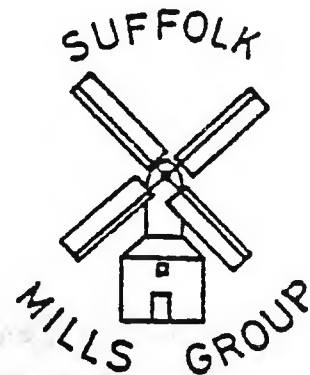


SUFFOLK MILLS GROUP

Newsletter

No. 41
JANUARY 1988

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1988 sees S.M.G. in reasonably good health, with several events planned and others anticipated, and a membership of around 150. We must try to build on this in the coming months by attracting new members, especially anyone able to help extend our activities. As well as our public meeting in Ipswich on February 27th, we are also holding a meeting in Lowestoft with the aim of stimulating the latent mill interest in this part of the county. It will be interesting to see how successful this meeting turns out to be.

While we are ever aware of the need to expand our activities, in comparison to the mills groups in neighbouring Norfolk and Cambridgeshire we seem to be doing rather well. It is sad to see the local groups in these important mill areas in decline, especially so in the case of Friends of Norfolk Windmills which has a larger membership than S.M.G.. We hope both groups can slowly revive.

May I wish all our members a successful and enjoyable New Year and also remind them that I am always looking for new contributors for these pages!

Mark Barnard

TWO SOUTH AFRICAN WINDMILLS NIALI ROBERTS

During the autumn of 1985 my wife and I spent seven weeks in East and Southern Africa visiting our two sons (working in, respectively, Tanzania and Lesotho). Whilst in South Africa itself, we visited two windmills, five watermills, at least one horse mill and one donkey pump. One of the windmills had been fully restored, with machinery. The other was restored structurally and had sails but, I understand, has no interior machinery below the windshaft. We also saw from a distance a preserved sailless tower. The two more interesting mills are described below.

MOSTERT'S WINDMILL, CAPE TOWN

This is a three-storey whitewashed stone tower mill (believed to have been built in 1796) with a thatched cap and four common anticlockwise sails. One of Cape Town's many modern expressways passes beside it. Although the cap is essentially conical, it has such marked 'dormers', for the protruding windshaft at the front and to admit light (and provide an opening for the external brake-lever) at the rear, that it could almost be described as having a pitched roof. Winding is by a double-braced tailpole with a capstan winch at its lower end and a circle of anchor posts set in the ground around the base of the tower. Walton, in his book 'Watermills, Windmills and Horse Mills of South Africa', points out that this is the only recorded example in the Cape of a tailpole winch and he suggests

that this may have been added when the mill was restored by the Dutch millwright C. Bremer in 1936. The cap runs on a dead curb. The sail bars are morticed directly through the wooden stocks which pass through the ornamental poll-end. Walton draws attention to the fact that the sails on this mill (later copied to some extent on Durbanville mill) were at the time he wrote his book (early 1970's) the only complete set of sails in South Africa and that they do not necessarily reproduce exactly the original sails at this or other mills in the Cape. The Mostert sails were designed by Bremer for the 1936 restoration. Another feature of the restored mill which, Walton suggests, may have been introduced during restoration is the rather elaborate

date board with the inscription 'Mosterts Meule AD - Welgelegen - 1796'.

According to Walton, there is no evidence of such boards being used on any South African mills. The flanged collar around the neck of the windshaft to protect the neck bearing from rain also looks to me like a modern feature.

The internal machinery is understood to be original, but the metal staves and associated metal hoops in the lantern wallower would seem to be the result of modernisation at some stage. The stout clasp-arm brakewheel with wooden teeth (photograph above) is almost wholly surrounded by an equally stout brake shoe in two parts. The brake lever carries a weight box filled with stones and rests on a fixed iron brake hook by means of an iron bar let into the side of a recess in the lever, unlike the cam-shaped swinging brake hooks we are accustomed to in the U.K.. An iron extension to the end of the brake lever is itself suspended by a chain from a secondary brake control lever pivoted from

the roof of the cap, and from the outer end of the control lever (which projects through the dormer window in the rear of the cap) hangs the brake chain. A square iron quant is let into a longitudinal slot at the lower end of the wooden upright shaft. The slot is closed by a fitted piece of timber secured by three iron clamps. There is only the one pair of stones.

The present varnished stone furniture appears to date only from the 1936 restoration and the crook string is wrongly arranged. Instead of rising upwards from an anchorage point at the end of the feed shoe, over the notched bar across the horse and then downwards to a twist peg, the string is anchored to a swivel block secured to the top of the tun, then passes down to an eye-hole in an extension to the shoe, then upwards through a hole in the 'willow spring' and finally over a small pulley on the edge of the opposite side of the tun and down through a hole in the floor to a twist peg near the meal spout. The oddity is that the crook string passes through the willow so that the willow appears merely as a support for the string and does not serve to hold the shoe end against the quant. Walton's book (p.163) does, however, show the correct arrangement with the willow strung to the end of the shoe quite independently of the crook string. There is no sign of a bell alarm.

Tentering is by means of a suspension arm (the lighter bar) between one end of the bridgetree and the mid-point of a brayer on the stone floor, with the fulcrum of the brayer at one end and with the brayer's other end suspended by a short chain from the end of a lighter staff. The opposite end of the lighter staff is held in position by a loop of rope, one end of which is knotted beneath the stone floor and the other end of which passes through a second hole in the stone floor and has what looks like a cannon ball as a weight for securing the rope around a suitable part of the hursting near the meal spout. At the time of my visit, the rope was needlessly long for this purpose and the weight rested on the floor. There is what looks like a flangeless belt pulley on the stone spindle, and Walton suggests (p.164) that this may have been for a belt drive to a governor. This seems unlikely, given the relative primitiveness of the present method of tentering, but perhaps in the 1936 restoration the mill was 'put back' to an earlier tentering arrangement rather than restored to its last known working condition. If that is what happened, maybe the tailpole winch ought not to be there! Personally I would not be dogmatic about the 'last working condition' principle but I would favour historical consistency. Unfortunately there is no guidebook available in which these matters could be dealt with.

