SUFFOLK MILLS GROUP

Newsletter Number 24

JULY 1982

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As I write this the first week of the Thelnetham 'work-in' is fast approaching (see 'Events') and we once again hope for a good turnout of Members to enable the restoration to take another leap forward. Visitors I've shown round the mill recently have all commented on the amount of progress we've achieved in such a short space of time (a little over two years), so it would be nice to keep the momentum going.

As well as planning for the work-in, the S.M.G. Committee has been busy in other ways during the last few months. For example, a new curb has been completed for Thelnetham mill; detailed comments have been made on the repair work at Buttrum's Mill, Woodbridge; a Code of Practice on mill repair has been drafted, and the trip to Denmark has been organised and successfully completed. In view of our efforts it was heartening to see all the chairs occupied at our A.G.M. last month. One decision taken at that meeting was that subscriptions should be increased to £4 per annum, but I'm sure you will all agree that we're still good value for money.

I would like to thank those Members who have sent me items for the Newsletter, and so prevented the well from running completely dry!

Mark Barnard

A FINIAL FOR THELNETHAM CLIFF LOVETT

Being 'windmill mad', the making of a finial for Thelnetham mill was a task I accepted almost with alacrity. After all, I'd produced one for Bardwell, and what I could do for Bardwell I could surely do for Thelnetham. Alas, this enterprise soon proved to be a different cup-of-tea altogether. The Bardwell finial was turned from a length of telegraph pole a mere 13 ins. in diameter. For the one at Thelnetham I had to work on 3 ft. of green English oak 16 ins. across which had been chain-sawed to octagonal shape. Fortunately, a sterling effort of hand sawing by Colin Budgey at last year's work-in had removed much of the excess wood and converted it to a basic finial shape. Nevertheless, my heart sank when the monster weighing over 180 lbs. was delivered and deposited on my garage floor.

It had been proposed that Thelnetham mill should have a ball-shaped finial. But after some discussion it was decided to crown it with an acorn as this appeared to be the shape of the original, although the evidence from old photographs is inconclusive.

