SUFFOLK MILLS GROUP

Newsletter Number 27

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SECRETARY:
Peter Dolman
11 Bluebell Grove
Needham Market
IPSWICH IP6 8JH

EDITOR:
Mark Barnard
41 Melbourne Road
IPSWICH IP4 5PP

Since the last Newsletter in January, two events organised by S.M.G. have passed off successfully: our public meeting in February and the S.P.A.B.'s Wind and Watermill Section tour on May 7th. Both were well attended which gives added cause for satisfaction. Although it has been a quiet time as far as mill visits are concerned, now that the better weather is here these can be resumed, one of the first dates being our A.G.M. at Woodbridge tide mill, where S.M.G. was born six years ago (see 'Events').

It has been pleasing to receive a steady trickle of contributions for the Newsletter, on a surprisingly wide range of molinological topics! What I could really do with is one or two longer articles of a historical or technical nature, although I appreciate that these are the most time-consuming to write. The next issue is due in July, shortly before the first of the work-ins at Thelnetham.

Mark Barnard

HOLBROOK MILL

KEN & JENNY READ

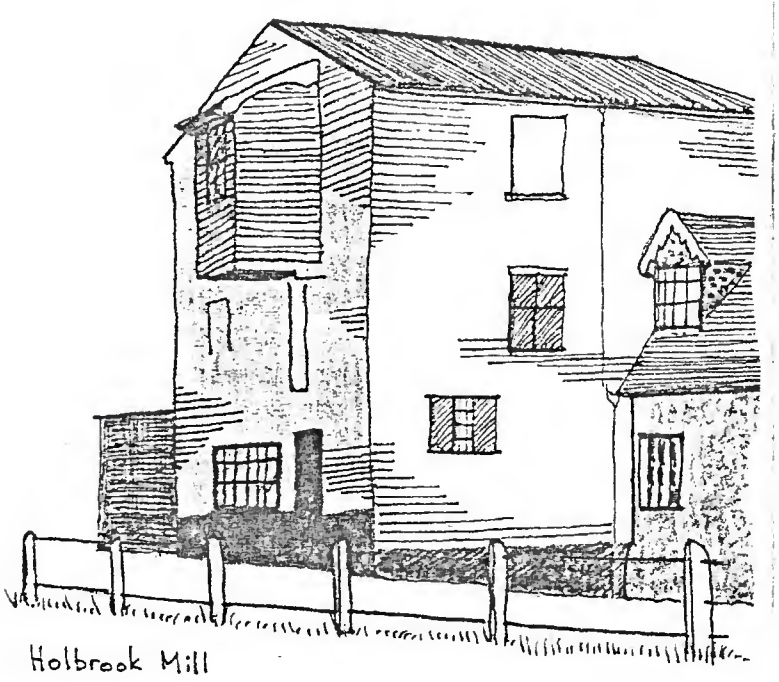
The first of three short articles on Holbrook watermill by the owners, who are in the process of converting the upper floors to living accommodation and re-instating the turbine drive to the remaining two pairs of millstones.

PART 1 : FACT AND FANTASY

'Queen Elizabeth I passed through the village of Holbrook and decreed that it would be a good site to erect a mill.' The authenticity of this statement is difficult to substantiate, but it is after the reign of Elizabeth I that early reports of Holbrook mill are recorded. The early mill was a mansard roof structure with an internal overshot waterwheel, ten feet in diameter and six feet wide. According to Rex Wailes the wheel was later increased to a width of ten feet and measurement of the pit within the mill would probably substantiate this fact.

From 1840 it is possible to obtain the names of millers at Holbrook from Kelly's Directories. There appears to be some interchange of millers between Holbrook and Alton mills, Alton being the next mill upstream prior to its removal to the museum at Stowmarket. The only other mill recorded on Holbrook Creek (a brook running into the River Stour) was at Bentley, demolished early this century. Holbrook mill is now the last remaining mill on Holbrook Creek, and stands half a mile downstream of the dam retaining Alton Water reservoir.

Very little information is available on the millers prior to 1873 when Henry



Holbrook Mill

Beckwith became owner and lived in the mill house with his wife Rebecca Harman Beckwith. Details of Mrs. Beckwith are recorded because she outlived her husband and became miller after his death on 15th December 1891. Her nephew who took over the milling in her old age was one Hector Stone, a close friend of Rex Wailes. Hector Stone had worked in the mill from 1880, probably as an apprentice of his uncle.

'Have you met the ghost of Aunt Rebecca?' was a question put to us recently at the mill by a descendent of Hector Stone. It is too much of a coincidence to be anything other than a reference to Rebecca Harman Beckwith. To date no apparition has come forward but if it does appear we hope it is good at repairing turbines!

The turbine within the mill was installed, according to Rex Wailes, in 1887 but his record of this fact is open to conjecture. He quotes Hector Stone as saying '... in 1887 a turbine (had) replaced the wheel'. The word in brackets is our insertion because Kelly's Directory first notes the mill as being powered by steam in 1883. Inspection of the turbine reveals the engine and turbine drive shafts were combined amd it is therefore possible that the turbine was installed at least as early as the steam motivation.

A mill employee still living in Lower Holbrook informs us that prior to the First World War the mill employed 11 workers in shifts and operated 24 hours a day. The turbine was used every morning to stir the engine into operation. Hector Stone was fascinated by the technology of the day and changed the mill engine from steam to suction gas. It was tne coke by-product of this engine that provided the facing on the mill house which is generally mistaken for knapped flint. Hector Stone's spending on wharves at Holbrook Bay and on traction engines finally made him bankrupt in 1926, when the mill was gutted of its roller milling equipment. The difficulty of removing the turbine from its pit and the overlooking of 'obsolete' grinding stones has fortunately resulted in these two items of equipment remaining intact.

One further reference in Kelly's Directory to a miller Fredrick Martin is made in 1929, purported to be using only water power, no steam or suction gas. Any further information or elaboration of the above would be gratefully received.