DURBANVILLE WINDMILL

This mill is situated in the centre of a small new housing estate about 20km north-east of Cape Town, not far off the N1 Highway, and has been restored only during the past few years. According to a plaque on the mill wall, the mill

was built about 1801. As a well-deserved tribute to Mr. Walton's keen interest in and extensive knowledge of South African mills of all types, the road in which the mill now stands bears his name. Walton's book shows a photograph of the base of the tower as it was before restoration and he records that the roofed stump of the tower was used to house a horse mill (p.146). The rebuilt tower has a very marked batter. Like Mostert's, upon which (Mr. Walton told me) the restoration was based, the cap is thatched but, unlike Mostert's Mill, the tailpole has only single bracing and carries no winch at its lower end. The poll-end lacks the carved decoration of Mostert's and there is no date board. Another difference from Mostert's Mill is the scarf jointing of the stocks, secured by three iron clamps, so that there is in effect a wooden 'cross' consisting of the stock stubs set into the wooden poll-end. The joint appears to be without locking wedges at its central point, and relies on bolts and clamps to hold it secure. At Mostert's Mill, the stocks are each a single piece of timber without joints. I was not able to see the interior of this mill and I do not know if it has any machinery, but this seems unlikely as the restoration appears to have been carried out to provide an attractive centre-piece for the small estate of dwellings around the mill.

S.M.G.: THE FIRST DECADE MARK BARNARD

Suffolk Mills Group was formed at a meeting in Woodbridge tide mill on 28th May 1977. For those, including myself, who have been closely involved in running the Group from the start, the last ten years have passed all-too-quickly. We have achieved much of which we can be proud, especially in the organisation of repair and restoration work, although inevitably there has been frustration and disappointment along the way. In this article I want to briefly outline what I consider to be the Group's main achievements and highlight problems and opportunities for the future.

Our first project was the salvage of East Bridge windpump which had collapsed into its dyke early in 1977, and that summer we rescued all the parts. The next year saw the Museum of East Anglian Life gathering funds for the reconstruction of the mill at Stowmarket, with Peter Dolman preparing the detailed drawings. Work proceeded apace and the mill was officially opened on April 5th 1980, less than three years since our rescue operation. It was especially pleasing that S.M.G.'s first project, modest when compared to

later endeavours, should stimulate such a flurry of activity and result in the mill being rebuilt so quickly.

To many mill lovers, S.M.G. is synonymous with the 'work-in', a period of concerted repair work, usually lasting about a week and carefully organised in advance, to which as many volunteers as possible are invited. Five such work-ins were held at Ramsey post mill in Essex, each for a September fortnight, from 1974 to 1978, when a great deal of work was done which has saved the mill from certain collapse and preserved it in a static condition, with most of the original structure and all of the machinery. In 1979 S.M.G. held a work-in at Bardwell, when a metal-clad domed roof was built on the cap frame in only nine days. At the same time repairs were carried out to the roof of nearby Stanton post mill with the same material. Until this time, nearly all S.M.G. repair work (and much volunteer effort in the county before 1977) had been either of a first-aid nature on mills which were derelict (like Bardwell) or more ambitious projects which nevertheless could not be pursued to full working order (Framsden, Ramsey). Things changed with the purchase of Thelnetham mill by a group of enthusiasts in late 1979, for with good ownership there was at last the chance of a full restoration. The organisation of the two-week work-ins at Thelnetham from 1980 to 1985 has undoubtedly been one of the most important of our achievements, and a vital contribution to the successful (and speedy) return of the mill to working order. Volunteers came from all over the country and even abroad, many staying at the mill for a full week, others giving whatever time they could spare, all working as part of a team according to their ability. They included several children still at school and a Dutch professor of nuclear physics and his daughter. Meticulous organisation was the hallmark of these work-ins and the key to their success, and we owe a great debt to Peter Dolman who took on this responsibility. The Thelnetham work-ins can have few parallels in any field of restoration work in terms of how much has been achieved by the efficient harnessing of volunteer effort over a five-year timespan. In 1986 and 1987 the major work-in effort switched to Stanton, where the post mill had been bought by S.M.G. member Richard Duke. As at Thelnetham, an all-important change of ownership led to plans for a proper restoration to working order and not just holding repair work.

The work at Thelnetham and Stanton has been very time-consuming and in recent years has reduced the amount of 'first aid' weatherproofing work we have undertaken and most of our effort in this direction has been expended at Drinkstone. This is one of the most important windmill sites in Britain, showing mill work from the seventeenth century to the twentieth, with the 1689 post mill now only a year short of its 300th birthday. Holding work has to be an act of faith. This was the case at Bardwell, where the tower mill we had capped in 1979 was bought in 1982 and subsequently fully restored by James Waterfield. Richard

Duke's purchase and repair of Stanton mill has similarly justified our holding repairs of 1979. Where there is little hope of a change in ownership and a mill is in poor condition, the wisdom of undertaking even first aid repairs may be called into question. Syleham post mill was just such a case, for although we repaired the roof in 1980, it continued to deteriorate and its end came in the great gale of last October.

The loss of Syleham mill was very sad but it served to highlight many of the problems we face in the conservation of Suffolk's mills. We found ourselves asking questions such as 'What more could we have done?' and 'If we had carried out more repair work, would it have made any difference?' and even 'Why did we bother to work on the mill in the first place?'. Ironically we had planned further first aid at Syleham this year. Despite the success of the work-ins, the number of people we can regularly rely on to help with mill repairs is very small indeed, and we must choose our projects with care. Do we carry out small repairs to several different mills to keep them weathertight and safeguard their machinery - such as plugging the hole in the roof of Ixworth watermill which we did in a couple of days last August - or do we concentrate on large projects such as Thelnetham, where a mill is returned to working order, so generating much more public interest? In the past we have often secured a small grant from the local authority to help with the cost of materials for first-aid work, and kept them informed of our progress. Not only does this draw the mill to the authority's attention, it should enable us to have a greater say if the mill is ever threatened with, for example, house conversion. Some very limited repairs to a number of mills whose future is uncertain can probably be justified on this basis and should be our next priority. It would also be worthwhile to try to protect one or two items of machinery from derelict or collapsed mills which at present are simply rotting away.

We have to face the fact that public interest in our old mills at anything more than a superficial level is still very small, and the tiny number of mills in the region restored to working order and actually used is a reflection of this. At present levels of public support, working mills are a luxury, for they need constant maintenance and running repairs. S.M.G. has been fortunate to be able to demonstrate two mills where another organisation bears the responsibility of maintenance, at Pakenham watermill, where we started milling in the early 1980's after restoration by Suffolk Preservation Society, and Herringfleet smock drainage mill, maintained by the County Council. Herringfleet in particular shows the advantages of this arrangement, for while the County Council to their great credit continue to keep it in working order, it is extremely doubtful if it would ever be demonstrated to the public without the S.M.G.-manned open days. For the public to see a mill at work is perhaps the best way of recruiting new faces to our cause, and of increasing public awareness of mills generally.

