The Magazine of the Mills Section of the
Society for the Protection of Ancient Buildings

no 170

January 2022

Mill News

Some good news from South Africa
Phoenix rises from the ashes –
the rebuilding of Mostert's Mill

A tower of strength and a man with a vision
Alan Stoyel - a hard man to follow

An ill wind blows
Damage to mill sails up and down
the country during recent gales

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Deadline for contributions for the April 2022 issue of Mill News is 1 March 2022.

Copy should be sent to the editor at the office or at mcstonenut@gmail.com and should if possible be emailed as a Word document or sent on a USB stick.

Photographs should be as high resolution as possible. Photo prints should be clearly labelled on the back. We will make every effort to return items, but this is not always possible. The Editor's decision on any article is final.

Editor – Mildred Cookson
Layout and design – Ian Scotter

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Front Cover: Alan Stoyel in Risbury Mill, looking intently at the machinery before making notes and photographing it.
Picture – Mildred Cookson.
Back Cover: Alan Stoyel at Mortimer's Cross Watermill.
Picture – Henry Gage, English Heritage Photographer Volunteer.

Editorial

Even older and still things change

Ten years ago my editorial was entitled "We all change as we get older". I wrote this to reflect on how Mill News had changed over the years. It is now 10 years since we introduced the A4 format with a lot more space for pictures. Judging from the feedback I get, the transformation has been a success.

Change is not always for the better, as we have all found during the last two years of living with Covid. Some good came out of it for our mills during the first lockdown as our traditional mills worked overtime to supply flour to local communities. The down side was mills were unable to open up to visitors. The Mills Section has continued to operate with Silvia, our Administrator, working from home until a few weeks ago although she is now going into the office one day a week.

Covid has definitely changed us all, not being able to visit mills, or our mill group events. However, Zoom and TEAMS have let us all participate in ways we would not have been able to do before. I have enjoyed "attending" regional meetings in Wales and the Midlands as well as the Section meeting and one organised by the Traditional Cornmillers' Guild, all without going out of the front door. I have also avoided the hassle of international travel "meeting" friends at TIMS lectures. The Section virtual meeting went well as have individual talks, so we may consider doing more of these. I miss face-to-face contact but I do like that early glass of wine that is a privilege of this digital travel.

The relevance of the digital world to traditional mills is one of the biggest changes to note over the last decade. For example, back in April 2012 the Mills Archive, while celebrating its 10th birthday, was proud to display some 20,000 digital images of our wind and watermills. Today the number has grown by another 50,000. It is not altogether surprising that as they approach their 20th year, their website attracts many more than 60,000 new visitors each year!

Repair work on the Society's mill at Kibworth Harcourt in Leicestershire has involved a lot of effort from a large team and will prove a good demonstration of what is possible. The SPAB YouTube channel has a series of videos on the project, including a fly through, an investigation of graffiti and a fascinating film of SPAB Millwright Fellow Toby Slater constructing an oak staircase at the Dorothea workshop in just over one minute!

The Millwright Fellowship and our successful lobbying to have the craft listed on the Heritage Craft Association Red List of Endangered Crafts are two small steps to addressing a big change we still face. The first few of our A4 issues were privileged to feature articles and drawings on specific mills by Vincent Pargeter, who died in 2015. Fortunately his work (along with that of other important millwrights) is preserved by the Mills Archive. Our millwrights list continues to feature individuals and firms who work to high standards, but the number continues its rapid decline.

Much more publicity has been given to climate change as a serious issue and new weather patterns are having an effect with much more severe winds and flooding. This in turn causes more damage to our wind and watermills. Our issue from 10 years ago featured four windmills damaged by storms. How many will there be this year?

The Section was the first to introduce wind surveys; vital as more new housing developments threaten mills' access to wind, by building on nearby open spaces. We have been successful in some instances, thanks to Steve Temple's analysis of results of our anemometer readings. Sited on windmills they record the data needed to convince local councils of the impact on a working mill.

No doubt 2022 will present more changes but we will overcome any obstacles and take the Section forward another 10 years. Thank you to everyone – without our members we would not survive.

Mildred

Restored horizontal-wheeled watermills of the Shetland Isles

Nigel S. Harris

Incredibly, it is believed that up to 800 horizontal-wheeled watermills once existed on the Shetland Isles[1]. Today, the ruined remains of several hundred exist together with a small number of restored mills. Of the restored mills only two are currently capable of producing meal.

Introduction

I recently undertook extensive literature and online research into the horizontal-wheeled watermills of the Shetland Islands. Using late-19th century Ordnance Survey maps and comparing with modern satellite images I was able to locate the remains of 384 watermills[2].

Unfortunately, nearly all of these mills were found to have fallen into disrepair with the stones reused and sites often overgrown. There is little protection for the ruinous mills that remain. Some remains are just a few courses of stone or a pile of rubble. As the vast majority of land is in the hands of crofters it is to their discretion what happens with them. Most remains are just left to further deteriorate. A very small number of these mills are categorised as scheduled monuments or as listed buildings. Both of these designations grant a level of protection to the mills. Of the 384 mills I found there were six mills that had been restored to more or less original condition at some time during the past 100 years. One additional mill (at Tangwick) is a complete reconstruction. Two of the restored mills are still capable of producing meal today. Here I give details of each of the seven mills.

Fig. 1. Map of the Shetland Isles showing the location of the mills mentioned in this article.
Basic map: Ordnance Survey © Crown copyright.

Restored mills

Fig. 1. shows the location of the six restored mills and one reconstructed mill. These are shown as red dots on the map of the Shetland Isles together with their location as latitude and longitude measurements. Itemised below are details of each mill in order travelling from south (where Sumburgh Airport is located) to north of the islands.