S.M.G. CRANFIELDS VISIT PETER STEGGALL

Ipswich dock looked strangely deserted and quiet in the early darkness of a wet and windy September evening. 'Hydrogen', a fine sailing barge in good condition, lay alongside the Common Quay in front of the Old Custom House. There were lights on the old lightship, and in the windows of the tall concrete building of Eastern Counties Farmers at the north-east corner of the dock. Inside the ground floor of Paul's massive concrete silo next to the Custom House, the tapered bottoms of the storage bins and the pipes which carried away the contents were clearly visible.

The small S.M.G. party was split into three and we were taken round the interior of Cranfield's mills almost at a trot, but with frequent stops for explanations of the various processes and machines. We did not go round in the same sequence as the processing of the incoming wheat from grain to flour and other products, but by the end of our one and a half hour tour we had a fairly clear understanding of the sequence and nature of the various stages of what is surprisingly complex and technical.

Most of the wheat used is English or Canadian. The English wheat comes in by lorry, and samples are tested in the laboratory before unloading takes place. The Canadian wheat is unloaded at large ports such as Rouen and Rotterdam, and sent in smaller ships to Ipswich (Cranfield's own ships) - or to Tilbury and thence by road (it is apparently more costly and slower to use ships from Tilbury to Ipswich). The incoming wheat goes into the large concrete silo buildings, and thence by 'pipelines' to the various cleaning machines.

Cleaning the wheat of the various impurities that arrive with it is an ingenious process done by a mixture of compressed air, reciprocating screens, relative density and gravity, removing pieces of straw and stick, weed seeds, dust and stones (by the bucketfull) - it's amazing what combine harvesters pick up and put through!

After ensuring that it has the right moisture content (about 14%), the wheat is ground in roller mills - very similar in appearance to those made by E.R. & F. Turner Ltd. in Ipswich 50 years ago. The grinding takes place in a series of four stages or 'breaks', a proportion of flour being extracted each time by sifting. The granules of flour (or semolinas as they are called) are passed through further 'reduction' rollers to produce the fine white flour with which we are familiar. The sifting machines include six oscillating boxes, each the size of a small cubic room, rapidly vibrating - an awe-inspiring sight, made slightly bizarre by the speed and noise of the movements of the six boxes side by side, each with white cloth tubes projecting from below, giving the impression of a man standing inside the corners of each box and shaking it vigorously! A maze of pipes, colour-coded for convenience, carries the stock from rollers to sieves and back again, all by compressed air. Total extraction of flour is around 77% by weight.

The finished products - varieties of flour, and bran and wheat germ - are stored in silos and piped to the packing floor where paper sacks are automatically filled with 32 kg., their tops stitched, and passed along to chutes down to lorries below on the quayside. About half the output is taken away in bulk tankers.

Chalk (0.14%) and vitamins (0.02%) are added to the flour in accordance with regulations and specifications, together with a bleach to 'age' the flour and bromate to give it lift in baking. Total output is around 320 tonnes of flour a day, the mill being run continuously.

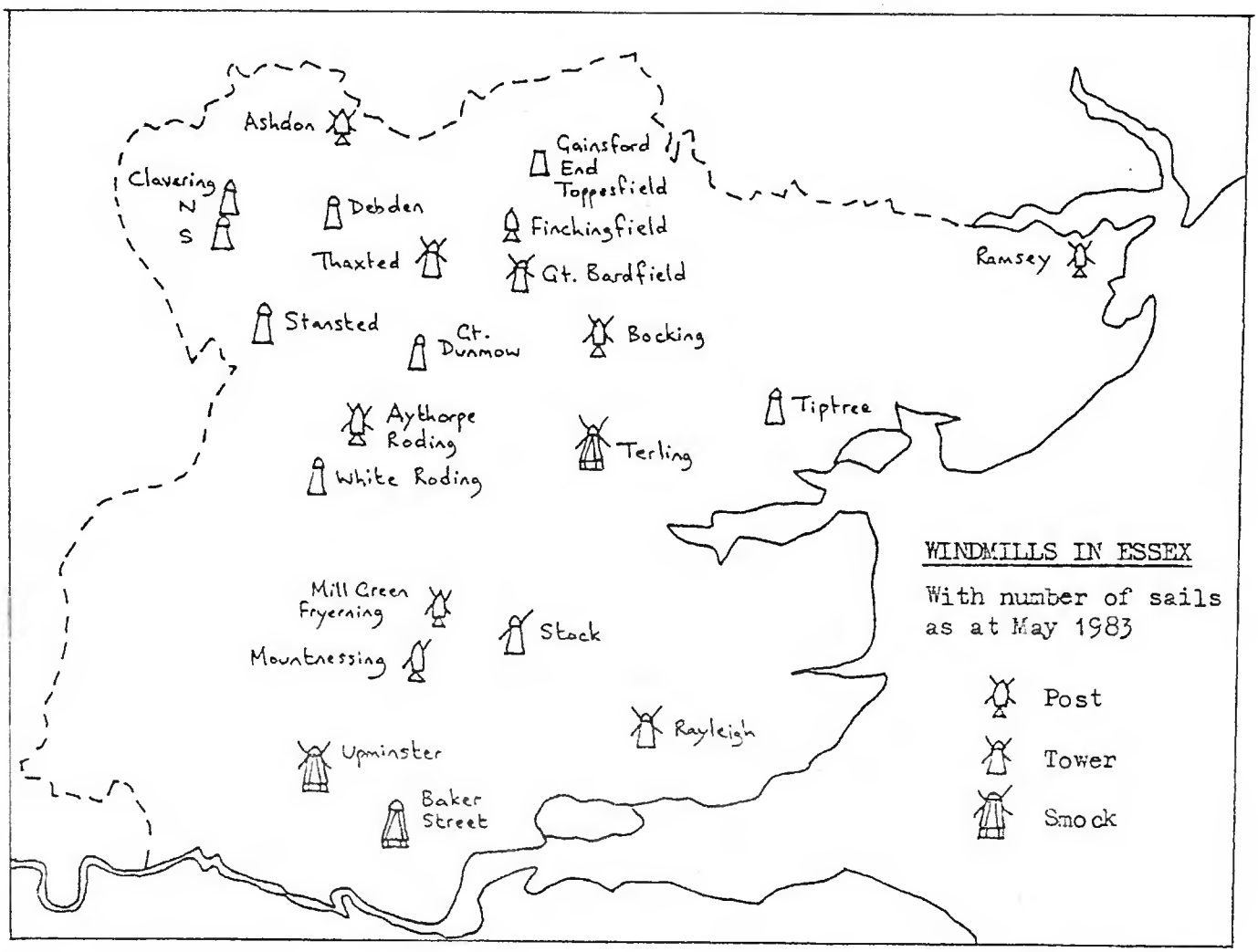
During our tour of the mills my attention was divided between trying to understand the technicalities and processes explained by our guide, and appreciating the structure and atmosphere of the buildings, familiar and evocative landmarks since my early days in Ipswich. As we walked around the mill, through automatically closing fire doors, up and down many flights of steps, I lost my sense of direction, but occasionally we had a glimpse through a window to the black shiny waters of the dock far below. At one point we emerged onto an outside steel stairway very high up, with a view over Key Street to the lights and buildings of the town centre. Inside the mills I remember particularly the long climbs and descents - some of the buildings have about eight floors - and the underneath of the zig-zag roof of the low projection over the quay. It was a most interesting and enlightening evening, seeing and hearing about the working of a large flour mill with modern automated machinery, controlled from a central panel (well soundproofed from the deafening noise of the roller floor!). The mills were founded here in 1884 but, despite growing both in size and complexity, far fewer men are now employed! Although the mill was working during our visit, we saw only one or two men; indeed, it was amazing to see whole floors of machinery going full pelt with no-one watching over it.