Needless to say, I hadn't access to a wood-turning lathe of sufficient

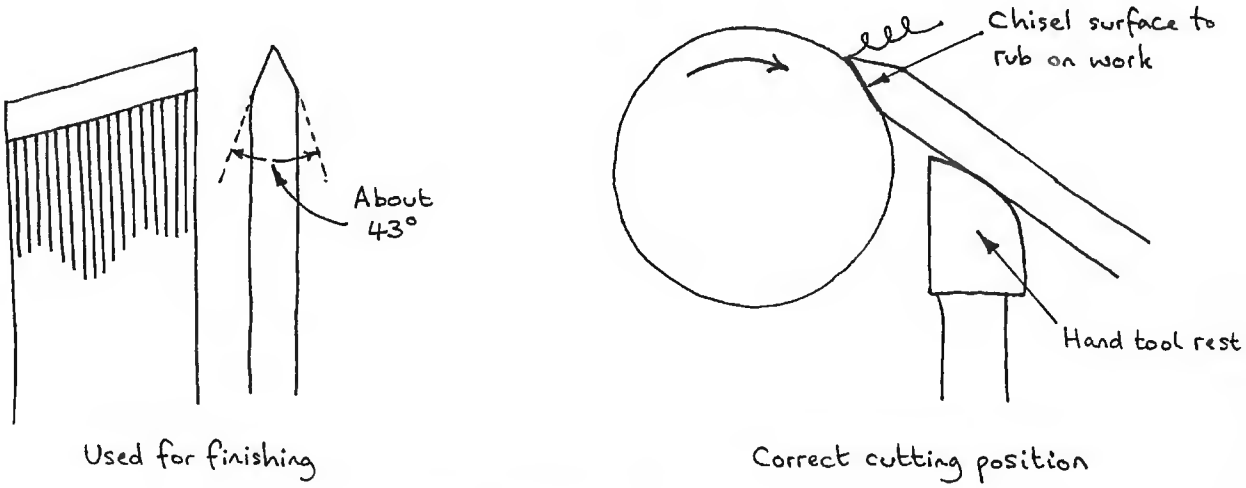


Fig.1 Skew Chisel

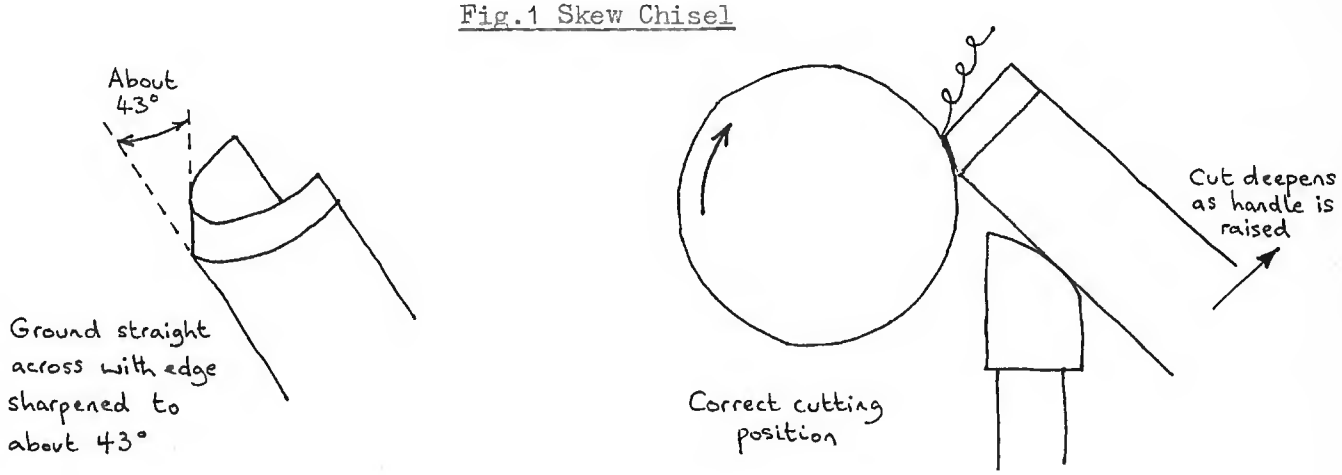


Fig.2 Roughing out Gouge

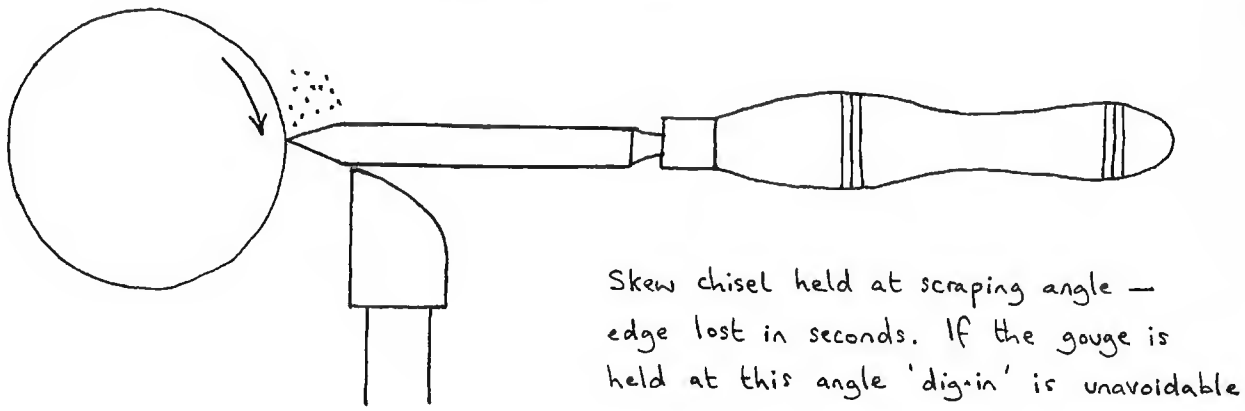
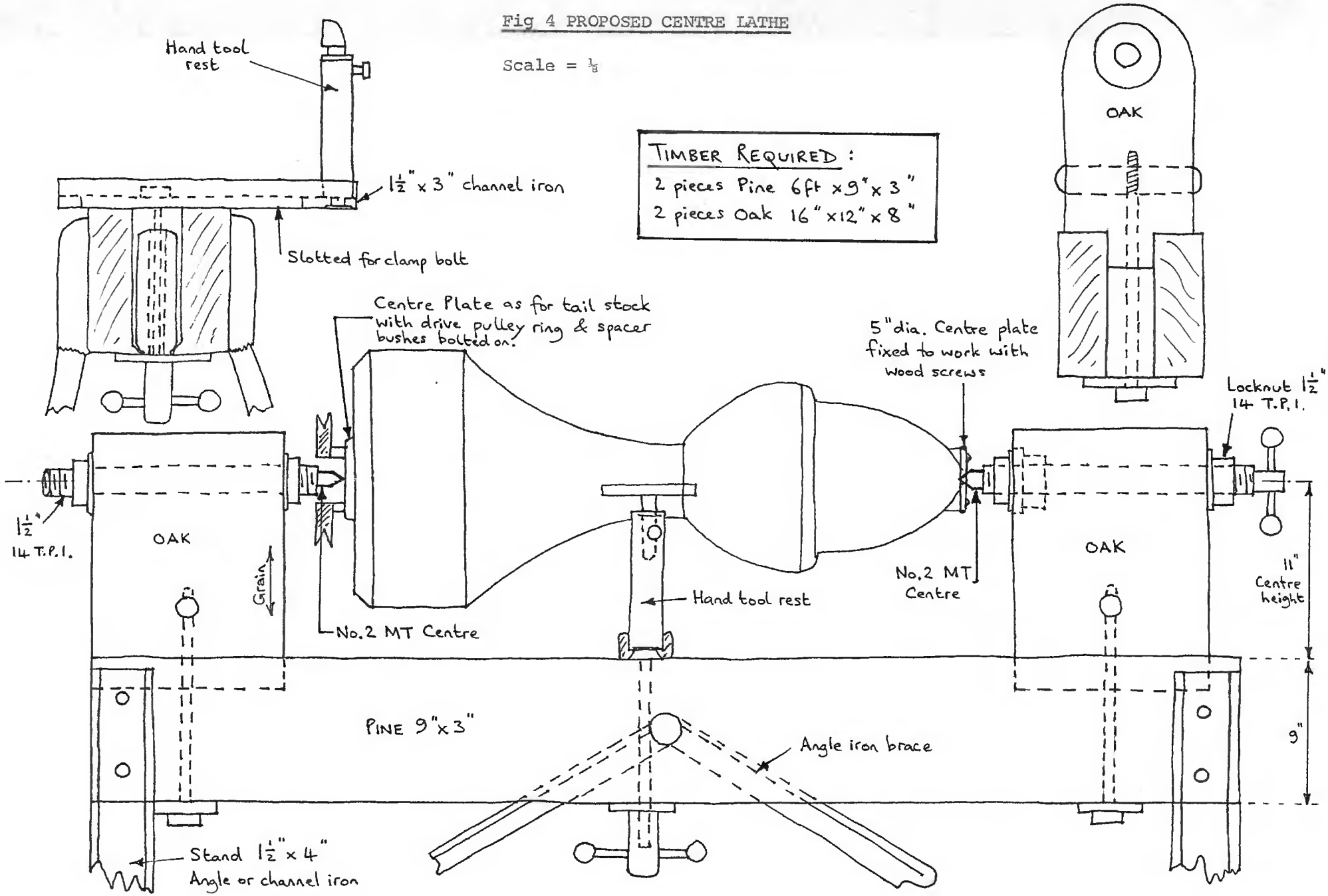


Fig.3 Completely wrong!

capacity, so improvisation was necessary to spin the big dormant thing recumbent on my garage floor. And in the interest of safety and to reduce lifting, I knew that it was here that turning would somehow have to be done, with me on my knees - a position to which I am unaccustomed. The job was a long and uncomfortable one due to the amount of wood to be removed, and my having for use only $\frac{1}{4}$ H.P. motor. The turning speed was about 220 r.p.m., which was too fast for the maximum diameter at the base, and too slow for the smaller diameter at the neck. As for the turning tools, the small chisels obtainable

Fig 4 PROPOSED CENTRE LATHE

Scale = ⅛



from tool shops were completely useless. They either bent at the tang or broke. Only 'long, strong and heavy' ones were of any use.

In the early stages the gouge digging into the swirling grain round the knots was nerve-shattering. Realising that the trouble was caused by lack of rigidity in the tool rest, I made a more stable one. The turning then became very satisfying. The wood responded to the sharp edge with a pleasing swish, producing splendid showers of shavings - three 20 lb. sackfuls of them! However, there was still the ever-present possibility of a 'dig-in', which increased with the gap between the hand rest and the work being accomplished, and with any movement of the gouge towards the scraping angle, which changed relative to the hand rest with the diameter being cut. Also, there was one section of the grain which defeated all my efforts to use the large gouge, and it ultimately had to be worked with the skew chisel which produced no dig-in problem, but slowed down progress.

The author with the completed finial

By this time I was becoming rather weary. Nevertheless, I pressed on, only to be thwarted by a dig-in combined with a stripped thread on the headstock clamping, which caused the finial to jump out of the lathe. The whirling hunk of wood was stopped by the tool rest, but no harm was done. After some re-centering and minor adjustments, all was well again.

