

REFERENCES:

¹ Information from Mr. H.C.B. Collins, December 1993

² *Country Life*.

³ F.W. Gregory, in Simmons Collection.

⁴ Photographs at the Royal Commission on Historic Monuments and in Peter Hemmings *Windmills in Sussex* (1936).

GUY BLYTHAM

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LATEST DATE FOR COPY FOR THE OCTOBER NEWSLETTER IS 4th SEPTEMBER 1995

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JULY 95

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Reports of Visits

Brighton Paddle Steamers

Extracts from Sussex Weekly Advertiser

Sussex Mills Group News

PROGRAMME OF ACTIVITIES

Saturday August 12	Tour of Mills starting at Burton Water Mill, Petworth, at 10.30 a.m. SU979180 Contact P. Pearce 01903 241169
Friday September 15	Visit to Littlehampton. Meet at museum at 2 p.m. Contact Chris Bryan 01243 773158
Sunday October 1	Open meeting to discuss the problems of opening mills to the public. All members as well as mill operators are invited. venue to be announced, see latest Newsletter 2.30 p.m. Contact D.H. Cox 01403 711137
Saturday November 25	Annual General Meeting Haywards Heath Town Hall, Boltro Road. 2.30 p.m. Contact R.G. Martin (01273) 303805

THE VISIT TO HARVEY'S BREWERY

On 1 June about 30 members gathered in the yard of the Harvey's Bridge Wharf Brewery of Lewes, one of a regrettably diminishing number of independent family breweries. We were here for what was to be a very informative tour conducted by the Head Brewer Miles Jenner who is not only an expert in his craft but a very entertaining guide and justly proud of his business.

First we were given a brief history of the brewery built in 1838 and one of over nine breweries to operate in the town. Next the sacks of malt made convenient seats while we heard about the malting process before moving to the Hop Store to learn how "fuggles" give the beer its flavour and account for the heavenly smell that lingers over Lewes on brewing day.

Each section of brewing plant was then visited in sequence and we heard how the crushed malt or grist is mixed with hot liquor in the Mash Tun and the resulting Worts boiled with hops in the Copper. We followed the trail past the heat exchangers to the Tun Room where we inspected various brews undergoing the fermenting action of the yeast producing frothy heads and giving off carbon dioxide. Finally it was demonstrated below in the cellar how the finished beer was racked off into the casks ready for despatch.

The pleasant evening was rounded off by a visit to the Sample Room where we were able to confirm that Harvey's beer is one of the finest in the country produced from natural ingredients by a process that has hardly changed for the last three hundred years. Long may they continue!

PETER HOLTHAM

INDEX OF MAJOR ARTICLES IN PREVIOUS NEWSLETTERS

Our Chairman has produced an index of the major articles in the Newsletters. Copies of this are available in two sequences a) by subject, b) by location, price 50p per sequence. Orders direct to him (address on back cover), enclosing a large stamped addressed envelope.

MEMBER'S PHOTOGRAPHS

I know that many members photographs are taken at Society Activities and wondered if members would like to donate any surplus or duplicates for inclusion in our archives.

PETER HOLTHAM
(Archivist)

EUROPEAN NATURE CONSERVATION YEAR

A two day conference is being held on 8 and 9 July, 1995 at Sussex University entitled "A Vision of Sussex" to mark the 25th European Conservation Year. The Sussex celebration weekend is aimed at bringing people from a wide range of interests, environmental organisations and statutory bodies together to break new ground in working towards a Vision for Sussex. It will be the ideal opportunity for individuals and groups to meet, find out about new ideas and initiatives and put forward their own views on the future of wildlife and the environment in Sussex. There will be a variety of sessions, talks, practical demonstrations, arts and crafts and a large exhibition by various groups as well as outdoor activities such as nature trails and orienteering.

RON MARTIN

EXTRACT FROM A LETTER WRITTEN TO SIAS

Wealden Iron Industry

I noticed on page 4 of *Newsletter* 86 (April 1995) the reference to the use of cyrene limestone in the iron smelting process. Cyrene limestone was certainly used by iron smelters in the Weald. The Fuller family of Sussex ironfounders in the eighteenth century recognised its ferruginous qualities as a form of ore, known as 'greys', essential if slag was to run freely in the furnace. However, Wealden iron ore was very low in sulphur (less than 0.1%), and

arsenical sulphur does not feature in the composition of Sussex ore at all. In the *SCM* article from which this brief reference is culled, the author, Wyndham Hulme, suggests that steel making was continuing at Robertsbridge forge in the second half of the eighteenth century, his evidence being the apparent use of an air furnace there by John Churchill. In fact in correspondence in 1754, prior to his lease of the forge, Churchill asked Sir Whistler Webster, the landowner, for the restoration of the second finery and the dismantling of the air furnace, and by 1773 when Henry Home's essay was written, the forge was in the hands of James Bourne. For further details see H. Cleere & D. Crossley, *The iron industry of the Weald* (2nd ed. 1995).