The design of the mills was simple and could be built from local stone and driftwood (as very few trees existed). Typically they are like that shown in Fig. 2 and conformed

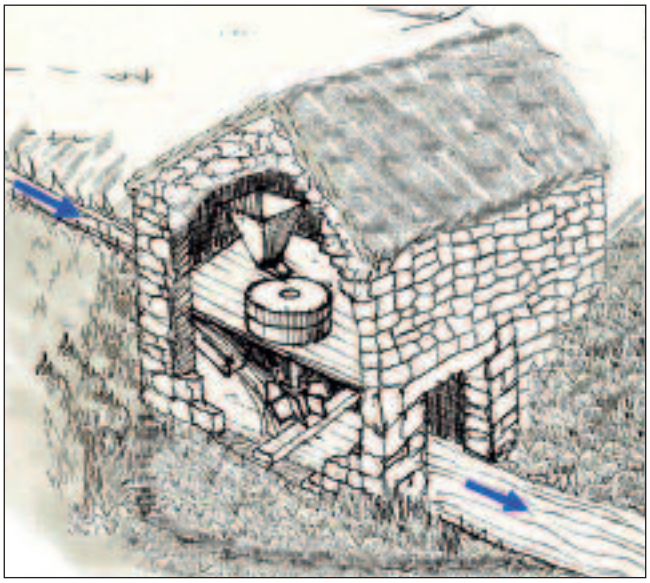

Fig. 2. Representation of a typical Shetland horizontal mill. Part of the gable end wall has been removed in the drawing to show the milling mechanism inside.

to a standard arrangement of a rectangular gabled drystone rubble building containing an upper and lower house with square openings to water inlet and outlet. The millstones being situated in the upper house and tirl in the lower house. The entry door to the upper house was normally vertically-boarded timber and could be in the gable end or a side wall. The timber roof structure was typically covered with straw and turf.

Mill 1: Southvoe Mill, Dunrossness

Listed Building: LB5414
Listing Date: 18 October 1977

Fig. 3. The restored Southvoe Mill on the Burn of Wiltrow at the Croft House Museum, Southvoe, Dunrossness in 2007.
Picture courtesy of Robbie Work.

It was said[3] of this group of three mills on the Burn of Wiltrow that in 1977 the middle mill was ruinous, the upper one was still thatched, but converted to a shed. The lowest mill had been restored in 1970 in connection with the nearby Shetland Croft House Museum. Apparently, it was an excellent restoration and remained in good order (see Fig. 3) until about six years ago. Now dilapidated, a new access path has been installed and restoration work is planned[4].

Mill 2: Troswick Mill, Dunrossness

Scheduled Monument: SM2859
Date Scheduled: 22 December 1969.

Fig. 4. The restored mill at Troswick, Dunrossness in 2011. The original roof has been replaced with a tarred felt covering.
Picture courtesy of Derek Mayes

Nine individual mills were built on the Clumlie Burn, of which seven survive as upstanding remains dispersed along a single short stream. The lowest mill was restored in 1904 and again circa 1929. The original roof has been replaced with a tarred felt covering (see Fig. 4). The mill has been in continuous use and is in good working order[4].

Mill 3: Burland Mill, Trondra, Tingwall

The mill was in working order in 1912 when it was last used. It was restored in 1991 and is still capable of producing meal. It is currently part of the Burland Croft Trail. The Burland Croft Trail is a small working farm/croft where most of the animals are Shetland bred and quite unique.

Fig. 5. The restored mill, at Trondra in 2013.
Picture courtesy of Tommy Isbister.

Owner Tommy Isbister, told me:

> "*When I first restored the roof of the mill it was thatched, but some years later this was replaced with Norwegian-style grass which needs much less maintenance. There was only the original runner stone left, the bedstone had been lost when it had been used for a boat mooring. Every maker of millstones had different ways of shaping them, they were all about the same diameter, but were often different in the concavity, so they had to be made by the same person. A pair of matching stones were eventually obtained from Northmavine.*" Tommy continued "*millstones were made from what was known as 'millgrutt'. I think this is mica schist, there are several places in Shetland where they could get the rock slabs big enough for the purpose.*"

An article by Tucker[5] lists two quarries located in Shetland, at Yell and West Burrafirth. However, the only information about these quarries is that "garnetiferous schists were used for millstones in both places". Tucker is quoting this information from MacGregor[6]. More recently, Baug and Jansen[7] of the University of Bergen reported finding an unregistered quarry at Weisdale about 10 miles NW of Lerwick. In this quarry they found millstones that had been produced from slabs of "schistose gneiss containing porphyroclasts of retrograde staurolite – probably muscovite aggregates".

Tommy Isbister also mentioned that:

> "*There was another mill about 50 yards (56m) further up the stream from the restored mill. As this is the only stream on the island of Trondra, both mills would have been used by all the 19 crofts there.*"

Mill 4: Huxter Mill, Walls and Sandness.

Listed Building: LB18631.
Listing Date: 13 August 1971

Fig. 6. One of the mills at Huxter in 2012.
Picture courtesy of nz_willowherb.

I found satellite images of four mills here, the lowest group of three small mills are built along a steeply flowing burn before it falls into the sea. The mills stopped being used during the 1940s and were recorded in 1977 as 'a very fine group of three mills'[3]. Some restoration work was carried out in the 1980s by the Sandness Conservation and Heritage Group. Further work was undertaken by members of the Sandness History Group in 2009. Again, the mills have fallen into disrepair. The buildings are on common grazing land and none of the restorers actually owned them[4]. At present they are mainly unroofed but still have the supports in place and stand to their full height[8]. One of the mills is shown in Fig. 6. The mill nearest the sea is the listed building.

Mill 5: Uyea Sound Mill (alias Vementry Mill), Sandsting

Listed Building: LB18818
Listing Date: 13 August 1971.

Fig 7. The mill at Uyea Sound (Vementry), in late 2019.
Picture courtesy of Richard Lewis.

The mill is sited on the burn from Hostigates Loch. The mill was restored in 1946 and possibly again in the 1960s. It had an eight-paddle tirl with inclined paddles driving a pair of 38in (0.96m) millstones. However, in 1977 it was reported that the thatched roof was decaying and the runner stone had been removed. By 1996 it was said to be roofless. Fig. 7 shows the mill in 2019.

Mill 6: Tangwick Mill, Northmavin

Fig. 8. The reconstructed mill at Tangwick, Northmavine in 2008.
Picture courtesy of Stan Darling.

The mill is not far from the Tangwick Haa Museum. This is actually a reconstruction of the 1829 original mill and built on the same site. Utilising local stone, it uses the original millstones found on the site. Restored in 2007/2008 by Hillswick, Eshaness Area Regeneration and Development Association (HEARD). Currently it is in a fairly good condition.

Mill 7: Kirk Knowe Mill, Westing, Unst

Listed Building: LB17473
Listing Date: 13 August 1971.