We wondered what a nineteenth century miller would make of it all, and whether he would think the end products any better than those of his village wind or watermill. We also thought of the stoneground flour we get from such old mills as Pakenham and elsewhere that has not gone through all the processes of cleaning and sieving, and addition of chalk and vitamins. We concluded, I think, that one can make very good bread from any of these sources, but obviously the present population could not be fed adequately even if all the old wind and watermills had survived.

ESSEX WINDMILLS TODAY COLIN BUDGEY

Anticipating the final volumes of Ken Farries' book, 'Essex Windmills, Millers and Millwrights', I wondered if members might be interested in the present state of windmills in Essex.

Essex currently boasts 22 recognisable mills: 7 post, 12 tower and 3 smock.



There are in addition several remains, bases and roundhouses. Beginning in the north-west of the county, and making our way south, we have:

ASHDON Post (Grid Ref.595,426) Externally very smart, with 4 dummy sails; the buck is bulging slightly. Most machinery is missing, except for the brakewheel and tailwheel.

CLAVERING (North) Tower (467,328) Recently sold by mill repairer Philip Lennard with permission for house conversion to retain machinery; no sails or fan, with a dummy cap.

CLAVERING (South) Tower (465,327) Externally the twin of North Mill, it contains no machinery.

DEBDEN Tower (556,336) A house conversion with a dummy cap.

GAINSFORD END, TOPPESFIELD Tower (726,350) A derelict tower with cap frame and machinery, but open at the top.

FINCHINGFIELD Post (686,329) Belonging to Essex County Council, the sails have been removed prior to a substantial rebuild, hopefully beginning later this year. A new wooden windshaft is to be fitted, replacing the broken iron one that came out of Toppesfield mill. Timber is ready for a new brakewheel and much of the buck. No machinery at present, but there are hopes of installing some eventually.

GREAT BARDFIELD Tower (680,307) A very old mill known as 'Gibraltar Mill'. A house conversion containing brakewheel and spurwheel, with dummy sails and fan. Very picturesque.

THAXTED Tower (609,309) Internally more or less complete with 4 overdriven stones, no stone tuns. It has 4 sail frames and a non-working fan. There

are long-term plans for complete restoration. Open days are held.

STANSTED Tower (510,248) Internally complete. Sails have been removed at present. A skeleton fan is fitted. Open days are held.

BOCKING Post (763,259) The mill has been restored recently by Millwrights International after gale damage which tailwinded the sails and wrecked much of the internal machinery.

DUNMOW Tower (634,225) A house conversion with dummy cap.

AYTHORPE RODING Post (590,151) The pièce de résistance of Essex mills. A fine mill, superbly restored by Essex county millwright Vincent Pargeter, that has recently worked by wind power. Half the shutters are fitted to the double-shuttered patent sails. It is privately owned, but leased to Essex County Council, and it is hoped to hold open days eventually. No casual visitors are allowed.

WHITE RODING Tower (565,130) Notable as the last mill built in Essex, by Whitmore and Binyon. Now an empty tower with windshaft, brakewheel and a new cap.

RAMSEY Post (209,305) A very tall post mill, owned by S.M.G. member Mike Organ, and recently partially restored by S.M.G. under Chris Hullcoop's direction. Internally complete, but with no fan or shutters.

TIPTREE Tower (894,168) A house conversion but fairly complete internally. There are no sails or fan, and the stones are set up for engine drive.

TERLING Smock (764,150) The last mill to work commercially in Essex, featured in the film 'Oh Mr Porter' with Will Hay. A house conversion retaining some machinery. Dummy sails on original stocks, dummy fan.

MILL GREEN, FRYERNING Post (640,008) Complete but not in working order. Some recent storm damage. No public access.

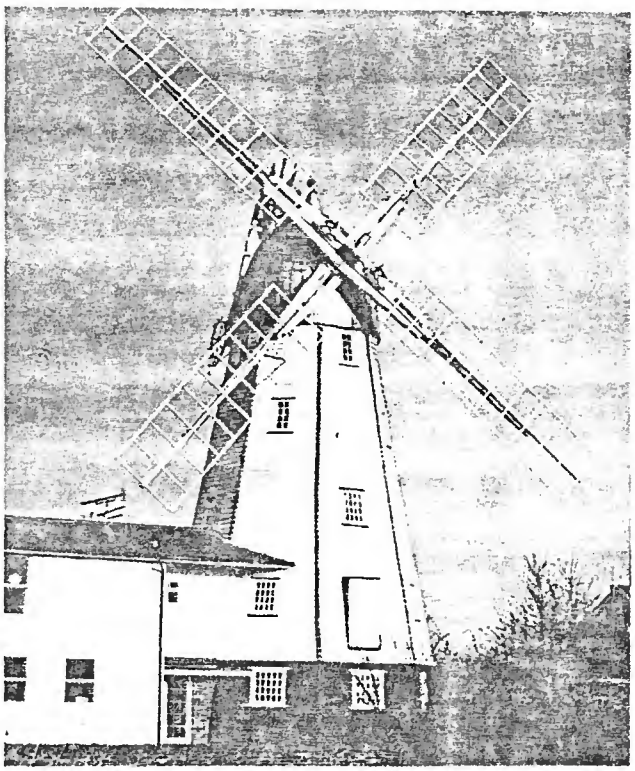
MOUNTNESSING Post (631,980) Extensive restoration work has been completed by Vincent Pargeter. The mill now carries 2 spring sails and the stock for the second pair. Millwright Peter Stenning is assisting with repairs to the machinery. It is hoped to complete the restoration to working order this year. Owned by Essex C.C..

