

SUFFOLK MILLS GROUP

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There was an encouraging response to my plea for articles in the last Newsletter, some of the results of which appear in this issue. However, I am still keen to receive further material for eventual publication.

S.M.G. are particularly pleased that the rebuilding of East Bridge Mill at Abbot's Hall Museum, Stowmarket is going ahead. This comes only a year after we rescued the pieces of the fallen mill from the marshes and represents a major achievement for our small group.

May I finally remind Members whose subscriptions are due for renewal to try to renew promptly so that we continue to enjoy your valuable support.

M.J.B.

SOME THOUGHTS ON THE SITES OF EARLY MILLS (1) JOHN McCANN

Most existing watermills occupy the sites of earlier mills, one having succeeded another on the same site from very early times. In addition there were many watermills which went out of use in the Middle Ages or later, leaving abandoned sites which one can still hope to find by a careful study of all the evidence. Many existing windmills were established on sites with a shorter history of occupation; the site of an earlier windmill serving the same local community can often be found some distance away. These thoughts arise from local history studies in Essex. It is hoped that they will stimulate similar studies in Suffolk and elsewhere.

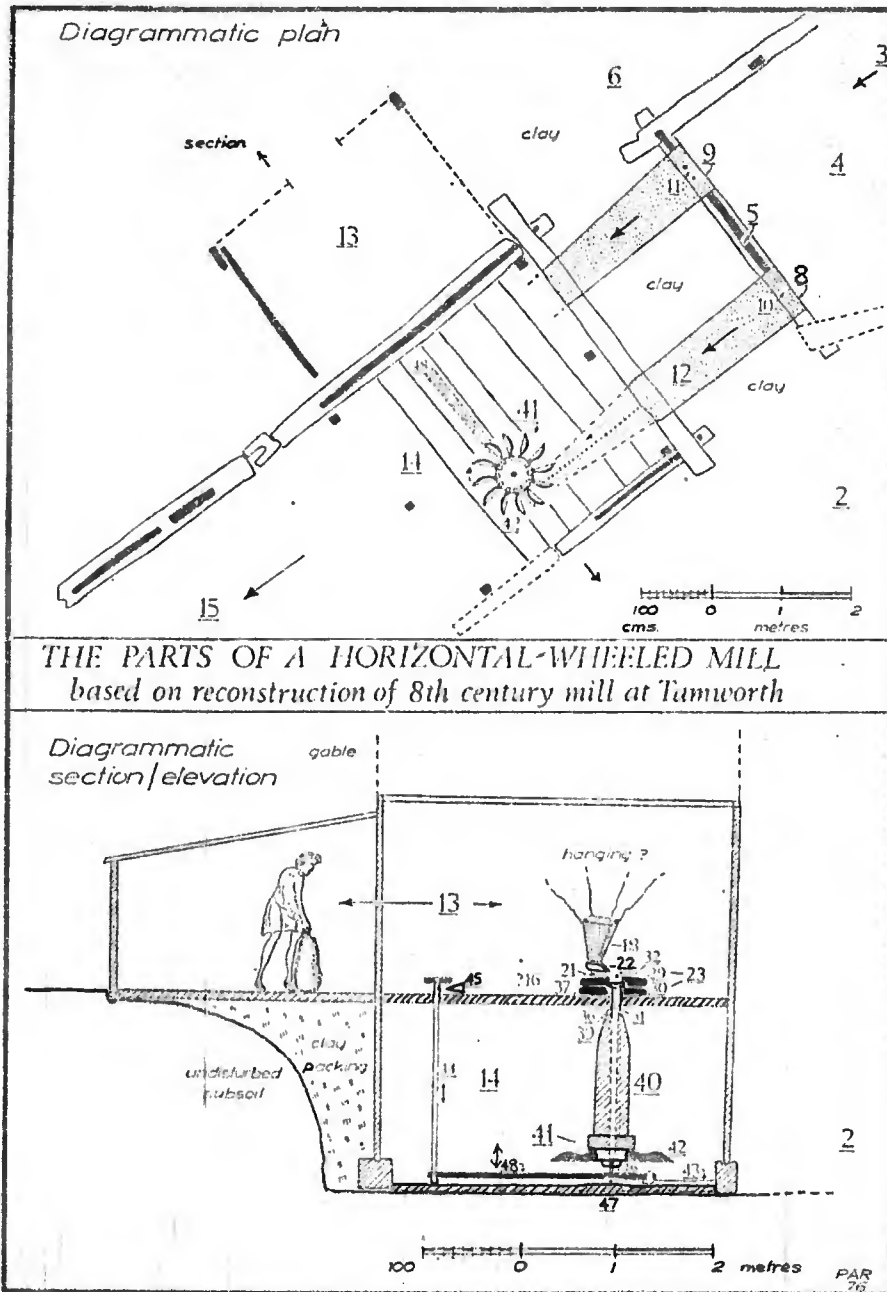
The water-powered corn mill was known in many parts of the world in the first century B.C. In the later Roman Empire there was a great expansion of mill technology - undershot, overshot, floating and turbine mills were in use. In Britain two mill pivots of this period have been found, in both cases in hoards of miscellaneous iron objects hidden in wells. One found at Silchester is 36 inches long and seems to have had a wooden pinion, which perhaps indicates that it was driven by a horizontal-axle wheel¹. The other, found at Great Chesterford, Essex, is 21 inches long and there is no indication that it had gearing².