This restored mill on the Burn of Bighton, had a turf thatch over corrugated-iron roof and a window opposite the door. In 1997 it had a timber shute feeding a tirl in the lower house; the millstones were in-situ in the upper

Fig. 9. Kirk Knowe Mill at Westing on Unst in 2011.
Picture courtesy of Mike Pennington.

house with a horizontally-boarded timber hopper suspended above. Apparently, at present although the roof is still on, the inside of the mill is derelict[3].

It would appear that the future of these once restored/reconstructed mills is in the balance. Their current state of preservation is variable. Those that are maintained are done so as a visitor attraction and with visitor numbers down due to the Covid pandemic their long-term survival cannot be taken for granted.

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Acknowledgements

My thanks go to all those who allowed me to use their photographs and to M T (Tommy) Isbister for information on restoring Burland Croft Mill: to Stephen Jennings of Archaeology Shetland and to Dr Ian Tait, Curator, Shetland Museum and Archive.

Further Reading

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MUNDEN'S TURNTABLE MILLSTONE CARRIAGE AND AN IMPROVED MILLSTONE CRANE.

Mystery object at Chinnor Windmill

Adrian Marshall

Among the photos taken at Chinnor Windmill as it was demolished in 1967 was a single picture of an object resting between the postmill's six brick piers. It clearly had a pulley drive to some sort of wooden box, but quite what it was and what its role might have been was not clear.

Introduction

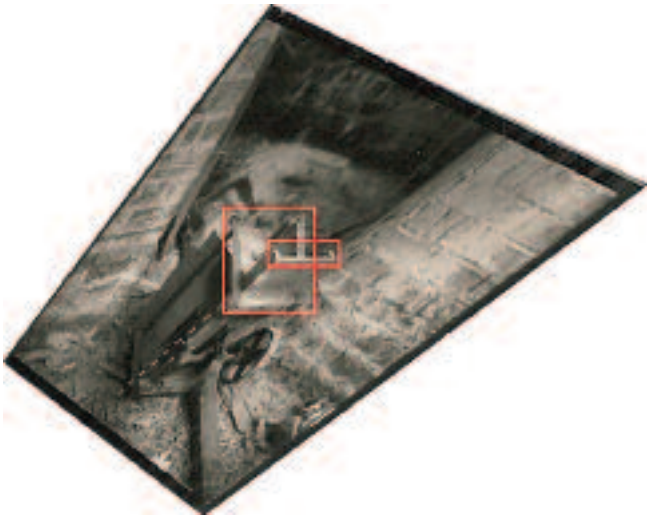
Chinnor Windmill's structure is nearing completion and we're looking to fit out its interior, so to discover what this item was (and whether we should build a replica) we decided to produce a CAD model to help understand the design and discern the object's purpose.

The 1967 photograph of the mystery object at Chinnor Windmill.

Modelling

This was done by examining the photo in detail, helped by correcting off the 3D viewpoint and lens distortions, by morphing the image in different ways so as to 'show rectangular parts as rectangular', meaning that details of these faces became clearer.

The original photograph morphed so that the 'base' is portrayed as head-on.



The original photograph morphed so that the 'exit chute' is portrayed as head-on.

What became clear is that what appeared to be a long wooden actuating arm was just a piece of wood lying on the ground, and the object was a rectangular box above an inclined chute, with the object lying on its back with its underside facing to the camera.

Closer inspection revealed an eccentric drum constrained between faces of a casting attached to the chute, which would create a vibration of the chute if the four support rods were actually leaf springs, flexing to allow the motion.

Having identified the object to be a 'vibratory feeder', measurements for the component parts could be gauged from the photo as it also showed a marked rod (we have assumed that these are one-inch divisions, which would be consistent with the brickwork in view) and then the parts

Component parts used in the CAD modelling

Mystery object at Chinnor Windmill – continued

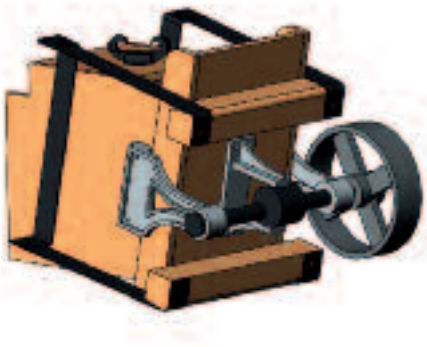
were drawn up and combined into an assembly, giving a chute width of 8in and a hopper capacity of about half a bushel.

The CAD model was then fine-tuned so that we could generate a CAD view which matched the original photograph (see images right).

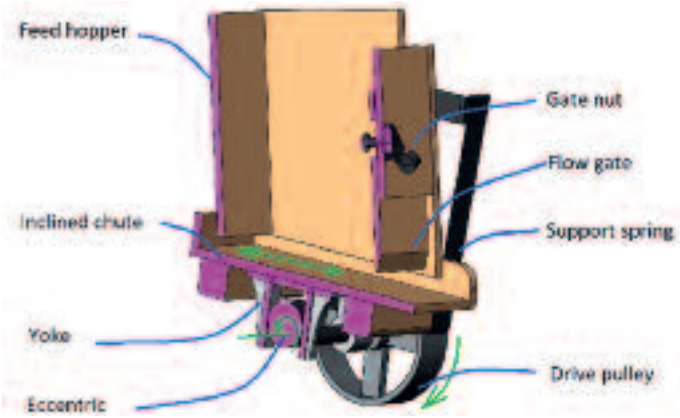
To function correctly as a feeder, we can infer details which were hidden from the photographer – you can just make out a wing nut presumably for clamping in place an adjustable gate and of course the base of the 'box' must be missing to allow feed onto the vibrating chute!

The resultant CAD model can then be viewed from any angle and its operation animated (see images below right).

Source photo.



CAD Matching.



Section through the vibratory feeder, showing adjustable flow gate and eccentric take-off casting.

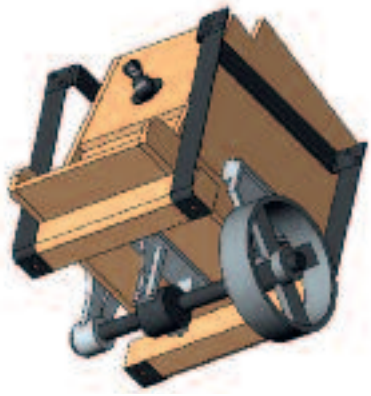
Use

With just a single output it is unlikely that our device could actually do anything on its own (such as sorting/cleaning as these would require multiple exits), rather it would appear to set up a steady feed to some other equipment.