You may wish to include the above in the next *Newsletter*. Also I should be grateful if you would publicise the new edition of Cleere & Crossley's book, which is now priced at £24.95, almost half the original price, and significantly extended.

JEREMY HODGKINSON

Chairman Wealden Iron Research Group

BRIGHTON EXCURSION PADDLE STEAMERS

The following article by Robin Jones is intended for use in the "My Brighton" educational project being set by Brighton Museum. It will feature in a section on transport.

1. The Paddle Steamer

Britain's first commercially successful paddle steamer commenced operations in 1812. Named *Comet* and designed by Henry Bell it operated a service between Glasgow and Greenock in Scotland. The success of this venture influenced shipping companies around Britain to look at this form of propulsion for coastal passenger vessels. From the second half of the eighteenth century small fishing villages were expanding into large towns and a feature of these towns in most cases was the seaside pier. The majority of piers were structures built a short distance out to sea with a landing stage constructed at the end. With this facility shipping companies could operate pleasure cruises from seaside resorts around Britain. Due to the shallow water at the end of the pier, the most suitable vessel was the paddle steamer, which had a shallow draught, the depth of the hull below the waterline, and was easily manoeuvrable.

A number of different designs of paddle steamers developed. The steam engines, providing power to the paddle wheels, could be of an oscillating type, a compound diagonal or a triple expansion design. Other features within the paddle steamer would also vary. Some paddle steamers only had one funnel, while others had two. The design of the paddle wheels themselves varied, the smaller vessels having fixed floats, while the paddle wheels of larger steamers incorporated a feathering mechanism to ensure each float entered the water vertically to improve the steamers operational efficiency. Other features included various designs of passenger areas, and over the years further improvements were introduced to ensure passenger comfort.

2. The Early Years.

Pleasure steamers commenced operating from Brighton in 1878, when *P.S. Brighton*, a wooden steamer, was built for a Mr. W.S. Gardner. This steamer was later purchased by a Captain J. Lee in 1887 for £1,500. Later still Capt. Lee was appointed Managing Director of the Brighton, Worthing and South Coast Steamboat Company, which was formed in January 1891. In 1893, the Brighton Company purchased *P.S. Princess May*, which had a steel hull and

a single funnel. Competition appeared in the Brighton area in 1896 with the introduction of P.S. *Plymouth Belle* chartered by R.R. Collard of Newhaven. Further paddle steamers acquired by the Brighton Company included P.S. *Brighton Queen*, a splendid ship, 603 gross tons powered by a two cylinder compound diagonal engine. These vessels together with vessels from R.R. Collard's fleet and the Hastings, St. Leonards & Eastbourne Steamboat Co. Ltd. all trying to operate excursions from Brighton at the turn of the century, caused congestion. In the *Brighton Herald* dated Thursday 28 July 1898 it was reported that nine steamers were alongside the substantial landing stage at the West Pier. It should be emphasised that this was the only pier available at the time because the Chain Pier had been destroyed in a storm in 1896, and the new Palace Pier did not open until 1901.

3. P & A Campbell

P & A Campbell first operated excursion paddle steamers in Scotland before moving to the Bristol Channel in the late 1880s. One of the traditions carried on by Campbells, once established at Bristol, was to operate long day cruises, one of which was to Southampton. This was a success, they started to expand their operations in the Solent area offering cruises as far as Weymouth to the west, and Hastings in the east. In the Sussex area they found competition which included the Brighton, Worthing and South Coast Steamboat Company. However after a number of years this competitor was in financial difficulties, and was happy to sell out to Campbells in the Winter of 1901-02. The first steamers to come into Campbell's ownership resulting from this deal were P.S. *Brighton Queen* and P.S. *Princess May*. With this takeover the two brothers Peter and Alec Campbell expanded their operations along this part of the South Coast, as well as maintaining the Bristol Channel operations, and on many occasions paddle steamers would move locations. Up to the beginning of World War I, Campbells were establishing themselves in the area with P.S. *Waverley* of 1885 operating along the South Coast between 1911 and 1913, and P.S. *Ravenswood* being introduced to operate cruises during 1912. During World War I, many steamers were requisitioned by the Admiralty for minesweeping duties, but with the coming of peace P & A Campbell restarted operations in the Bristol Channel and on the Sussex Coast. These were to be the most successful years for the excursion paddle steamer.

4. The Golden Years.

Owing to the loss of many paddle steamers during World War I, it was not until 1923 that P & A Campbell were able to commence operations again from Brighton. In preparation for this Campbell's ordered a new paddle steamer from Ailsha Shipbuilding Co., Troon, in Scotland. This vessel, named *Glen Gower*, was built using engines from an earlier paddle steamer. Other paddle steamers which were operated by P & A Campbell after the World War included *Ravenswood*, built in 1891, *Devonia*, built in 1905 and *Waverley II*, built in 1907. Two further steamers carrying the name Brighton were also used. P.S. *Brighton Belle*, originally named *Lady Evelyn* was built in 1900, while P.S. *Brighton Queen II* operated cruises from Brighton between 1933 and 1939. All these steamers formed the White Funnel Fleet of P & A Campbell. A glance at any P & A Campbell timetable will show cruises to a variety of destinations, the majority to seaside resorts which had a pier providing landing facilities. Examples would be Sandown and Shankin on the Isle of Wight, Sussex resorts of Worthing, Eastbourne, and Hastings, and there were also cruises to Boulogne in France. With the threat of World War II looming on the horizon, plans by the Admiralty were being prepared to requisition paddle steamers for minesweeping and other duties. The most significant role played by these vessels during the war was the evacuation of troops from the Dunkirk beaches in 1940, when many P & A Campbell steamers were lost due to enemy action.