The watermill was re-introduced from continental Europe in the eighth century - a charter of King Ethelred of Kent in 762 refers to one near Dover. A vertical-axle mill has been excavated at Tamworth, dated by radio-carbon to the eighth century. It had an iron bearing and wooden turbine blades of L-section. Over 200 fragments of stones were found, of which 20 were re-assembled, 23 to 28 inches in diameter, mostly of English grit but including some of Rhineland lava³. It occupied the site of an earlier mill, of which less evidence remained, but it seems to have failed through scouring of the

foundations. Another Saxon mill has been excavated at Old Windsor; it had three horizontal-axle wheels in parallel. It was destroyed by fire - possibly in a Danish raid in the ninth century - and was replaced by a smaller, simpler mill of vertical-axle type⁴. At this period it is likely that mills were provided mainly on major estates, particularly royal and monastic estates - Tamworth and Old Windsor were both associated with royal palaces. Whether lesser secular estates had mills is not known. By the time of the Norman Conquest mills were widespread, and they then increased further. It has been calculated from Domesday Book that by 1086 there were 5,624 mills in England⁵, distributed throughout most of the country - although there were few in Cornwall and none were recorded north of the Humber basin. Most of them were sited on small watercourses which we might not regard as useful sources of power - the lower reaches of rivers were not used for milling. Some were specifically described as winter mills, indicating that there was no power in summer; when one looks at the streams which operated them one suspects that this was often true of others. In Essex there were 203 mills, which represents one to every 79 households. In Suffolk there were 218 mills, one to every 94 households. In many places a local community was served by more than one mill, although more than two was exceptional⁶. So far as we know these were all watermills. It has been suggested that some were powered by animals; there is documentary evidence of horse-mills from the fourteenth century⁷ but there is no evidence that any of the Domesday mills were of this type.

Windmills of vertical-axle type were known in Persia in the tenth century. It used to be thought that windmill technology as we know it was introduced into western Europe by returning crusaders, but it now seems that the opposite is true. The first recorded horizontal-axle windmills appeared in Yorkshire and Normandy in the 1180's; the technology was taken to Syria by German crusaders in 1193⁸. Crusaders' castles in the Near East had post mills mounted on the walls. Probably the technological development was more complicated than either alternative on its own, resulting from a fusion of Byzantine and western technical contributions. The inadequacy of water power in the best corn-growing areas of England provided the stimulus for the spread of windmills, and the concentration of wealth which was inherent in feudal society provided the resources.

Even in late Saxon times the principle became established that a landowner had a monopoly of all milling within his estate, and from the Norman Conquest it was rigorously exploited. Consequently the lord of the manor had every incentive to provide a mill, however small the manor, if it was feasible at all. It was under no necessity to be economic; the peasants had to use his mill, and they did not even have the right to grind their own corn with their own hand-mills. They did, of course; numerous disputes are on record in which the lord took action to protect his prerogative. At some mills the amount of corn milled must have been minute; much of the land was not in arable cultivation, and yields per acre were very small by later standards. To envisage an early mediaeval watermill one needs to think in terms of a small installation exploiting a minor source of power with simple technology, perhaps only in intermittent use. (See Philip Rahtz's reconstruction of the Tamworth mill on facing page). Mediaeval windmills were probably more like the post mills we know, but without automatic controls and



Key

- | | |
|--------------|-----------------|
| 4 Millpond | 21 Damsel |
| 5 Headsill | 22 Shoe |
| 8 Penstock | 40 Shaft |
| 9 Flood gate | 45 Wedge |
| 12 Flume | 47 Iron bearing |
| 15 Tail race | 48 Plank |
| 18 Hopper | |

(The paper from which this is reproduced gives the equivalent words for all the numbered parts in Old English, Shetland Scottish, Faroese, Norwegian, Scottish Gaelic, Irish Gaelic and other languages).