So we now know what there was at Chinnor Windmill in 1967: it's a pulley-driven vibratory feeder, for grain or maybe flour.

However, it wouldn't have been for the grain feed into the stones because the stone's feed shoe would have been agitated by the damsel, not an external belt drive, so our feeder is probably for some other auxiliary equipment.

Feeder exit view.



Eccentric drive view.

As Chinnor is a postmill, our vibratory feeder is either from a piece of 'wind powered' machinery in the buck or something driven by a later stationary engine, down in the roundhouse.

Chinnor did have a flour dresser on the bin floor, which survives to this day having been relocated to Pitstone Windmill, but the installation at Pitstone has a grain feeder already fitted in the form of a leather-supported chute agitated by protrusions on the rotating dresser shaft (see drawing on page 8).

An interesting possibility is that our dresser may have been adapted to also allow operation as a smutter; in a photo

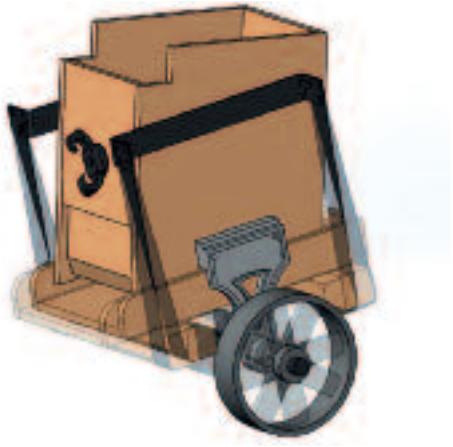
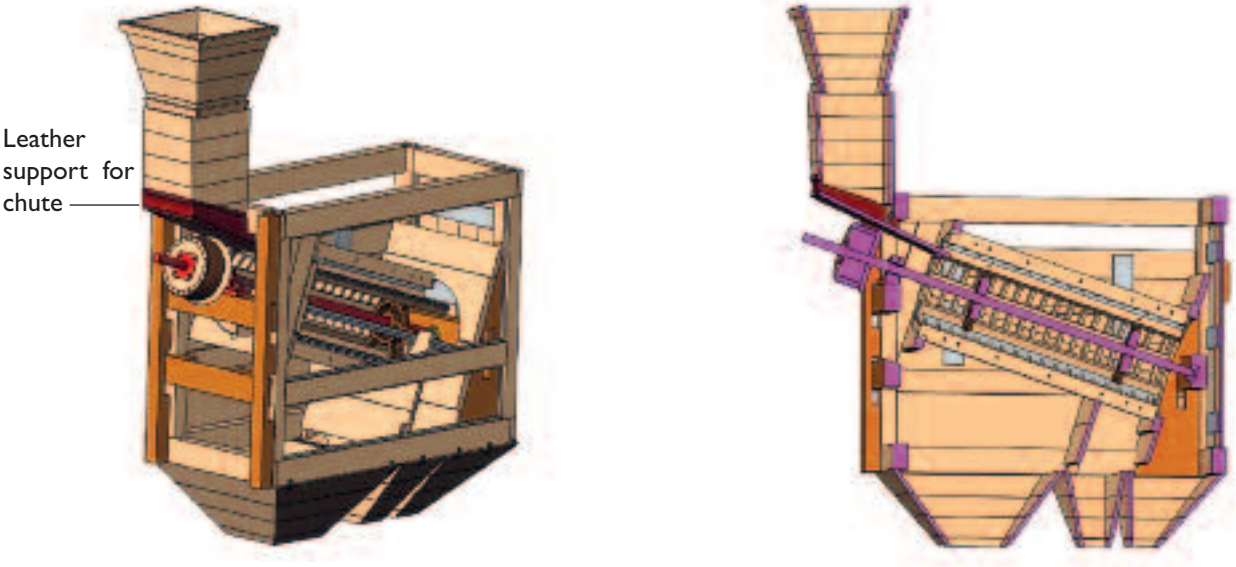


Illustration of the vibratory feeding movement of the chute oscillating on its four supporting leaf springs, created by the pulley-driven eccentric.

Mystery object at Chinnor Windmill – continued

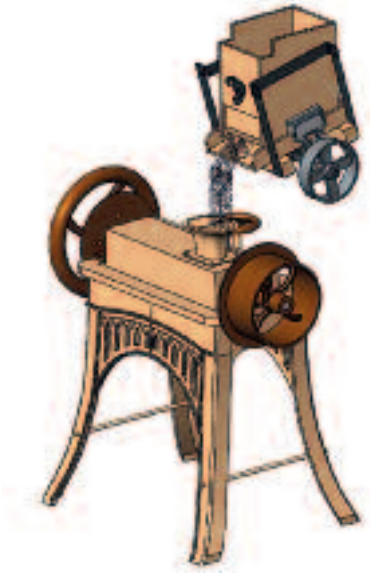


Drawing of the dresser at Pitstone Windmill, which was moved from Chinnor Windmill.

from its installation at Chinnor, an additional offset feed chute can be seen entering the roof of the dresser cabinet, and if a 'half-shell' smutter grid was fitted beneath the rotating brushes (with no upper shell), then grain feed would fall onto the grid and be wiped against the mesh by the brushes. If this was the case then our feeder would have been placed on the top of the dresser.

The Pitstone dresser when installed at Chinnor (left) and the possible vibratory feeder (right).

As far as roundhouse machinery goes, we have obtained a Cooch winnower, but this has its own elevating conveyor which would give a controlled feed. Another possibility is that our feeder may have been for a small stationary engine-driven roller mill installed in the roundhouse in the mill's later years, for milling on windless days.



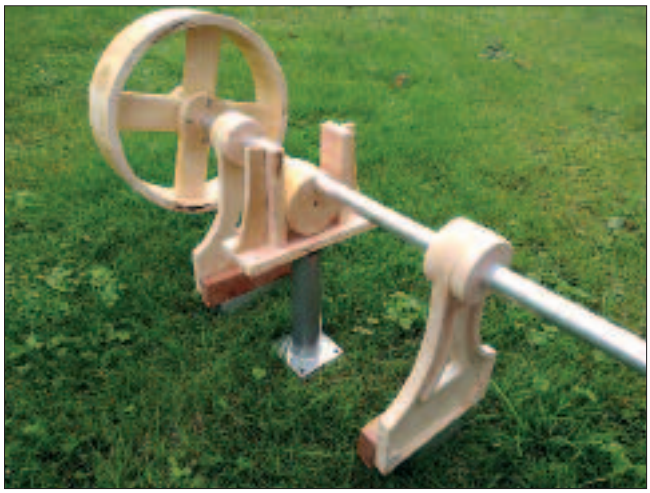
Possible arrangement combined with a roller mill in the roundhouse.