Suffolk Mills Group has laid great emphasis in all its permanent repair work on high standards of craftsmanship and the need for repairs to be long-lasting. This has been stressed in several articles in our Newsletter and also at our meetings and those of the S.P.A.B. Wind and Watermill Section we have attended in London. Equally important is the need to ensure the survival of original components such as brakewheels and sections of curb, however decayed, and as much as possible of the structure. Far too much original work is being discarded in restorations, removed from the mill and simply left to rot. The degree of necessary replacement of original structure and machinery should be taken into account when contemplating the repair of a mill to working condition: if the extent of this would seriously devalue the historic interest of the mill, then restoration to working order may not be the best policy.

As well as fighting for our mills with hammer and nails, S.M.G. has also been in contact with other organisations to ensure that our voice is heard. In particular we have been alert to planning applications affecting mills, and have given realistic advice based on our knowledge and experience. Luckily there has been relatively little serious threat in the county posed by conversion, the only really worrying case being a proposal in 1979 to part-convert Layham watermill which was subsequently refused. We can expect more problems of this nature in the future as the wealth of Suffolk increases as steadily as the popularity of converting disused buildings, and certain mills continue to decay. A problem linked to this is the degree of protection offered to mill machinery if the mill is a listed building. Some recent appeal decisions and cases in the courts have made it pretty clear that the milling machinery is protected, although when it comes to the crunch there will always be room for argument, especially about the smaller fittings and moveable items of auxiliary machinery introduced at a later date. It is pleasing to see the number of listed mills in the county increase as a result of the recent re-survey and in particular the more important ones like Framsdon and Wickham Market up-graded to II^x.

Over the last ten years S.M.G. has held a successful series of public meetings on a wide variety of molinological topics, from 'Old Suffolk Windmills', a nostalgic look back to yesteryear, to 'Power from the Wind', which included a glimpse at what wind power might offer as an energy source for the future. There have also been social evenings for members, visits to nearly every mill in the county (some of them twice!) and three week-long mill trips abroad. During all these events we will often discuss mill problems with owners and give them words of advice and encouragement. Our regular Newsletter keeps our membership in touch with what's happening, especially useful as so many live outside the county. Throughout our work we maintain close links with the S.P.A.B. Wind and Watermill Section, with other mills groups, particularly those in neighbouring counties, and with the Suffolk Preservation Society.

Our membership has been pretty static at around 140-150 over the last six or seven years, and I'm sure this figure could be increased if our name and activities could be more widely publicised. One answer may be to hold public meetings in other parts of the county, another would be to have a Suffolk Mills Group noticeboard at the mills most regularly open to the public. These we hope to do. There are many other ways in which our work could be better publicised, but until we have more members willing to help, this will not happen. The Group has really reached - or even passed - the stage where an infusion of new blood is badly needed. Why are there no enthusiastic young members to help organise our events or help at work-ins - the equivalent 'generation' to the one which set up the Group ten years ago? The same old stalwarts can't go on forever and without new blood S.M.G. will move forward only slowly.

MILLS AND ME (4) PETER STEGGALL

GETTING INVOLVED

In 1969 my section head at County Hall, Ipswich, moved upstairs to higher things, and I moved into the post he had vacated. I then became more directly involved with mills as my new duties included an administrative responsibility for seeing that the County Council's decisions relating to mills were implemented. This era in my career lasted for five years until 1974 when, under the nationwide reorganisation of local government, East and West Suffolk came together as one new county.

During those five years I learned quite a lot about mills through studying reports for the County Planning Committee and writing the minutes of its monthly meetings. With the help of two young experts, Mark Barnard and Peter Dolman, I drafted new leaflets describing the three windmills which East Suffolk County Council maintained - Buttrum's (Woodbridge), Holton and Herringfleet. Becoming involved administratively, not practically, in arrangements for repairs and maintenance, I got to know the owners and enjoyed their friendly co-operation. After a while, I found myself conducting school parties over the windmills, a venture which deserves a separate article. Also worthy of a special article is the saga of Friston mill which was threatened with demolition in 1970.

Meanwhile Woodbridge tide mill figured prominently in the deliberations of the Committee and the Council who succeeded, mainly as co-ordinator and 'grant-aider', in helping the new owner to get the mill restored. I dealt with some of the paperwork, but all the discussions and decisions on such an important matter took place at a much higher level.

All this was several years before the Suffolk Mills Group was formed, but during the early 1970's I became well acquainted with the three people who

(Continued on p.10)

CROSSWORD Compiled by MARK BARNARD

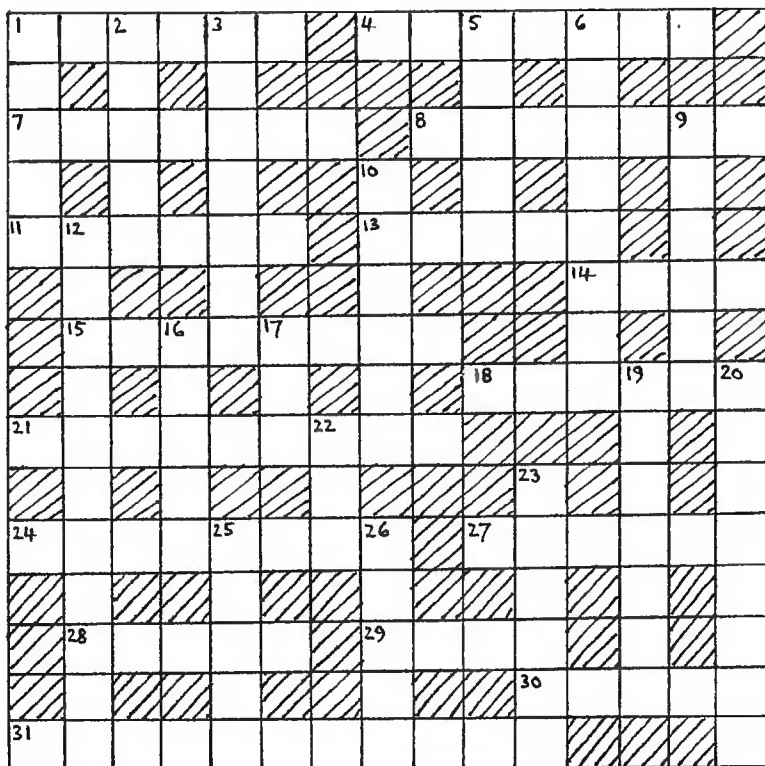
Here's the 1988 crossword, the tenth I've compiled for S.M.G.! As in recent years there are two prizes to be won, the first prize being a book token for £12 and the second prize a book token for £6.

