#### HISTORIC FARM BUILDINGS GROUP

Old farm buildings are among the most conspicuous and pleasing features of the traditional countryside. They are also among the most interesting, for they are valuable and substantial sources of historical knowledge and understanding.

Although various organisations have included old farm buildings among their interests there was no single one solely concerned with the subject. It was the absence of such an organisation which led to the establishment of the Group in 1985.

Membership of the Group is open to individuals and associations. A weekend residential conference, which includes visits to farm buildings of historical interest, is held annually. The Group also publishes a Journal and issues regular newsletters to members.

If you wish to join, send your subscription (£5 a year for individuals) to the Secretary, Mr Roy Bridgen, Museum of English Rural Life, Box 229, Whiteknights, Reading RG2 2AG. Telephone 0734 875123.

#### MEMBERSHIP CHANGES

#### New Members

Mrs B.E. Longhurst 29 Alfriston Road, Worthing BN14 7QS (0903 200556)

Mrs E. Riley-Smith Brewhurst, Loxwood, Nr. Billingshurst RH14 0RJ (0403 752353)

Change of Address

Mrs P. Bracher 2 Hayes Close, Ringmer, Lewes BN8 5HN (0273 813902)

#### **OFFICERS**

President A.J. Haselfoot

Chairman Air Marshal Sir Frederick Sowrey, Home Farm, Herons Ghyll, Uckfield Vice Chairman J.S.F. Blackwell, 21 Hythe Road, Brighton BN1 6JR (0273) 557674

General Secretary R.G. Martin, 42 Falmer Avenue, Saltdean, Brighton BN2 8FG

[Office (0273) 28479, Home (0273) 33805]

Treasurer & Member- J.M.H. Bevan, 12 Charmandean Road, Worthing BN14 9LB

ship Secretary (0903) 35421

Editor B. Austen, I Mercedes Cottages, St. John's Road, Haywards Heath

RH16 4EH (0444) 413845

Programme Secretary D.H. Cox, 3 Middle Road, Partridge Green, Horsham RH13 8JA (0403) 711137

Archivist P.J. Holtham, 12 St. Helen's Crescent, Hove BN3 8EP (0273)413790

Publicity G.E.F. Mead, 17 Hollingbury Park Avenue, Brighton BN1 7JG (0273) 501590

Area Secretaries

Eastern Area
Western Area
R.M. Palmer, 11 Arlington Close, Goring-by-Sea, Worthing BN12 45T

(0903) 505626

Central Area J.S.F. Blackwell, 21 Hythe Road, Brighton BN1 6JR (0273) 557674
Northern Area E.W. Henbery, 10 Mole Close, Langley Green, Crawley (0293) 23481

# COMMITTEE MEMBERS

B. Austen, Brig. A.E. Baxter, D.H. Cox, F.W. Gregory, E.W. Henbery, P.J. Holtham, G.E.F. Mead, R.M. Palmer, G.G. Thomerson, M.F. Tighe

Copy for the Newsletter should be sent to:

G.G. Thomerson, 42 Gander Hill, Haywards Heath, West Sussex RH16 1RD (0444) 450722

PLEASE NOTE Latest acceptance date for copy for the April Newsletter

is 10th MARCH 1989

# SUSSEX INDUSTRIAL ARCHAEOLOGY SOCIETY

Registered Charity No. 267159

NEWSLETTER No.61

ISSN 0263 516X

Price 10p to non-members

JANUARY 1989

#### CHIEF CONTENTS

Annual Reports - Gen. Hon. Secretary, Treasurer Area Secretaries' Reports Inauguration of Sussex Mills Group New England Road railway bridges - Brighton Two Sussex Harbours in the 18th century Brighton & Hove Gazette Year Book

#### DIARY DATES

Sunday, 5th March. Working visit to Coultershaw Pump, Petworth. Meet at pump at 11.00 a.m. Wear old clothes, bring picnic lunch and some tools to clear undergrowth. Maintenance painting also required. Map reference SU 972194. Contact Mike Palmer 0903 506626.

Sunday, 5th March. Amberley Chalk Pits Museum Association visit to Papplewick Pumping Station (Nottinghamshire). Preliminary arrangements: coach leaves Chalk Pits Museum 8.00 a.m., British Engineerium (Hove) 8.30 a.m. Cost to be arranged. Further details from Mrs Shirley Fagg at the Museum 0798 831370 or evenings 0273 463933.

Saturday, 11th March. South East Industrial Archaeology Conference.

Sunday, 12th March. Westgate Leisure Centre, Chichester. See enclosed leaflet for

Tuesday, 14th March. Sussex Mills Group Meeting to discuss future programme. Details from Don Cox 0403 711137.

Tuesday, 14th March. Joint meeting with Chichester Museum Society. Talk on "Cast Iron Tombstones" by Tony Yoward. Chichester District Council offices, East Pallant, Chichester 7.30 p.m. Parking at rear. Contact Alan Allnutt 0243 786044 if sketch map of venue location needed.

