

MEMBERSHIP CHANGES

New Life Member

A. G. Stevens, 26 Lorna Road, Hove, BN3 3EN

New Members

A.E. Baxter, 11 Milton Street, Worthing, West Sussex. BN11 3NE (Worthing 203058)

M.S. Davis, 73 Islingword Street, Brighton, East Sussex. BN2 2US

J.R. Elliot, 1 Hammer Cottages, Chequer Lane, Bosham, Chichester, PO18 8EL  
(Bosham 572450)

E.S.C.C. Local Government Unit, Southover House, Lewes, BN7 1YA  
(Lewes 5400, Ext.590)

E.T.C. Harris, 18 Sergison Road, Haywards Heath, West Sussex. RH16 1HX  
(Haywards Heath 451466)

P.W. Pannett, 3 Forest View, Hailsham, East Sussex. BN27 3ET (Hailsham 840481)

Dr. R.C. Riley, 48 Maplehurst Road, Chichester, West Sussex PO19 4RP  
(Chichester 528635)

Mrs. A.C. Riley, 48 Maplehurst Road, Chichester, West Sussex. PO19 4RP  
(Chichester 528635)

Changes of Address

M. Brunnarius, 30 Chanctonbury Road, Burgess Hill, West Sussex. RH15 9EY

R.N. Crook, 6 Annington Road, Eastbourne, BN22 8NG (Eastbourne 29059)

D.F. Gibbs, 16 Ormonde Road, Godalming, Surrey

Mr. & Mrs. R.J. Goulden, 156 Addiscombe Road, Croydon, Surrey. CRO 7IA

N.V. Martin, 84 Annweir Avenue, Lancing, West Sussex. BN15 9NE

Mrs. M. Meredith, 52 Western Road, Lewes, East Sussex. BN7 1RP

Resignations

G.W. Goring, "Littlewood", Rushlake Green, Heathfield, East Sussex. TN21 9QS

D.I. Watson, "Wood's Mill", Virgins Lane, Battle, East Sussex. TN33 0JH

OFFICERS

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 & Membership Secretary	J.M.H. Bevan, 12 Charmandean Road, Worthing. BN14 9LB (0903 35421)
Editor	E.J. Upton, Rowan Cottage, North Trade Rd, Battle. TN33 0HU (04246 2319)
Programme Secretary	D.H. Cox, 3 Middle Road, Partridge Green, Horsham. RH13 8JA (Office: 0293 27777 ext. 3340. Home: 0403 711137)
E. Sussex Secretary	A.J. Haselfoot, Albion House, Coburg Place, Hastings. (0424 436260)
W. Sussex Secretary	R.M. Palmer, 11 Arlington Close, Goring-by-Sea, Worthing. BN12 4ST (0903 505626)
Central Sussex Sec.	J.S.F. Blackwell, 21 Hythe Road, Brighton. BN1 6JR (0273 557674)
North Sussex Sec.	E.W. Henbery, 10 Mole Close, Langley Green, Crawley. (0293 23481)

COMMITTEE MEMBERS

A.G. Allnutt	B. Austen	D. H. Cox	F.W. Gregory	A.J. Haselfoot
E.W. Henbery	P.J. Holtham	E.W. O'Shea	R.M. Palmer	G.C. Thomerson



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NEWSLETTER NO. 43

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CHIEF CONTENTS

New Publication: I.A. of Sussex - A Field Guide  
Mathematical Tiles Galore  
Council for British Archaeology Conference

S.I.A.S.  
E.W. O'Shea  
13th October, 1984

FORTHCOMING VISITS

23rd September, Saturday 2.00 p.m. Another 'get-together' with the East Kent Mills Group in the Lecture Room of the Public Library, Tunbridge Wells.

