



# SUSSEX INDUSTRIAL ARCHAEOLOGY SOCIETY

Barge Life  
Kiln  
Hellingly G. Hill

NEWSLETTER No. 26

April 1980.

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## GENERAL NOTES AND NEWS

Deans Watermill, Lindfield. The new owner, Mr. L. Broomfield, hopes to start grinding soon. As the mill only ceased working a few years ago the internal machinery is still in very good order. A working party of members has swept and cleaned the mill from top to bottom. The wheel will require several new buckets before operations commence and we wish the owner every success with his new venture. J.S.F.B.

Burton Mill. Recently some of the forge cinder mentioned by Straker as 'below the mill' was recovered downstream of the spillway from the turbine. This included a rather interesting lump with a very clear impression of the nose of the bellows and therefore had accumulated round the tuyere at some time prior to the date of the present mill (the 1780's).

The specimen was shown to members at the Winter WIRG meeting and evoked considerable interest; the specimen was then returned to Mrs Mills for future exhibition at the mill. T.E.E.

It is hoped to pursue this matter further in future Newsletters.

## HAVE YOU PAID YOUR 1980 SUBSCRIPTION DUE ON APRIL 1st.

If not, please let the Treasurer have it NOW and save him the trouble and EXPENSE of having to send out reminders.

Full Member	£3.00	Junior Member (under 18)	75p.
Family Member	£1.50	Full-time Student	75p.

It would be a great help to the Treasurer, as well as a convenience to yourself, if you would use a Bankers Order (obtainable from the Treasurer, Mr J.M.H. Bevan, 12, Charmandean Road, Worthing).

(Tel: Worthing 35421)

Argos Hill Windmill, Mayfield. Open Days - Mondays, 12th May, 28th July, 4th August and 1st September, 11.00 a.m. to 5.00 p.m.

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#### FORTHCOMING VISIT

West Sussex Wind and Water Mill Mystery Tour Saturday June 14th. Meet at Swanbourne Lake Gatehouse, Arundel, TQ 018080 at 10.30 a.m. This year's tour is in West Sussex and is similar to last year's popular tour of Wind and Water mills not normally open to the public, in the east of the County. What is there to see at Swanbourne Lake? See SIAS Newsletter No.2, April 1974, or better still, come and find out. Our guide once again is Sussex Windmill enthusiast, Mr Frank Gregory. Please return the visit slip by May 14th, to Mr. J.S.F. Blackwell, Central Sussex Secretary.

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#### CURRENT PROJECTS

Piddinghoe Kiln. The ownership of a listed building can be a mixed blessing indeed; if it is a house of manageable proportions it can be a source of pride and enjoyment, but an industrial monument with no revenue or practical use and costly maintenance can be an embarrassment in the extreme.

Such is the case with the pottery kiln at Piddinghoe. This is a simple updraught bottle kiln c.1800 and the last remaining building of the brick and pottery industry of this Ouse-side village. It is also the last remaining kiln of its type in the south-east and was last fired in 1901 but is now in very real danger of collapse. It was visited by the Society in 1975 and reported upon in the October (No. 6) Newsletter of that year. It has been referred to as a biscuit kiln. There is no residual evidence of glazing of any sort being used here and it is most likely that it was used for the manufacture of roof furniture such as ridge finials. I have been shown samples of land drainage pipes said to have been from the last firing, but they are extremely crude and I am sure that better products would have come from here as the general run of the mill ware.

Last summer I was invited by the owners to inspect the kiln and advise on its restoration, and its condition as I found it then was, to say the least, disturbing. The kiln is built on two levels to take advantage of the sloping site, which gives access to the stoke hole and the firing chamber at different levels. These two chambers are square on plan built of uncoursed rubble of flint, rock-chalk and brick and rely solely on their bulk for stability. The roof of the firing chamber is domed and of similar construction. Recent falls of the face of the top of the firing chamber have been repaired by the owner as a temporary measure.

The cone is of brickwork with open dry joints, in which the perpends have over the years filled with blown soil and brick dust, providing a breeding ground for a variety of weeds. The purpose of the dry joints is to allow for thermal movement; mortared joints without an insulated lining would have encouraged expansion cracks, but settlement and the action of the vegetation have opened up the joints and the cone is now in a very dangerous condition. So dense is the vegetation that it is impossible to say if it was originally built to a batter or an entasis, and inspection is impossible without a free-standing scaffold.