5. The Post War Years

After the end of World War II, P & A Campbell prepared to start operations again along the Sussex Coast, but it was not until 1947 at Whitsun that P.S. *Glen Gower* operated from Brighton. With high losses in World War II, Campbells found it necessary to order a new steamer. However the decision was not to order a paddle steamer, but a turbine steamer which was named *Empress Queen*. As this vessel was larger than the more traditional paddle steamers, mooring at pier heads proved to be difficult, and this vessel only survived on the Sussex coast until 1951. In 1950 the decline of regular pleasure steamers was apparent, and with falling passenger numbers, P & A Campbell decided to only operate one steamer, the *Glen Gower*, from Brighton. Campbells also suffered a decline in the Bristol Channel, where because of losses during the war they had ordered two new paddle steamers, P.S. *Bristol Queen*, built in 1946 and P.S. *Cardiff Queen* built in the following year. In 1952 and 1953 P.S. *Cardiff Queen*, which had two funnels, concealed paddle boxes and was powered by a triple expansion engine, operated cruises from Brighton, but returned to the Bristol Channel after 1953 season. The sole steamer at Brighton in 1954 was P.S. *Glen Gower*. In 1955 with the introduction of 'no passport' trips to France there was a short revival of interest when P.S. *Glen Gower* operated these excursions creating an increase in passengers carried. In fact during the 37 trips operated, 16,000 passengers were carried. P.S. *Glen Gower* operated on the Sussex Coast again in 1956, but due to the atrocious weather that year 23 sailings were cancelled. This turned out to be the last year P & A Campbell operated on the South Coast, as *Glen Gower* was moved to the Bristol Channel for the 1957 season. Three years later in 1960 a Mr. Herbert Jennings decided to operate a paddle steamer from Brighton, but this was not successful.

6. Paddle Steamers in Preservation.

With the decline of paddle steamers in coastal waters around Britain during the mid 1950s, a group of enthusiasts joined together and formed the Paddle Steamer Preservation Society in 1959. Initially the Society concentrated on recruiting members who were interested in this form of transport, which was fast disappearing from our seaside resorts and the few rivers where paddle steamers were used. During the next few years the Society expanded their interest, which had been mainly meetings and cruising on the remaining steamers, because in 1967 the chance occurred to purchase P.S. *Kingswear Castle*, a small river steamer operating on the River Dart in Devon. This steamer has been completely restored and operates cruises on the Rivers Medway and Thames during summer months. However during the 1970s, the only paddle steamer in revenue earning service was P.S. *Waverley*, being operated on the River Clyde in Scotland by Caledonian MacBrayne, but due to falling passenger numbers, put up for sale in 1973. As the Society had been looking for a suitable paddle steamer for coastal cruising, P.S. *Waverley* offered cruises from Liverpool and North Wales. Since 1978 the vessel has operated cruises along the Sussex Coast from Hastings, Eastbourne, Newhaven and Worthing, as well as other parts of Britain. From the mid 1980s it has only operated from the Sussex resorts of Eastbourne and Worthing, due to the unsuitability of Newhaven and the poor condition of the landing stage at Hastings Pier. In May 1990, P.S. *Waverley* did operate cruises along the Sussex coast and to the Isle of Wight from Brighton Marina during the Brighton Festival, but in subsequent years similar cruises have been operated by the 1949 Motor Vessel *Balmoral*. It is not possible for P.S. *Waverley* to call at Brighton during its annual visit to the Sussex Coast, because the West Pier, which at one time had a substantial landing stage, is closed and isolated, and the original landing stage at the Palace pier has long since gone. However the current owners of the Palace Pier are always improving the structure, and it may be possible some time in the future to board P.S. *Waverley* at the end of the Palace Pier, Brighton for a coastal cruise.

EXTRACTS FROM THE SUSSEX WEEKLY ADVERTISER

OUSE VALLEY IMPROVEMENTS

Sussex Weekly Advertiser
10 January 1791 page 3

Navigation and Drainage – the owners and occupiers of lands in the Lewes and Laughton Levels and the merchants traders and others interested in the Navigation of the River Ouse between Newhaven and Lewes bridge in the County of Sussex are desired to meet at the Star Inn in Lewes on Monday 31st January instant. At 10 o'clock in the forenoon, to consult upon the best mode of carrying into effect the intended application to parliament for a bill to improve the Navigation of the said river and for better draining the levels. An estimate is also preparing to be laid before the meeting of the expence attending this undertaking.