PUBLICATIONS

A New Publication

With this Newsletter it is hoped will be enclosed a leaflet publicising an important new book sponsored by the Society and published by Phillimore. This is The Industrial Archaeology of Sussex - A Field Guide which will provide a comprehensive listing of IA sites in the County, extensively illustrated with photographs. It has been carefully compiled from information supplied by members of the Society with special expertise in the fields concerned, and will be the standard work on the subject for many years to come. The book is competitively priced at £3.95 but for those members ordering and paying now a special pre-publication price has been negotiated of £2.75 plus postage. Orders may be sent directly to Phillimore at Shopwyke Hall, Chichester, PO 20 6BQ. Members living within the town areas of Hastings, St. Leonards, Battle, Lewes, Brighton, Hove, Worthing, Chichester, Haywards Heath, Heathfield and Horsham may have their copies delivered without postage by sending their orders and remittance to Ron Martin at 42 Falmer Avenue, Saltdean, Brighton, BN2 8FG. Any member prepared to collect his copy from the Hon. Secretary or any member of the committee may also avoid the postage charge and order through Ron Martin.

Members may order as many copies as they wish at the special pre-publication price of £2.75 but once the book is generally available to the book trade on publication it will only be available from the Society at the full price of £3.95. To ensure that you get the advantage of this special offer order NOW.

Nutley Windmill

Following the success of the Bridge Cottage leaflet produced by the Uckfield & District Preservation Society last autumn, they are pleased to announce a sister publication for Nutley Windmill.

The front cover illustration has, once again, been donated to the Society by Buxted artist, Miss Peggy Langton. Text, and further illustrations, by founder Society member, Tony Turner.

Lovingly restored and cared for over the years, and the winner of a European Conservation Award in 1975, Nutley Windmill continues to attract many visitors each season. It is open to the public as detailed on the leaflet, admission cost is 20p for adults, 10p for children at the present time, parties by arrangement.

Copies of both leaflets are available at the mill, from Bridge Cottage or by post from the Secretary: Mrs. A. Long, The Mustard Pot, Fairwarp, Uckfield, East Sussex. TN22 3BT

## M-TILES GALORE

For those of us who have lived and worked with mathematical tiles most of our lives, the renewed interest shown in them in recent years has proved rather puzzling. They were introduced for the covering of framed buildings and provided a solution for creating a modern front to both old and current buildings and were altogether a practical and sound building technique serving a useful function for well over a century in our part of the world.

Alec Clifton-Taylor's television programme on Lewes, in his 'Six More English Towns' series, highlighted this technique so well represented in this town. This was followed by Maurice Exwood's Ewell symposium and a paper on the subject by Terence Paul Smith at the Annual General Meeting of the British Brick Society at Wye. He has followed this with a short article on the subject in a recent edition of 'Information' the Newsletter of the BBS. David Duckham has an article in SPAB News on their repair, in which I am generally in complete agreement, but I would like to emphasise the necessity, in my view, of strict supervision by someone experienced in this craft. Some of the DIY efforts and, in fact, some by professional builders have been disastrous. I would also suggest that the use of Portland cement should be avoided like the plague. As a backing it is too inflexible, generated heat causes excessive cracking and the pointing looks quite horrid. I have found hydraulic (not hydrated) lime mortar to give a completely satisfactory result.

Mr. Duckham also makes reference to tiles hung over battens, which I always considered a myth until the Wye symposium, where I learned of one positive example at Canterbury and have since visited Boys Court, near Sutton Valence, Kent, where David Easton is restoring his c15/16 framed building. I would like to hear of other buildings where this technique has been used.

As well as the many normal enquiries that find their way into my post, two projects have been of intense interest. In the first case, a Georgian addition to a Tudor state building in central London was being damaged by a leaking gutter which was causing damp penetration to a "brick" wall, which on examination turned out to be a framed wall covered with mathematical tiles. The reason for this isolated tile wall was something of an enigma, until it was realized that because the wall had been set back to form a light well, a supporting beam would have protruded down below the ceiling of a state room below. The wall was therefore designed as a huge trussed partition spanning a width of some eight metres and of a similar height.

The method employed for re-covering was to cover the original framing with marine plywood and expanded metal on spacers (see my article on restoration in the Ewell Symposium report). None of the old tiles could be re-used as they had received several coats of white paint over past years and new tiles were provided by the Guestling works of Milton Hall Brickworks Ltd. The tiles were bedded in French hydraulic lime mortar, all metal fastenings were of stainless steel and altogether it turned out to be a highly successful project. I was also delighted to see some very fine replacement sheet lead work, a craft in which I have always been interested.