(Illustration reproduced by courtesy of Philip Rahtz from 'The parts of an Anglo-Saxon Mill' by Philip Rahtz and Donald Bullough, Anglo-Saxon England, Vol. VI, 1977.)

operating smaller stones.

An extent of the possessions in Essex of the French abbey of St. Valery in 1324 (during wartime, when the revenues were appropriated by the English Crown) records a windmill at Lindsell worth 20 shillings per year, and a watermill at Birchanger (on the River Stort just above Bishop's Stortford) worth 26/8d. per year⁹. Some appreciation of these values can be derived from the fact that in the same document arable land is valued at 3 pence per year. The watermill yielded as much rent as 106 acres of arable land, equivalent to the capital value of two cart-horses or two oxen. At this time the population of England was as high as it ever reached in the Middle Ages; land was greatly in demand and the position of the lord of the manor was strong. From 1348 the ravages of the Black Death and of the other epidemics which followed it reduced the population by, according to various estimates, one-third or even one-half, and it did not recover to the earlier density until the time of Queen Elizabeth¹⁰. In the later fourteenth century there were not enough people to work the land. All marginal land went out of use, and much good arable land was converted to pasture for wool production, and this process continued throughout the fifteenth century. It is likely that many mills went out of use during this period, and in most cases the sites were not used again.

The sixteenth century was a period of population growth and rapid economic change, in which the under-developed economy of England at last 'took off'. The legal prerogatives of the lord of the manor were whittled away - not without resistance on his part. Increasingly corn was taken to the most efficient or the cheapest mill in the area, a process which lords were often unable to check, and so the less favoured mills fell into disuse. An estate map of Little Canfield in 1590 shows a disused millpond beside the river, but a working post mill on high ground 500 yards away¹¹. (The mound is still there). The watermill can never have been very reliable. The stream which powered it is the River Roding, but very near the source - it drains an area of only about 2 square miles. Most summers the water is only ankle-deep, and in drought years it can dry out. Of course rainfall, drainage and ground cover were different earlier, but whatever allowance one makes for these factors the mill must have been chronically short of power. Confirmation of this is provided by Chapman and André's map of 1777, which shows no mill on the River Roding above Whaples Mill, Berners Roding, seven miles downstream. A mill which was well sited for power but which was difficult of access tended to be replaced by one near a good road. An estate map of White Roding in 1609 shows a disused mill mound on high open ground, but 200 yards from the nearest road. There was a working post mill only 600 yards to the west, within the same manor, but at the roadside. Later a tower mill was built on the same site, of which the tower is still present.

(Part II of the paper will describe some of the ways of tracing the sites of early mills, with some case studies. It will appear in the next Newsletter).

Notes

1 W.H. Manning: 'A mill pivot from Silchester', *Antiquaries' Journal*, Vol. XLIV, part 1, 1964, pp. 38 - 40.

2 R.C. Neville, *Archaeological Journal*, Vol. XIII, 1856, p.9.

- 3 Philip Rahtz and Ken Sheridan, Transactions, South Staffordshire Archaeological and Historical Society, Vol. XIII, 1971-2, pp. 9 - 15.
- 4 David M. Wilson and John G. Hurst, Mediaeval Archaeology, Vol. II, 1958, pp. 183 - 185.
- 5 Margaret T. Hodgen: 'Domesday water mills', Antiquity, Vol. XIII, 1939, pp. 261 - 279. This figure has been disputed as too small. There are problems of interpretation where the revenue of a mill is divided between manors, but this figure is likely to be much nearer the truth than the often quoted figure of 7,500 mills.
- 6 Ibid.
- 7 Fred H. Crossley: 'Timber building in England' (Batsford, 1951), pp. 103 - 4. (Cites Bicester priory, Kirkham, Lancs., 1337; Lincoln 1555).
- 8 Lynn White: 'Mediaeval technology and social change' (Oxford, 1962), pp. 87 - 88 and p. 262.
- 9 BM. Add. MS 6164, pp. 178 and 188.
- 10 J.C. Russell: 'British mediaeval population' (University of New Mexico, 1948), p. 280.
- 11 Essex Record Office, D/DHt M.20
- 12 Essex Record Office, D/DC 27/1118

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S.P.A.B. LEICESTERSHIRE TOUR JOHN SNOWDON

A rather slow start to the tour was made as the train was late arriving at Market Harborough, apparently no fault of British Rail. In consequence the drive past the house conversion at Arnesby was cancelled and we went straight to the S.P.A.B.-owned post mill at Kibworth Harcourt. After a brief introduction by Mr. Lord, the assembled party was let loose on the mill, which due to its small size soon became very crowded. All too little time was available and soon we were herded back onto the coach for the picturesque run to Oakham.