Within days of cutting shakes developed in the oak owing to the rapid drying and contraction of the exposed growth rings. However, as the core seasons the shakes should close again, but this will take many years. My experiments indicated that the application of a grain sealer on completion of each cutting session reduced the formation of shakes. It is now clear that the grain should

have been sealed immediately after rough shaping, but one can always be wise after the event. The sap from the oak proved very corrosive, and rust formed on the tools even as work progressed.

My efforts to adorn Thelnetham mill with a finial have taught me much, and I would not like to attempt to make another without starting from scratch and building a new lathe. Accommodation for this enterprise has, in my ordinary domestic premises, been a great problem, and my car has not been in my garage for three years! It would be very useful if S.M.G. could be equipped for this work. Fig.4 shows proposals for a massive centre lathe suitable for producing finials, thrifts and other millwrighting objects. I would like to suggest that this be built for the Group and installed in the workshop at Thelnetham. And if someone will donate the timber, I will build the machine.

Woodturning itself is really irrelevant to these notes, but Figs.1-3 show the general principles, and readers who may wish to learn more of the craft are referred to the books listed at the end of this article.

I hope I haven't unwittingly suggested that this was a hazardous undertaking as far as safety was concerned. Much serious thought was given to this aspect and there was consequently little risk of accident. As protection from dust and flying chips of wood, I wore a mask and goggles. And I considered a slipping drive belt on the lathe an essential component in the set-up, although its contribution to safety was to some extent limited by the energy stored in the mass of revolving timber.

Throughout my operations on the large piece of oak from which I produced Thelnetham's finial, a number of friends have visited my garage, and all have remarked on the fragrance and beauty of wood.

References

'The Craftsman Woodturner' by Peter Child. Published by Bell & Sons, London; 1976. (£10.95 post paid)
'The Practical Woodturner' by F. Pain. Published by Evans Bros. Ltd, London; 1957. (£5.50 post paid)

The above-mentioned books, 'long, strong and heavy' turning tools and other woodturning items are obtainable from Peter Child, The Old Hyde, Little Yeldham, Halstead, Essex.

IRISH HOLIDAY JOHN SPENCER

I spent a very interesting fortnight travelling around Ireland, both North and South, in May last year, my mode of transport being mainly trains. The weather was very unsettled and there was rain in varying degrees on every day except one - and that was the day I visited Ballycopeland windmill, of which more anon.

My first visit was to the widespread Ulster Folk Museum at Cultra on a decidedly damp afternoon. The museum, situated halfway between Belfast and Bangor, contains a fascinating collection of reconstructed buildings including farmhouses, a school, a forge, weaver's cottage, church and, last but not least, two water-powered mills. One of these is the Coalisland Spade Mill which has two breastshot

waterwheels. These drive the tilt hammer to shape the spade blades and a fan for the two hearths inside the building. An adjacent structure houses a display of the spade making industry and contains the finishing workshop with hearth, bellows, shears, belt sander and strap roller. The Coalisland Mill was built about 1840 and reconstructed at the museum in 1964.

The other mill at Cultra is the Gorticashel Flax Scutching Mill (try saying that quickly!), dating from the 1850's. This was not open to the public at the time of my visit but the simple internal machinery could be seen through the open windows on the ground floor. It consisted of cogged rollers and rotating blades driven by a main shaft. The large waterwheel mounted on one end of the building bore the inscription 'Strabane Foundry, Strabane - James Stevenson'.

After a pleasant overnight stay in Bangor I journeyed by Ulsterbus to the village of Millisle, changing buses en route at the pleasant town of Donaghadee. A mile west of Millisle by the Newtownards Road stands Ballycopeland windmill, the only working windmill in Ireland. I first became aware of the mill's existence when I acquired a H.M.S.O. guidebook on the subject nearly 20 years ago. The mill is said to date from the 1780's and is now owned by the Department of the Environment for Northern Ireland. It was out of action for over 60 years and in 1978 was restored to working order. The outstanding feature of interest is the sails with their Hooper's Patent Reefing Gear. The guidebook mentions the sailcloths are folded, not rolled, which is the usual method. Also the striking gear with its worm and pinions is said to be unusual. Mr. Hughes the custodian showed me round the mill and then left me on my own to take photographs and make notes. There are three pairs of stones, a friction driven sackhoist and a vertical main shaft which was formerly a ship's mast (rope marks can be distinguished on it). As I was about to leave the mill two minibus loads of young schoolchildren arrived on the scene to be shown round.

My AA touring guide of Ireland mentions a windmill at Tacumshane, Co. Wexford, but to reach this by public transport wasn't easy as the village, according to the C.I.E. timetable is served by one bus a week, on Fridays only. After what must rank as one of the most scenic rail journeys in the Emerald Isle, from Dublin to Rosslare Harbour, I walked the seven miles along quiet country lanes to the village. It happened to be a Friday and I reckoned to catch the one and only bus back to 'civilisation' in Wexford Town, after my visit. To my surprise the little red bus passed me along the road; I thought the timetable must have changed and that I would be in for another long walk back. However on enquiring in the village, a lady said I would be able to travel on the unadvertised school bus. This allowed me half an hour to examine the picturesque little tower mill with its conical thatched cap, bowsprit extension to the windshaft and cartwheel on the end of the long

tailpole. The guidebook says the mill was built in 1846 and was reconstructed in 1952. To my delight I was able to gain access, the key being obtained from Tacumshane's grocery stores situated at the end of the drive leading up to the mill. There are two pairs of underdriven millstones, an iron brakewheel and wallower and friction driven sackhoist. Some of the mill's internal features have been taken out but the furnishings are less sparse than those inside the other thatched windmill in the British Isles, at High Ham, Somerset.

The following Sunday saw me in Ennis, Co. Clare, on what turned out to be the town's carnival day. The map of Ennis in my AA guide showed the River Fergus flowing through the town, and a 'Mill Road' which warranted investigation. I was pleasantly surprised to find two large derelict watermills and a steam plant. The latter did not appear accessible but one of the watermills had a large external undershot wheel with wooden paddles and the building seemed alluring to mill enthusiasts. Ignoring a faded trespass warning notice in the yard I gingerly entered and was soon met by a young local lad who acted as my guide. It was not always easy to understand his brogue but in a strange way it was reassuring to have his company in this huge empty building, which he said was haunted! I remember seeing, not a ghost, but a large iron hurst frame and gearing and floors covered in a fine white dust. The mill across the road, adjacent to the steam plant, had a wide internal wheel. It would be interesting to find out more about the Ennis mills and their history.

I suppose a holiday in Ireland would be incomplete without a visit to Killarney and a trip by jaunting car round the famous lakes makes this even more outstanding, even in the rain. This is how I ended my holiday and, on consideration, it was one of the most enjoyable moments. During this, my first ever horse-drawn ride I was allowed half an hour to visit Muckross House, about four miles from Killarney. In this lovely mansion there is a museum and craft workshops. One of the items on display was an old hand quern. So this was a reminder of the earliest days of milling.