Saturday, 22nd April. Mystery Tour of Mills. Meet Polegate Mill 10.30 a.m. Map reference TQ 627209. Contact Frank Gregory 0273 505754.

Wednesday, 19th May. East Court, East Grinstead 8.00 p.m. Mr J. Franks, Principal, Polytechnic of the South Bank, "The Inland Waterways of Britain, Past, Present & Future". The East Grinstead Society. Non-members welcome 75p.

Saturday, 27th May. All day visit to Hampshire. As guests of Southampton University I.A.

Group we shall tour sites in the Hampshire area. Meet at Twyford Pumping
Station map reference SU 493248 at 10.30 a.m. Further details from Mike
Palmer 0903 506626.

# GENERAL SECRETARY'S REPORT FOR YEAR 1987-1988

Another year has passed since I have reported on the activities of the Society. This time last year we were still recovering from the ravishes of the worst storm in nearly 200 years. Several mills had suffered but most of the damage has now been put right.

The Society has continued to maintain an interest in all aspects of industrial archaeology. It often seems that little progress is made but like dripping water wearing away a stone the continual activity in which the Society and its Members are involved does, in the long run pay off.

Concerning the Society's own projects:

At <u>Poyntz Bridge</u> the decking has now been completed and chrome steel balls have been obtained for the swivel and a steel bearing ring is being fabricated with a fibreglass skirt.

- At Coultershaw Beam Pump there has been a very successful year with more visitors than ever before. The second sluice has now been fitted and the third one converted into a fish ladder by Southern Water Authority. When water is needed to operate the pump, stop logs need to be temporarily fitted to this.
- At Ifield Mill, work to the launder has been completed and problems with the pit wheel are being resolved. There has been excellent attendance at all opening days. The adjacent mill house has recently been converted into a public house.
- As far as sites not under the control of the Society but with which we have an interest, usually through the good offices of one or more of our members:
- At <u>Clayton Mills</u>, Jill, the fantail assembly has been replaced and the steps and the brake wheel repaired. Two of the sweeps which were removed to facilitate the repair work have just been replaced.
  - At High Salvington, four sweeps have now been fitted.
- At Winchelsea Mill, there are no plans for re-erecting the mill which was toppled during the gale last year.
- At Oldland Mill, a new crown tree has been fitted and work is proceeding in preparation of fitting new side girts.
  - At Nutley Mill, all the storm damage has been put right.
  - At Polegate Mill, the cap has now been replaced and is winding.
- At Rottingdean Mill, the sails have now been removed and work is about to proceed on repairs to the cap.
- At <u>Shipley Mill</u>, the fantail assembly has been dismantled and the shutters taken out in preparation for further extensive work.
  - At West Blatchington Mill, all the storm damage has been repaired.
- At Lowfield Heath, although not now strictly in Sussex, the round house has been rebuilt and the trestle and post repaired and re-erected. Repairs are continuing on the rest of the mill structure.
- At Windmill Hill, Herstmonceux, the planning application for conversion into a residence has been approved.
- At Dean's Mill, Lindfield, there has been a most unfortunate corollary to the storm. The sluice which controls the level of water to the mill was damaged in the gale and Southern Water Authority have decided that they will not repair it. Ownership of the sluice is in doubt and at the moment the problem is unresolved. It is this sort of thing which the Society should be on its guard against as once a mill like this is deprived of its source of power there may be no opportunity for future generations to restore it. A mill which has been in working order for the whole of its life will become only a static museum.

The Society has had a very successful programme of Visits and Meetings.

The first event was the working party at Coultershaw Beam Pump, a regular annual fixture needed to prepare the pump for opening to the public. During the course of the summer we have had walks around East Grinstead, Midhurst and Steyning. These were all very worth while and are an excellent way of getting to know the villages and towns of Sussex. In June we had a visit to the Shoreham Cernent Works at Beeding and in September we were the guests of the Surrey Industrial History Group who took us to see the Godalming Turbine, Albury Mill, the Chilworth Gunpowder Works and to the Stationary Engine Museum at Westcott. The members evening was held in Michelham Priory where we were shown around the house and this was followed by talks on soap making in Brighton, the dismantling of Lowfield Heath Windmill and the I.A. of Banking. Our thanks are due to all members and others who have contributed to this programme.

The Society has been unable to publish Sussex Industrial History during the year but Issue No.18 is just on the point of being issued. This is devoted entirely to "The History

of Mills in Brighton" by one of our members - Hugh Dawes. It is being published jointly with the Urban Studies Centre in Brighton. Incidentally it is hoped that Issue No.19 will be ready by April, 1989. The Newsletter continues its good standard and although there has been criticism of the size of the typeface we hope that by maintaining the quality of print that this has proved adequate.

The Society continues to maintain links with other societies and organisations:

SERIAC this year was hosted by the Surrey Industrial History Group: the subject was the Extractive Industries. This was extremely well attended and there were several very interesting visits on the following day.