STOCK Tower (699,989) Owned by Essex C.C.. The cap and brickwork have been made waterproof, and the mill awaits restoration. Internally it is more or less complete; one pair of sails and no fan. It is not open, and much work is needed.

UPMINSTER Smock (556,868) This large smock mill, owned by the local council, is internally complete. The fan and sheer-tree extensions are to be worked on soon. The ultimate aim is complete restoration. Open days are held.

RALEIGH Tower (806,910) An empty tower with cap, 4 sails and fan. Owned by the local council.

BAKER STREET, ORSETT Smock (632,813) This extremely dilapidated mill is being house-converted with the machinery retained.



Terling mill - now a house

NEW BOOKS Reviewed by MIKE ORGAN

'CORN MILLING' by Martin Watts (Shire Album No.98). Published by Shire Publications Ltd.; 1983. Price 95p.

The Shire Album series of booklets explain and illustrate rural crafts and industries and, the with 'Discovering' pocket books from the same publisher, form a useful introduction to their subjects for the beginner.

In 'Corn Milling', however, Martin Watts has managed to pack much more than a brief introduction into its 32 pages. He has tackled milling from a rather different angle to the many (repetitious) windmill and watermill books now available.

Starting with a short history of the milling process from palaeolithic times right up to modern roller milling, he goes on to describe the types of grain and its preparation, cleaning, grinding by stones or rollers and, finally, the sieving, dressing and grading of the meal for various purposes.

All the methods and stages are illustrated by excellent photographs and some very helpful diagrams. Altogether a well written and thoughtfully presented treatise which I found both enjoyable and informative and which I highly recommend to all members.

'MOLENDOMESTICUS INFESTANS'

During our public meeting in February, Chris Hullcoop happened to comment on this well-known mill pest. This prompted the following letter from Ken Read:

"At the S.M.G. meeting I was interested to learn of an additional damaging infestation to structures. Unlike common furniture beetle (Anobium punctatum), death watch beetle (Xestobium rufovillosum) or dry rot (Merulius Lacrymans), which are indiscriminate in their attacks on all buildings, this one exclusively affects mills and is known as 'house conversion' (no known Latin name?).

The image of house conversion projected by Suffolk Mills Group is unfortunate considering that the attitude is likely to alienate owners of a considerable number of mills which have already been converted. Those owners are vital in maintaining an historical link with certain mill sites in the county.

There are some disastrous conversions, especially of windmills, and watermill conversions are at best a compromise. However it is easy to be critical, and far more difficult to provide a secure future for a redundant mill. Even the preserved examples are at best only conserved, after all mills were never intended to be 'open to the public', and there is a limit to the number of mills which can be preserved as monuments to past milling glories.

In order to illustrate this point I am challenging all S.M.G. members, and non-members, to submit their proposals for Hawks Mill, Needham Market. The problem is as follows:

Hawks Mill, a gigantic Victorian edifice (1884), is for sale at a price of £69,950 (Newsletter 25) and I believe it has a current planning approval for 9 (nine) flats (house conversion en masse). The object of the competition is to assume you are the purchaser and to formulate the best use which will be consistent with conserving the mill and securing its long-term future maintenance as a listed building and mill. The building is of considerable size (at least 6,000 sq.ft., 560 sq.m.) and contains some machinery including a turbine.

Entries to the Editor please, to be received by 31st August 1983. I will provide a bottle of champagne to the best proposal, as judged (if in agreement) by Peter Dolman, Chris Hullcoop and Mark Barnard for S.M.G., John Popham of S.P.S. (as an expert on expenditure) and myself (safeguarding the champagne).

Perhaps S.M.G. would be willing to provide a comparable prize to the runner-up as the future of Hawks Mill and others like it are vital to the aims of the group. By the way, being a judge does not disqualify an entry (in fact it could be compulsory).

Reply from Chris Hullcoop (Chairman, S.M.G.)

I was most interested to see Ken Read's letter regarding my comments on house conversion at our February public lecture. This has been a subject of debate - even argument - for many years and quite rightly so. Different opinions keep any organisation alert and guard against complacency. Without debate meetings can become mere back-slapping sessions and like Parliament itself debate on aims, methods and compromises is vital. Some years ago the venerable and respected senior brethren of the R.S.P.C.A. disagreed on foxhunting and a committee meeting ended in a fight! The cartoonists had a field day and journalists questioned the competence of the society. While not a good idea for debates to end in fisticuffs or even in Parliamentary-style slanging matches, this demonstrates the health of a society, not its decline.

Indeed house conversion should have a Latin name. Perhaps Molenamo Lachrymosa or Molendomesticus Infestans?

With the benefit of hindsight perhaps it was a mistake to mention in passing only a small part of a large and complicated subject. Rather similar to being quoted 'out of context' the wrong impression could be given. My words were not intended to berate those already living in converted mills, but were in support of those precious few mills now left with complete machinery and in the case of watermills a good water supply.