As in the past, all the clues are connected in some way with mills and milling, and there are some anagrams. To enter the competition, simply fill in the copy of the crossword at the end of the Newsletter and post it promptly to me! The draw for the winners will be made at our public meeting on February 27th, so it would be a good idea to ensure your entry arrives by the post on that day!

As we usually only receive about 20 or so entries, you have a really good chance of winning, several thousand times greater than in most competitions. So don't delay, fill it in today - I only wish I could enter too!

CLUES ACROSS

1. Large watermill on the Suffolk Stour (6)
4. Sifting machine (3-4)
7. Essex windmill (7)
8. Stone tower mill close to the A1 road (7)
11. Famous Norfolk windmill (6)
13. Illustrated Rex Wailes' 1954 book (5)
14. Rear of a post mill (4)
15. Expired under weight of cap? (4,4)
18. Raise stones off the floor (6)
21. Part of the striking gear (9)
24. Suffolk post mill (8)
27. Not spring or common (6)
28. Another name for 20. Down (5)
29. Surround the stones (4)
30. Suffolk milling family - at Woolpit, for example (5)
31. 28. Across or 20. Down arranged in a circle? (7,4)



CLUES DOWN

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Mill author (5) 2. Found on a waterwheel (5) 3. Seventeenth century post mill (7) 5. Found in bins and hoppers (5) 6. Few Lincolnshire windmills had one! (8) 9. Sail innovator (6) 10. Suffolk millwrighting family, best known for demolition work earlier this century! (6) 12. Stones on 18. Across would always be this (11) 16. Bell --- warns when 5. Down is running out (5) | <ol style="list-style-type: none"> 17. Essential part of a gearwheel! (3) 19. Mill wrecked in the October 1987 storm (7) 20. Can she trust the millwright to make all these? (8) 22. Fantail innovator (3) 23. Miller's daughter? (6) 25. By 'showing his ---' a stone dresser could prove his experience (5) 26. Famous Sussex millwrights (5) |
|---|--|

were already doing a great deal of practical work on mills, and who were to play a leading part in the work of the Group - Chris Hullcoop, Peter Dolman and Mark Barnard. I have vivid memories of Chris sitting in my office complaining of the County Council's apparent indifference to the fate of Suffolk mills, except for the trio it had adopted, and of its apparent ignorance of the finer points in looking after those (a shortcoming which I think was later remedied as Peter Dolman and others, by sheer persistence, managed to educate the powers-that-were).

Chris Hullcoop's single-minded enthusiasm always made me feel sorry, and even guilty, that I could not do more, but to me and to the County Council, my employers, mills were only a minor part of our responsibilities. However, we did what we could, and I eventually had reason to believe that Chris in the 1970's and the S.M.G. in later years, were grateful for the very limited ways in which, at work and otherwise, I was able to help. For, when I retired in 1981, I received a beautiful card, depicting a Norfolk mill; inside was the inscription - 'To Peter - Best Wishes on your retirement - in appreciation of your special interest and endeavour in the preservation of Suffolk mills' - signed by Mark Barnard, Chris Hullcoop and Peter Dolman 'on behalf of your fellow Suffolk Mills Group members'.

This surprised and pleased me greatly, as I am sure they knew that I had become involved, and then interested, only through an unplanned chain of circumstances starting with my good fortune in returning to work in Suffolk in 1962, and being obliged in 1969 to accept certain responsibilities connected with Suffolk mills.

WINDMILLS OF SOUTH EAST ENGLAND (2) GUY BLYTHMAN

Part Two: Remainder of West Sussex & the Brighton Area

BARNHAM (SU968039, O.S. Sheet 197)

See my article in S.M.G. Newsletter 36.

ARUNDEL (TQ013063, O.S. Sheet 197)

South Marsh Mill, as it is sometimes known, is a tarred four-storey tower mill situated close to the east bank of the River Arun. It was built in 1830 and ceased work in 1915 when the sails were damaged in a gale. The mill became derelict and in the early part of the last war the tower was gutted of machinery. It was later converted into a house. The original beehive cap has been replaced by a conical roof, but the windshaft remains in position, its canister sheared off. This must have been a fine mill in its working days, as the photograph reproduced in Brunnarius (Plate 70) indicates.

NUTBOURNE (TQ078189, O.S. Sheet 197)

This beautifully built stone tower mill dates from 1854 and probably ceased work sometime during the 1890's. By 1908 part of it was used as a summer residence by Dr. Barnardo's Homes, and some of the machinery may have been removed to facilitate this. Later it fell into disrepair and by the 1970's the cap had gone and the windshaft fallen through the cap frame, its descent checked by the stocks which came to rest horizontally on top of the tower, giving the ruin a curious appearance. In August 1980 I found the tower an

empty shell and the cap frame and the surviving machinery, consisting of the windshaft, wallower and upright shaft, lying on the ground nearby. I am happy to report that the present owner has weatherproofed the tower and placed the machinery inside it; he hopes eventually to restore the mill.

The mill stands in rather an isolated position, in the middle of a field, about a quarter of a mile down a lane from the road running through the village. The lane runs past the remains of one of the two watermills with which the windmill was run in conjunction.

WEST CHILTINGTON (TQ085181, O.S. Sheet 197)

A tarred smock mill with a Kentish-type cap, probably built in 1838 and not 1688 as was once mistakenly believed. The two-storey base has brick piers built on to strengthen it and to support the stage. One pair of spring sails, now without shutters, remain in position as does the fantail cradle. After ceasing work in 1922 the mill was house-converted, and most of the machinery below the windshaft was removed. However, it retains much of its character, despite the addition of large windows and a covered outside staircase which mar its appearance somewhat. It is worth a visit, not least because it is situated in a very attractive part of the county, traversed by leafy lanes with high banks of trees on either side.

ANGMERING (TQ082044, O.S. Sheet 197)

A tower mill, built in 1826 and worked until 1880 when the cap and sails were blown into a nearby chalk pit. It then became derelict, and by the 1930's only the ivy-covered shell of the tower remained. In 1973 this was converted to form part of an ultra-modern house

HIGH SALVINGTON (TQ123067, O.S. Sheet 198)

This tarred post mill is said to have been standing in the 1740's and is possibly older, for a mill is shown here on Budgen's map of 1724 although it is not certain that this is the present one. It is undoubtedly one of the oldest windmills in Sussex. It has not worked since 1897, apart from a short period during the First World War. Later it became the property of Capt. Douglas Jones, who maintained it in good repair. Since 1959 it has been in the care of Worthing Council. In 1976 much of the structure was found to be badly decayed, and an extensive restoration programme was begun.