The A.I.A. Conference which was held this year at Swansea was attended by some dozen of our members and a very rewarding time was had by all. Members also attend the working weekend for members of affiliated societies which is held in March at Ironbridge.

Representatives from the Society sit on Committees of Sussex Archaeological Society, and Subterranea Brittanica and there is a representative from the Amberley Chalk Pits Museum on our Committee.

In connection with this I would like to report that our President John Haselfoot has recently been made the Vice-President of the Amberley Chalk Pits Museum Trust. This is an honour which reflects the standing of our President in I.A. circles and we congratulate him most warmly.

The Committee has been considering the formation of a <u>Sussex Mills Group</u> within the Society. Considerable interest has been shown and a <u>meeting</u> is to be held on December 13th to inaugurate the Group.

The process of recording I.A. Sites in Sussex is proceeding slowly but more help is still needed. It is a fascinating and rewarding exercise for members who undertake this task.

The <u>Brick Study Group</u>. Work on compiling the gazetteer of brickmaking sites has been proceeding more rapidly this year than in previous years partly due to the acquisition of a word processor. Kate Cosway has been giving considerable assistance and examination of the maps in West Sussex is almost complete. Various members have been checking the gazetteer entries for their areas. Further volunteers to assist with this task are always welcome. Our thanks are due Molly Beswick on whose shoulders the bulk of the work falls.

The actual achievements may not seem great but I can\*assure the meeting that much hard work is being put into the Society by the officers, the committee and members and I wish to thank all concerned.

RON MARTIN

#### TREASURER'S REPORT

Your Society has had a good year financially, in part due to non-recurring items which have enabled us to augment our reserve funds.

First, Wilfred Beswick arranged with Brighton Polytechnic for the donation to the Society of a Blackstone engine and the sale of this produced £650. Secondly, the issue of Sussex Industrial History No.16 published in conjunction with Gatwick Airport Ltd. has benefited our funds by about £700, i.e. nearly £200 from the sale of this issue, plus the saving to us of printing costs, the whole of these being carried by Gatwick Airport Ltd. Thirdly, we received a donation of £200 from IBM towards the reinstatement of Poyntz Bridge, and expect shortly to receive a substantial sum from English Heritage for the same cause. And finally, we have had £152 as proceeds from SERIAC 1988 and have not yet had to find the bulk of the funding for SERIAC 1989.

At Coultershaw our income from visitors was £277 last year, made possible by the dedicated volunteers who man - and woman - the mill on alternate summer Sundays. More are badly needed. This is the only revenue producing activity of the Society and deserves your support. During the year we had to spend £400 on treating the roof timbers with preservative and in consequence our Coultershaw balance has dropped from £390 to £109.

Although we had six new covenants last year you will see that our income from this source reduced from £181 to £164 because of the reduced standard rate of income tax and there will be a further reduction next year.

We spent £30 on replenishing our stock of <u>Field Guides</u> and another £35 on buying from the publishers several hundred copies of back numbers of <u>Sussex Industrial History</u>. The sale of these will provide us with a small but steady income in the luture.

I am glad to say that our administrative costs reduced this year from £902 to £582. This is because we were involved last year in extra expense following our change of Bank which meant circulating our membership. A few members are still paying their Standing Order subscriptions to the wrong Bank and may I implore them to change their instructions. Our Bank is now the Midland, Worthing and NOT Lloyds, Kernp Town.

Our income from deposits continues to rise and the average rate from our investments over last year was 8.7 per cent.

We had 16 new members during the year, including one life member, as against 12 the year before.

Finally, the best thanks of your Committee and myself go to our Honorary Auditor, George Martin, for his hard work.

MICHAEL BEVAN

## AREA SECRETARIES' REPORTS

### WESTERN AREA

#### Coultershaw Pump

The winter maintenance programme is under way.

Some starts and paddle boards on the waterwheel are rotten and are being replaced. On one of the pump beams the attachment of the bearing block for the connecting rod and pump rod was found to be slack due to a rotten packing piece which has been replaced.

The Duke and Ockenden deep well pump is being cleaned and reassembled.

Apart from the regular working parties on the first and third Sundays in the month, there will be a special effort on Sunday 5th March to have the site ready for visitors in connection with the SERIAC Conference in Chichester the following weekend. This opening date is three weeks earlier than usual and we do ask volunteers to come forward to help us to meet it.

#### Poyntz Bridge

The 42 inch diameter steel ring for the turntable ball race has been flame-cut and is now with Southdown Engineering of Bognor Regis for machining.

It is hoped to have the bridge operational this year.

MICHAEL PALMER

#### NORTH SUSSEX AREA

The Horsham timber merchants, Agates, have now vacated their premises at Kings Road and the buildings have been demolished. The sight of seasoning timber, open slatted sheds and the large gib crane - almost a landmark - will be missed. Did anyone photograph or record the site, prior to demolition?