But there again, the miller's adjoining property had a very large chimney (photo opposite about 1900), presumably for powering a fairly large steam mill set up in the adjoining two-storey building (Kellys Directory calls the1887 owner John Juggins a 'wind and steam miller'). If he had a full-sized set-up, why would he bother with something small in the roundhouse?

Mystery object at Chinnor Windmill – continued

Replica

We've made the wooden patterns for the cast parts and the manufacture of the chute, hopper and springing will follow shortly. We just need to work out exactly where we should use Chinnor's new vibratory feeder!



Wooden pattern for the cast parts of the feeder.

Conclusion

The use of castings suggest that the feeder was 'bought in' rather than of local manufacture, but unfortunately we're really not much further forward. Perhaps Mill News readers will have suggestions of what other piece of equipment our feeder might have been be used to feed, or perhaps will recognise the castings or method of chute suspension from equipment in other mills? Maybe the style of the castings is typical of a particular agricultural machinery supplier, so we could have a go at establishing the feeder's provenance.

All drawings courtesy of Crafty Tech who offer a 'vintage machinery documentation' service.

Adrian Marshall

Adrian has spent 30 years rebuilding Chinnor Windmill in Oxfordshire, gathering dimensional data from old photos and the surviving parts.

He runs an engineering consultancy Crafty Tech. which designs custom processing machinery for food manufacturers worldwide (using Solidworks CAD and his 3D printer some of the time and a well-equipped workshop whenever he can).

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Chinnor Windmill

The postmill built in 1789 was demolished to make way for housing in 1967, but has been steadily rebuilt near its original location by volunteers on behalf of Chinnor Parish Council

Chinnor Windmill
Whites Field
Mill Lane
Chinnor
Oxfordshire
OX39 4RF
SP 749 010 (OS sheet 165)
Tel 01844 296161
http://www.chinnor-windmill.blogspot.com
chinnorwindmill@gmail.com

Oldland Mill Sussex – getting the new dressing machine into the mill.
Cartoon by Sheila Sheppard.

News from the Mills Section

News from the Committee Room

Most of you will have now heard of the sad news of the death of Alan Stoyel, such a well-known figure in the mill world and one whose knowledge will be sadly missed by many. I am glad to say his collection will be going to the Mills Archive so others in the future will have access to it once it is catalogued.

These past few months have seen damage to mill sails, which could possibly be due to lack of maintenance during the Covid period, or poor-quality wood. We all know that the wood previously used for sail stocks is no longer available and so we have to rely on wood that is must faster grown and not as long lasting any more, even laminated sails have a shorter life span than previously. If for either of these reasons then it makes it clear that the Section's course on 'Maintenance Matters' should be of help to owners, volunteers etc., on the many aspects of looking after your mill.

The course has unfortunately had to be postponed during Covid times, but we are hoping to hold it again in 2022.

Our Administrator, Silvia, is now back working in Spital Square one day a week, but our committee meetings still continue to be held by Zoom. We will possibly hold one meeting a year in London at the office starting in 2022.

Casework, the Mill Repair Fund and general queries have continued to keep the committee busy during the past few months as you will read from the reports.

Silvia, Steve (our Vice Chairman) and I visited Kibworth Harcourt mill in November and inspected the work to the timbers and particularly the trestle. A fuller report is written up in this issue.

We sent in our responses to the Environment Agency consultation document on water resources, regarding charges over impounding and abstraction issues. More on this when we hear the outcome.

We wish all our members a very Happy Christmas and look forward to having a more normal year in 2022 with our mills once again open to visitors. We will have our National Mills Weekend video available once again thanks to Martyn Taylor, who will be visiting mills up and down the country for those unable to visit mills at any distance.

With very good wishes from myself and the Mills Committee.

Keep well,

Mildred

Casework report

Silvia McMenamin

Recent planning applications

Helsington Laithes Mills, Cumbria

An application was made to South Lakeland District Council for Listed Building Consent for the restoration and repair of the waterwheel.

Helsington Laithes Mills
Picture – Richard L. Hills via Mills Archive Trust.

The SPAB Mills Section supported the proposed restoration and repair of the waterwheel but would like to see a millwright appointed in a supervisory role to ensure that the work is done to an acceptable standard. The outcome of the application is currently unknown.

The Watermill, Rutland, Leicestershire

An application was made to Rutland County Council for Listed Building Consent for change of use from office building to holiday lets and dwelling with associated alterations including demolition of existing two-storey link extension and single-storey rear extension and erection of a new replacement single-storey rear extension. The SPAB Mills Section supported the proposal but suggested that details of window frames and roof lights should follow established conservation practice and minimise their impact on the old fabric. The outcome of the application is currently unknown.

The Watermill, Rutland
Picture – Mills Archive Trust.

Addicroft Mill, Cornwall

An application to Cornwall Council was submitted for Listed Building Consent for removal of existing roof covering to the mill and plasterboarded underside, repairs to roof structure, recovering of roof reusing existing slates, installing new bituminous felt and insulation between rafters and new plasterboarded underside and the replacement of UPVC guttering and downpipes.

Addicroft Mill
Picture – Martin Bodman via Mills Archive Trust.

The SPAB Mills Section supported the proposed restoration and repair of the roof and is expecting that any slates added to the roof are a sound match to the existing ones. Cornwall Council approved the application for Listed Building Consent with conditions.

Leathley Corn Mill, North Yorkshire

An application to Harrogate Borough Council was submitted for the erection of acoustic fence, glazed infill to two archways, replacement external canopy, fit out of cinema room, fit out of Bake House as office, reconfiguration of master bedroom suite and external landscaping. The SPAB Mills Section has supported the proposal for Leathley Corn Mill of improving damp issues by providing additional ventilation through an open ceiling to control dampness in the floor. The outcome of the application is currently unknown.

Leathley Corn Mill
Picture – Frank Gregory via Mills Archive Trust.