Just after the last war when there were literally thousands of complete mills and hundreds still at work, house conversion was not a threat. Naturally this was a time of looking forward to better things and forgetting the past. Site and status were all important and machinery was just so much old wood and iron, perhaps even a little sinister and dangerous representing toil, shades of Blake's 'dark satanic mills'. Far better to purge the building of it and replace its oppressive heaviness with lighter things such as a built-in bar, bright curtains and carpets. Rupert Brooke's appreciation of 'the keen unpassioned beauty of a great machine' (1914) was 40 years too soon. Not many years ago it seemed as if working mills, once so numerous, would go the same way as the North American buffalo herds. Today we have far fewer mills but a more enlightened attitude to them, made possible through better education, good books and the pioneering work of the S.P.A.B. and Rex Wailes and his contemporaries. The more popular and spectacular achievements of historical transport enthusiasts with their old cars, railway locomotives, aircraft and ships are a delight to everyone. A few decades ago these enthusiasts were regarded as 'cranks'. Some of us may remember Bob Pratt and his pioneering work for the Suffolk photographic survey. When he first took

a licence for his traction engine he entered the word 'pleasure' under description of use and a baffled official enquired if he had made a mistake! Today the majority of people no longer regard the restoration of an old machine as either dottiness, backwardness or a desire to return to the bad old days.

Perhaps what I said came over in rather a negative way. I thought there might have been someone in the hall who might be a potential mill restorer, a person whose priority was the sheer romance of the mill at work, with down-to-earth sound investment considerations rated second. Such people are around. The purchase earlier this year of Bardwell tower mill and its mill house by James Waterfield justified all our efforts in keeping the house converters at bay for a few more years. Mrs. Gardner's purchase and subsequent gift to Woodbridge of the tide mill made its restoration possible. Thelnetham tower mill may have been house converted had not Peter Dolman and his colleagues bought it and taken on the restoration. There must be others like them.

The first aim of Suffolk Mills Group and the S.P.A.B. must be to encourage people to aim for the best and to follow their hearts. This could irritate people living in house converted mills but rather unlikely. They are not interested in debates like this, their spare time is spent in other ways. The very high values of house converted mills (see 'Country Life') ensure the preservation of the structure. We must fight for the proper restoration of complete mills, if necessary through the District Councils and the Department of the Environment. The final decision on any mills is theirs and provided it is arrived at democratically and with all the facts we will accept it graciously even if it means house conversion. Obviously an owner may take umbrage because we opposed his plans and may destroy machinery rather than let us remove it. This is a risk we must take if we are to be true to our principles. It is far better though to teach by example rather than try to resort to controls. We want people to visit working mills and fall in love with them.

Ken Read mentions compromise and in most cases this is what we try to do. At one end of the scale is the high and dry watermill building, gutted of machinery and its water supply irretrievably diverted. Aldham mill was such a case, house converted a few years ago by Sir George Burton, a good way of preserving the building. A previous owner had plans for its use as a restaurant, another good idea. Bosmere mill (incidentally incorrectly named) at Needham Market did become a restaurant with two flats for the proprietors. The mill had been gutted many years previously and all that remained was the wheel, now well preserved. We commented on the Hawks Mill application when it was announced two years ago. The original scheme proposed 10 flats and would have obliterated the turbine, all that remained of the machinery. Here is part of what we wrote to Mid Suffolk District Council:

> "Ideally the best use of the mill would be a small craft industry which could use the turbine in conjunction with electric power. However, we recognise

that for a variety of reasons such a use is unlikely to materialise and that a residential use is the best alternative. We therefore approve of the scheme in principle.
We are however most concerned that the proposals make no mention of the turbine and its associated gear. Although occupying less than 1% of available space the present proposals would obliterate this machinery. The turbine room occupies the area for the proposed bathroom of flat 1 on the ground floor. This is directly above the watercourse and is probably unsuitable for residential use and could better function as a communal storage area (e.g. for garden implements) or as a store belonging to the adjacent flat. Although this area would be private it would be no different to the interior of most mills and a separate access could be provided at the rear for interested persons to inspect the machinery. The controls now on the first floor could be removed and fitted in the turbine room so they could still be operated conveniently.
The machinery is confined to the turbine room apart from the engine drive which occupies very little space above head height in a corner of bedroom 2 in flat 1. This engine drive could be encased in perspex and retained in living quarters as is common in many house-converted mills. Outside the engine drive consists of a shaft with 4 pulleys under a wooden cover. This could be cut back leaving one pulley on the shaft close to the wall. Projection would be under 1 ft., it would not require cover and would be an interesting feature seen from the outside.
Needham Market's other watermill ('Bosmere Mill') is now converted into two flats and a restaurant. Here the waterwheel has survived and is a source of pride and of great interest to the specialist and everyone who sees it. The turbine at Hawks Mill could be similar. Unlike the Bosmere Mill there are no problems with the water and there is no reason why someone living in the adjoining flats should not repair and operate the turbine. The motive power could drive a generator, produce heat, etc.. There is an ever increasing interest in old machinery and in small scale alternative sources of power. The turbine at Hawks Mill combines the two."

Holbrook mill was three-quarters gutted and sold away from its mill house and land. We would far sooner see a working mill and a working mill house, one filled with machinery and sacks of wheat and meal, the other with furniture, paintings, carpets and curtains. However, as there was no house, and the remaining machinery was isolated in a damp basement area, the conversion of the gutted area to a house plus conservation and improvement of the machinery by owners keenly interested in their mill was very worthy of our support.

Any of these solutions for say Baylham, Thorington Street, Layham or Kersey where fine mill houses exist beside complete watermills with good water supply would be disastrous.

We must not forget there is money to be made from house conversion, either by developers or more usually by a private individual taking advantage of the generous tax concessions to the owner-occupier who buys a property, improves/converts, sells (often piecemeal) and then starts all over again. It is therefore very tempting for an owner to buy a mill together with its house and buildings and then gradually sell off the buildings including the mill for conversion. Very plausible economic arguments are put forward but the purpose is personal gain, not the preservation of our heritage, and

altruism does not come into it. Not even the worst accountant could have justified bringing back Brunel's 'Great Britain' and Mr. Peglar's romance with the 'Flying Scotsman' ended in ruin. There are working mills though in good competent hands which make enough profit to maintain them and their proprietors. If sheer competence and good management is combined with a deep love of mills it can still be done. Many years ago I attended a talk given by the late Santos Simoes, a Portuguese mill enthusiast. He described how he had bought a mill to prevent its demolition. It was, he said, 'an affair of the heart'.