At Ifield we have considered the need for an enlarged main spur wheel and it seems likely that we shall attempt to make a new one instead of trying to modify the existing one. This will be the first step in the last stage of the endeavour to complete the drive system to one pair of stones. During the winter the arrangement of the ground floor will be changed to improve the available floor space and display area.

The adjacent Mill Cottage is now re-occupied after an extensive refurbishment by Crawley Council. Security is now more assured, to our relief.

At Charlwood aviaries the final erection was successfully carried out of the cross-trees and main post of Lowfield Heath windmill on to the Roundhouse. The top courses of brickwork are being laid up to the finished height and this stage of the restoration will then be wrapped for protection against the winter weather. The successful completion of this chapter has greatly lifted morale and 1989 should see significant work completed.

E.W. HENBERY

#### VISIT TO SURREY INDUSTRIAL HISTORY GROUP - 24th September

Sixteen members of SIAS met our Surrey host Professor Alan Crocker on the lawns of Kennedy and Donkin Ltd. at Borough Road, Godalming.

Our first visit was to an impressive water turbine built in 1869 for Catteshall Mill on the River Wey by Macadam Bros. of Belfast. Alan Crocker has a gift for explaining details which helped us to understand the working of this turbine. A 6-7 foot head of water turned well over 60 tons of machinery in the paper mill, a tribute to the skill of the Victorian engineers. The cast iron turbines were brought to this site on the River Tillingbourne by water transport. The river supported corn mills, fulling mills, and gunpowder mills along its banks over the years and its course was changed periodically to suit these various needs.

Whilst Alan Crocker was talking to us the Mayor of Godalming, resplendent in chain of office, paid a visit as he is a member of SIHG. We were at the site where electricity was first generated, powered by a water wheel to serve the street lighting of Godalming which was the first town in the country to have electric street lighting.

We then moved to Albury Mill and to the upper and lower Postford Mills. These mills were purchased by the Botting family in 1909 and we were fortunate in that Charles Botting, the grandson of the founder gave us a talk. Gunpowder was made in this area in the sixteenth century and continued until the twentieth century when demand dropped and production ceased.

We were then introduced to Bill Kindred, the miller of long standing. He told us that the Postford Mill was equipped as a 4½ sack mill, but had run for some years as a 2½ sack mill until regraded as a 4 sack mill. A sack weighed 280 pounds. We were shown the various stages of milling flour, working our way from the third floor downwards. All the machinery, mainly wooden, was made in the 1850s and is belt driven. The silk and metal screens were exposed so that we were able to see how the flour was moved at each stage of the milling by belt operated conveyors in wooden trunking both vertical and horizontal. The various processes were made very clear to us by Bill Kindred who also gave some tips on baking. The quantities of flour dust around the mill must have made it a rather unpleasant environment in which to work.

After lunch we visited the gunpowder mills at Chilworth. We walked the track of the tramway which transported gunpowder to the railway sidings from whence it was despatched to customers. Before the advent of railways, transport was by means of water to the Thames. Alan Crocker said that the mill grew its own timber for charcoal and that saltpetre and sulphur were imported. At one time smoke from a warship's broadside was so black it obscured the view of the target, but a German company invented a gunpowder which gave off brown smoke. This was more acceptable to the naval authorities. There were 154 buildings on the Chilworth site at the end of the 1914-18 war. These were surrounded by corrugated iron drums filled with sand to minimise the effect of an explosion which happened on average about twice a year. After the war the gunpowder companies amalgamated to form Nobel Industries which later became part of ICI who decided to move the manufacture of gunpowder to north west England, and the Chilworth plant was therefore closed. Some of the buildings on the site have now been converted to smart dwellings.

Our last call was to the Westcott Stationary Engine Museum where very welcome tea and biscuits were laid on. There were eighteen machines on show, some in the open and some under cover, dating from 1889 to 1950 with such familiar names as Lister, Petter, Crossley, Priestman, Tangye, Blackstone, and Ruston and Hornsby, plus two I had not previously heard of: Pelapone, and Southwell (from USA). Two of the engines were thumping away.

We should all like to thank Alan Crocker very much indeed for giving his time and energy to making this such an enjoyable visit. Our thanks also to SIHG and others for their contributions.

LESLIE MARTIN

#### BREWHURST WATER MILL - WORKING PARTY Saturday 29th October

Some fifteen members presented themselves at Brewhurst Mill, Loxwood armed with all manner of implements to do a general clear up in glorious sunshine. Before starting work Jonathan Minns, Director of the British Engineerium at Hove, gave us a run-down on the history and the working of the mill, as he had prepared a report on the feasibility of retaining it as a mill rather than have it developed as living accommodation.

The earliest document relating to the mill is dated 1554 although there is strong evidence that it was in operation long before that date. About 1890 a fire destroyed the top two floors of the mill, and by 1900 silting had become a serious problem. Extensive refurbishment then took place over the years until 1928 when a Blackstone oil engine was installed. The mill continued production until 1968 when commercial corn grinding ceased. Occasional millings were made for domestic purposes until 1981.