I have been in close contact with both our chairman, John Haselfoot and Mr. Brian Dawson, the architect responsible for conservation at Lewes District Council Planning Office and between us we have decided upon a scheme to restore the kiln, subject to funds being available from a number of sources, a real but not completely unsurmountable problem under the prevailing conditions. The only way to tackle the kiln will be to erect an independent scaffold, fitted with a trammel and protractor at dead centre and accurately measure and record course by course as the bricks are lifted. This will be slow and costly process, even allowing for voluntary labour. The scaffold will be the most expensive item but how much to be spent on replacement material will only be known as the work proceeds.

I have agreed to direct the work, under the aegis of the Sussex Industrial Archaeology Society and Mr. Dawson will voluntarily watch the interests of the subscribers. The Lewes Archaeological Group will also provide volunteer labour and equipment. There are, however, two fields in which I would like assistance. A further recent set-back in health will limit the physical contribution that I will be able to offer and I would like the help of a site supervisor who can do some of the clambering for me. We will also like two volunteer bricklayers, not necessarily professionals, as the work will be slow and care rather than skill will be the criterion as the work will have to be laid to the trammel. The total team will be eight and working one day at week-end and one during the week, when my Lewes ladies will display their prowess in recording. I anticipate that the work could be done in ten to twelve weeks.

It will be a most interesting project and I will be pleased to hear from any members who can offer any help. Please state what time you can offer and the days that you would be available. The anticipated starting date should be the beginning of May. Replies to me direct please, to E.W. O'Shea, 14, Pelham Terrace, Lewes, East Sussex, BN7 2DR, Telephone, Lewes 2393.

E.W. O'Shea.

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#### Brick Study Group.

#### Mathematical Tiles; A Survey.

When this Group was originally set up it was decided to concentrate on a survey of brick making rather than upon the end product, but our experiences are proving that it is impossible to divorce one from the other and a more omnibus approach has to be adopted. In some instances the finding of a few bricks is the only evidence existing, or perhaps a field or place name, but nevertheless they are worth recording as further evidence may eventually come to light. The problem of multi-purpose works also creates difficulties as to what to include, especially in areas of a long and continuous ceramic history as for example Ringmer, where there has been a progressive history from pottery to tiles and ultimately brick making for almost eight centuries, although a great deal of work has still to be done to fill in the gaps.

Mathematical tiles, being neither flesh nor fowl, are a typical example of the output of multi-purpose yards. Having, over a good many years been involved with them both structurally and archaeologically, I have found them an absorbing subject and am pleased to have noted a revival in the interest in them as a matter for study. There are still a number of popular misconceptions in both recognition and use. One building in Lewes has been a puzzle to me for quite a long time: sand-faced red bricks in flemish bond with tight joints suggestive of mathematical tiles, but with narrow returns to reveals.

I have recently been told that the whole building has been refaced with brick slip tiles, a process that I did not know dated back to the mid-eighteenth century when this refurbishing appears to have been done, but without surreptitiously raking out a few joints, I will never be really satisfied.

Whilst the south-east of the country is considered to be the home of this form of cladding its use has spread as far afield as Wiltshire, and I have had unconfirmed reports of their having turned up in the South Midlands. Maurice Exwood and Ian West of the Domestic Buildings Research Group (Surrey) are doing a nation-wide survey on the subject, but meanwhile our own Secretary, Mr. Ronald Martin, has taken over the responsibility of carrying out a comprehensive survey of their manufacture and use in the counties of East and West Sussex.

Brighton and Lewes have already been pretty thoroughly recorded and are being looked after by Ron and me respectively, but he would like as much assistance as possible in other parts of the counties, in towns, villages or isolated buildings, and if any member has knowledge of any examples, or would like to assist with the survey, please contact Mr. Martin at 42, Falmer Avenue, Saltdean, Brighton, BN2 8GF (Telephone Home Brighton 33805, Office Brighton 28479). Meanwhile, as Lewes probably has the best selection of differing types of tiles and combinations of their usage, I will be pleased to show members the many examples of these tiles and our other multitudinous brick-work techniques, although I have not yet found any examples of rat-trap or silver-lock's bond.

Before leaving this subject, it is no secret that Mr. Alec Clifton-Taylor is making a second series of his most interesting television programmes on English Towns and Lewes has been selected as one of the subjects for his 1981 series, and from a discussion that I had with him I am certain that mathematical tiles will form an important element in his programme.

E.W. O'Shea.