Editor's Comment

Let's have some more letters on this tricky subject. Do I see Niall Roberts reaching for his pen?

"""""""""""""""""""""""""""""""""

Following the note in the last Newsletter (p.14) about the demise of the estate mill at Lackford, Graham Wilson has commented:

"...I saw that mill building when I was travelling to Pakenham watermill when S.M.G. were opening it on Mills Day May 9th last year. It was ironic that I forgot to mention it to Peter Dolman when I arrived at Pakenham. As I was travelling on my Puddle Jumper (moped) I did slow down and take a good look at it from the outside as I went past. Of its interior I know nothing. Roughly, it was a two storied rectangular barn like structure of red brick with, I think, a pantile roof. On one corner was a small square red brick chimney no higher than Thelnetham mill.

I intended to have a much closer look when I was in the area again. I am sorry that the building which appeared in good repair has been very meanly demolished."

NEWS

WOODBRIDGE TIDE MILL OPENING

You may have seen the feature on Woodbridge tide mill shown on B.B.C.'s 'Look East' recently. In the dark days of January and February we had set up a pair of stones to working order and as was reported at the end of the last Newsletter the mill ran for the first time in a quarter of a century on February 6th..

The T.V. film crew arrived one Sunday morning, Gordon Dunnett (the tide mill warden), John Snowdon and I having prepared the mill to run. We explained that with only enough water to grind for about 15 minutes, any re-takes would be tricky. The new pond is only a fraction of the size of the original one, unfortunately converted into a marina many years ago. At best the mill can only work at half speed with very little feed on and this was really not enough for the film crew who wanted to see a good flow of grain into the stones. So we raised the runner and increased the feed: this looked good from above but only cracked wheat appeared below! With the water running out fast and conflicting directions the film makers completed their task under some pressure and were probably glad to get outside to enjoy scones made from tide mill flour.

On March 27th a Friends afternoon was held and we were again asked to run the mill. We used the cracked wheat from the previous session and with the advantage of a higher than usual tide the mill worked well, grinding about 40 lbs. of meal.

Mrs. Wyllie unveiled the sign by the pool in memory of her late husband Peter who worked tirelessly for the mill in his retirement. Mrs. Gardner, who bought the mill in 1969 and subsequently gave it to the town, raised the sluice to start the mill which ran for some 20 minutes. Chairman Colvin Tooke made a speech and we then enjoyed a splendid tea made by Mrs. Tooke.

On Saturday April 23rd the mill was offically opened by the Duke of Grafton. It was again working, but only just! On the Thursday before all the pitwheel wedges fell out leaving the pitwheel lurching drunkenly against the brickwork. The following day John Snowdon and I spent our lunchour examining the damage and planning how to re-fit the wheel in time for the opening. Together with Ken Wilson and Ken Piper we were there early Saturday morning and thanks to John's fine 3-ton Tirfor we soon had the wheel lifted. Trueing such a large wheel in a confined and very muddy space called for patience and good team work. At last the wheel was wedged and we heaved it round once to test the mesh. It was too far out to turn safely and we felt despondent but John soon had his Tirfor re-rigged and with a jack we eased the wheel into better mesh which although not quite right was good enough to turn. Half an hour before the opening we adjourned for lunch and tried to clean off some of the mud!

When it was time for the Duke to start the mill we had our fingers crossed but thankfully all was well and a steady flow of wheatmeal soon appeared. Small bags of flour were presented to V.I.P.'s and the vicar told us he intended using it for his next batch of communion bread. Everyone enjoyed an informal and convivial afternoon and everyone realised that without Mrs. G it would never have happened. (C.H.)

S.M.G. CROSSWORD RESULT

There were 18 entries for the prize crossword published in the last Newsletter; of these, 14 were correct. These were from: Andy Abbott, Len Ball, Rosemary Dennis, Mayling Hargreaves, Peter Hill, Russell Jones, Cliff Lovett, Mike Organ, Vincent Pargeter, John Pelling, Chris Seago, Richard Seago, Alan Wallis and Graham Wilson. Winner of the painting was Rosemary Dennis, and the runner-up (table mats) Mike Organ. The solution is:

ACROSS: 1 Batten 4 Bolter 10 Ice 11 Rollerreefing 12 Schiedam 13 Sweeps 15 Tirl 17 Rodebalk 19 Rack 21 Clamps 22 Reel 24 Finial 25 Stave 28 Vat 29 Pelton 30 Aldred

DOWN: 1 Burrs 2 Talthur 3 Exeter 5 Over 6 Tailwheel 7 Rigger 8 Headsick 9 Breast 14 Woolpit 15 Thrift 16 Bill 18 Lee 20 Cant 21 Caston 23 Little 25 Sail 26 Vane 27 De

BARDWELL WINDMILL: THE STORY SO FAR

We bought the mill, mill house, granary and cart sheds at the end of February this year. Our intention (that is to say my father, mother and myself) is to repair the mill to full going order and to run her as a flour milling business. Initially the intention is to get the mill running by engine (as

she last worked in 1942), because the engine drive is a good, well-designed set up coming across underground from the granary via a 3 in. diameter shaft. Inside the bottom of the mill is a pair of mitre wheels, the driven one having wood cogs, and another vertical shaft drives up onto the spurwheel via a little iron nut. The spurwheel is wood but has had an iron gear rim bolted over the original cogs so I expect rather noisy running. This arrangement strikes me as a bit odd because the stone nuts were mortised iron so it is a bit daft to put on an iron wheel which means having to have the spurwheel greased up which would not have been necessary had the nut been wood-cogged.