On arrival we all descended on the Rutland Museum where after a very brief introduction by the curator the premises were thoroughly inspected. To certain members one of the more interesting exhibits was a pair of hurst-mounted millstones for use with an engine drive. As soon as practical after one o'clock we were shoo'd out to eat a tasty packed lunch, supplied courtesy of S.P.A.B..

After lunch the party set out for the tower mill at Wymondham. The cap frame, wind-shaft and brakewheel had been lowered in 1977 and taken to Suffolk for rebuilding by Jameson Marshall Ltd., so there is a good view from the curb which is now open to the sky. Back on the ground the owner produced a model of the mill when the cap and six-armed cross were still in position. In the brisk wind the miniature sails whirred round happily.

The coach set off again to return to Oakham and hence out towards Stamford. This route passes by Rutland Water, now the largest man-made lake in the country. Just before Stamford we diverted to pick up a guide from Tinwell who led us across country to Market Deeping watermill. This is now a house and even though the mill was not on view the coach emptied with a lemming-like instinct. We wandered around outside the mill while Mrs. Dance dealt with the local police who did not exactly relish our presence on a busy main road. Back on the coach, we proceeded a few yards down the road to the remains of Molecey watermill. All that remains here is the arches. We were then taken to Deeping

St. James to again behave like lemmings and pile out of the coach to admire the river navigation system, whose molinological importance we were never quite able to gather.

On route to Maxey watermill a detour was made to see the remains of Deeping St. James tower mill - well, it was there last time, 20 years ago. At Maxey the pleasant sounds of a working mill greeted the multitude. The wheel was peacefully turning and driving a single pair of stones, grinding barley for animal feed. Unfortunately there was not enough time to investigate all the nooks and crannies before we were back on the coach to go for tea in Stamford, via Barnack tower mill which was seen from a distance.

At tea the portions had been measured out to the nearest barleycorn so as to be fair to the multitude. Afterwards we progressed via Easton on the Hill (overgrown tower) and Duddington watermill (offices) to the group of three mills at South Luffenham. The coach parked on the bottom side of the railway and as the windmill fanatics made their way up the hill the crossing keeper closed the gates. Talk about frustration! Just as an entrance was made to the watermill, an assault course in itself, the train came and all those interested ran up the hill, only to be called back as no time was left! However a few deaf ears were turned and we pressed on to the 1832 tower.

The party went finally to the converted tower mill at Morcott. This Civic Award winner was only viewed from the road but it was deplored that Stickford mill had been cannibalised for the 'restoration'. From Morcott the coach journeyed back to Market Harborough through countryside which other than brief glimpses of Corby was still relatively unspoilt. At the station attention was drawn to the facade which British Rail had just restored.

On the way home the S.M.G. party stopped at two tower mills, Spaldwick and Over. The former was built on the site of a post mill which blew down in the late 1800's. There is no machinery left but plenty of loose pieces of wood, brick and the odd millstone in the long grass outside for the unwary to stub their toes on. (If you suffer from hay fever don't go here as the grass is about two feet high). And so finally to the working mill at Over where Graham Wilson had only recently ceased work. A guided tour followed and eventually after long discussions over sail shapes, iron v. laminated stocks and other windmill matters, the weary travellers finally arrived back in Ipswich, but not before the new day had started!

RECENT PUBLICATIONS PETER DOLMAN

I have recently been shown three articles on mills by Members in magazines to which they subscribe.

Firstly, in 'Post Medieval Archaeology' 1977 there are two articles, one entitled 'Millstones, Quarries, and Millstone-Makers' by Dr. D.G. Tucker of the Midland Mills Group and the other called 'The Company of White Paper Makers in Hampshire: An Inventory of Plant' by J.H. Thomas. This latter article is of a rather specialised nature, being a description of the making of paper at South Stoneham paper mills near Southampton in 1696. The inventory itself is reproduced and makes interesting reading as does the article in general. It is surprising to learn of the output from such mills, 6000 reams

per annum being quoted.