We set to work in small teams, some clearing the internal wheel pit area and lower ground floor of flotsam which in times of flood is forced into the building by excessive river water, some doing general clearing up on the ground and upper floors, some sweeping up the multitudinous pigeon droppings, and others filling holes in the structure to prevent further residence by the pigeons.

At 12.30 p.m. we were all invited to join Mrs Riley-Smith, the owner, for a magnificent selection of pre-prandial refreshment in her fascinating cottage. The cottage is fascinating not only in its history but also in the contents which Mrs Riley-Smith has displayed in every conceivable nook and cranny, from paintings to pewter pots, and even an early brass fireman's helmet. The cottage, although mainly Tudor, is believed to stand on Norman foundations.

It seemed rather an anti-climax to eat our picnic lunches perched here and there around the mill, after which we continued with our various tasks.

Those members who do not attend such working parties miss a lot of enjoyment. A number of tasks are physically hard and usually dirty, but there are also many lighter, cleaner jobs which can be found and are equally necessary for those less able or less inclined to tackle the harder ones. All those who turned up at Brewhurst Mill considered that this was a splendid day out and that the "before" and "after" state of the mill was reward in itself, and all are very grateful to Mrs Riley-Smith for her generous hospitality.

GORDON THOMERSON

#### SUSSEX MILLS GROUP (Newsletter No.60 p.9)

An inaugural meeting was held on 13th December in the British Engineerium at Hove by kind permission of the Director, Jonathan Minns. There was an encouraging attendance of about 50 with 16 mills being represented, and a lively discussion ensued.

Frank Gregory agreed to undertake the chairmanship for the initial period of getting the Group under way. Don Cox was elected Hon. Secretary with committee members as follows:

P. Hill, J. Minns, J. Muddle, P. Pearce, B. Pike, C. Potten, S. Potter.

Any member of SIAS may attend meetings without any further formality. Anyone else interested in joining the Group would be asked first to join SIAS at the current annual subscription rate of £5 and would then be entitled to all the benefits of SIAS plus the Mills Group. Both wind and water mill enthusiasts and those interested in both are welcome. Application should be made to the Hon. Membership Secretary: J.M.H. Bevan, 12 Charmandean Road, Worthing, BN14 9LB, 0903 35421.

### THE BRICK STUDY GROUP - Help wanted

The gazetteer of brickmaking sites in East and West Sussex is now almost complete (see Annual Report) and I should be glad of the help of any member willing to examine the entries for the area with which he or she is familiar.

This will involve any or all of the following:

- 1. Checking the grid reference for each site against the description of the location. (Mistakes have been made with grid references in the past and we want to keep errors to the minimum this time. Once anything incorrect is printed, it is very difficult to set the record straight.)
- 2. Checking the present condition of the sites. In urban areas these will almost always have been redeveloped, although a large enough brick pit may have been turned into a recreation ground. However, in rural areas there may still be some physical remains e.g. a pond, a levelled area for the hacks (drying ground) and either a scatter of brick and tile debris or bricks embedded in a bank where the kiln was situated. Also some 'Brickyard Cottages' may have retained their old names.
- 3. In the case of sites which have only gone out of use in the present century, talking to any of the older inhabitants who may recollect the existence of a brickyard and gleaning some information from them.

Will volunteers please contact: Mrs M. Beswick, Turners House, Turners Green, Heathfield, East Sussex TN21 9RB.

#### NEW ENGLAND RD RAILWAY BRIDGES, BRIGHTON TQ 308053 to TQ 309053

New England road is crossed by the London to Brighton railway about 300 yards north of Brighton Station. The locomotive and carriage works were originally on the south side of the road, east of the running lines. Thus more spans over New England road were needed as the station and the works were extended. All except one extension were to the west of the first bridge over the road, and eventually as the extensions spread westwards, both New England road and Old Shoreham road were crossed where they diverge.

The first bridge built for the opening of the line in 1841 was a handsome yellow brick structure having a 22 ft. span semi-circular arch over the road and pedestrian arches on either side. The overall length between abutments was 56 ft. and the width 32 ft. for three tracks. The style and stone details show the work of David Mocatta, the company's architect. Construction was by Hale and Wythes whose contract included the line from Patcham tunnel to Brighton station. A few years later a small extension westwards was made using a cast iron girder with a span of 59 ft. 6 in.

In 1854 an extension of three tracks was added by the use of four 5 ft. 7 in. deep Warren trusses. To accommodate the road widening westwards approaching the road junction, the north abutment was splayed to increase the span lengths westwards from 62 ft. 9 in. to 67 ft. The top (compression) chords of the Warren trusses were cast iron, the bottom (tension) chords were wrought iron, and the cruciform section diagonals were cast iron. This extension enabled the running lines to be slewed westwards to make room for rail access to the locomotive and carriage works from the north.