The other project in which I became completely absorbed last summer was the proposal to cover some of the walls of Arley Hall, Cheshire with M-tiles. The building had been re-erected from 1832 over a further twenty years or so on the site of a medieval hall but by 1962 the building had suffered so much from rot and decay that it proved necessary to pull down the octagonal tower and oriel window surmounting the entrance porch, together with other extraneous buildings which unfortunately included the great dining hall. This I understand was one of the best rooms in the hall.

The demolition meant that some of the internal walls became externally exposed walls. These had been subsequently treated with various forms of rendering and waterproof paint, trapping the damp within the building and the consequential crazing and colour fading has created fearfully tatty finishes to an otherwise good example of Victorian architecture.

I believe it was Ronald Brunskill who suggested that M-tiles might be the solution and the owner approached me to enquire if this was a feasible proposal, and here my problems really started.

The building was faced with red brick facings with Staffordshire blue diapers, which are virtually impossible to reproduce as M-tiles. Tiles as thin as M-tiles cannot be burnt to vitrification to match blue Staffs because of distortion and none of the alternatives offered to me provided a satisfactory result. Something like 800 m<sup>2</sup> required covering, requiring nearly 60 000 tiles, of which 23 000 would be blue headers for the diapers.

The alternatives available to us were: 1) To cover the elevations with plain red M-tiles with the diapers in a darker red tile 'ghosting in' - a representation rather than a restoration; 2) To use Milton Hall black tiles for the diapers. The objection to this was that the colour, by using a black staining agent applied before burning, did not produce a dense black, certainly nothing like a vitreous tile, and abrasion of the edges exposed the red core. 3) By using a black glazed pottery tile. Here I have been unsuccessful in finding anyone prepared to make them. Evidently 23 000 is too small a number to be an economical proposition for a commercial pottery and too many for a craft potter to handle. 4) To cut out for and build in blue Staffordshire brick headers left projecting and fill in flush between with red M-tiles. This would mean that a great number of the red tiles would have to be notched round the projecting header. This is technically possible and Milton Hall were prepared to do the notching at no extra expense, overall it would be a very expensive operation. My estimate of these alternative methods would vary from £67 to £119 per m<sup>2</sup>, which included bedding in hydraulic lime mortar and spot nailing to the brickwork, as was highly successful at Ovingdean Hall.

The only other method would be to cut away a half brick skin and rebuild in red facing bricks with the diapers of blue Staffordshire headers cut and pinned in to their full depth to form a bond. This is a method that I do not like because of the need to needle and prop the roof and floors and the shattering effect of the cutting away. Meanwhile, if anyone knows of alternative tiles that could be used, not tile slips, or can think of an alternative method, please let me know.

Other queries still roll in and I find that reinstatement under controlled conditions is generally successful, but not always. I made some suggestions for the restoration of Cheam rectory but this seems to have run into various problems. I have not been involved since making my preliminary suggestions and perhaps closer liaison throughout might have overcome the troubles. I have been fortunate in having been involved with the practical work on M-tiles over many years and am more than happy to share my experience on a purely voluntary basis.

E.W. O'Shea.

### Non-members attending outings and meetings.

At the last committee meeting it was agreed that a charge of 50p be made to non-members and visitors who attend our outings and meetings.

It was felt that this was in fairness to members who pay an annual subscription.

### Newsletter No. 42, April 1984, p.5:

A full account of the structural and operating history of Tunbridge Wells West Station, including two plans and five photographs, will be found in Three Bridges to Tunbridge Wells, by D. Gould, Oakwood Press, 1983. There are eight further photographs in Branch Lines to East Grinstead by V. Mitchell and K. Smith, Middleton Press, 1984.

M. J. Leppard

## THE RESTORATION OF HANGLETON MANOR DOVECOTE

I am suffering sleepless nights through the trauma of deciding whether the reconstruction of this 17th century dovecote is Industrial Archaeology or whether it comes under some even more controversial heading. Introduced into this country by the Romans, battery pigeon breeding was the fore-runner of our battery hen breeding but it seems to have insufficient nuts and bolts to be classed as industrial. Despite this I have agreed to carry out the restoration of the Hangleton dovecote.