The article by D.G. Tucker is probably of more interest to the 'general' mill enthusiast. Considering their fundamental importance to molinology, relatively little has been published on the subject of millstones. This paper goes some way to redress the balance (pun not intended!), although as the author states it does not claim to be comprehensive in any way. The best part to me is the description of 'home grown' millstone makers, especially of 'Peak' and 'Welsh' stones. The fabrication of French stones from imported segments is also covered in some detail. Several Trades Directory adverts are illustrated in the text and there are several half tone illustrations of millstones at the end of the volume. The first appendix lists known quarries or areas from which millstones were made in the British Isles, and I was staggered to see so many (31 listed), all different. In Suffolk it is rare to see any other stone than a French stone!

The second appendix attempts to list all the millstone makers in the country, with their address and if possible the years when they were active. This was a bold move, with dozens of makers listed, but I think too much attention was paid to Trades Directory entries. The only Suffolk firms listed are Whitmore and Binyon (of course) and Tinsley of Ipswich. Bear of Sudbury is omitted (he also had a works at Ipswich) and there may be other omissions as well.

The third appendix gives some actual examples of named stones, which is fine as far as it goes, but I'm sure many of our Members could add to the list. A quaint entry is 'Ixworth windmill', somehow moved from Pakenham!

In general though, a very well written and interesting article for the discerning molinophile.

The second magazine lent to me is 'History Today' (April 1978) in which is an article 'The English Medieval Windmill' by Terence Paul Smith. This is an extremely readable account of documentary, pictorial and archaeological evidence for the early existence of windmills in this country and their technology. While it obviously derives largely from previously published sources it bears none of the 'scissors and paste' hallmarks of some articles on mills.

An interesting point made refers to the researches of professor Lynn White Jr., who suggests that the 'conventional' post mill was invented in England and spread abroad rapidly, being such a successful device. An interesting theory; what do our eminent Members think, I wonder? Some excavated remains of early sunk post mills are mentioned and the construction and technology are gone into in some depth, based on old illustrations and on Bourn mill. The author leaps on the bandwagon of 'early seventeenth century' dating of Bourn; while this mill is undoubtedly of old design I cannot accept this 'oldest windmill' business talked about by virtually every windmill author in connection with Bourn mill. In the course of my researches into Bedfordshire windmills several years ago I found many early references to mills which survived to recent times. Just because a mill standing in 1550 had its site occupied 400 years later does not mean that the same mill is involved; in some cases it might be possible, but post mills are very prone to accident and rebuilding. Where does one draw the line?

In the case of Bourn mill, a deed of 1653 refers to the mill changing ownership in 1636. The next reference to it I know of is contained in 'History of Cambridgeshire' by E. Carter, first published in 1753, which states that Bourn windmill was blown down in a great storm on Sept. 8th. 1741 (I have seen 1745 quoted elsewhere), killing a man and boy in its fall. This ties in nicely, as the earliest date in the mill is 'E. Bismur 1758'. This must mean that Bourn was rebuilt after 1741 (or 1745), probably using some of the parts and the design of the older mill.

Possibly a better contender for the 'oldest' title is Great Gransden mill, a couple of miles from Bourn, which is dated 1674 although the timber that carries the date has been altered somewhat. Documentary sources put the mill's rebuilding date back to 1612 (researched by Philip Unwin).

But I digress. Another point I disagree with in the article is that windshafts were set at an angle to provide a counterbalance. This must be nonsense, for as the top sail moves back, the lower sail moves forward in counterbalance and the overall centre of gravity is unaltered. I maintain that the only reason for tilting the windshaft was to clear the body of the mill to allow more width to the sail.

These three articles are all of interest to dedicated mill enthusiasts and I would recommend such persons try to obtain copies.

THE MYSTERY OF THE MISSING MILL PETER JENNINGS

Hampshire has, of course, very few windmill remains and there seems to be a sad lack of interest in restoring or preserving the few there are. The most interesting of the ruins are conveniently situated for a visit so, after exploring more fertile windmill counties in previous years, my family and I set off in June to photograph them.

The first call was at the village of Weston, off the A3 just south of Petersfield. This was a challenge. It is supposed to have the stump of a smock mill but Peter Dolman was unable to find any trace of it when he visited the area two years ago. The map reference, 728218, is at Weston Farm and, at the entrance to the farmyard, we saw and eventually photographed the remains of a tower-like structure, about twelve feet tall, which had been incorporated into the farm walls and which seemed the most likely candidate to be windmill remains. As so often happens at windmill sites, we could find no-one at the farm building. But there were machinery sounds from the farm dairy a short distance up the lane opposite. We explored and found the sounds were coming from a seemingly untended machine but further exploration revealed a figure, dressed in cap and overalls, slumped in a chair in a dark corner of the cow shed. The figure awoke and showed itself to be an elderly lady with a marked Glaswegian accent. Asked about the windmill, she pointed out a telegraph pole in the middle of a field about two hundred yards away and said it had been there. I asked if we could reach it along the road and she said she didn't know, she'd never been there! The telegraph pole (at approx. map reference 725221) was eventually approached through the garden of a large house - again with no-one at home - and it proved to be in the middle of a collection of chicken runs, small glasshouses and enclosures populated by families of goats. We studied the site from three sides but could not see any sort of structure resembling a windmill stump and

again there was no-one to ask.