By 1860 the locomotive works were being extended and to provide space a new carriage and waggon works was under construction on the west side of the running lines. Rail access from the north was needed about 100 ft. west of the Warren truss bridge. The new bridge had to span both Old Shoreham road and New England road and also to accommodate a fanning out of the tracks southwards. A row of ten 2 ft. dia. cast iron columns, parallel with the south abutment, divided the bridge into two spans, the south over New England road being 43 ft. and the north spans over Old Shoreham road increasing westward from 25 ft. to 43 ft. The splay of the tracks widened the bridge from 58 ft. at the north abutment to 69 ft. 6 in. at the south abutment. Wrought iron plate girders were used.

In 1864 the cast iron diagonals of the Warren trusses were strengthened by the addition of pairs of wrought iron flats pinned through the joints. Both top and bottom chords were also strengthened by rivetting on wrought iron flats.

By 1870 it became necessary to fill in the 100 ft. gap between the Warren truss bridge and the two span extension. This was done with wrought iron plate girders.

(1)In May 1891 a cast iron bridge over Portland Road near Norwood junction collapsed, fortunately only causing a (2)derailment. Within three months a contract was

placed for the replacement of the Warren trusses by a mild steel plate girder bridge. A survey of all cast iron bridges revealed that some 80 were in need of replacement or strengthening.

Brighton goods yard was also south of New England road, on the east side of the station, and at a lower level. Originally its only rail access was from the Shoreham line and involved a tunnel through the chalk fill under the station. The extra shunting of goods trains from the main line led to the construction of a direct approach line across New England road 80 yds. east of the original brick bridge. An elegant cast iron arch bridge was erected in 1852. It had four cast iron arch ribs each cast in 3 sections with integral vertical spandrel members and deck edge. Later, strengthening under the tracks was done by the insertion of three mild steel plate girders. The cast iron work was by the Regent Foundry Brighton.

All the bridges are still in place, but the brick arch and the cast iron arch are now disused.

- 1. L.T.C. Rolt, Red for Danger, (1966), 105
- V. Mitchell and K. Smith, Three Bridges to Brighton, Southern main line albums, (Midhurst, 1987) Photograph No.11

#### Engineers to the LB & SCR

J.V. Rastrick 1837-1846 R. Jacomb-Hood 1846-1860 F.D. Banister 1860-1895

# AMBERLEY CHALK PITS MUSEUM

Our mammoth winter work programme is well under way, so far unimpeded by adverse weather. Staff and volunteers are beavering away in all parts of the site.

John Land and the Ranger teams have installed the new wooden frame for the limegrinding mill. Matt Cooper, Gordon Thomerson and Ian Powell have tiled the roof of the ex-Cowfold horizontal racksaw shed, and will shortly begin the new shed for the Aqualate Hall circular racksaw. Our timber yard will have a far more authentic appearance for next season and promises to be one of our most pleasing settings to date.

Gerry Nutbeem's Wednesday volunteer team continue to make tremendous progress with the Village Garage which is due to open in May 1989.

Behind the scenes are the stalwart team of Ida Darlington, Harry and Dorroll Piggott who are cataloguing our archive photographs, whilst Southampton University I.A. Group Chairman, Tony Yoward, who is also one of our keen members, makes regular fortnightly trips "across the border" to sort our slide collection.

A new audio-visual show is in preparation and will feature a glance back at the working life of the region. A great number of the photographs are from the Garland Collection at West Sussex Record Office.

There is still much to do before the museum re-opens in March, and as ever, new volunteers are always welcome. Please call the Museum Office (0798 831370) for further information on our work programme.

MIKE WALL - Curator

# TWO SUSSEX HARBOURS IN THE EIGHTEENTH CENTURY

During some recent research in the microfilms of Brighton Reference Library, I have found some references which I hope will interest members.

Sussex Weekly Advertiser Monday 17 November 1760

"Lewes - extract of a letter from a person at Shoreham to his friend in this town - I here send you the agreeable news of my being this moment returned from the New Harbour, where I had the pleasure of seeing the first foundation pile for the West Pier drove. A great number of spectators from the town and places adjacent were present; a very pleasing countenance to be seen in all faces. There was plenty of wine, punch etc. and success to the New Harbour etc. was drunk by everybody. They were upwards of an

hour and an half driving the said pile, which was not above 16 or 17 feet long. The foundation seems very hard and sound; and 'tis the opinion of everybody it may be made very secure good work, notwithstanding the many reports that have of late prevailed that our Harbour would never by compleated. I can assure you that it is now pushing on with vigour.

Yours etc.

2 o'clock. Shoreham Wednesday 12 Nov. 1760"

This entrance was necessary due to the shingle of Shoreham Beach drifting eastwards, creating a barrier that diverted the Adur mouth as far east as the present King Alfred swimming pool; by opening the entrance opposite Kingston Buci it was hoped to increase the Adur flow and ease the silting of the river west to New Shoreham. Within 15 years shingle began to drift across this new exit and by 1815 the exit was 2 Km east of Kingston, and access was again difficult to the port. By 1818 the Kingston exit was re-opened and, with the protection of groynes and breakwaters remains the exit at the present day. In the 1850s the former channel of the Adur east of Kingston was converted into a canalised harbour basin controlled by lock gates. This is now the major commercial and industrial area of the port.