It would seem that Ireland is a country that can be recommended to mill enthusiasts. Hopefully on my next holiday there it will be possible to travel around by car.

NEW BOOKS Reviewed by PETER DOLMAN

'WIND AND WATERMILLS' Number 3. Published by the Midland Mills Group; 1982. Price £1. Obtainable from John Bedington, 5, The Crescent, Bromsgrove, Worcs.

This is the third such publication from Midland Mills Group and maintains their excellent standard. Seven articles covering a wide variety of molinological topics appear in this issue, one of which, 'French Millstones' by Owen Ward, is particularly useful as it attempts to gather all the relevant data on the subject and to dispel some of the many myths surrounding French stones. The articles are all very well written and presented, with several illustrations

(including Wilf Foreman's drawings of Norton Lindsey mill). Highly recommended.

'STABILITY IN WINDMILLS AND THE SUNK POST MILL' by Paul Jarvis. Published by The International Molinological Society; 1982. Price £3. Obtainable from TIMS, 2, Eldon Road, Reading, Berks.

Those who heard the author's talk on postmill design at a recent S.P.A.B. Windmill Meeting will remember the fascinating and revolutionary ideas put forward. Full marks then to Paul Jarvis and to TIMS for developing these ideas into a full-scale book of 74 pages. The introduction is called 'a fresh look at an old subject' which is exactly what is undertaken. The evidence from old pictures and archaeological remains is sifted and analysed to give some clues as to the design of the first post mills and sunk post mills. The reasons for building sunk post mills and the factors affecting post mill design are explored in considerable detail, with many mathematical formulae. This is a weighty tome, and much of the text will be over the head of the general reader. For those interested in the technology of windmills however, this is a pioneering work deserving of lengthy study. I suppose that this could herald the start of a period of intense discussion on the subject, which will hopefully enable us to all achieve greater understanding of how windmills evolved.

'STOW MILL, PASTON, NORFOLK' - Cardboard Cut-Out Model; Olsen Products. Price £1.50 + 25p. postage from Mike Newton, Stow Mill Cottage, Paston, North Walsham, Norfolk.

This model to 1:72 scale (approx.) has been designed by John Nichols of Holton mill in Suffolk. Like the earlier model of his own post mill it is somewhat inaccurate although this is understandable bearing in mind the difficulty of the modelling medium chosen. An elementary spelling error on the front cover of the folder does little to enhance the model. For those with the patience, or a young relative, this could provide hours of fun. Full instructions are included. All profits go to the fund to refit Paston mill with machinery.

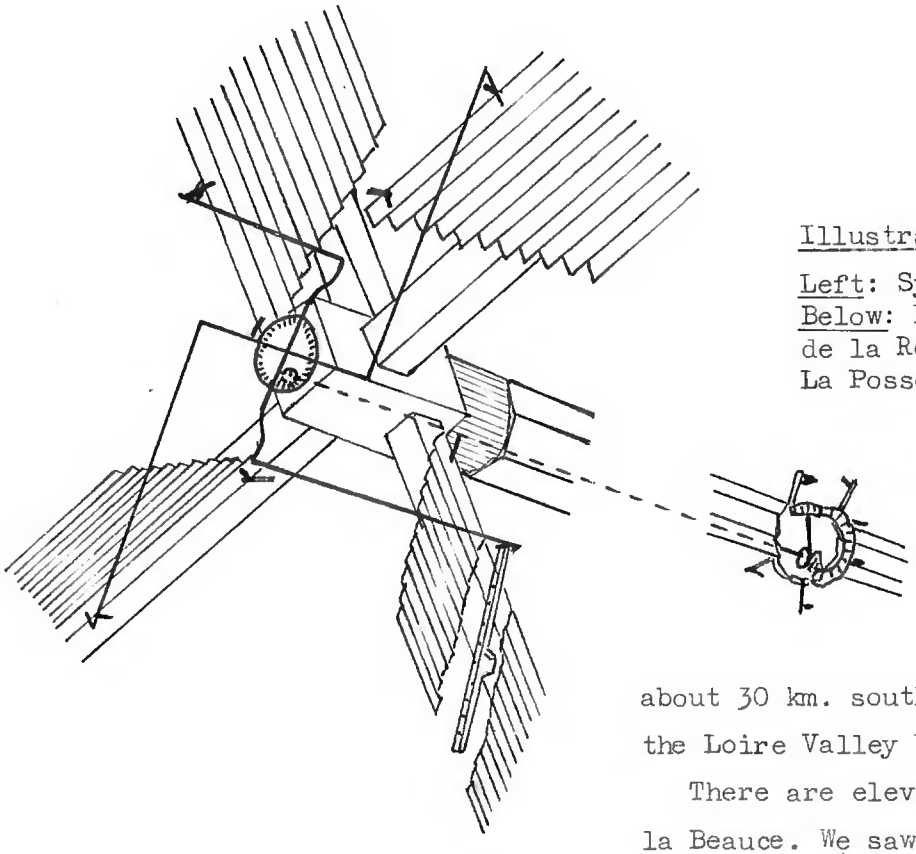
'WEST BLATCHINGTON WINDMILL' Text by Roger Hayden. Published by The Friends of the West Blatchington Windmill; 1982. Price 70p.

This is a most attractive 14 page guide to this unusual mill, with interesting information on the history of the settlement as well as on the mill itself. Complementing the description of the mill are several photographs and a good sectional drawing.

WINDMILLS IN FRANCE: SOME FIRST IMPRESSIONS

MICHAEL ORGAN

The fifth Symposium of the International Molinological Society ('TIMS') in April gave me my first sight of French windmills. Two main areas were visited: la Beauce, a wheat growing area in the Department Eure-et-Loire