About four miles more along the A3 we saw the ruins of the tower mill at Chalton. This looked impressive from a distance but turned out to be an empty shell, despite the promise of a broken stock and windshaft still in place. Our next visit, the house conversion at Langstone, familiar from postcard views, looked more like an abandoned lighthouse than a tower mill. The next stop should have been Portchester, where Peter Dolman was unable to find two reputed windmill stumps. We did not do so well. We didn't find Portchester! A tangle of new roads took us past and onto a motorway and, with the afternoon becoming late and the light decidedly poor, we decided to keep going to what is Hampshire's best windmill now that the Isle of Wight (with the splendid National Trust mill at Bembridge) has been removed from the county. This is the tower mill at Bursledon, cap and sail-less but with the machinery seemingly intact except that the runner stones have been removed.

The only other Hampshire remains we know, the tower mill stump at Grateley, was not on our route.

So, the mystery remains. Has anyone found that missing smock mill stump at Weston? And what, if anything, remains of the two tower mills at Portchester? One is given as map reference 619044, which appears to be a cemetery now. Does anyone know where the other Portchester mill is, or was? And are there any other windmill remains in Hampshire? Answers, please, to the editor or see the next thrilling issue of this Newsletter to find out.

R.H.M. ROLLER MILL VISIT RACHEL MUMMERY

The roller mill lies on the waterfront of Felixstowe harbour overlooking the commercial freight basin. Five storeys high, built in fine Victorian gothic style it dominates the warehouses and dockland offices. Though harbour security officers were much in evidence they took little notice of our party and we were able to wander along the quay and inspect the site.

We were greeted as we started to assemble around the mill by Mr. Clover of RHM. Before conducting us through the mill he led us to a recently discharged cargo vessel moored outside, and proceeded to explain how grain was piped direct into the mill's grain silo from the holds of the boats brought alongside. This in a sense is the start of the milling process, the arrival of the wheat grain at the mill. We then entered the mill.

Before milling can start the grain is first cleaned or 'dressed'. Grain piped from the top of the silo passes down through several storeys of dressers. On the top floor the first separation takes place; here weed seeds, stones, dead mice and all manner of large debris are sieved out. A few years back a wallet containing several hundred dollars was found here during the grain cleaning process! As the grain passes down finer debris is extracted until a clean grain is produced. Unwanted cereal grains such as oats are sent off to make pig meal. At the end of this cleaning process the different types of wheat grains are mixed according to the type of flour to be produced. Grains from

England, France, Germany and Canada are used, the latter being harder and grinding to a finer flour than European wheats. French wheat yields a very white flour and is used to produce the desired colour for the white sliced loaf. Other factors involved in making up bread flour mixes are flavour and loaf shape. In order to obtain the fine white flour required by the modern consumer certain proteins and vitamins are removed in the milling process. However, to satisfy legal requirements governing the contents of the flour produced these proteins and vitamins are added back in later when the flour is processed.

We then entered a different section of the building where the actual milling process takes place and, above the noise of the machinery, Mr. Clover explained the mechanism of the roller mill. Grain is forced between two rotating cylinders (or rollers) which have a fine, sharp grooved surface. These rotate at different speeds, the upper roller rotating down on the grain shearing it while the lower roller holds the grain in place. This process, known as 'breaking', frees the 'semolina' from the outer 'bran' coat. The mixture is then sieved and the semolina ground down several more times until the remaining bran is removed and a fine white flour of the desired consistency and texture is produced. Smooth rollers are used for the later fine-grinding stages. The grain, dried to 14% moisture content for storage, is moistened before grinding to facilitate the separation of the bran from the semolina.

The roller mills we saw were surprisingly old - many dated from 1920 when the mill was enlarged and carried the name of Henry Simon on the maker's plate. There were also several interesting large dressing machines still in use, again at least 50 years old. The mill was driven by steam until 1955 and we saw the site of the engine, now replaced by the ubiquitous electric motor. One thing that impressed us whilst walking round the mill was the almost total absence of workers supervising the machinery and moving belt drives. However, despite this low labour input the mill is still less efficient than more modern complexes, a factor which is already leading to the disappearance of these older roller milling plants.