Henry Blackman, Chairman.

10 January 1791 page 3

Newhaven Piers. – the commissioners and trustees of the harbour and piers of Newhaven having resolved to extend the said piers one hundred feet into the sea and having provided timber proper for that purpose I hereby give notice to all persons who may be desirous of performing the above work that I am ready to receive proposals for the performance thereof according to the plans which may be seen at my house in Lewes.

J. Hoper, Clerk to said Committee & Trustees.

GEOFFREY MEAD

SHIP BUILDING AT SHOREHAM

During the early eighteenth century Daniel Defoe noted the dominance of ship building in the locality when he noted in *A tour through the whole island of Great Britain* (1724):- "... We came to Shoreham, a sea faring town, and chiefly inhabited by ship-carpenters, ship-chandlers, and all the several trades depending upon the building and fitting up of ships which is their chief business; and they are famed for neat building, and for building good sea boats."

Sussex Weekly Advertiser 9 October 1786 page 2

"Sussex – to be let and entered upon immediately at Kingston-by-Sea near Shoreham, a very compleat and roomy yard for ship building about a mile from the town of New Shoreham and half a mile from the harbour mouth, there also two new dwelling houses, a large shop for boatbuilding and a mould loft over the same with every other convenience for the ship building business and room to erect any other buildings that shall be thought necessary. A timber yard adjoining and room to lay any quantity of timber for the use of the yard.

For further particulars enquire of John Norton esq., the owner at Kingston-by-Sea or of Mr. Attree attorney-at-law, Bighthelmstone. To prevent trouble none need apply who have not substance and property sufficient for the business.

*** Several timber wharfs upon the river where the best timber of every kind may be had for the use of shipbuilding."

GEOFFREY MEAD

A MELANCHOLY ACCIDENT

Sussex Weekly Advertiser
23 October 1786 page 3

"On Wednesday last a most melancholy accident happened at the iron-works of Alexander Raby esq. at Cobham in Surrey. A carpenter in doing some repairs at the large wheel which worked under the great hammer, was by accident forced under it, and before any assistance could be given him his head was almost wholly scalped, and the bones of his legs and other parts of his body in a great degree laid bare, from the flesh being so shockingly torn and mangled. Fortunately a man was present who drew him from under the wheel in time to save his life, and we are happy to add, that notwithstanding he was a most shocking spectacle to behold, Mr. Hall of Leatherhead who was called to his assistance has given some hopes of his recovery".

hough an 'out of country' incident it graphically illustrates the dangerous nature of industry, made more so by the lack of medical facilities and safe working practices of the time.

GEOFFREY MEAD

SHOREHAM AIRPORT – WSRO

Browsing through the catalogues of West Sussex Record Office in Chichester, I came across the following entry under the reference SP 2074 (Sale Particular)

"Shoreham Old. Shoreham Aerodrome. Hangars, Flight Sheds, repair shed, offices, stores, huts and 147½ acres of land, formerly occupied by Sussex Aero Club. For Sale by direction of the Disposal and Liquidation commission"
6 Dec 1921 (Map)

GEOFFREY MEAD

BOOK REVIEWS

R.W. Gallins & B.C. Vorssam *Geology of the county around Horsham* British Geological Survey – HMSO 1993

At £26 this is a volume for the specialist or an extremely enthusiastic local studies person! Geological memoirs exist for each British Geological Survey sheet but they are infrequently updated. The publication of this memoir a few years after those for Lewes and for Brighton brings the latest in geological studies and techniques to our county.

There are references to items of I.A. interest throughout the volume e.g. 35 pages have references to brickworks but chapter 7 on economic geology has most to offer on the topic of I.A. Brick clays, building stone, iron ore and water supply are all sub-headings of this chapter. On stone itself the memoir illustrates the wide variety and type characteristics of the Wealden range from the calcareous Horsham stone used for roofs to the crushed Wealden limestones – winkle stone – noted in farm roadways. Of note to this reviewer was the use of highly rippled sandstones to farm 'non-slip' surfaces in stables.

Throughout the memoir, which is sectioned into stratigraphical units, e.g. Hastings Beds, Weald Clay, Quaternary deposits, there are many references to pits, quarries, workings and cuttings which expose the various strata allowing close examination.

The memoir is attractively illustrated with colour and monochrome photographs of landscape views and rock detail. The maps are large and clear as are charts and diagrams, and the print and paper quality excellent.

Only a geology freak would describe this book as a 'rattling good yarn' but for a clearer understanding of the raw materials, power supplies and location of some of our important historical industries this memoir is invaluable.