A useful addition to Sussex port studies is found in a later Sussex Weekly Advertiser of 4 May, 1761 which contained the following announcement:-

"Notice is hereby given by order of the Commissioners and Trustees of Newhaven Harbour, that a new groin or pier is intended to be erected within the said harbour to divert the course of the water running from the lower end of Sleepers Hole towards the Old Dam. And any carpenters or other persons that are disposed to undertake the said work or find materials for the same may receive further information by applying to the said Commissioners and Trustees at Newhaven aforesaid on Thursday next at eight of the clock in the morning.

William Mitchell Clerk to the said Commissioners"

The mouth of the Ouse was similarly deflected by the growth of a shingle spit, and the present western exit is entirely artificial; various attempts were made to improve access to the Ouse, starting with a 'new haven' being made at Meeching in 1593. By 1698 Admiralty charts showed the mouth at a point 1 Km east of Tide Mills, and problems of drainage and navigation promoted the excavation of a new western exit in 1731 with additions to breakwaters in 1791, 1847 and 1890.

#### References:-

H.C. Brookfield, Sussex Archaeological Collections 88 (1950) "Shoreham Harbour 1760-1816"

H.C. Brookfield, S.A.C. 90 (1952) "Estuary of the Adur"

P.F. Brandon, S.A.C. 109 (1971) "Newhaven & Lewes Levels"

J.H. Farrant, S.A.C. 110 (1972) "Evolution of Newhaven Harbour before 1800"

GEOFFREY MEAD

#### BRIGHTON & HOVE GAZETTE YEARBOOK 1947-8

In <u>Newsletter</u> No.58 I outlined some items of interest from a small booklet on Sussex Industry 1947. Since then I have come across a copy of the Gazette yearbook for the same year and thought some pieces from this would revive memories and renew acquaintance with forgotten businesses and traders. Inflation being what it is, it now costs £2.50 to purchase a 1/- (5p) 246 page book!

The Alliance Building Society was offering  $2\frac{1}{4}\%$  investments, tax paid! - a good start; and the Brighton Co-op with 68,000 members had an annual trade of over £2M: the accompanying illustration shows the arcade front of the main London Road store now long gone and replaced with a featureless plate glass frontage.

Richard Dimbleby was visiting the Railway workshops in August 1947 for BBC "Down your way" and is seen interviewing some workmen and a driver in front of the Tank Engine 'Boxhill' (A picture of this loco appeared in the Brighton Herald archive I.A. index 1 compiled in Newsletter No.59).

Southwick Power Station had its first pile driven in Nov. '47 by the Mayor of Brighton. A picture shows the building site but no civic dignatories, only five workmen

and two cranes. An article alongside noted-

"opponents of the Government's nationalisation plan for the industry unsuccessfully objected to this and other plans for expenditure on local plant".

Volks railway was planned to re-open-

"the lines and stations suffered extensively during the war but repair work is well in hand and the railway will be re-opened as soon as possible".

A fine black and white drawing of the Citizens Building Society in Marlborough Place promised 4% mortgages. This building in 'Georgian Civic' was a purpose built finance office opened in 1934 when mortgages in the UK were running at record levels with the house building boom around Brighton fuelling the building of this and the Alliance's North St. building a year later.

The Borough Treasurer's financial survey provided a range of statistics. The Electricity Undertaking made a surplus of over £25,000 in 1947 with an output of 502 million units, 40% of which was distributed locally. The Passenger Transport Undertaking actually made a £14,223 surplus carrying 34 million passengers - the average fare was 1.63d (½p). Hove's financial survey showed its Electricity Undertaking had an output of 37,449,170 units with 19,609 consumers.

A continuity link with that year is the small quarter page advert for Wilmshurst Bros. of Gloucester Road and Elder St. - "for ropes pulley webs and twine, sashcords, blindcords, threads and line blinds and other canvas goods tarpaulins, lorry tilts and hoods 'A shade better". Wilmshurst's now occupy one of the flatted factories built in the 1960s on the bulldozed site of Elder St.

The manager of Brighton Area Employment Exchange, Mr C. Thorne, had compiled a chapter on Trade and Industry which listed the major industries as distribution, building, hotel and catering, railway services, transport, general engineering, electrical engineering, national and local government services, utilities. Discussing the future trend in industry, Mr Thorne thought there would be a contraction in building and civil engineering but that the construction of the new power station at Southwick involved an estimated 1,000 workers in its construction. A major problem was the seasonality of the town's employment structure based on the tourist trade. It was thought that the new factories planned for the Carden Avenue Estate would reduce winter unemployment levels though owing to the dollar crisis it would be difficult to make a reliable forecast of industrial trends.

