The canal construction story in this area is dominated by the efforts to build a new type of lock, the Caisson Lock. Little remains of this ambitious project apart from some contemporary records and reports. The area through which the structure was built is largely inaccessible but we were able to get some idea of the scale of the undertaking and to hear about its features. There was time, of course, to thank Will Harris for arranging the walk and for giving us such an interesting afternoon, before heading homewards.