The mill ran with two common and two spring sails and had a single-storey timber roundhouse. The latter was replaced in 1911 with a concrete structure, said to have been one of the first buildings in Europe made from this material, which was used for a period as a tea-room. The machinery, which includes a wooden windshaft and compass-arm tailwheel, is complete. The restoration work is now almost finished, with work on the body complete and one pair of common sails in position. The concrete roundhouse is to be demolished and replaced with a replica of the original wooden one, as the new sails will not clear it.

It was once rumoured that the post was actually the trunk of a growing tree, but this cannot be true since it is clear of the ground like most conventional posts. It is also said that the mill was the first in the country to be insured against fire. There is no evidence for this, but it may have been one of the first and at one time the mark of the Sun Fire Insurance Co. was to be seen on an internal timber.

WASHINGTON (TQ128137, O.S. Sheet 198)

To be found in a picturesque wooded setting, this former windmill, dating from the 1820's, is now part of a private house. The cap, sails and machinery were all removed at the time of the conversion, which took place a few years after it ceased work in 1914, and a conical roof put on. It was once the home of the composer John Ireland.

SHIPLEY (TQ143218, O.S. Sheet 198)

Probably one of the finest windmills in the country, this large white smock mill stands on a tarred two-storey base with a stage, and has an octagonal conical cap with a scalloped petticoat. There is a prominent hatch above the

poll-end giving access to the striking gear of the four patent sails. The octagonal smock tower, the corners of which are, I believe, rounded instead of straight, is well-lighted and extremely roomy inside, making it a pleasant one to work in. All the machinery is intact and there are three pairs of stones, a dresser, a smutter and an oat crusher.

Variouly known as King's Mill, Vincent's Mill, Belloc's Mill or 'Mrs. Shipley', the mill was built in 1879 for Friend Marten by the millwrights Grist and Steele, of Horsham. It was owned for a time by the writer and poet Hilaire Belloc, to whom its delightful rural village setting must have appealed. It ceased work in 1926, but in 1958 was restored as a memorial to Belloc who had helped to keep it in good repair. A tablet above the door reads: 'Let this be a Memorial to Hilaire Belloc, who garnered a harvest of wisdom and sympathy for young and old, MDCCCCLXX - MCMLIII'. Now in the care of West Sussex County Council, the mill still grinds occasionally, wind permitting.

LOWFIELD HEATH (TQ270398 (old site), O.S. Sheet 187)

This was a large post mill with a high, narrow roof. It had a single-storey roundhouse and four patent sails. Its origins are something of a mystery; one account states that it was brought to Lowfield Heath from Hookwood, 2½ miles to the north, in 1762, but there is no evidence for a windmill at Hookwood before 1820. The mill ceased work in c.1880, and since then has had a rather chequered and traumatic history. It stood derelict until the 1930's, when the owner repaired it and fitted a set of mock sails. Within a short time, however, it was again in a shockingly ruinous state due to vandalism (and probably aircraft noise, according to local opinion). In 1971 the body was repaired by E. Hole & Son, millwrights of Burgess Hill, but a full restoration was not carried out and the mill stood for some years with its sails and roundhouse roof missing. By the mid 1980's its condition was again causing concern. Its position close to Gatwick airport had always been a problem and the threat of the surrounding area being developed, which would have made access and maintenance difficult, led to a decision to move it to a new site by the newly-formed Lowfield Heath Windmill Preservation Trust. The dismantling of the structure is now complete and the parts have been moved to the Gatwick Zoo and Aviaries at Charlwood where it is hoped to re-erect the mill in 1989. The mill was in Surrey until transferred to Sussex by the county boundary reorganisation of 1974, and is now returning to its former county. Some machinery had been removed over the years but at the time of the mill's dismantling the windshaft, head and tailwheels and stones were still in place.

KEYMER (TQ321163, O.S. Sheet 198)

A large post mill with a pitched roof and an octagonal roundhouse reminiscent of those found on Belgian post mills. Oldland Mill, as it is usually known, is of uncertain age but probably dates from the eighteenth century and may be one of the oldest mills in the county. It is said to mark the junction of three ancient downland trackways.

The mill ceased work in 1912, and then became derelict. In 1927 the owner gave it to the Sussex Archaeological Trust, who for a time used the roundhouse as a museum. Repairs were carried out in the 1930's and 1950's, but in the late 1970's the structure was found to be in danger of collapse. Extensive repairs are now in hand, and the sails, stones and machinery have been removed and the front of the windshaft propped up to lessen the strain on the ageing timbers. A new crowntree is being made.

The pulley which transmitted the drive from a steam engine, which supplied power on calm days towards the end of the mill's working life, could still be seen in the 1930's, situated on the right side of the body. It now appears to have been removed. The yoke on the end of the tailpole, by means of which the mill could be turned to face the wind, is now in the Anne of Cleves House at Lewes.

CLAYTON MILLS (TQ303134, O.S. Sheet 198)

These are possibly the two most famous windmills in the country, heard of as far away as the Middle East. They stand close together on Clayton Hill, a ridge of the South Downs, and have become known as 'Jack and Jill'.

Jill is a white post mill with a metalled roof and breast and a single-storey timber roundhouse. She has patent sails and is winded by a tailpole-mounted fantail. There are two pairs of stones and a dresser. The mill was originally situated off Dyke Road, Brighton, where she was erected in 1821, and was moved to her present site sometime in the 1850's. She ceased work in 1907 but remained in fair condition although repairs had to be carried out in the 1950's. In 1977 she was found to be in danger of collapse, and the Jack and Jill Windmill Preservation Society was formed to carry out a thorough restoration. After much repair and renewal of timberwork she is now in very fine condition and is grinding again.

Jack is a tarred five-storey tower mill with a stage at first floor level. He was built in 1866 to replace a post mill whose roundhouse still stands alongside the tower. The tower is metalled on the southern side to afford extra protection against the elements. He has a domed cap and four patent sail frames, the latter fitted in 1973 to improve his appearance for his role in the Michael Caine spy thriller 'The Black Windmill'. Previously Jack had been without sails since ceasing work in 1909. The fantail is missing. No machinery remains apart from the windshaft, the tower having been gutted soon after the mill stopped, although there is a chapel on the stone floor. At one time the mills were worked by the Hammond brothers, Joseph and Charles, who also had Hurstmonceux post mill, and Jack was fitted like Hurstmonceux with a governor to regulate the speed of the sails.