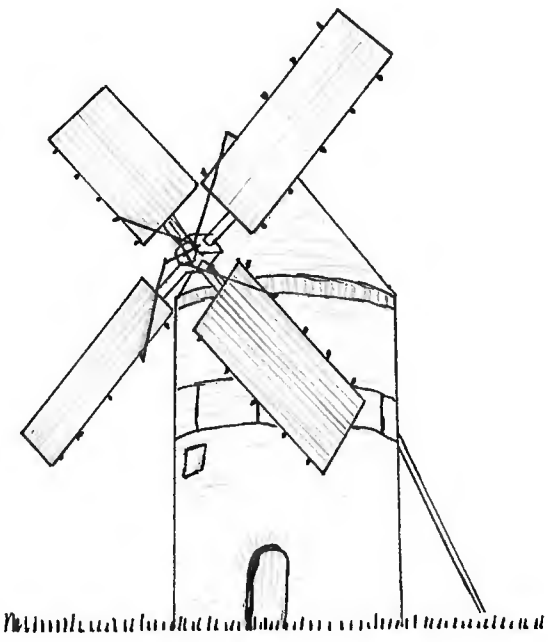
Illustrations

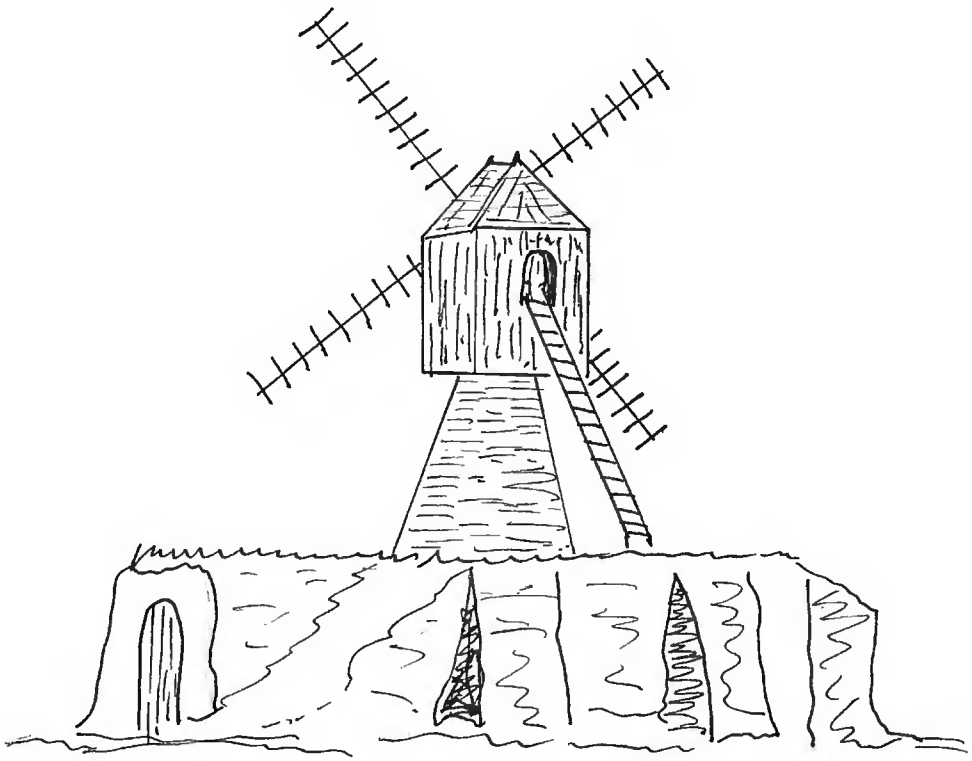
Left: Système Berton
Below: Le Moulin
de la Roche at
La Possonniere

about 30 km. south east of Chartres, and the Loire Valley between Angers and Saumur.

There are eleven restored post mills in la Beauce. We saw several, standing outside villages in small hedged square fields amidst the larger corn fields. They are rather solid looking mills, either open trestle or with single storey roundhouses. Immediately apparent differences from English post mills are the shingled straight roofs often topped by a weathercock, vertical weatherboarding, external sack hoists, multiple quarter bars and long tailpoles (none of the mills we saw had fantails).

The most interesting features, however, are the sails and windshafts. On the mills with common sails the stocks and whips are usually in one piece, the mortised sail bars being fitted after the stock is centered in the poll-end. Most of the mills we saw had sails with longitudinal wooden shutters and are called 'ailes à planche' or 'ailes Berton'. This system was invented by M. Berton in 1840 and consists of 10 or 11 planks folding in behind each other and swivelling on and in front of the stock. When closed they look like a solid bar and when open like a large rectangle of weatherboarding fixed to five cross bars. There is of course no need for laths or hemlaths. The angle of weather is constant as it must be with planks folding behind each other and the





Le Moulin de la Petite Roche

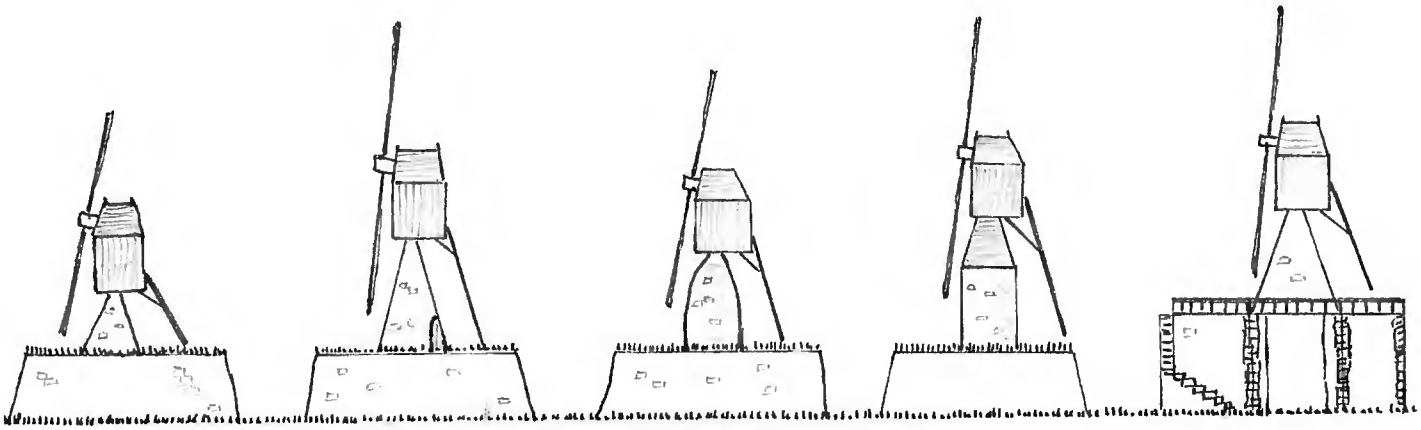
great width relative to length makes them look cumbersome. However the ones we saw working seemed very efficient. They are not automatic like English patent sails but can be adjusted internally without stopping by means of levers on the windshaft, the area being increased or reduced by a differential gearing (see diagram).

The windshafts are invariably of wood, the poll-end square and mortised for sail stocks and compass arm brakewheel. There are three bearings; at the neck (grand colet) and near the tail (petit colet) having steel liners set into the wood, and the third at the tail (butte) to take the horizontal thrust.

We visited two tower mills, the first in la Beauce, Le Moulin de Pierre at Artenay. This is a fully restored town mill built in 1848. It is a straight-sided stone tower with a conical cap. Winding is internal by means of iron gear wheels in the cap turning on a toothed curb. She has two pairs of underdriven stones and also, on the first floor, two silk machines. One was immediately struck by the space and easy access to the machinery on all floors.

The second tower mill we visited was at La Possonniere near Angers, Le Moulin de la Roche. This too is a straight-sided stone tower, built in the second half of the seventeenth century and modernised in 1860 with Berton sails and two pairs of stones. Winding is by means of a long tailpole.