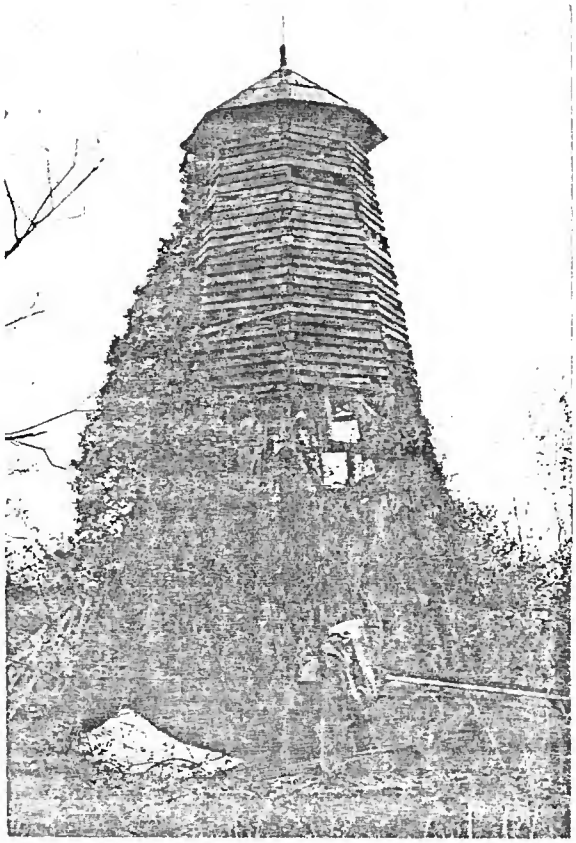
The north pair of 3 ft. 10 ins. French stones remain but the south pair of 4 ft 4 ins. French stones were taken out a few years ago by Mr. Wagg of Great Bircham mill, Norfolk along with the only remaining stone nut and quant (the mill is overdriven), flour dresser, bridgetrees, tentering gear and governors. I have got the stone nut back but no other parts. I have an iron bridgetree and a set of lag governors from Lincolnshire and have fitted these up to work with the north stones initially. I am making a pattern for a new quant at the time of writing. I have collected a pair of 4 ft 6 ins. French stones from an otherwise gutted mill in Nottinghamshire and will be fitting these in the south stones position.

We had to corbel the ends of the floor beams for which we used second-hand wood. At the time of writing much of the new flooring is down (tongued and grooved $7\frac{1}{2}$" x $1\frac{1}{4}$" softwood) and new windows (centre swing four pane casements) are fitted. A fallen arch over the stone floor loading door has been rebuilt and pointing and rendering the tower continues spasmodically as weather permits. Watch out for the next thrilling instalment! (James Waterfield)

STEEL STOCK FAILS AT PAKENHAM

Shortly before Easter the new steel stock fitted last year to Pakenham windmill broke clean in half inside the canister following a strong wind. The wedges fortunately held firm although the top sail was leaning back over the cap. John Lawn was hurriedly summoned to remove the sails which he did without any further damage occuring. The stock had broken at a weld on the centre line. The mill had never been worked since putting up the stock; just as well, for it could have broken at any time had the shutters been closed! The second steel stock, significantly of a revised and strengthened design, was fitted in early May so the mill again has its four sails. The broken stock has not yet been repaired and at the time of writing it is not clear who will pay for the repairs (it was made by Watton Engineering Co. but fitted by John Lawn). This is the second failure to occur to a steel stock in recent years and any mill having one fitted really ought to have safety checks made as it seems the welding can deteriorate fairly quickly and the stresses are very great at the canister.

CROWFIELD MILL REPAIRED



Crowfield mill (1972)

It is with pleasure, and some surprise, that we learnt of the repairs now being carried out to Crowfield smock mill, near Ipswich. Built in the early 1840's by Henry Collins of Melton, supposedly using the tower of a windpump from near Great Yarmouth, it is one of the smallest smock mills to have been built, not much bigger than the Minsmere windpump. After losing its cap in 1916 it continued to work by engine until the 1940's. It has been owned by the Gibbons family, who run a well-known and old-established building company, for many years and has been sorely neglected until now. Indeed, we had written it off since the machinery had collapsed into a heap and the tower seemed ready to follow. Mr. Gibbons decided to utilise some spare capacity in his workforce to repair his mill. The framing is being patched where necessary, and the entire mill re-boarded, with repaired floors. The machinery, consisting of two pairs of stones and an oat crusher, has been left on the ground floor and will not be re-fitted at this stage as the repairs are only of a 'holding' nature. The upright shaft with its spur and crown wheels has, however, been put back in its proper position and as everything is being kept it will be possible to carry out further internal work if desired at some future date. We offer our congratulations to Mr. Gibbons on his initiative and wish him well in the project.

PROGRESS AT THELNETHAM

Work has been progressing slowly but surely this year, small jobs being attended to as the poor weather has prevented any serious work on the cap. Away from the mill, a new neck bearing and two sets of bedstone brasses have been cast; all the brasses for the fan gearing and striking gear have been cast and machined; new striking gear is being made and new fantail gearing cast. The mill was given a good clean out for the S.P.A.B. visit and the 4 ft 7 ins. bedstone and its gearing was installed. Handrails and skirtings have been fitted around some of the openings to safeguard visitors.

Plans for the 1983 work-in are still being made; the main effort will be on the cap, with the curb also taking a lot of the time. Other less demanding tasks include demolishing the lean-to by the mill's 'back door', digging a drainage trench around the mill and yet more re-pointing. We are trying

to gradually improve facilities at the mill. A new semi-permanent shed with toilet and washroom has been constructed, and for a short while we had a large (30 ft. by 10 ft.) caravan to provide better accommodation. Sadly it was only a short while for a few weeks after we had struggled to get it into position it was broken into, set on fire and completely destroyed. Needless to say the culprit (or culprits) have not been apprehended. This was all the more regrettable as the caravan was not covered by our insurance and so represents a total loss.

Please try to give us some time this year; we are an easy-going crowd at Thelnetham and the mill is a very pleasant spot on a warm summer's day. There is plenty of work for people of all abilities to tackle. For anyone not wishing to camp by the mill local lodgings can be found. The work-in dates are:

Saturday July 23rd - Sunday July 31st and
Saturday August 20th - Sunday August 28th

PAKENHAM WATERMILL DOES 'THE TON'

On Easter Sunday John Snowdon and Peter Dolman, the regular 'volunteer millers' at Pakenham, manned the mill for a well-publicised open day, when they decided to put the mill through its paces. Mike Bryant supplied 25 cwt. of good milling wheat to be ground during the afternoon. A good head of water had been built up overnight, an extra board being put on the spillway. The sackhoist came in useful as the grain was in 14 stone sacks and as no bin was available, a sack lifter was borrowed from Thelnetham to raise the sacks into the hopper. Several other S.M.G. Members turned out to assist, in particular James Waterfield, who needed a 'fix' of watermilling having been away from Little Salkeld for a couple of months!