Owned by the popular Sunday Times golfing correspondent, Henry Longhurst, until his death in 1978, the mills are now in the care of the Mid Sussex District Council.

PATCHAM (TQ292086, O.S. Sheet 198)

Built in 1884-5 for Joseph Harris, and last worked in 1926, this cement-faced tower mill was the last corn windmill to appear in Sussex. According to Hemming it was built using materials from a mill which stood in the yard of Lewes jail and ground corn for the prisoners. The tower was erected by Hubbard of Preston and fitted out with the latest iron machinery by Holloways, the Shoreham millwrights.

The tower has a rather steep batter and this may be why cracks began to appear soon after its construction, necessitating the fitting of an iron hoop around it. The cap, formerly covered with zinc, is an unusual shape, with a flatter top and straighter sides than the normal Sussex dome type. Although the mill is now a house, the sails and fantail have been restored. The former, whose shutters have now been removed, were a combination of spring and patent similar to that devised by Cheale of Lewes. The brake is of the screw-down type popular with Holloways, another example of which may be seen at Barnham mill.

Inside, most of the machinery is still present. The character of the mill has been in no way impaired by its conversion, and is enhanced by its fine downland setting.

WEST BLATCHINGTON (TQ279068, O.S. Sheet 198)

Without doubt this is one of the most unusual and interesting mills in the country. It is a hexagonal smock mill on a square three-storey base against which were set several barns. When not grinding corn, the mill drove a threshing machine and a chaff cutter situated within the barns. The largest barn, to the south of the mill, was a medieval aisled manor barn of considerable historic interest. This was destroyed by fire in 1936, although some timbers survive embedded in the mill base. Only one of the barns now remains.

The mill itself is often said to date from 1720 but is probably a hundred years younger. It was painted by Constable in 1825. Originally it was part of a farmyard complex based on the manor house, but today the farm, part of the estate of the Marquis of Abergavenny, has been entirely swept away and the

whole area developed so that the mill is now surrounded by houses. It now stands on a little island of its own, a small green set aside from the surrounding development, and apart from the church is the sole reminder of the area's rural past.

The mill ceased work in 1897, but remained in fair condition and was restored in 1937 by Hove Corporation who had acquired it from the Marquis of Abergavenny; it was at this time that the land around was developed.

The base of the mill, like the surviving barn, is built from chalk flints and has distinctive circular 'Catherine wheel' windows. The mill proper is smaller and more slender than the average smock or tower mill, as one might expect with a 'utility' mill. The cap is similar in shape to the Kentish type only more rounded. The patent sails are mounted on a cross instead of a poll-end; this is unusual for this part of the country, although 'utility' mills often did not follow traditional millwrighting practice. At present only the spokes of the fantail remain in place. Inside the mill most of the gearing is intact. The two pairs of stones, which were unusually small, were removed during the 1937 repairs; I suspect they have been replaced with the stones from Winchelsea post mill. The great spur wheel is supported by a fine A-frame hursting. The gearing which drove the machinery in the barns may still be seen although the machines themselves have gone. At one time a luck-stone with a hole in it, a charm to ward off evil spirits, hung beneath the cap, and the cradle used to tar the mill was also to be found inside. Both these were present in 1928 but regrettably have now disappeared.

It is said that Rounderby, the man who at one time carried out the tarring, was a hen-pecked husband who when aloft in his cradle and out of reach of his domineering spouse, who often came to watch him at work, was possessed by courage enough to taunt and slang her vigorously, much to her intense anger. People would come from miles around to listen to their entertaining exchanges. But what goes up must come down.... Another story is that the farmyard was haunted by the ghost of a young woman in white. Once an important seamark, the mill is said to have been frequented by smugglers who may have put about such tales in order to deter people from snooping around the place and perhaps discovering their hidden contraband.

In recent years the mill has been opened to the public and a considerable amount of work carried out, including the fitting of new sails with steel stocks.

ROTTINGDEAN (TQ366025, O.S. Sheet 198)

A tarred smock mill on a single-storey base, with a Kentish-type cap. Standing on Beacon Hill, on the brow of the Downs overlooking the sea, this mill like West Blatchington is an important seamark rumoured to have been the haunt of smugglers. It has a forbidding, slightly sinister air. When its foundations were being dug in 1802, the workmen unearthed the skeleton of an ancient warrior, complete with burial sword. Unfortunately they went off to dinner leaving the remains unguarded, and on their return found they had been stolen. The mill itself is something of a warrior, for it has endured a good many gales in its exposed position, and in fact its survival to the present day despite having been out of use for over a century seems remarkable. The buffeting of the wind has visibly distorted the timbers of the smock, causing it to lean to the north-east, and has had to be countered by an internal steel frame erected by Hole & Son.

By 1881 the mill was so ravaged by the elements that it was no longer possible to keep it in use. It quickly deteriorated, but repairs were carried out in 1905-6 and in 1935-6. The winter gales of 1970-1 seriously damaged the mill, almost causing its collapse, but repairs were put in hand at a cost of £4,000. Formerly the property of the Marquis of Abergavenny, the mill is now owned by Brighton Corporation although the Rottingdean Preservation Society are responsible for its upkeep. Much of the machinery has been removed, although the upright shaft and great spur wheel are still in place. The interior is inaccessible. The fantail is missing but the four patent sails have been restored.

Editor's note The first part of this article appeared in Newsletter 38.

VANISHED MILLS PETER DOLMAN

WATERLOO MILL, BRAMFIELD

This unusual tower mill was one of only a handful of Suffolk mills to carry a name, in this case obvious in origin and evidenced by the datestone set in the wall: 'WATERLOO MILL 1815'. It is said to have replaced a post mill although I have no direct evidence of this (there was a post mill in the village as well). Who built it, and for whom, is regrettably not known. The tower had very little batter and few other mills in the area even slightly resembled it, the nearest being Chediston mill, which had a boat-shaped cap. The earliest reference to it I have is rather interesting: Suffolk Chronicle 14th October 1826 'Auction .. at Waterloo Mill, Bramfield. The property of Thomas Page esq. who has let the estate... A very Capital cast-iron windshaft, fit either for a tower or post mill, with brasses complete for neck and tail; dozen cast-iron travellers, with brasses complete for the cap of a tower mill: about 8 cwt. of cast-iron curbing ...'. Thomas Page could have been the original owner but it is strange that a cast-iron windshaft should be going spare only eleven years after the mill's erection. Perhaps he had just acquired it and decided to up-date the mill. Its later machinery bore all the hallmarks of John Whitmore's work and it would not surprise me if he carried out the remodelling of 1826, in which case it would have been one of his first major projects since starting in business.