All that now remains is a flint shell approximately 7 m diameter and 4 m high, with about half of the 536 chalk block pigeon holes intact. From early photographs the roof is seen as a tile covered truncated cone, on which sits a rectangular pent-house with hipped ends housing the entry traps and it is from these photographs that I have had to design the roof structure, aided by one broken rafter and an examination of the similar but far from identical roof of Patcham dovecote. It has been a most intriguing study, commencing by counting the ridge and bonnet tiles, the number of tiles along the penthouse eaves and the number of courses overall.

We have been offered rock chalk free of charge from Newtimber quarry, from which we have some 500 blocks to cut and shape. The roof will be made from ancient oak with pegged joints and we are collecting tiles to match the original from where-ever they are available.

Members will have the opportunity of learning new skills, from building in flint and chalk, carpentry with contemporary joints to leadwork and tiling. The potence or revolving ladder will also be replaced but I am not sure if the neighbours would like the pigeons back.

Volunteers are urgently needed. We work every Thursday and Friday from 9.30 a.m. to 5.30 p.m. and those who do not wish to bring packed lunches will be very well catered for at the pub at very reasonable prices. There will be something for everybody to do, from washing flints to lead flashing. If you would like to help please contact me at Lewes 2393. E.W. O'Shea.

## East Grinstead Town Museum - East Grinstead Pottery

Construction has begun of cabinets to house the extensive collection of items from the local Pottery in East Grinstead Town Museum.

The Pottery, founded in 1855 by George Lynn and taken over by the Foster family, operated until 1943 when black-out restrictions required it to stop work. After the war it was not restarted but fell into dereliction until in 1970, on the death of the last member of the family, it was demolished and many of its surviving contents were acquired by the late Mr. Charles Goolden. From him they came to the Town Museum and when he died in 1981 members of the East Grinstead Society organised a memorial fund for their better preservation and display. That fund is financing the new cabinets and members of the Museum Society are doing the work of construction.

The Museum is anxious to take advantage of these improvements to enlarge its East Grinstead Pottery collection. It has many moulds and fired and unfired terra cotta wares but almost nothing of the Pottery's glazed wares, including toby jugs.

Anyone who can give anything from or connected with the Pottery is asked to contact the Hon. Curator, Mr. M. J. Leppard, 20 St George's Court, East Grinstead. Tel. East Grinstead 22511.

It is planned to inaugurate the new cabinets at a small ceremony early in October. Meanwhile the items the Museum already has can be seen whenever the Museum is open to the public, every Wednesday 2-4 p.m. and every Saturday 2-5 p.m., admission free. (Strangers should follow the signs to the police station).

M. J. Leppard

The above Society will have 'a vivid re-creation of the recent past' called "Our Town 1884-1984" at Moat Road Scout Hall from 30th July-4th August.

## EVENTS

Council for British Archaeology - Industrial Research Forum 1984.

The Industrial Research Committee's 4th Annual Open Forum is to be held at Southampton on Saturday, 13th October, and will be hosted jointly by the University Department of Adult Education and the Industrial Archaeology Group.

The Forum opens at 10.30a.m. with coffee and biscuits followed by an introduction to the area by Dr. Edwin Course. Talks will be as follows:-  
"The Work of the Hampshire Buildings Preservation Trust" by Mr. P. Turner  
"Survey of Farm Buildings in Hampshire" by Dr. E. Course  
"Restoration of the Golden Lion Brewery, Southwick" by Mrs. P. Moore.

After a buffet lunch there will be an Open Forum, Chairman will be Mr. R. M. Robbins, MA., FSA., CBE. The fee for the Forum, including lunch, will be £3.50p. A Cheese and Wine Party, hosted by Southampton University Industrial Archaeology Group takes place from 19.30-22.30, tickets £2.50

On Sunday, 14th October, it is hoped to arrange site visits for those delegates who wish to participate. Among sites to be visited are:- Bursledon Windmill, Twyford Waterworks, Golden Lion Brewhouse, Southwick, and Portsmouth Dockyard.