In Anjou there are 1,581 known windmill sites and 444 visible mills or ruins, i.e. 206 towers, 14 post mills and 224 caviers. On our short journey through part of this region we saw dozens of these ruins, mainly moulins



Moulins Caviers

caviers. They are so numerous that at one stop I photographed three on one exposure with a wide angle lens.

The moulins caviers are peculiar to this area. They consist of a cone or bottle-shaped tower rising out of a large mound of earth containing the man made cave which gives these mills their name. The tower is surmounted by a small hollow post mill containing the windshaft and brakewheel which turns a vertical shaft by means of lantern gearing. This transmits the power down through the hollow post and tower to the cave where the stones are housed. The post mill shaped cap is reached by a long ladder which is also the tailpole.

There is an excellent book, 'Les Moulins d'Anjou', which describes the various types of mills in the region, their machinery, history, restoration and an area by area series of suggested tours. It has 64 pages, profusely illustrated with photographs and drawings, in paperback A4 format, and costs about £4. It is in French but even with my elementary and rusty knowledge of the language - School Certificate 1944 (failed) - I was able to understand most of the text. It is available from: Association des Amis des Moulins de l'Anjou
17, rue de la Madeleine - 49000 ANGERS

Two other useful addresses for anyone contemplating a visit are (nationally):

Fédération Française des Amis des Moulins
P.O. Box 113-16 - 75763 PARIS CEDEX 16

and (locally): Association Regionale des Amis des Moulins de Beauce
Mairie d'Artenay - 45410 ARTENAY

A.G.M. REPORT

The venue for the 1982 Annual General Meeting of S.M.G. was Pakenham watermill, where table, chairs and projector and screen were set up at one end of the stone floor. We were very pleased with the attendance of 34 Members and friends - only one less than our record A.G.M. attendance two years ago. No doubt this was partly due to the special notice we sent out to all Members in early June.

The meeting commenced at 11.20 am. with a welcome from Chairman Chris Hullcoop. Apologies for absence were received from Len Ball, John Holdway, Barry Hall and Bob Sharp. The minutes of the last A.G.M. (see Newsletter 20, pp. 8-9) were

proposed as a true record by Cliff Lovett; this was seconded by Graham Wilson. Treasurer Brian Flint then presented the year's accounts. These showed that the financial state of the Group remained healthy (current balance in bank and building society : £840), but that the amount by which income exceeded expenditure had declined from £330 last year to only £101. Also, there had actually been a slight drop in income from subscriptions. The accounts were proposed for acceptance by Mike Organ; this was seconded by Peter Dolman. Copies can be obtained on request from the Secretary.

Chris Hullcoop then said that he felt there was a need to raise the subscription, and suggested £4 per annum. Tony Bryan felt that any rise should be in line with the current inflation rate, but Chris Hullcoop pointed out that the subscription had not kept pace with inflation (it was £2.50 in 1977). Tony Bryan queried the large amounts in the accounts for materials for repairs, and said that ideally mill owners should pay for these and S.M.G. should give labour only. Reg Clover said that the 'Drinkstone Fund' would in fact be paying for materials used at Drinkstone. Chris Hullcoop said that the materials were for 'holding operation' work only and therefore inexpensive. A formal proposal was then put by Brian Flint that subscriptions for 1982-3 should be as follows: Full Member £4 (increase of £1); Junior Member £2 (increase of 50p.) This was seconded by Reg Clover and carried unanimously on a vote. Tony Bryan stated that this decision might result in a few lost Members, and make it difficult to recruit new ones. Chris Hullcoop said that the present membership size made printing the Newsletter awkward - very small or very large numbers were easier to deal with.

Editor Mark Barnard reported that Newsletter publication was going well, with a good selection of material published in the last year and more in hand. He also mentioned that the Group had published Wilf Foreman's drawing of Thelnetham mill for fund raising purposes, and that it was hoped to prepare a guide to the county's mills in the coming year, concentrating on the ones most accessible to the public.

Peter Dolman, S.M.G. Secretary, said membership stood at 131 (an increase of 11 on last year), most of these being Full Members. He was still receiving a steady trickle of routine enquiries on mills which he answered on behalf of the Group.

John Snowdon proposed a vote of thanks to the four main Committee members; this was seconded by Graham Wilson. The meeting then came to the election of the Committee for the coming year. It was explained that the Committee was really a 'two-tier' affair, with the four main members plus the others who attended as they were able. There had been two nominations for the one vacancy on the Committee : Rob Shorland-Ball and Anne Whitney. A vote was taken and Rob Shorland-Ball was duly elected by 15 votes to 4. However, in view of a possible future vacancy on the Committee it was agreed that Anne

Whitney would be invited to attend meetings 'on approval'. The remainder of the Committee were all willing to stand again : Graham Wilson therefore proposed their re-election en bloc and this was seconded by Kate Davidson.

Chris Hullcoop concluded the meeting with the Chairman's report, which covered the wide range of activities S.M.G. had been involved in over the last year. Among these were : drafting a 'Code of Practice' on mill repair; liason with S.P.A.B.; meetings and publicity displays; visits to mills (Kersey; Pakenham; Holbrook; Holland); provision of advice on repairs (Reydon; Holbrook; East Bridge; Buttrum's Mill, Woodbridge); commenting on planning applications (Hawk's Mill, Needham Market); demonstrating working mills to the public (Herringfleet; Pakenham watermill) and of course practical repair work (Thelnetham; Drinkstone post mill).

The meeting concluded at 12.50 pm., giving those present the chance of enjoying a pic-nic lunch before visiting Sapiston watermill in the afternoon (by kind permission of Kit Helps, the new owner).

NEWS

PROGRESS AT THELNETHAM

Work is now complete on the curb which has been dismantled and protimised by the double vacuum process. Our thanks go to Chris Hullcoop for the long hours put in on the making of the curb, to William Brown & Co. for thicknessing and protimising the wood, to John Snowdon for transporting the wood on its various journeys and to Miss Posford for the use of her garage for over six months! The curb will be fitted onto the mill during the second week of this year's work-in as the brickwork at the top of the tower is as yet unfinished.

Another important task recently completed is the turning of a new finial (see elsewhere in this Newsletter). Cliff Lovett has made a magnificent job of this, turning out an acorn shape, which is the best estimate of the original we could make from old photographs.

Also carried out recently has been the turning of the seven cap rollers by John Snowdon. These wheels were all unevenly worn and had to be turned to a true circle and have their edges turned up. Some appeared to have given up turning and had become simply skids, causing a flat spot.

Two window frames have been made for the ground floor and the bin floor and these will be fitted during the work-in.