At the time of the tithe award in 1840-1 Thomas Page was still owner with Robert Curtis Andrews as tenant. He farmed as well and was declared bankrupt in December 1842. He may have carried on nevertheless but eventually in 1850 Thomas Page sold his Brook Hall estate, which included 'a Brick-built TOWER WINDMILL, 30 feet diameter at the bottom, and 20 feet at the curb, fitted up with the best-constructed Machinery, Patent Sails, Winding tackle, and driving two pair of French Stones; with a neat COTTAGE RESIDENCE, stabling and a kiln for drying



wheat and other grain'. This last item is especially interesting as grain-drying kilns are unknown elsewhere in Suffolk, being more a feature of mills in the north and west of the country. The size of the tower at the curb is also noteworthy. Who bought the mill is not known but it then went through a succession of millers, many of whom seemed to have failed to make a go of it. From 1850 to 1854 Charles Hadingham was there: he later had the giant Beccles mill. In 1855 Stephen Staggull Higham of Wenhaston Mills (wind and water) was advertising for a man to work a tower mill and he is listed here as miller in 1858. In 1868 Thomas Gibson is listed and in 1874 James Vincent (who was later at Metfield post mill). In 1883 a miller from Halesworth, Stephen S. Hadingham, was working it by steam and wind power: he continued until about 1900 although the 1896 directory lists him as S.W. Hadingham. In 1904 'Smith and Girling' were millers and the last directory entry is 1908 with Leonard S. Docwra. It was apparently last worked by a man called Barnes but whether he was employed as miller or was his own boss is not clear. The mill ceased work around 1910 and was abandoned. The sails rapidly became unsafe and the fanstage dangled precariously, both being removed in the early or mid 1920's. By the 1930's the cap roof was off and in January 1944 an application was made for demolition. In fact only the ironwork seems to have been taken out and the tower remained until c.1963 when it was 'blown up and demolished'. When I visited in 1977 a heap of bricks and two French stones remained at the site.

Waterloo Mill, which stood at Grid Ref. 397753, was an impressively large tower mill which never had a stage. The five storeys were all lit by large sash windows. The cap was a very flat dome shape with a ball finial and a 'barrel vault' rear dormer giving access to the fanstage. The original sheers had been overlaid and a typical Whitmore fanstage had been added with a big six-blade fantail. This drove down to a horizontal shaft just above the left sheer, connecting with a cross-shaft with worm and spur reduction to the final pinion onto the rack (immediately above the neck), whose teeth faced upwards on the inside of the curb. The hand-winding gear connected with the worm shaft by spur reduction and the whole arrangement was identical to that at Buttrum's Mill (as originally built). The original iron-toothed rack remained, on the outside of the wooden curb. Perhaps no-one wanted it in 1826! It is probable that the original fantail gear had proved ineffective with such a large cap and Whitmore was able to fit his improved version with its almost tailwind-proof design. The 11" square windshaft was iron, with a bolted-on tail and a large iron eight-spoke mortice brakewheel with iron band brake, all typical of Whitmore's practice and still to be found at Buttrum's Mill and White Roding mill in Essex. The wallower was also iron, of large diameter and cast in four segments, bolted together. The upright shaft was a very heavy iron one, 16-sided and 11" across flats, possibly a replacement

for a wooden one. The two pairs of French stones were underdriven on the first floor by a clasp-arm great spur wheel and iron nuts. An iron bevel ring under the spur wheel took the drive from the steam engine in an adjacent shed, with the belt in an enclosed 'tunnel'. Auxiliary machines were driven by a clasp-arm crown-wheel on the second floor, driving a layshaft via an iron bevel. A slack belt drive went up to the sack-hoist bollard on the third floor while a kibbler was installed on the stone floor. The flour machine had been removed by the 1930's but was driven from the same bevel ring as the engine drive on the spur wheel. The mill was plastered internally and had winding staircases with closed risers and a handrail with turned end posts and square balusters. Each pair of stones had a governor, one having four arms. The sails were massive double-shuttered anti-clockwise patents, two with 10 bays of 3 shutters and two with 11 bays, the inner 4 with 2 shutters. The stocks were very long and had 'clamped clamps' as could be found on some Norfolk mills.

Another interesting point about this mill is that its cottage, a miserable hovel compared to the mill, had the bedrooms in a separate building to the remainder, either side of the entrance drive! This very odd arrangement seems to give credence to the idea of a smaller post mill having been on the site before the tower mill, with a low cottage to avoid taking the wind.

NEWS

HALLAM ASHLEY

Veteran photographer and mill enthusiast Hallam Ashley died last autumn after a long illness bravely borne. For many years he collaborated with his old friend Rex Wailes and his superb photographs (he was a Fellow of the Royal Photographic Society) illustrated Rex's books and Newcomen Society papers.

Many members will recall the evening in Ipswich in February 1979 when Hallam and Rex entertained us with slides and reminiscences of Suffolk mills long gone. 150 people were there, an attendance we have never equalled since. Hallam was well-known to members of the S.P.A.B. on their mill tours and everyone enjoyed his warmth and lively sense of humour. In 1977 the Society visited Norfolk and on one visit Hallam and Rex were peering intently at the machinery of a watermill. Jim Woodward-Nutt took a photo of them together and said to me 'That will be a rare photograph one day'. (C.H.)

NEW MILL BOOKS

Two important mill books have recently appeared. 'Harvesting the Wind' by Professor Edward Kealey, published by Boydell Press of Woodbridge at £25 is heralded as a major new work on the early use of windpower. The author, an American academic, has gathered information from various sources and re-worked it into his own theory of how windmills developed. This may well cause some heated debate in the months to come but unfortunately I cannot comment first-hand as I have yet to receive my copy.

'Watermills of the London Countryside' (Volume 1) by Kenneth Reid, published by Charles Skilton at £19.50 has been awaited for several years and is being published in two volumes. The first volume, now available, deals with general matters together with the start of a river-by-river survey, to be continued in Volume 2 (which will cover most of Essex). Kenneth Reid began drawing watermills and making notes as a young man in the early 1930's and has produced a marvellous record of probably all the significant watermills which stood in about 1930 within a 50-mile radius of central London. If you plot this on a map, the scope of this work becomes apparent with literally hundreds of mills being included. The author is well qualified to draw buildings, being an architect, and his sketches, made largely from life, are as good as photographs in their detail and accuracy. The text is illuminating without being dry although obviously in two volumes each mill is not going to be chronicled in every detail. I was particularly impressed by the series of scale drawings of the giant Newark mill in Surrey, one which I wish I could have seen (it burnt down in the 1960's). Well worth acquiring. (P.D.)