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#### PUBLICATIONS

Sussex Industrial History No.10. Members will have received their copy of S.I.H. No. 10 with this Newsletter. The Society will be grateful to any members who are able to facilitate the general sale of this Journal; will any member who can help in this way or make any relevant suggestion please get in touch with the General Secretary or the Editor (Addresses and telephone numbers on last page).

Brickmaking. A History and Gazetteer by Alan Cox, Conservation Section, Planning Depts., Bedfordshire County Council. 1979 Price £2.40.

This exceedingly well prepared volume is part of the Survey of Bedfordshire produced jointly by the Bedfordshire County Council and the Royal Commission on Historical Monuments (England) which is intended as a comprehensive study of the county's historic environment. If all of the other sections attain the same standard, it will be a lasting tribute to the county's historians. Comprising 110 well illustrated pages, the first 65 deal with the history of the trade, management of the industry, traditional brickmaking methods and later developments up to the present time. The remaining pages form a gazetteer of some 180 works, in alphabetical order of their district, giving their exact position, operator, further information on products, history of the works and references. 37 photographs and four maps complete what must be one of the most comprehensive studies on a like subject and I found it informative and fascinating reading and at its price of £2.40 one of the best buys going. I only hope that our members will obtain something like this gazetteer.

E.W. O'S

Industrial History of Chichester. W.E.A. Local History Workshop, 8 pp, obtainable from Chichester City Museum, price 10p.

The leaflet is one of four dealing with local history. Starting with a brief survey of the markets, and of the corn, wool, tanning, brewing and needlemaking trades, it gives family histories of Cutter Bros., coach builders John Lang and Sons, cabinet makers and with Shippams. Thirteen other old trading families are listed.

A.G.A.

"The Thames to the Solent" by J.B. Dashwood. This small book, originally published in 1868 has been republished with the original illustrations and maps, by Shepperton Swan as a paper-back at £1.95, with a proportion of the royalties being given to the Wey & Arun Trust. The book is sub-titled "The Log of the Caprice" and describes a voyage in the summer of 1867 made by the author and his wife in the Una-rigged boat 'Caprice' from Weybridge to Lymington via the Wey Navigation, the Wey & Arun Canal and the Arun Navigation. From Littlehampton they had to go by sea to Lymington as they found, much to their dismay, that the Arundel & Portsmouth Canal no longer existed.

The Wey & Arun Canal, then known as the Surrey and Sussex Canal, was well past its 1839 peak of prosperity and the Dashwoods had some difficulty in getting through owing to low water levels and thick weeds. There appears to have been very little commercial traffic and the author speculates on how long the canal can remain viable with little traffic, difficulties with water supply and competition from the railway. The 'Caprice' was almost certainly the last vessel to make the complete trip from Weybridge to Littlehampton before the canal was closed in 1871.

The book is a charming account of a leisurely journey by water through Surrey and Sussex with excellent descriptions of the scenery and notes on the history of the various towns en route, and very human accounts of the difficulties encountered, the people they met and the help received from them. Although a sailing boat, 'Caprice' was horse-drawn from Weybridge until the towpath ceased just above Littlehampton. It says much for the design of a 16 foot open sailing boat, drawing only 18", that she made a successful sea passage from Littlehampton to Lymington in spite of meeting a certain amount of dirty weather. On the way the Dashwoods were able to sail through the Channel Fleet anchored off Spithead for a Naval Review.

The book was well recieved when first published in 1868 and, long out-of-print, it has been one of the most sought-after canal books of the 1800's. A 'must' for anyone with an interest in canals, rivers or countryside, and very good value.

A.J.H.

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#### LECTURES, ETC.

A Seminar on Kilns. The London Kiln Study Group is organising a two day seminar at the Museum of London on 10th and 11th May 1980, entitled "Kilns in their context - the whole pottery" It will be held at the Museum of London Fee £8.50. I have attended the last two seminars of this Group and have found them extremely interesting and responsible and would recommend them to anyone interested in this subject. Applications and further particulars from The Secretary, London Kiln Study Group, c/o Cuming Museum, 155, Walworth Road, London, S.E.17.

E.W.O'S.

Closure of Crowborough Brickworks by W.R. and M. Beswick.

The Crowborough brickworks at Jarvis Brook (TQ 532 296) ceased production at the end of February 1980, having been in existence for close on a hundred years. It occupies a site alongside the railway to the west of Jarvis Brook station. The old claypit now forms a large pond and more recent clay workings are reached through a tunnel to the north of the works.