GEOFFREY MEAD

# NOT WORTH A CANDLE? Some aspects of the Sussex tallow trade

As late as 1938 candles were still being manufactured in Brighton in Evershed's Eastern Road manufactory. The closure of this plant saw the end of an industry that was an essential feature of everyday life until the widespread use of gas and electricity saw its demise.

Candles, as we know them today, date only from about 1840. Prior to this they were made from rushes brought from the Somerset levels at Glastonbury or the Huntingdon Fens, being delivered in time for the winter 'candle boom' after the June rush harvest. These rushes were dipped in a vat of hot tailow, (rendered internal fat from sheep or cattle), several times over a period, until the required thickness was attained: rushes and mutton fat made for incredibly smokey and smelly lighting systems!

From 1836 candles began to be made from the fatty acids of palm oil and in 1840 Prices of Battersea manufactured the first composite candle from coconut stearin and stearic acid which with a plaited cotton wick did away with the necessity of snuffing: it gave a hard and brilliant light as compared to the dip. This use of imported vegetable oils indicated the effect an increasing Empire had on changing raw material sources, and rising affluence in the home market saw Prices employing 500 people at their Vauxhall and Battersea works.

Locally the production of dips probably continued for a deal longer than in the metropolis. If we take the number of tallow chandlers in the county to be an indication

then this is probably true, though many of these also supplied the burgeoning soap industry. Cobby's Directory of 1799 shows tallow chandlers clustered around the market area of Brighton's Old Town in Nile Street and Brighton Place.

The rapid expansion of Brighton pushed the 'noxious trade' of tallow preparation out into the farmlands of North and Hilly Laines with premises around Church St. and Edward St. located downwind of the smarter residential areas! In 1827 a bankruptcy notice for Christopher Elliott contained this information:—"upon the premises, Spring Gardens, the plant of a tallow chandler, including all the excellent implements of trade, dipping moulds, long and short mould frames, blocks, rods, reels, scales, press, dipping machines, coppers, pan, cases and other necessaries also four casks of Russia tallow and two carts". Candle making stayed on this site north of Church St. for many years, entries apprearing for Jonathan Lynn in 1845 and 1854 and for the Brighton branch of the Lewes firm of J. Broad in 1902.

The 1851 Brighton census, though only listing residences and not manufactories, had a master tallow chandler with two apprentices - his sons - at Redcross St. off Trafalgar St. and also one other at Meeting House Lane in the Old Town. By 1899 the use of imported materials showed how a coastal location or a railway site was important, with the industry listed at Brighton, Lewes and Hastings. Undoubtedly other locations could be discovered but trade directories are notorious for naming only major producers.

The largest firm producing in Sussex was that of Evershed's whose joint operation in candles and soap enabled them to reap the benefits of compatible industries. Bones, vegetable oils and acids were imported through Shoreham Harbour where the main soap manufactory was located at Kingston by Sea. Rail connections adjacent to the works gave access to local markets along the south coast and raw materials could be sent to the candle works in Eastern Road, Brighton via the Kemp Town branch railway.

The Eversheds were a Billingshurst family which had branches all over Sussex at Horsham, Arundel, Lewes, Seaford, Newhaven and Brighton, all involved in soap, candle and coal carrying trades to some degree. Tallow was being rendered at Seaford in 1775, but by 1837 John Evershed had moved from there to Brighton. Evershed's soap and candle businesses were described in detail in a series of articles on Sussex Industries published in the early years of this century in the Sussex Daily News (see Newsletter No.54). From these it seems the candle production used paraffin oil imported from USA but still had one machine making rush dips in 1903. Moulded candles were sent out in 8s or 12s that is 8 to the pound in 36lb boxes or 12 to the pound in 24lb boxes. Retail grocers were advised in a grocer's handbook of 1930 that "- heat will spoil the shape and much handling the fresh clean appearance". Night lights, according to the handbook were sold in two forms "- odd hours 5, 7, 9 are made without the paper case and a small glass is supplied in which to burn them. The even hours 6, 8 and 10 or 'Childs Night-lights' have a paper case and are burnt in a saucer with a little water surrounding them. 'Pyramid Night-lights' are a special variety made by Clark's and are used to give light and also to keep hot the infant's food during the night".

Candle making at Brighton was ended in 1938 though soap continued at Kingston by Sea until 1954. Evershed's gradually moved into dry goods and groceries and now form part of the Spar grocery chain. Candles are now made almost exclusively by Prices at Battersea though specialist beeswax candles for religious services are made elsewhere.

The production of candles in the local area ceased with the rapid contraction of the market, and its consolidation in the capital with its major shipping and Empire trade links: thus ended the production of one of domestic life's basic requirements in Sussex.

Bibliography:-

Sussex Daily News, 25.3.1903
West Sussex Gazette, 18.9.1980
Prices Patent Candle Co. Ltd. - postcard
Goods of the Grocer and Provision Dealer, C.L.T. Beeching 1930
Various directories, Kellys, Taylors, Pikes, Cobby, Bennets Business Directory
Census returns 1851
Brighton Gazette, 23.8.1827
Sussex Business Times, April 1975