Further information can be obtained from Southampton University Industrial Archaeology Group, The Secretary Mrs. Pam Moore, c/o "High Trees", 52 Park Lane, Fareham, Hants. PO15 7LB

Come Down to Kew in Lilac Time .....

Saturday, 15th September may not be quite lilac time but Kew has something to offer all of the year round. I am organizing an all-day visit for the Brighton & Hove Archaeological Society for that date and it is possible that we may have some vacant seats on the coach of which some of our members may like to avail themselves.

My intention was to visit the Timber Museum where we could have a discussion on dendrochronology but since the development of Wakehurst the emphasis on tree ring dating as far as the public is concerned, seems to have moved away from Kew. I am sure, however, that we can find an equally interesting subject. We will also be visiting Kew Palace - the Dutch House - to look at its brickwork in the Flemish style and bond, and enjoy a guided tour of the interior. There will be time for a picnic lunch in the gardens and for visitors to view their favourite spots and glasshouses and there is even an ice house for the delight of Ron Martin.

In the afternoon we will visit Kew Pumping Station followed by the Music Museum. The former contains the finest collection of steam operated beam engines and the staff will demonstrate their show piece for our benefit. Also on show will be examples of many stationary and mobile machines as well as other artifacts depicting the history of London's water supply.

The Music Museum housed in the old parish church contains a superb collection of both manual and mechanical pianos, a "Mighty Wurlitzer" organ and many examples of instruments, hand and mechanically operated. It is a most absorbing exhibition and we will be guided round by the proprietor.

Kew and Brentford, despite its now dismantled gasworks and where the pubs opened at 6 a.m. to let the workers have their slug of hot gin before starting work, have pleasant memories for me, from catching sticklebacks in the mote to my courtship along the tow-path. Details have yet to be finalised but if any of our members would like to come they will be welcome on a first come first served basis after the closing date of 20th August for B. & H. members, by application to me at 14 Pelham Terrace, Lewes.

We cannot entertain visitors on a self drive basis as arrangements are already somewhat complicated.

E.W. O'Shea.

## REPORTS

### North Sussex Secretary's Report

#### Ifield Mill.

Steady progress during the winter has resulted in the pitwheel being remounted on the wheel shaft. The pitwheel was rescued from Hammonds Mill about 7 years ago and it is very encouraging to see it turning once again. Work is in hand to re-cog the wheel and establish suitable foundations for the base bearing of the vertical mainshaft.

#### Lowfield Heath Windmill

An initial promise of funds for restoration work has been received from a local trust. There are some conditions regarding public access and retention on site which are being discussed with the present owner, if these conditions can be met there are prospects of future funds over a number of years.

A programme of work has been suggested costing up to £30 000 which would result in a secure building, restored roundhouse and mock sails. It is not anticipated at this stage that the mill would be in 'working condition'.

E. W. Henbery

## VISITS

### Tour of East Sussex Mills

On Saturday, 19th May, about 25 of us met at Argos Hill Windmill, Mayfield in the customary 'Don Cox' weather, (although he could have turned up the thermostat to advantage this time!), for our annual Mills Tour led, as usual, by Frank Gregory.

Argos Hill Mill, built about 1835, is a fine example of a post mill with fantail at the end of the tail pole. It was working until about 1927, and has been well maintained by Wealden District Council, from whom permission must be obtained to inspect the interior. The roundhouse contains an interesting museum of milling tools and associated artefacts.

Our next visit was to another post mill at Cross-in-Hand which is being rebuilt by the owner Mr. Newnham and his son. It was built originally in 1806 at Framfield, moved to Cross-in-Hand in 1855, and re-erected on its present site in 1868. Another windmill stood about 100 yards to the South West until 1901. The mill was designed to drive two pairs of stones, and a further pair from the tail wheel, and was the last to grind commercially in Sussex. Mr. Newnham showed some fascinating photographs of the restoration of the mill and also the two mills standing together before 1901, together with some legal documents dated in the last years of the 16th century.