S.M.G. extend their thanks to Mr. Dixon the mill manager for allowing us to visit the premises, to Mr. Clover for showing us round and to Chris Hullcoop for arranging the tour for us.

MORE ABOUT TRICKER'S MILL, WOODBRIDGE PETER DOLMAN

Following on from our feature on Tricker's Mill in Newsletter 4 and Brian Flint's interesting letter in Newsletter 5, I have received a letter from Tony Austin in Kent enclosing a small oil painting of Tricker's Mill (reproduced opposite). He tells me the picture was given to him in 1959, before he had become interested in mills. The artist was an elderly man by the name of Frederick Therouf, who said the picture was painted in 1957. While not particularly accurate, it does show cap and two sails still in place. In the December 1957 issue of the 'East Anglian Magazine' there is a photograph of the mill with cap and two sails (p.105) captioned 'Tricker's Mill before the cap was removed'. If the date of the painting is correct this would seem to indicate



Tricker's Mill, 1957 (from a painting by F. Therouf)

that the top came off the mill sometime during 1957. Can any Member confirm this?

Another point about the painting is that it depicts the mill as being white, not red brick as it now is. Although on the face of it this would seem to be artistic licence, a couple of months ago I visited an exhibition of paintings and drawings by Leonard Squirrel, a distinguished local artist. Among several mill pictures there was a superbly detailed small print called 'White Mill, Woodbridge', dated 1914. It was obviously Tricker's Mill, with boat cap, fantail and four patent sails in working order. It was definitely drawn as a white mill - perhaps it was whitewashed in earlier times??

MILLNEWS

EAST BRIDGE SUB-AQUA MOLINOLOGICAL EXPEDITION: LOST NECK BEARING FOUND

When East Bridge mill collapsed into the dyke in February 1977, the neck brass together with its cast-iron swinging pot must have fallen out when the weight of the windshaft ceased to locate it. Last year, after much probing in the water, we found the lower half of the bearing, which was mounted on a broad oak base preventing it sinking too far. However, by then the bearing itself was deep in the mud, so we sought advice from diver Stuart Bacon of Orford Crafts (you may have seen his article on Dunwich in a recent 'East Anglian Daily Times'). He volunteered to try to find the bearing and one evening in mid July he plunged into the stagnant muddy dyke. As luck would have it the first object he found was the bearing. Accustomed to identifying objects by touch in nil visibility, he could feel the curve of the bearing and the three semi-circular projections on the base. The great suction of the mud held it firmly, so a rope was passed down and a quick heave brought it to the surface, looking just as we had expected, and in fine condition with many more years of wear in the brass. Although in only two feet of water, below this there was six feet of mud and Stuart said he felt safer in Dunwich 40 feet below the waves of the North Sea!

Deep mud can be very dangerous; once trapped the more you struggle the deeper you go and there have been many fatalities amongst bait diggers and stranded yachtsmen. There cannot be many windmill sites where a diver is needed! South Ockendon smock was one with its mysterious basement holding clues to the water drive but under ten feet of water. I wonder if there are windmills left in Dunwich?...

RECONSTRUCTING EAST BRIDGE (MINSMERE) WINDPUMP

This month has seen David Nicholls and his workforce at Jameson Marshall Ltd. begin to sort out the jig-saw of pieces at Leiston in preparation for the reconstruction of the windpump at its new home at Abbot's Hall Museum, Stowmarket. David tells me that they hope to get the foundation works completed before winter so that the frame can be pre-fabricated at their premises during the cold weather (now?) for quick erection next year. Unfortunately the original pump is too far gone to repair and will be replaced, and the cap frame will need much restoration, the sheertrees having rotted at the tail. It is hoped to use the curb and virtually all the machinery, although much ironwork needs repair either through salt corrosion or wear.

A full set of drawings of the mill will be available soon. If anyone is interested could they let me know and I can try to get them copied.

P.C.J.D.

PROGRESS AT DALHAM

After a number of early problems the repairs to this mill are now well under way with half the boarding stripped. To date three corner posts have been replaced and the framing between installed. At present (and for some while yet) the machinery can be seen from the outside. We're a long time off seeing sails turning again but this time next year, who knows, we might.

RECENT EVENTS

During the country fair held at Abbot's Hall Museum, Stowmarket on July 8th., S.M.G.'s display stand was set up in the watermill with several Members in attendance. The main aim was to publicise the rebuilding of East Bridge mill and the work of the Group in general. With the help of a pump from I.C.I. Paint's fire brigade, the mill wheel turned steadily for most of the day.