GEOFFREY MEAD

P.A.L. Vine, *London to Portsmouth Waterway* Middleton Press 1994 pp.96 illus £9.95 ISBN 1 873793 43 X

The Middleton Press made its name initially by publishing an extensive range of albums of photographs of the railway scene of the past ably supplemented with extracts from large scale O.S. maps. To these in recent times have been added similar volumes on other transport themes, including waterways. P.A.L. Vine will require no introduction as an author as it was his pioneer work *London's Lost Route to the Sea* which did much to focus attention on the Wey & Arun route. The volume reviewed is rather different although it has much in common. The new work is essentially pictorial though it does contain a number of pages of text giving outline histories of the various waterway undertakings which together provided the inland waterway route from central London to Portsmouth. Engravings, historic photographs and map extracts provide the main pictorial elements. Of the 120 illustrations, 45 cover the the Thames Navigation from Queenhithe Wharf to the entrance to the River Wey at Shepperton. None of this is covered in Vine's earlier work. Of the remaining illustrations some have been reproduced before, the reviewer having identified eleven, but the great majority are new and provide a valuable supplement to those who own a copy of the earlier work. As usual with Middleton Press publications, the quality of the illustrations and print is of an excellent standard and by today's prices the book represents very good value. (Available from booksellers or direct from the Middleton Press, Easebourne Lane, Midhurst GU29 9AZ, post free).

BRIAN AUSTEN

Southampton University Industrial Archaeology Group Journal No.3 (1994)
ISSN 0967-3474 pp.29 £2 (available from Capt. Ivan Downer, Publications Officer SUIAG, 4, Harley Close, Bishopstoke, East Leigh, Hants. SO50 6JE.)

A wide-ranging number featuring both detailed survey articles concerned with single sites and those of wider scope. Although Hampshire is the main centre of focus, articles also deal with Berkshire and Kent or developments on a national basis. Given the need to keep cost to a modest figure to ensure an attractive cover price, both the text and illustrations (line drawings and photographs) are of good quality.

John D. Asteraki provides a detailed survey of a Victorian estate sawmill at Bearwood in the Thames Valley near Sonning. The mill operated initially on the basis of both water and steam

power though by the 1930s a Blackstone oil engine had been installed and later still an electric motor was used. Bert Moody reviews railway steamer services from Southampton from their inception in 1842 until closure in 1964. Services to Normandy and the Channel Is. for both passengers and freight and the vessels used on these are fully described. James Parffett illustrates and describes the Sheerness Boat Store, the subject of a SUIAG visit. Martin Gregory describes the use of the steam hammer with particular reference to the iron industry from its invention early in the nineteenth century until the early decades of the present century. A particularly interesting and perceptive article by Edwin Course deals with the location and nature of engineering works in rural Hampshire. The firm of Taskers of Andover feature in the article but other businesses in places as diverse as Basingstoke, Ringwood, Fincham, Kings Worthy, Alton and Wickham are fully dealt with. Production was centred on the needs of farmers but the product range was much wider with stationery and traction engines, road rollers, tile and brickmaking machinery and general foundry and engineering work in iron and brass being undertaken. The final article by David Plunkett deals with industry in Saxon Southampton. Who said that I.A. starts with the Industrial Revolution! A rich mixture and well worth the price asked.

BRIAN AUSTEN

SERIAC '95

The SIAS hosted this event which this year was held at the De La Warr Pavilion at Bexhill on 8 April. Freddy Sowrey introduced and chaired the conference. The first speaker, Gwen Jones dealt with the history of Oast Houses from medieval times to the earlier part of this century. This talk was lavishly illustrated with slides of examples from Kent and Sussex. It is hoped we might undertake a guided tour of some of these examples in our visits programme next year.

Next, Brian and Nigel Sturt gave a graphic account of how coal gas was marketed to heat and light the home and of the tremendous commercial battles between the leading electricity and gas companies in the inter-war years. The theatre was filled with sound when at the conclusion of the talk they played one of the gas company advertising songs of the thirties.

Electrical heating was not to be outdone, however. John Norris brought a large selection of electrical heating devices from the interwar period on to the stage. Bed warmers, curlers, irons, trouser creasers and room heaters were all there and some of the audience were able to get a 'hands on' idea of how these devices were used.

The exhibition stands, a smaller number than usual, were in the central area of the Pavilion and not only attracted the attention of the conference goers but also of the general public who were passing through the building on the day. Our special thanks go to Jill Allen and Don Cox who stewarded the exhibition area throughout the conference.

After lunch we were kept fascinated by Nick Kelly's illustrated account of fireless steam engines. These operated on a reservoir of high pressure steam provided by a stationary source. The devices were particularly useful in works dealing with munitions or paper and other inflammable materials. The work of various British manufacturers was outlined. The disastrous attempts by the Turkish navy to use fireless steam in submarines was well described. These efforts even resulted in an English vicar being made an officer in the Turkish Navy when it was found that no Turkish officer would take the boats out!

Paul Sowan brought us back to earth literally, with an excellent account of the lime industry, particularly in Surrey. He told us of the existing remains of the Betchworth lime company in Surrey where he has taken school field study groups. It was lucky the Health and Safety Executive was not around at the time of these visits when some particularly dangerous sounding demonstrations in the slaking of lime were encouraged by the site manager.