The mill performed admirably, the little extra head of water making an enormous difference to the power available. It ran on 'half throttle' (i.e. with the inner gate only half open), turning out a steady 4 - 5 cwt. of fine wholemeal an hour. We dropped the sluice completely towards the end of the afternoon when the mill really got down to some hard work, driving the stones at 120 r.p.m. with all the feed it could take - the output went up to an amazing $6\frac{1}{2}$ cwt. an hour of fine flour. A large amount of flour was sold to the 250 or so visitors, the S.P.S. making a good profit on the day.

The long-awaited metal bin and new spout should appear this summer, so the mill will be able to sell on a regular basis shortly and begin to pay for itself. A further 'grinding day' will be held later in the year.

S.P.A.B. VISIT

S.M.G. arranged a very full programme for the Wind and Watermill Section of S.P.A.B. on their visit to Suffolk on May 7th, which some 75 Section Members and friends attended. Commencing at Stowmarket, the coach tour took in Drinkstone, Sapiston, Bardwell windmill, Thelnetham, Stanton and the Pakenham mills. At Pakenham watermill a buffet style tea was served on the stone floor, with a pair of stones running at the same time! In all an excellent day. I would like to thank in particular

Kate Davison for arranging the marvellous food, ably assisted on the day by Mike Organ, Shirley McCauley and Alan Wallis. Thanks too to Chris Hullcoop for providing cutlery and urn, to Peter Dolman, John Snowdon and James Waterfield for their help at the various mills, and last but not least to the owners who allowed us access. (M.B.)

NEWS IN BRIEF

All 90 or so seats were filled for S.M.G.'s winter public meeting at Ipswich town hall in February. Main speakers were Peter Dolman and S.P.S. Director John Popham.

About 150 people came along to the open day at Herringfleet on Easter Monday. Mark Barnard, Peter Dolman and Chris Hullcoop were in attendance for S.M.G.; there was just about enough wind to keep the sails turning for most of the time.

Repair work to Holton post mill, leased by Suffolk County Council, has now been completed by Millwrights International and it is hoped that the mill can soon be opened once again to the public.

Suffolk County Council has approved a grant of £500 towards the repair of Reydon windpump near Southwold. The mill, on which S.M.G. has recently advised, is a prominent feature of the marshland landscape by the River Blyth.

EVENTS

VISIT TO BILLINGFORD AND SYLEHAM MILLS: SUNDAY JUNE 5th 1983: meet 2.30 p.m. at Billingford

These two mills, only a few miles apart, could hardly provide a greater contrast. Billingford is a tower mill, standing prominently on a common by a main road, preserved in good order and owned by the Norfolk Windmills Trust. Syleham, a post mill, is hidden away down a farm track off a minor road and is in private ownership. It is derelict and faces a very bleak future.

Billingford finished work by wind power in 1956, and by engine power a few years later. It was one of the first windmills in Norfolk to be preserved. In recent years some volunteer work has been carried out by Friends of Norfolk Windmills and it is hoped to eventually return it to full working order.

Syleham mill last worked on two sails in the mid 1950's and has been slowly deteriorating since then. In the 1970's there were plans for a restoration and indeed the engine powered stones in the roundhouse were run during a couple of open days. Nothing materialised however and the only maintenance has been some first-aid repairs by S.M.G. in 1981 to keep out the worst of the weather.

Please meet at Billingford mill first - the mill is $1\frac{1}{2}$ miles east of Scole on the A143.

S.M.G. ANNUAL GENERAL MEETING: SUNDAY JULY 3rd 1983 at 11 a.m. at WOODBRIDGE TIDE MILL

This year we are holding our A.G.M. at Woodbridge tide mill, which has recently worked by water power again. During the afternoon there will be an opportunity to visit another mill in the locality. This date has been chosen as it precedes the Belstead House course on mills and milling, so we hope any S.M.G. Members coming up to Suffolk specially for the course will attend our A.G.M. too.

AGENDA

1. Apologies for absence.
2. Minutes of the last A.G.M. (circulated in Newsletter 24)
3. Business arising from the minutes.
4. Treasurer's report.
5. Editor's report.
6. Secretary's report.
7. Election of officers and committee for 1983-4.
8. Any other business.
9. Chairman's report on S.M.G. activities in 1982-3 (illustrated)
10. Report on the Thelnetham mill restoration project by Peter Dolman (illustrated)

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New S.M.G. Members since Newsletter 26 (full Members unless otherwise stated)

BARTON, David
1, Sunningdale Avenue, Ipswich

COOPER, Mark A. (Junior Member)
15, St. Michaels Close, Oulton Broad, Lowestoft NR32 3JT

GODWIN, Peter
'Pelambech', Fen Road, Pakenham, Bury St. Edmunds

HALLIDAY, Robert
10, Phillip Road, Bury St. Edmunds

LINCOLNSHIRE MILLS GROUP (Corporate Member)
c/o 75, Yarborough Road, Lincoln LN1 1HS

PEARCE, D.H.
The Mill House, Layham, Ipswich

STARLING, Robert F.
'Clovelly', 10, School Lane, Lawford, Manningtree, Essex CO11 2HZ

WATERFIELD, James
The Windmill, Bardwell, Bury St. Edmunds

Changes of Address

David Alderton: The Old Police House, Hackford Road, Wicklewood, Wymondham, Norfolk NR18 9QJ

Tony Austin: 29, Oaks Park, Rough Common, Canterbury, Kent

Malvin Martin: 71, Fairways, Waltham Abbey, Essex EN9 1ST

Ken Read: The Mill, Holbrook, Ipswich IP9 2QN

S.P.A.B.: 37, Spital Square, London E1 6DY Tel. 01-377-1644 (4 lines)

John Spencer: 7, Coleridge Way, Crewe, Cheshire CW1 1JW

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