After our lunch break we visited Rudyard Kipling's last home, Bateman's at Burwash. The water mill had been built in 1750, but had been idle since Kipling removed the wheel in 1903 to make way for the installation of a turbine to generate electricity for his house. The water wheel and mill were restored by members of this Society 1970-5. Flour is milled regularly and sold to visitors to this National Trust property.

Our final call was to Funnett's Town smock mill built in the early 19th century at Biddenden, Kent. It was moved to its present site in 1856 replacing an earlier post mill destroyed by fire. The brick base incorporates the well equipped workshop of the owner, Mr. Archie Dalaway, which was put to good use after the mill was struck by lightning in 1979. Mr. Dalaway has restored the mill to a very high standard, achieving a fine balance on the sweeps which we were privileged to see turning once Frank had released the brake wheel.

Our thanks are due again to Frank Gregory for a very pleasant and interesting day out, to the mill owners for allowing us to visit their mills, and to Don Cox our "programmer".

G. C. Thomerson

### Visit to Poyntz Bridge at Chichester, Saturday, 28th April, 1984.

Once again a fine warm day for about 35 members and friends who assembled at the Canal Basin. A short walk into the nearby school ground led us to the place where the bridge is being prepared to be re-erected across the canal. Alan Allnut described the work that has and is still to be done on the bridge. This cast iron hand operated bridge was previously sited about a mile away, this site being the next place to visit where a new bridge has been erected over the canal to provide access to a farm.

On then to the Chichester Boat Marina where we were able to look at the last half mile of the canal and examine the lock that connects the canal to the sea. A short walk took us to the old tide mill at Birdham. The wooden building is still there and in use for purposes other than milling but it is clearly the remains of a tide mill. (Not a great deal seems to be known about this mill. Would any member knowing of anything written about the mill please let me know). Thank you Alan for the tour and for the very welcome cup of tea at your house afterwards, it was very much appreciated by everyone.

### Members' Evening at West Blatchington Windmill on Saturday, 23rd June 1984

A talk on Insulators and Telegraph Poles (insulators will mean much more to me in future) and then one on Tanning (a brief result of degree thesis) started the evening for 25 members and friends. This was followed by some refreshments that gave us time to get to know each other a little better. John Blackwell then told us how to get an hours IA squeezed into the annual family holiday. Finally Ron Martin told us of some of his findings following his survey of ice houses. Between whiles some of us managed to find a few moments to look over the mill. Thanks to all who came, especially the speakers Dr. Pope (insulators), Mr. Mead (tanning) plus those mentioned above. Thanks also to the "tea ladies".

### General note from Programme Secretary:

It is good to see a few new faces on the visits. I am especially pleased to see some families coming. We even had a six week old baby on the tour of mills, nothing like starting them young. So please make the effort and come on the visits and how about suggestions for next year's visits. Now is the time when I start planning where we can go and whom I can persuade to organise or lead us somewhere of interest.

Don Cox.

### The East Grinstead Society - Project for 1984

Repainting the 'Bow Bells' cast iron mileposts in the town is the East Grinstead Society's project for 1984.

Every year the Society makes some practical contribution to enhancing the amenities of East Grinstead. This year, following the Halifax Building Society's restoration of post 30 outside its new offices, the East Grinstead Society will bring the others within the town boundaries up to the same standard, with the County highway authority's blessing.

These are: No.29, outside Halsford Park, No.31, in Lewes Road and No.32, at Ashurst Wood.

These posts were provided by the 18th century turnpike trusts that served the area and are part of a series along the A22. A full survey will be found in Sussex Industrial History, Vol. 5 (Winter 1972/3, pp.3-8)

Their exact date is not known, nor their place of manufacture, but they are possibly from one of the local forges. Their design, five bells diminishing in size suspended from a bow under the number of miles from London, has led to the belief that they punningly represent the famous bells of Bow church. There is no evidence, however, that Bow church was ever used for measuring distances from and the designs may be simply ornamental with no special significance.

However, they remain an important part of our heritage and one which deserves careful conservation all the more because they now serve little functional purpose.

M. J. Leppard