To cool us off and to round off the conference Ron Martin explained the insulation and drainage problems of keeping things cool in ice houses. His drawings looked terrific on the large screen of the theatre although sometimes the sound system had a job to keep up with his enthusiasm.

At the end of the conference we divided up into smaller groups for guided tours of the building. These were provided by the Friends of the De La Warr Pavilion and took us into areas not normally seen by the public. The roof space above the theatre was particularly interesting with the top side of the acoustic ceiling clearly visible. Some of the original furniture, designed for the building could also be seen in store here. Although we could not go into the Edinburgh and Elizabeth rooms, the original location for our day, we could see the effect of raising the ceilings to their original height. It is hoped to renew our acquaintance with the building with a Society visit some time in the 1996 programme.

The change of location and timing did present many problems and my sincere thanks go to Ron Martin for overcoming these. Thanks also to Gordon Thomerson the other member of the working party, and to Pat Bracher, Diana Durden, and Brian Austen for stewarding at the conference.

Abstracts of the proceedings are available on receipt of a stamped addressed A4 envelope sent to R. Allen (address on the back page of this newsletter).

BOB ALLEN

NEWS FROM AMBERLEY MUSEUM

I am pleased to be able to announce the completion of another major exhibition project at Amberley.

On Tuesday 6th June, the Museum's President, Prince Michael of Kent, visited the Museum to officially open the Paviers' Museum of Roads and Roadmaking. It was particularly fitting that his Royal Highness should open the Museum as he launched the original appeal to raise money for the project.

The new exhibition has been developed by the Worshipful Company of Paviers and Amberley Museum and aims to tell the story of roads and roadbuilding from earliest times up to the present day. It features not only maps, diagrams, models and photographs of roadmaking through the ages, but also features a variety of roadmaking equipment, along with signs, street furniture and many other items. It is believed to be the only exhibition of this type in the country. It is contained in the former Tanyard building in the White Pit area of the Museum. This building has been enclosed and enlarged to a design by John Malyan, an architect and one of the Museum's new Trustees.

In opening the new exhibition, His Royal Highness Prince Michael of Kent said, "Although the history of both horse-drawn and motor vehicles is well represented in museums, the

developments on which they depended - the technology of roads is not. The Paviers' Museum illustrates how technological change enabled roads to be improved from rough tracks, virtually impassable at certain times of the year, to the carefully engineered surfaces of today. It also illustrates the vision of the engineers of the past, such as McAdam, Metcalf and Telford, as well as the work of the many skilled people who build our roads today."

Following the speeches His Royal Highness joined the Museum's Engineer, Derek Kilburn, on the West Sussex County Council Steam Roller to complete the proceedings. As a set of traffic lights changed from red to green His Royal Highness drove the steam roller through a tape to formally declare the Museum open.

The steam roller driven by His Royal Highness was built by Marshalls of Gainsborough, Lincolnshire in 1925, and spent all its working life in the Midhurst area. It is still owned by West Sussex County Council and is regularly operated at Amberley Museum. It is one of a number of large items of roadmaking equipment in the new exhibition: others include a concrete laying machine and a Barber-Green bitumen finisher.

Smaller exhibits on display include road signs. These range from a 10 mph speed limit sign from the early years of the century, through to the modern direction signs used on motorways today. Another feature is the road testing laboratory which shows some of the equipment used for the testing of road surfaces and base materials. Further displays are devoted to road marking, traffic lights and even cats eyes.

The floor of the display area is an exhibition in itself, being surfaced in different materials including tarmac, concrete, chippings, granite setts and paving slabs.

The Museum is also continuing with its programme of special events and the autumn events are listed below.

- Sunday 17th September Dennis Day. Special assembly of Dennis buses, commercial vehicles, lawnmowers and other items, to celebrate the Centenary of this famous Guildford company and to launch our newly restored 1927 Dennis 30cwt single-deck bus.
- Sunday 24th September Woodworking Show. Visiting craftsmen, displays of tools and machinery and the Museum Timberyard in full operation.
- Sat/Sun 30 Sept/1 Oct Model Engineering Weekend. Model steam traction engines, model steam railways, model boats and much more.
- Sunday 8th October 18th Annual Autumn Vintage Gathering. Steam engines, vintage cars, motorcycles, commercial vehicles, buses, stationary engines etc.

ROBERT TAYLOR

TWYFORD PUMPING STATION

OPEN DAYS 1995

Sunday 8th October 11 a.m. to 4 p.m. Adults £1.50; Children 50p
Sunday 17th September 10 a.m. to 4 p.m. Free. (No working machinery)
For further information telephone 01703 - 269228



SUSSEX MILLS GROUP



NOTES FROM THE SECRETARY

Tour of mills on Saturday 12 August 1995

Peter Pearce has put a lot of effort in the planning of this day and this promises to be an interesting series of places to see - most of which are not open to the public.

Meeting on Sunday 2 October 1995

This will be at Michelham Priory starting at 2.00pm. We hope to discuss matters of interest to all people restoring and opening mills to the general public. Amongst other subjects we shall discuss insurance (does anybody know of an insurance expert who would come to advise) and a new mills open to the public leaflet. Please come along and give us your views.