On July 16th. about 20 Members and their families assembled at Friston mill for a visit organised by S.M.G.. After a thorough inspection of the mill with owner Piers Hartley, we moved on to Thorpeness where, having greased the neck bearing, we had the sails turning in a stiff breeze.

Another event which passed off successfully was the boat trip on the River Waveney organised by Peter Dolman (see last Newsletter). This took place on July 22nd., with two boatloads of keen mill-hunters spending over seven hours on the water. Twenty sites on both sides of the river were checked, from Somerleyton nearly as far as Beccles. Four definite mill remains were seen, together with several interesting engine houses, now sadly empty, at the sites of others.

MOLINOLOGICAL CONFERENCE 1979

I have just received outline details of next year's Avoncroft Mills Conference, a repeat of last year's successful event. It runs from April 5th. - 8th. and will cost about £40 for a residential place. There will be several lectures on all aspects of mills from acknowledged experts, together with visits to mills and exhibitions.

Booking starts in August, applications forms being available from the Avoncroft Museum at Stoke Prior, West Midlands.

P.C.J.D.

EVENTS

VISIT TO PAKENHAM MILLS: SUNDAY 13th. AUGUST, from 11 a.m.

By invitation of our good friends Mike and Jean Bryant we will make our annual pilgrimage to Suffolk's finest windmill. Wind obliging Mike will have the mill working for us. Come in the morning from about 11 a.m. and bring a pic-nic, or arrive after lunch. At about 3 - 3.30 p.m. we will stroll down to the watermill to see the restoration work so far. Suffolk Preservation Society Director John Popham hopes to be there to describe progress, recent finds and future plans for the mill.

Pakenham is a unique place, with a working windmill and a working watermill, each in good and competent hands, and we are made welcome at both!

RAMSEY EXPECTS!

Our Ramsey Fortnight is earlier this year, 2nd. - 17th. SEPTEMBER and all Members are welcome any time during the 'work in', even if they can only spare a day. Work will be very varied and interesting this year, our main task being repairs to the sails. Last year we fitted four new clamps to reinforce the old stocks. This year, working from scaffolding at the head of the mill, we hope to repair sail bars, hemlaths, uplongs, leading boards and to replace striking gear. We also have to finish boarding the head

gable and make a new storm hatch.

Inside the buck we will reinforce the sagging crown tree with two 6 ft. x 6 ins. R.S.J.'s over the top. These will then be completely covered by a new floor and we also hope to cover the side girt R.S.J.'s in a similar manner. Refitting of stone furniture, meal spouts, sack hoist, etc. will make the buck much more mill-like again. On the first floor of the roundhouse we will fit shelves and set up a small 'museum section' for interesting pieces which have had to be removed or replaced.

Jobs are too numerous to mention them all, but don't be put off if you don't fancy working on the sails. There is plenty to keep us all out of mischief! If you can, try to let us know when you will come so we can plan the work. All we need then is the weather on our side!

Other Mills Groups' Events:

Cambridgeshire Wind and Watermill Society will be holding their A.G.M. at the National Trust Lecture Room, Wicken Fen on Sat. August 5th. starting at 11 a.m.. There will be talks illustrated with slides as well as a chance to view Wicken Fen drainage mill. Refreshments will be available at lunchtime.

NEW S.M.G. MEMBERS SINCE LAST NEWSLETTER

CRACKNELL, Stephen J. (F)
39, Preston Drive, Ipswich
Tel. 44560 (home); 55838 Ext.473 (work)
(Interested in naturally powered mills, esp. watermills)

ROBERTS, W.N.T. (P)
12, Laburnum Grove, New Malden, Surrey
Tel. 01-942-6271
(Interested in the mechanism of mills)

SEAGO, Christopher J. (F)
33, Acacia Road, Thorpe St. Andrew, Norwich
Tel. Norwich 34351 (home); Norwich 22233 Ext.252 (work)
(General interest in mills)

TALBOT, A.H. (F)
14, Knight's Close, Felixstowe
Tel. Felixstowe 77514

TURPIN, Brian J. (Group)
'Grangewood', Watling Lane, Thaxted, Essex
Tel. Thaxted 830203
(Interested in windmill history and design)

YATES, N.H. (F)
'Old Beams', Diss Road, Scole, Norfolk
Tel. Felixstowe 78169 (work)
(General interest in mills)

Alan WILLMOTT has transferred to full Membership.
David BUTTERS new address is: 77, Hargrave Avenue, Needham Market, Suffolk.
Tel. Needham Market 721205