Although brickmaking has now finished, quite large stocks remain in the yard and a skeleton staff was still working when we visited the works and spoke to Mr. Hill, the foreman. He said that there were no immediate plans for demolition, but it seems likely that the site will be redeveloped quite soon. Mr. Hill kindly allowed us to look round the works and take photographs and gave us details about its operation.

Clay preparation was straightforward. It was first passed through roller crushers to break up any stones, then, after admixture with coke breeze, it was subjected to fine grinding in a normal edge-runner mill. An interesting feature of the Crowborough bricks was that fine coke breeze was incorporated with the clay, even though the bricks were kiln-fired. We had previously been given to understand that breeze was only used for clamp-fired bricks and would welcome any observations that members may have on this subject. The resulting colour of the bricks was purplish, with some quite large black spots on the surface.

Originally all bricks were hand moulded, and special shapes continued to be hand made to the end. However, an Avison brick making machine was used for the production of the ordinary bricks. This was steam-driven until the 1960's, when the change over to electricity was made. Steam heat was also used in the drying chambers until the boilers were removed, when propane gas was substituted.

There were three kilns, all of the continuous type. The oldest, a Hoffman kiln, had 16 wickets. The Sercombe kiln had 20 and the Belgium kiln the most modern, had 24, but each of the three had a capacity of about 250,000 bricks. Before 1939, the kilns were coal-fired, the Belgium kiln being stoked through the wickets, the other two from above. During the last war, brickmaking ceased and the works was taken over by the army, who used it as a bakery! (It had been a storage depot during the 1914-18 war.) In 1945 the change to L.P. gas-firing was made.

Latterly, 45 to 50 men were employed in the yard and production was running at about 250,000 bricks per week. However, the clay had been exhausted and Redlands Bricks, who took over the works from the Crowborough Brick Co. in 1961, decided that closure was the only course.

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The Chalk Pits Museum, Amberley by A.J. Haselfoot

As reported in the last issue, the Chalk Pits Museum was opened to the public on 26th May 1979, and during the remainder of the season it attracted over 20,000 visitors. It re-opened for the present season on April 2nd and will be open Wednesdays to Sundays inclusive, plus Bank Holidays, until 2nd November.

The organisation of the Museum is handled by three bodies, the Southern Industrial History Centre Trust deals with overall policy and holds all the exhibits in its care, the Southern Industrial History Centre Ltd. operates the Museum, pays the staff, rent, rates and general overheads, and the newly

formed Development Trust raises funds for the capital growth of the project. A fourth body, the 'Members of the Museum', gives valuable support and assistance with the running of the Museum and with restoration work.

Several stationary engines have been recently been acquired including a 1929 Robey engine of about 30HP from Littlehampton; it is intended ultimately to build around the temporary housing a replica of its original brick-built engine house.

During the winter months much work has been undertaken by volunteers, some 4,500 hours having been completed since last November. One of the many projects in hand is the laying of a quantity of 2 foot gauge railway track to accommodate some of the restored industrial rolling stock. This track had previously been on loan to the Basingstoke Canal where it had been used on restoration work. The locomotives, a Ruston & Hornsby, a Hibberd 'bow frame', and an Orenstein & Koppel will be operable together with some representative items of industrial rolling stock.

The contents of a shoemaker's workshop have been obtained and the donor has supervised the setting up of this working exhibit.

The road, rail and canal exhibits have been extended and many valuable items have been donated for display.

A brick-drying shed, saved from the Nightingale Brickworks at Petersfield, has been re-erected on site as the first stage of a replica brickworks.

The Concrete Society have launched a nation-wide appeal for funds to erect at the Museum a new pavilion of modern design to house their fine collection of exhibits illustrating the development of this material and its uses.

A further new development is the improved Museum Shop - this stocks a wide range of items, including a large number of I.A. books. The Museum has a mail-order list and is always willing to supply any published I.A. book.

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#### CHANGES TO ADDRESS LIST

##### New Members

East Sussex K.S. Donaldson, 52, Linton Road, Hastings, East Sussex.

Central Sussex M.W. Broomfield, The Barn, Dean's Water Mill, Lindfield, RH16 2QY  
(Tel: Lindfield 3008).

##### Change of Address

North Sussex M.J.P. Bolton, 29, Burwash Road, Furnace Green, Crawley RH10 6LQ

Brighton Area S.R. Bostel, Rildoan, 162 New Church Road, Hove, BN3 4EJ

Outside County A.J. Dell, Ashdown, 11 Stangrove Road, Edenbridge, Kent, TN8 5HT.



## OFFICERS

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