Preparations for the work-in are nearing completion but we are still a bit short of volunteers. There is a great variety of work this year for skilled and unskilled alike (see last Newsletter for details) so please come along if you can, either for a few night's stay (plenty of space to camp and all facilities to hand) or for the day. Work proceeds at a comfortable pace - as fast or as slow as you like - with regular stops for tea, while in the evening there is the chance to enjoy a drink at the 'White Horse' just down the road or perhaps to

see an open-air slide show. If you would like further details please contact Peter Dolman on Needham Market 721077, or call in at the mill anytime during the work-in, which is: Sat. July 24th - Sun. August 1st and
Sat. August 21st - Bank Holiday Mon. August 30th

BUTTRUM'S MILL, WOODBRIDGE

In the last Newsletter we mentioned that we had found it necessary to draw attention to some faults in the winding gear of the new cap, being built by Millwrights International Ltd.. The main problem was that due to an oversight by the millwrights, the fan to curb ratio had ended up at around 32,000:1, too high by a factor of nearly 30. The design was also different from that originally fitted, approximate details of which had been provided by S.M.G. at an early stage but for various reasons not acted upon. As we were never officially approached for advice we could not offer precise details at the time. Unfortunately, by the time we were formally asked tc advise the work had been completed. On investigating the problem we discovered that the new fanstage, a copy of the 1950's Smithdale one, was significantly different to the original and that because of this the original shaft layout was impossible to re-create. It is a pity S.M.G. were not involved from the beginning, as we could have spotted this in time for the design to be changed to make it historically accurate.

The nearest compromise 'Whitmore style' system was that fitted to Kelsale mill, but unfortunately it was decided that this too was impractical, and so the existing Millwrights International layout has been retained, with the correction of the offending three pairs of bevel wheels to bring the ratio to a more sensible 1,200:1 or thereabouts.

The new curb has recently been fitted, with new castings, and a fine job it is too. The cap was lifted onto the tower on July 8th, although at the time of writing it is not turning to wind.

'WORK-IN' AT PAKENHAM WATERMILL

The apprentices of Eastern Electricity have just completed their second work-in at Pakenham watermill. Their tasks ranged from further repairs to the mill machinery, new paths and rehabilitating the hut which will be used as a tea room for visitors.

The engine shed now has a solid concrete floor with a space left at the top end which will be partitioned off for toilets still to be fitted. A cooling tank with pipes to and from the engine has been neatly fitted which will allow the engine to run for demonstration. It cannot drive the mill yet as many of the crown wheel cogs badly need replacement (any volunteers for this?). They are strong enough to drive the sack hoist but not to transmit power from the engine. The electrically driven elevator has been fully repaired with all new wiring and switch gear. If the mill ever works regularly

again the elevator will save a lot of wear and tear on the miller! The apprentices have also wire-brushed and painted the second line shaft, and carried out improvements to the interior lighting.

Outside concrete paths have been laid from the road gate and the fire escape door to the refreshment hut, and a new gravel path leads on to the spillway gate. As well as being better for visitors these paths will prevent mud from getting into the mill on wet days. The fire escape handrail supports were rusting rapidly and have now been wire-brushed and painted.

It was hoped that the new grain bin and spout would be ready in time for the apprentices to install. Unfortunately it proved more expensive than expected and Haverhill Meat Products may not after all be able to make it, although they will review the situation this autumn.

The mill is now better equipped to deal with visitors and the machinery is a little nearer being capable of regular production, but one vital component is still missing - a miller.

WOODBRIDGE TIDE MILL

With their new pond almost complete the Tide Mill Trust asked S.M.G. if we would help get the wheel turning again for the official opening by the Duke of Grafton on July 17th. We met at the mill early one evening and together with Mike Weaver and Stan Hewitt we started digging some of the mud from the tailrace to allow water to flow through and hopefully remove the rest. We were soon aware of the material we were handling and were relieved when the Woodbridge fire brigade arrived to pump water through from the headrace while we tried to turn the wheel.

The sight of the fire engine and the hoses laid out soon attracted unsuspecting onlookers, some of whom were press-ganged into the wheelhouse and onto the wheel! Eight of us slowly turned the wheel backwards and forwards, gaining a little more movement each time. As it is made of wood and had not been turned for some time that part of the wheel below high tide was very wet and heavy while that part above was dry and light. This together with the mud made the wheel very reluctant to turn despite the 800 gallons per minute delivered by the two hoses. After an hour's heaving with Mike Weaver making exhortations similar to those heard on the rugby field we managed to turn the wheel one revolution and left the heavy wet portion uppermost to dry out and help bring the wheel back into balance.

Now that we know the wheel will turn without damage - albeit reluctantly - we can direct water from the new pond onto it once the flap valve has been fitted. With a lot of pushing it should gradually clear and come back into balance. It will be several weeks though before the wheel is turning smoothly and reliably and in view of this the Tide Mill Trust have decided to postpone the official opening until later in the year.

It is a pity that the original seven acre pond was converted to a marina but in the 1960's few could see a future for the mill. We owe so much to Mrs. Gardner who bought it and the few stalwart Woodbridgians who have stood by the mill over the years, slowly bringing their dream of it working again nearer to reality.

ERIC ERNEST BURROUGHES

It was with considerable sadness that we learnt of the death of one of our keenest Members recently. Eric Burroughes was born 80 years ago into an old-established windmilling family. His father was mill manager at Ling Mills, Wortham (a post mill and steam roller flour mill) and the family lived in the mill house. After leaving school at 13 he was apprenticed to a firm of coachbuilders at Diss. He subsequently set up his own coachbuilding and wheel-wrighting business at Rickinghall. He became well known as a builder and latterly as a restorer of carriages and never retired, finishing a trap the day before he died. He also did other forms of woodwork, including work for mills: Pakenham watermill has a stone tun and re-cogged stone nut as examples of his work. He was a mill enthusiast most of his life and since the 1920's had visited mills in the area, often in company with his brother-in-law Claude Aldridge. He had many memories of local mills and had freely given help to Brian Flint and Peter Dolman when they were researching for their books. He took a keen interest in restoration work at Thelnetham and was a frequent visitor, having seen the mill in its last days of work in the 1920's. His friendly face will be greatly missed.

DALHAM MILL

Weatherproofing work at the mill began in mid June when the tower was yet again shrouded in scaffolding. This work will mark the final chapter in the County Council's efforts to see the mill restored to working order, and from now on any subsequent work of restoration or maintenance will be the responsibility of 75 year old Frank Farrow, the owner.

MILL FOR SALE

One Suffolk mill recently advertised for sale is Raydon watermill on the River Brett. This was house converted in the 1960's although the two pairs of hurst-mounted stones and their drive from a turbine was retained. It is listed Grade II. The property includes the adjoining cottage and very fine grounds with a long river frontage. A snip at £190,000. Agents : Fenn Wright, Ipswich / Colchester.