GREAT THURLOW MILL REPAIRED

The smock mill at Great Thurlow, on the Vestey estate, received general repairs during the second half of 1987. The mill is preserved in static condition. Work included new fantail blades, a new fanstage platform, repairs to the sail frames, new windows and door, some new weatherboarding and external redecoration. It was carried out by Bruce Wade of Wickhambrook. During the work, details of the 1962 restoration were found on a concealed section of boarding. As well as the names of the people involved, local and world news at the time was also chronicled, and even the wages of the men - 5s 8d an hour for tradesmen, 5s 0d for labourers!

WORK AT THORINGTON STREET MILL

Repairs to the mill have commenced with the wheel sluice gate, now repaired in elm, and the footstep bearing for the upright shaft, which has been removed for re-machining. Some tidying up of the interior has been done and most of the tailrace has been cleared of vegetation. Several members and friends have helped so far and I hope that others may come and help with the work in the future. The waterwheel sluice guides and the flood gates will require some attention before the water can safely be put back in the pond, so these will be the next item to be tackled. Work tends to take place on mutually agreeable week-ends so if you would like a change from repairing wind-swept mills, bring a pair of wellies to Thorington Street! Contact Peter Dolman on Higham 279.

STANTON PROGRESS

Restoration work at Stanton continues to make steady progress. The mill has now been hand-cranked round and by the summer should be winding herself again, the fantail now nearing completion. At the end of January Chris

Hullcoop fitted the 82 new cogs in the spurwheel and he is now repairing the brayers. A new stock and clamps are also under construction. A more detailed account of recent work will appear in the next Newsletter.

MILL ART AT LAVENHAM

The Mill House Gallery, Prentice Street, Lavenham will be holding a theme exhibition of mill paintings and images by East Anglian artists during April. The exhibition is called Wind and Watermills of East Anglia, and is open to the public on April 1st (2 - 5.30pm) and then daily, except Wednesdays, until April 29th (10.30 - 1pm, 2 - 5.30pm). Admission is free.

EVENTS

★ S.M.G. PUBLIC MEETING: 'OLD SUFFOLK MILLS' - IPSWICH TOWN HALL, SATURDAY FEBRUARY 27th 1988 at 7.30 pm.

This year's Ipswich public meeting takes an overview of the state of Suffolk's wind and watermills, looking at restoration work over the last 25 years and at the problems the surviving mills pose today. After our three 'home grown' speakers, Chris Hullcoop, Peter Dolman and Mark Barnard have said their stuff, we hope to hold a forum to stimulate discussion and hear other people's views. The meeting will conclude with two short cine films of Pakenham watermill and Herringfleet marsh mill at work.

This year we are relying on the posters to a considerable extent for our publicity, so if you receive one with this Newsletter please try to display it!

IPSWICH LIBRARY DISPLAY

S.M.G. will be mounting a small publicity display in the foyer of the central library, Northgate Street, Ipswich, during the first two weeks of April. We hope this will be successful in attracting several new members.

★ 'MEET S.M.G.' PUBLIC MEETING - LOWESTOFT CENTRAL LIBRARY, FRIDAY APRIL 22nd at 7.30 pm.

This is our first indoor public meeting outside Ipswich and will broadcast S.M.G.'s message in a new area (sounds evangelical, doesn't it?!). As well as increasing our membership, we also hope to encourage regular participation at the Herringfleet open days, the next of which will be on the week-end following this meeting (see below).

★ HERRINGFLEET MARSH MILL OPEN DAY: NATIONAL MILLS DAY, SUNDAY MAY 1st, 1-4.30 pm.

Herringfleet marsh mill will next be open to the public on National Mills Day, and will be working (wind permitting). The last few Herringfleet open days have been spoiled by the weather - either rain, lack of wind, or even both! We hope for a bright and breezy day to match the one in May 1986, when conditions were perfect. We hope to arrange for the Scout Support Group to spend some time digging out the watercourses around the mill as these are getting badly silted and overgrown.

★ VISIT TO WISTON WATERMILL, NAYLAND: SUNDAY MAY 8th from 2.30 pm.

Wiston is one of the few Suffolk watermills with machinery which S.M.G. has yet to visit, so we are delighted that owners Jeremy and Suki Cohen have offered us a chance to look it over. A very large mill which once boasted no less than 13 pairs of stones, six of them driven by two waterwheels and the remainder by a beam engine, it was incorporated as an annexe of the mill house by the 1930's, preserving the main gearing. The mill is on the River Stour at Grid Ref. 962333, off a minor road leading to the hamlet of Wissington, about a mile west of the village of Nayland.

★ S.M.G. WORK-IN AT THELNETHAM MILL: JUNE 11th - 19th. inclusive

There will be a work-in at Thelnetham windmill this summer, during which the remaining jobs to complete the restoration will be tackled. These include setting up the engine stones to work and attempting to get the oat crusher to run by wind power; final coats of paint to the fanstage and other woodwork; tarring the tower and other improvements or adjustments to the mill. If time permits the site will be tidied up as well. If you can help, please contact Peter Dolman on Higham 279.

★ S.M.G. ANNUAL GENERAL MEETING

The 1988 A.G.M. will be held at Thorington Street watermill on Sunday June 26th. Further details will appear in the next Newsletter.

WICKEN WINDMILL RESTORATION WORK-INS

The Wicken Windmill Preservation Group will be holding two work-ins at the mill this year: July 2nd - 10th and August 20th - 29th. Last year's work prepared the way for the full restoration by getting the workshops ready and making the floors safe. This year the repairs to the smock will get under way with two or three sides being opened up at a time. There will be other jobs as well, final plans for which are still in preparation. Please come along to help if you can. Contact David Pearce on Horsham 53909 for further details.

MILL TRIP TO FRANCE

Members are reminded of Roy and Penny Berry's 9-day mill trip to France. This will visit the Beauce and Anjou regions. The provisional departure date is Friday July 8th. Accommodation will probably be in youth hostels, mostly on a self-catering basis. Contact Roy or Penny on Peldon 533 for further information, but hurry as only a very limited number of places are available.

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