Y Glyn Woollen Mill, Wales

An application to Ceredigion County Council was submitted for Listed Building Consent for the removal of slate roof covering, repair of rotten timbers, recovering roof with original slate, fitting three new and changing one conservation roof light, removal of rotten plywood window coverings and install temporary frames covered with Perspex and to reinstate cast-iron guttering. The SPAB Mills Section supported the reroofing by reusing existing slates, but queried if the Perspex for the window frames will be replaced by proper glazing in the future. The outcome of the application is currently unknown.

Updates on previous planning applications

Hewsons Mill, Barton-upon-Humber, North Lincolnshire

Hewsons Mill
Picture – Paul Glazzard via Geograph.

A planning application for Listed Building Consent was submitted in April 2021 to demolish existing outbuildings, strip out mill tower and convert to a new dwelling, and erect three linked dwelling houses. Listing Building Consent was granted by North Lincolnshire Council.

Letters to the editor

New home for windmill finial

Just thought I would send over the picture of the restored finial that we got through a subscriber to Mill News [see issues 166 and 168]. The finial was in a bit of a state when we received it, so your readers might like to see it now.

I also enclose the latest picture of the cap construction.

James Forsyth

Damage to windmill sails

Mildred

This column: the wind damage at Lytham Windmill.
Pictures – Margaret Croker.

In 2019 Woodchurch Mill in Kent lost a sail in high winds and the whole of the fan stage also blew off. The repairs to this are going to cost quite a lot of money. Fortunately Ashford Borough Council are looking into the repairs.

In October 2021, Lytham Windmill in the North West, owned by Flyde Borough Council, also lost a sail and skeleton fan blades. The damage in high winds was caused apparently just three months after the mill was repaired following previous gales. It is believed that Lytham will be using their local millwright, who will be sourcing new wood for the repairs.

In both cases the stock failed a quarter of the way down from the centre point.

We now hear that Brill Windmill in Buckinghamshire has also suffered the loss of a sail recently.

Why did this happen to these mills? Surely this is something with which we ought to be able to help the owners.

It could be lack of maintenance, poorly chosen wood or not treating wood before putting up on the mill.

With Brill it could be because the mill is fixed in the position of the prevailing wind and there is no one on site to turn it in case of a change of wind direction.

The Section will be sending letters of support to these councils offering our help on technical and other matters.

Hopefully by 2022 we may be able to start holding our 'Maintenance Matters' one-day course for mill owners and volunteers.

Perhaps the Section should also consider as our next 'technical leaflet', following on from the 'Fitting of Sail Clamps', one entitled 'Windmill Sails: their design, materials and maintenance'.

Lytham Windmill after removal of the damaged sail.
Picture – JPIMedia.

Damage to windmill sails – continued

Woodchurch Windmill without sails or fantail following damage by high winds in 2019.
Pictures – Carole Leith.

The broken sail at Brill Windmill.
Pictures – Tim Andrew

Mill Repair Fund report

Silvia McMenamin

Recent grant offers

Craggs Windmill, Preston, Lancashire – Grade II

A grant application was submitted for emergency repair for netting the building. A grant of £500 has been offered.

Craggs Windmill, Preston.
Picture – Stephen Richards via Geograph.

Whitchurch Silk Watermill, Hampshire – Grade II*

An application was submitted for the replacement of the starts, backboards and floats of the waterwheel. A grant of £1,000 has been offered.

Whitchurch Silk Watermill.
Picture – David Martin via Geograph.

MRF application update

Maud Foster Windmill has recently received a grant of £900. James Waterfield has written to update us on progress:

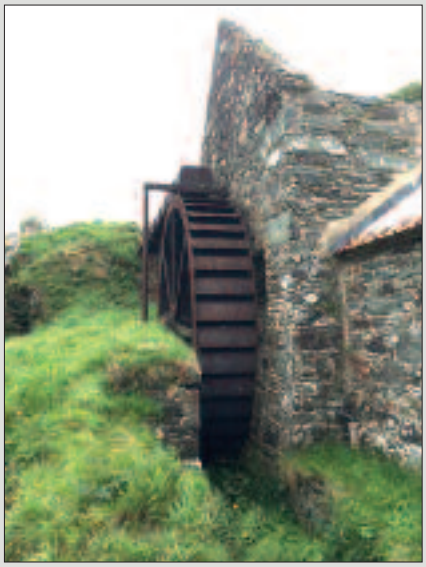
> *'The Maud Foster Mill in Boston built in 1819 is undergoing work to put it in good order. The first thing has been to repair and re-canvas the cap roof, followed by painting of all the exterior woodwork and ironwork, with assistance from the Mills Repair Fund. The next work as time and resources permit will be to refurbish the turning gear and the shades (shutters) in the sails. Surprisingly, in a good wind, the mill will still grind flour, albeit in smaller quantities.'*

Maud Foster Windmill, Boston.
Picture – James Waterfield.

Letters to the editor

Mill at Ardailly, Gigha, Scotland

The latest issue of Mill News has reminded me that last September I visited the derelict mill at Ardailly on the island of Gigha (off the west coast of Kintyre), when I took the attached photos (this page). It was a gloomy day and the photos are not very sparkling. A couple of builders were at work on the miller's house next door. I think they may move on to rebuild the mill building for use with the refurbished mill house in due course. I regret that I failed to enquire. From my limited knowledge of the island, I doubt that the mill in its current form is of very great age and there is not very much visible surviving evidence of the internal layout. What does remain there may not be going to survive for very much longer.



Google Maps has a reasonable aerial view of the site at 55.691387, -5.754152 (55°41'29.0"N 5°45'15.0"W). The Maps app on my iPhone also has an aerial view, in which the adjacent lochs are identified as Mill Loch and Upper Loch. The sea inlet below the mill is identified as Port an Duin.

There is or was a current Channel 4 series 'Murder Island' filmed largely on Gigha with easily recognised exteriors and interiors. It is written by Ian Rankin. I have not as yet seen the mill in the first episode but it may turn up as a location in later episodes. I make no claims for the series as high-quality television but the island is very beautiful and much loved by my wife and her family!

Andrew Simon

Letters to the editor – continued

Moarfield Mill, Yell, Shetland – update

Further to my article about Moarfield Mill in Mill News issue 168 (July 2021), Colin Dickie, Managing Director of Dickie Innovation Ltd, contacted me recently to say that he had just visited the mill and had taken numerous photographs using a drone. Some of the images are shown here with thanks to Colin for his permission to use them.