REPAIRS TO HERRINGFLEET MILL

The much needed overhaul of the machinery is being undertaken by our Member Richard Seago, who is now in millwrighting part-time. He is re-cogging the wallower, adjusting the brakewheel and wallower, repairing the brake and

doing various other minor repairs necessary through wear and tear and also finishing off some 'rough edges' left by the previous millwrights. Unfortunately, Richard tells us that the awful flat sails are in splendid condition, good for many years to come!

S.M.G. DENMARK TRIP

This trip, our second foreign jaunt, proved most enjoyable even if the pace was a little hot at times (we averaged about 230 miles a day!) and some meals a bit skimped. We saw some fine mills, many of which we were able to get inside thanks to the efforts of Boum Pyndiah and Anders Jespersen who between them most kindly showed us round for nearly all of our stay. There will be an illustrated account of the trip in the next Newsletter.

EVENTS

S.M.G. ANNUAL 'WORK-IN' AT THELNETHAM MILL: SATURDAY JULY 24th - SUNDAY AUGUST 1st and SATURDAY AUGUST 21st - BANK HOL. MONDAY AUGUST 30th

Please see above under 'News' for details of the work-in, which is of course our major event of the year.

VISIT TO HERRINGFLEET MARSH MILL: SUNDAY AUGUST 8th, from 2 - 5 pm.

We intend to hold another public open day at Herringfleet when the mill will be working, wind permitting. However, this open day depends on the repairs being completed in time. In view of this uncertainty we ask any Member wishing to come along to check with Peter Dolman (Needham Market 721077) or Mark Barnard (Ipswich 77853) first. Please don't just turn up as you may be disappointed.

VISIT TO FRAMSDEN POST MILL: SUNDAY SEPTEMBER 19th, from 2.30 - 4.30 pm.

This fine mill was built in 1760 as a little common-sailed, tailpole-winded open trestle post mill. Its present appearance results from the modernization by Whitmores in the 1830's and more recently from the splendid restoration carried out by Chris Hullcoop and friends during 1966-73.

As well as the mill we hope to see John Ablett's fine collection of country bygones amassed over many years from local farms, cottages and sales.

The mill is easily found, nine miles north of Ipswich beside the B1077 road.

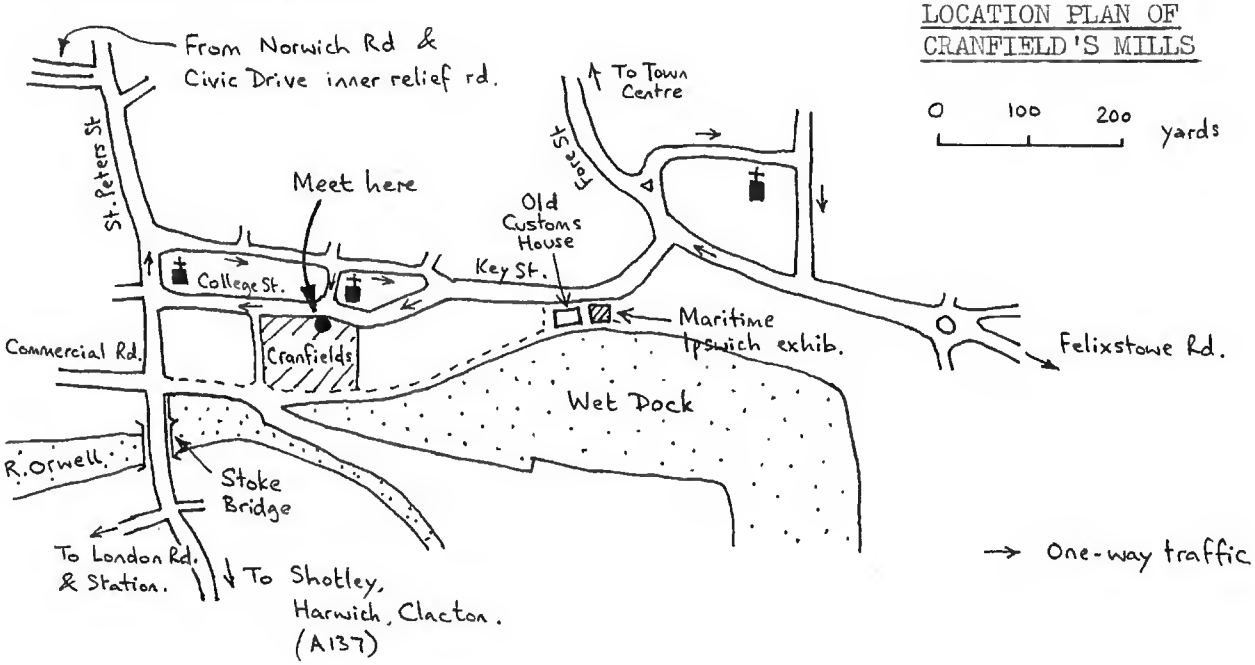
VISIT TO CRANFIELD BROS. LTD DOCK ROLLER MILLS, IPSWICH: FRIDAY SEPTEMBER 24th, at 7.30 pm.

By kind permission of Mr. M.G. Kyle, the managing director we shall be visiting the extensive Dock Roller Mills overlooking the wet dock in the centre of Ipswich. These mills were established in 1884 and have been enlarged over the years. They are now part of the Allied Mills Group and specialise in flours for bread and cakes, supplying most of the local bakery trade.

Those who made the S.M.G. visit to the RHM roller mills at Felixstowe Dock three years ago will know that modern mills are extremely interesting, so let's have a good number of Members present. Please assemble promptly at the main

entrance in College Street where we will be met by our guides. A further attraction is the Maritime Ipswich exhibition nearby with historic ships likely to be moored alongside.

LOCATION PLAN OF CRANFIELD'S MILLS



NOTE Please make sure you enter the dates of these visits in your diary as there will be no further notice of them. Also note that this time there are two visits within the space of a few days!

Other Dates

September 9th - 12th	S.P.A.B. Weekend Tour to Devon
November 20th	S.P.A.B. Watermill Meeting
March 19th 1983	S.P.A.B. Windmill Meeting
May 7th 1983	S.P.A.B. Day Tour

NEW S.M.G. MEMBERS SINCE NEWSLETTER 23

CRICK, Stephen T.
33, Baden Powell Drive, Colchester CO3 4SW

NEWTON, David H.
1, Spring Park, Chapel Road, Otley, Ipswich IP6 9NX

SHUTTLEWORTH, Nicholas
'Hillside', 12, Point Clear Road, St. Osyth, Essex CO16 8EP

Brian Flint's new address is 'The Hollies', Norwich Road, Claydon, Ipswich IP6 0DQ
Midland Mills Group Secretary John Bedington's new address is 5, The Crescent, Bromsgrove, Worcs.
The new Secretary of Friends of Norfolk Windmills is Peter G. Woodrow, 13, Hillside Crescent, Wicklewood, Wymondham, Norfolk.