List of suppliers of goods and services

The committee have decided to compile a list of suppliers of goods and services concerned with the restoration and maintenance of wind and water mills. If you have a good supplier of materials, then do not keep it a secret but let us all take advantage. Drop me a line and I will add it to the list which when compiled will be available to all.

Working Parties

Are you willing to help restore mills? We have had three requests each for a one day effort to help to get a mill back into better condition. We would like to compile a list of people willing to do some hard manual work for a day. It usually is hard but enjoyable work in the company of like minded people. You do not have to attend every session but it would be nice to have a list of people to call upon when a request is made. Please let me know.

The next working party is for High Hurstwood water mill and involves clearing out the pit by the pit wheel inside the mill. Also some outside clearance is required. The date has not been fixed with the owner but we hope that it will be a Sunday in October this year. Contact me for further details.

Stone Cross Windmill

The trust for the above mill recently held their first AGM at which progress was reported and trustees and the management committee confirmed as appointed.

The latest position is that work is progressing slowly through lawyers on the lease for the land around the mill and the conveyance of the mill itself. This is slow work but it is progressing and hopefully the trust will obtain possession of the mill very soon (in fact, I hope, by the time that you read this). Work can then commence.

Mills for sale

I have obtained particulars of the following.

Heath Mill, West Chiltington. Was a water mill on the site but the property being sold is, I believe the millers house plus an outbuilding/studio which was all part of the complex. The house is listed Grade II. Asking price £325,000,

Bignor Mill. Bignor

This two storey brick building was the water mill but now all machinery has been removed except for a scale replica of the original mill wheel which is sited in the wheel room. First converted into living accommodation in the 1930s it is now fully residential with some mill features retained. Asking price £485,000.

That is all the news that I have. What about you? Do you have anything to tell other members? Please do not leave it all to me!!!

Amendments - The lost Mills of Sussex

In the piece on Burgess Hill Mill in the January newsletter the last line of the 4th paragraph should read "latterly the mill stood with sweeps and most of the roundhouse roof missing." In Peasmarsh "C.W. Daniels *Windmills in Sussex* (1936)" should read "Peter Hemming, *Windmills in Sussex* (C.W. Daniels 1936)"

DON COX

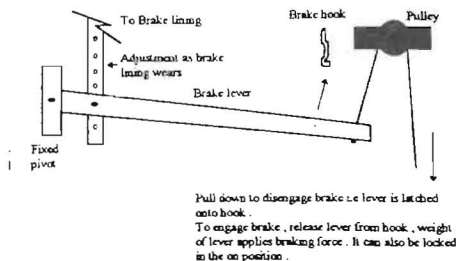
LOWFIELD HEATH MILL

The latest newsletter of the Lowfield Heath Windmill Society gives details of restoration progress.

The last major task of weatherboarding was completed in spring 1994; this was the boarding of the skirt. The skirt is the continuance of the boarding down from the mill body (buck) to within two inches of the roundhouse roof. This was especially difficult to do because the boarding had to be profiled to match the contours of the roof. The boarding was marked using a gauge and cut using an 'all-purpose' reciprocating electric saw. I think you will agree that the finished result is worthy of the rest of the mill.

The tailpole was repaired next as a certain amount of rot had developed in the original section dating from the repairs in the 1960s. This was consolidated using resin based fillers. The original tailpole tie (found in a hedge at the original site) was repaired using a new one made by our blacksmith (John Barwell of Cophorne). This tie partly supported the weight of the tailpole by suspending it from above the window at the rear of the buck. The taltur was made next. This is the lever which is suspended from the tailpole and is used to lift the ladder clear of the ground, prior to turning the mill. Unfortunately the mounting of the taltur will have to await the new steps, hopefully later this year.

The next task tackled was the repair of the brake, manufacture of a new brake hook (part of the old one survived, but the new one is essentially a copy from Reigate Heath Mill) and assembly. The details of this are shown in the sketch. This is now ready for attachment to the brake, when it and the brakewheel arrive this spring.



In September the complete mill was repainted in white. The paint used was Atzo Permaglaze acrylic system as recommended by Wrawby postmill in Lincolnshire (now South Humberside.). This is a water based i.e. an environmentally friendly product and comes in an anti-mould grade, which hopefully will prevent the 'green' look of recent years. The company awarded the contract was R. Durnell & Sons. of Westerham in Kent. This was particularly pleasing as they have been established since 1590 and have undoubtedly worked on mills over their long history. I am sure that research into their extensive records would confirm this. All the metalwork was also painted in black smooth hammerite. I am sure you will agree that they have done a splendid job. Incidentally this work was carried out, not by encasing the mill in expensive scaffolding, but instead by the use of a boom platform, the job being completed within three weeks. Maybe this is a something that other mills could do to reduce the cost of repainting.