This mill is believed to be one of only two horizontal-wheeled mills in the Shetland Isles that were converted to have vertical overshot waterwheels in the 1930/40s to generate 12V DC electricity for domestic lighting or for charging accumulators.

The building is a Category C Listed Building (LB45317. Listing date 30 March 1998). Historic Environment Scotland say that the building is of special interest:

> *"This is a tall and substantial example of one of these mills in an unusually confined and rocky site, resulting in the entrance door to the upper house being in the same elevation as the outlet, rather than the more common gable end. The alteration to a more sophisticated mill with vertical wheel and gearing to machinery is also unusual."*

It would be a shame if it was allowed to continue to deteriorate.

Nigel S. Harris

More of Andrew Simon's pictures of the mill at Ardailly, Gigha – see page 19

Obituary

Alan Stoyel 1939-2021

Alan: a tower of strength

Many members of the Society for the Protection of Ancient Buildings (SPAB) will have known Alan for different reasons, but mostly for his knowledge of watermills and milling in general. He was not only a miller, millwright and author, he was always willing to help anyone with questions and above all a gentleman.

He bought and repaired over several years Venn Mill in Oxfordshire, milling there for the local farmers. Alan's time with the SPAB Mills Section goes back many years and he was Chairman from 1985-88. He also organised tours for Mills Section members in both Oxfordshire and Herefordshire. He was a key adviser to the Society, readily responding to Listed Building casework and he won the legal case for us over the rebuild of Stotfold Watermill, going on to help them with the repair.

He was passionate for our annual National Mills Weekend and with his kindly manner managed to get the owners of 16 Oxfordshire mills to open their doors for the event each year while he was living in the area. When Alan moved to Herefordshire there was little interest in the county's watermills, but he soon changed that! He visited as many mills as he could and, with his customary gentle manner, persuaded them how important their mills were, encouraging them to open their doors once a year. Many of the mills were not even known to most of us. He also helped many mill owners with hands on repairs and even built a new waterwheel at one of the mills.

Over 30 years ago, Alan also took over the maintenance and running of Mortimer's Cross Watermill for English Heritage, continuing there until very recently when he trained the new miller.

Venn Mill, Oxfordshire, owned and restored by Alan from 1976 to 1988. Picture – Mildred Cookson.

Alan presented a Rex Wailes Lecture on the dating and pitching of gears in mills, a technical subject on which he was both an expert and an enthusiast. His book on Thomas Hennell's mill drawings underlined his connection with Rex Wailes, the pre-eminent mill expert of the 20th century.

Alan was also responsible in 1986 for saving the Rex Wailes collection for the milling world. The collection was housed in damp garden huts and Alan rescued hundreds of documents, photographs and drawings. Over several years he used his own large rooms at home to hang them all on lines to dry and then lie them flat before they were taken to the Science Museum and National Monuments Record.

His MBE, awarded in the New Year Honours List for 2019, was so well deserved and confirmed the high regard the mill world had for him. As a trustee of SPAB and a personal friend for more than 40 years, I shall miss him but never forget him for the support he gave and the advice he offered to so many.

Mildred Cookson

Alan: a man with a vision

Just over 20 years ago, when Mildred and I approached Alan to discuss the possibility of establishing a new national archive for the records of mills and milling, he not only regarded it as an important initiative, he become a Foundation Trustee, giving the project both energy and credibility. His drive to help us establish the Mills Archive Trust as a force to be reckoned with was vindicated in 2016 when the Trust become the first charity to be awarded National Accreditation as the repository for the history of milling.

He had been meticulous in supporting the Archive's drive to develop and maintain the highest standards of care and understanding of the records we hold. Not only was he keen to see his collection lodged with the Trust, he fought a long and ultimately successful battle to rescue the Rex Wailes Collection from the Science Museum where it had been left undisturbed and inaccessible for many years. Alan's collection covers all of Great Britain, much of Spain and is the most important watermill collection in the country.

As a dedicated researcher and authority on watermills and milling, he was an ideal choice as a trustee. Added to that was his commitment to making his work and that of others available to the public. Over the last 20 years that we have worked together, his intellectual input, strategic guidance and financial support has ensured our charity has grown from a dedicated group of six mill enthusiasts to a respected national archive with three million records, the biggest milling library in the UK, if not the world, and a website attracting 75,000 visitors a year.

None of this happened by accident. In 2004 he was writing on our behalf to the Heritage Lottery Fund supporting an intended Mills Archive project with these words:

> *"The value of this project is not merely academic. The resource would be of immense interest to a wide spectrum of the public. Perhaps the greatest value would be to those who need to restore or repair mills in Kent. Any such work could then be undertaken with the knowledge that all the available information has been consulted. Everyone could then feel secure in the knowledge that the work can be as authentic as possible, adhering to historic traditions, taking account of all the available records. My archive is an example of those that are little used at present, but, hopefully, will be included in the project."*

On a personal note, Mildred and I have lovely memories of our many visits, often for Trustee meetings, to stay with Alan and Critchell over the years. They were very happy times with Alan always having thought of mills or castles to visit. Meal times were always a pleasure and Mildred remembers Critchell's face when she came down in the morning to find I had got up very early to do all the washing up!

Another milling 'great' has been lost and we shall not ever be able to replace his knowledge and commitment. He will be deeply missed by all, though his personal, intellectual and archival legacies will remain for future generations and it will be our aim to ensure these are an enduring tribute and a widely-used resource.

Ron Cookson

Alan training the new miller at Venn Mill.
Picture – Mildred Cookson.

Alan measuring a turbine during the 1988 SPAB tour in Surrey.
Picture – ?.

Alan Stoyel: a tribute

I first met Alan in August 1972. He was a participant on a tour of mills in the Bristol region which I had helped organise for the SPAB Wind and Watermill Section. On the first afternoon we visited the former copper mills at Swineford, between Bristol and Bath, led by Joan Day, who had specifically asked that everybody was to keep away from the waterwheels, which were internal and enclosed, and only partially visible. My first memory of Alan is of him emerging from one of the wheels with a tape measure, saying that its diameter was different to that which was in the tour notes! I was a little taken aback, but Joan reassured me that she'd asked Alan to check it. He was wearing jeans and a pink shirt, I recall, and the latter by then had a smear of grease down the back.