In early October the roundhouse floor was covered with butyl rubber and a layer of cement screed was laid. The rubber extended up the side of the brickwork and met the existing damp proof course. This has since proved its worth by eliminating the flooding problems of past winters, when as much as three inches of water filled the roundhouse. This is also now a much smoother base on which to build the sleeper walls to support the re-instated wooden floor.

During this time the tenting frames which support the flyball governors were extensively repaired and re-erected. New ends were traditionally joined on to the original timbers which had suffered badly at their joints and other parts were consolidated using resin, thus continuing the philosophy of repair rather than replacement which is such a good feature of the spout floor of our mill.

1741?

Recently I was in the roundhouse and happened to glance at the remains of the wooden sack hoist drive pulley, which had been removed from the cast iron tailwheel some time previously in readiness for rebuild. As I looked the light caught some marks on it and on inspection I found the word 'Toye' with the date 1741 symmetrically above it. The carving has been done very carefully with extensive use of serifs. The date unfortunately has a small split in the wood, which at first look gives it the appearance of 1941.

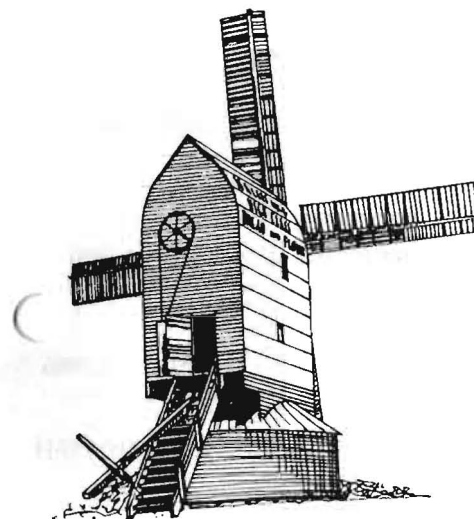
I am hoping to prove the existence of a millwright or similar of this name as the date fits very well with an often quoted reference (of unknown origin) stating the mill was moved from Horsham in 1738. Incidentally there are several Toye's in the telephone directory around the Horsham area.

PETER JAMES

LOST WINDMILLS OF SUSSEX

Telham Post Mill, Battle (TQ 766148)

It has been stated that this mill dates from 1747. It has also been referred to as Black Horse Mill as it originally stood close to the inn of that name, about half a mile from the site to which it was later moved. The move to Telham took place about 1800 but the mill that was demolished in 1961 appeared to be of mid to late nineteenth century date. This might suggest that this was not the same mill unless it had been subject to a substantial rebuild some fifty years after its move.



TELHAM MILL

R.G. Martin

The following item from the *Sussex Weekly Advertiser* of 13 August 1804 is thought to refer to this mill, a John Shaw having been the owner during the early nineteenth century:

"MIRACULOUS ESCAPE – On Thursday last some boys were amusing themselves in the mill plot belonging to Mr. Shaw of Battle, by running between the mill sweeps which were then going with great velocity. One of them, a child of about 4 or 5 years of age, whilst in the act of passing the sweeps had the brim of his hat completely cut from the crown, and wonderful to relate without the smallest injury to his person."

In 1834 the miller was Ebenezer Weller but by 1862 he had died and the mill was being worked by his executors. Around 1870 it was taken over by John Fry. Fry was later succeeded by George Edmund Morris, who was there in 1882. George J. Wallis was in charge by 1890, and the firm of Wallis & Co. continued to operate the mill until its closure in 1914 or 15.

It remained for some years in quite reasonable condition, although minus its sweeps, and at one stage the roundhouse was turned into a tea-room (curiously the same was proposed a few years ago for Windmill Hill mill). The venture did not really prove successful and had to be abandoned.¹ By the 1950s the mill was in need of considerable repair, but an appeal for funds for this purpose failed to produce enough.² The side girts had become badly bent at the crown tree, and it was this defect which led to the mill's partial collapse on 13 September 1961, following which it was pulled over by a tractor to avoid risk to those living in the nearby houses.³

Telham was a fairly typical East Sussex post mill, similar in some respects to Windmill Hill, though not quite as big. It was nevertheless a large mill, with a two-storey brick roundhouse through whose walls the piers supporting the trestle projected very noticeably, a feature not common among South Eastern post mills. The roof, breast and sides were clad in white painted metal sheeting, as at Windmill Hill, Cross-in-Hand and others, but here it terminated at the level of the sheers. It was a fine mill, with four patent sweeps whose striking chain wheel and weight box were on the tail to the left of the door. Latterly "WALLIS & CO. HIGH CLASS BREAD AND FLOUR" was painted on the metalling on one side of the body.⁴

The windshaft was of iron, with a wooden brake wheel and iron tail wheel. Unusually (but not uniquely) there was room to stand in front of the former. The tail wheel was cast in two parts, with wooden teeth. There were two pairs of stones, both 4 ft 6 in. in diameter. A flour machine was installed while on the spout floor were two wooden mixers, with a common spout which was horizontal and contained a brush for moving the meal along. The sack hoist was driven from the inside face of the brakewheel.