The same evening, I gave an after-dinner talk on Somerset windmills to the assembled group. I was somewhat nervous – there were a number of people in the audience, including Rex Wailes, the acknowledged national expert, who knew far more about mills than I did, as an enthusiastic 24-year-old, and some demanding questions followed. Rex, rather kindly, did not question me in front of the audience, but took me to one side afterwards, to 'put me right' on a couple of matters! I walked alone into the bar, feeling somewhat shaky but rather relieved, and Alan approached me with a pint of bitter in his hand, which he gave me with a smile and invited me to sit with him and a few others. It was the start of a friendship that continued for nearly 50 years.

The following year Alan organised a mill tour in central Scotland, with accommodation at Stirling University. The tour was, as were all those he organized and ran in subsequent years, packed with mills, sites and information, and also good company. When the tour finished, I stayed the night at Alloway with him, Vivien and the girls. I think that was the first time I discovered his boundless energy and stamina, as we stayed up into the early hours, talking mills while everyone else slept.

Shortly after, Alan and family moved from Scotland to Spain. He and I had both been invited to join the Wind and Watermill Section's committee and I thought it would be difficult for him to attend the four meetings a year which were held in London. But somehow, he always managed to get back to England for them and it was a matter of pride to him that he did not miss any. Alan always had a great sense of responsibility: if he committed to something, be it formal or casual, he gave it 100 per cent, with a direction and dedication I found admirable but sometimes exhausting. I know I fell short of his expectations on a couple of occasions, but our friendship was not diminished by such lapses. Fortunately, he had a good, sometimes impish, sense of humour and fortunately he tolerated mine, well, most of the time.

Alan was hankering to buy a mill in England and, after visiting a number of potential candidates, he bought Venn Mill, north of Wantage, in 1976 and the family moved back to England.

Alan recording the gearing at King's Mill, Stamford in 1993. Picture – Sue Watts.

In July that year I spent several days there, measuring up the mill and the mill house, and produced a set of record drawings for him. I promised him an isometric drawing of the waterwheel and machinery and, although I still have a partial draft, it was never completed, partly because some details proved rather difficult to illustrate well in that format. Alan used to remind me quite often that he was still looking forward to seeing the finished drawing.

In the 1970s and 80s we met up on numerous occasions to look at mills. Some of the visits were specifically made to record individual mills, others were off the cuff. Alan had a way of gaining access to mills, talking his way in even if at first the owners were less than enthusiastic about having two strangers climbing over their property with cameras, tape measures and notebooks. It was generally easier in those days than it has become more recently, with less concern about liability and 'health and safety'.

I recall us visiting a farm wheel site in Wiltshire one late spring afternoon in 1979. Only the very top of the iron rings of a waterwheel were visible in a pit which appeared to be full of farmyard slurry. Alan as usual was determined to glean as many details of the wheel as possible; he jumped on to the top of the rings and started calling out measurements to a less adventurous assistant. It transpired, from subsequent calculation, that the wheel was some 15ft in diameter, so the slurry must have been almost that depth! But it was Alan's approach to such things that made him an exceptional fieldworker and recorder. He told me on more than one occasion that he always wanted to discover some aspect or detail of a mill or site that no one else had noticed. It was always salutary working with him, trying to keep up with his energy and insatiable enthusiasm, inspired by his perception and fuelled by brief lunches (if I was lucky) and late dinners, usually with ample lubrication in the form of red wine and, later in the night, whisky or Spanish brandy.

Alan worked on the repair and restoration of Venn Mill over some 12 years. He saved it from demolition for road widening and also managed to wear down the opposition

Obituary: Alan Stoyel – continued

of the local river authority and restore the waterwheel and mill to working order. The dedication and energy he put into what some thought a lost cause was mind boggling. At the same time, he was salvaging machinery from threatened mills, fighting planning and listed building cases for the Mills Section, of which he was chairman for three years, earning a living selling signs to estate agents and finding time to add to his own unique archive of mill data and photographs.

Alan was a very good photographer, meticulous about getting the right images which recorded what he considered to be the essential features of each mill, waterwheel or site. Some of his photographs of Spanish mills, undoubtedly aided by favourable weather conditions and delightful locations, are simply stunning. He never backed away from trying to find the best viewpoint for a photograph, even though it sometimes had painful repercussions. I remember him telling me that he once watched his camera bag being carried away down a mountain stream in Andorra and, in much more recent times, he fell and broke his ankle while clambering through undergrowth to get a view of a Cornish mill which he'd been wanting to photograph from the other side of the valley for years. He, together with Eric, had to crawl back to the car where Critchell was waiting for him, which took him something like a very painful hour! The sad thing is, he fell before he was able to take the photograph.

Alan was meticulous about labelling his photographs and writing up his notes, in neat longhand and, latterly, on computer. I often asked him why he did not write and publish more, to which his reply was that he did not know enough and had not visited enough mills. While he did publish several books in recent years, it is sad that he was not given the time to write up his extensive researches and field notes on Cornish mills. He told me that when he lived there in the 1960s he had tried to look at least at one mill site every day. He had also been instrumental in saving a number of waterwheels there, including those at the Tregargus china stone mills and the magnificent 50ft diameter Gawns Wheel on Bodmin Moor, now re-erected on the Isle of Man. Alan was always very supportive of and generous to me with regard to my own publications, commenting constructively on drafts, with a good eye for correcting punctuation and English, and supplying information and photographs, always keen to make sure that I got things right.

Although Alan's molinological legacy will live on through the immense archive of photographs and records that he created over 70-plus years, which is destined to be deposited with the Mills Archive (of which he was a trustee), the mill world has lost one of its best ever all-rounders. Personally, I have lost a mentor whose perception and drive I could not and cannot ever hope to match, and, like many of us, I have lost a very good friend.

Martin Watts

Alan: one special story

Saving the waterwheel at Tregarus Mill in Cornwall.

The mill, formerly used for stone grinding dated to the mid-19th century, was in operation until around 1965.

There were two rectangular mill houses, with the wheel pit between the two, the overshot wheel formerly powered from a leat at the rear with the tailrace running along the front of the mill houses.

Bang! An explosion blows a hole in the slate roof of Tregarus Mill. The top three mills have been stripped of machinery and the fourth is being prepared for demolition.

Horrified, Alan appears on the scene.

He sees the last 35ft diameter wheel rigged to explode and rushes up to the scrap men. Alan convinces the boss that the wheel has a preservation order on it. But the man is not going to let the wheel go without a fight.

He demands 17 tons of scrap in exchange for the wheel. A lot to ask of one man.

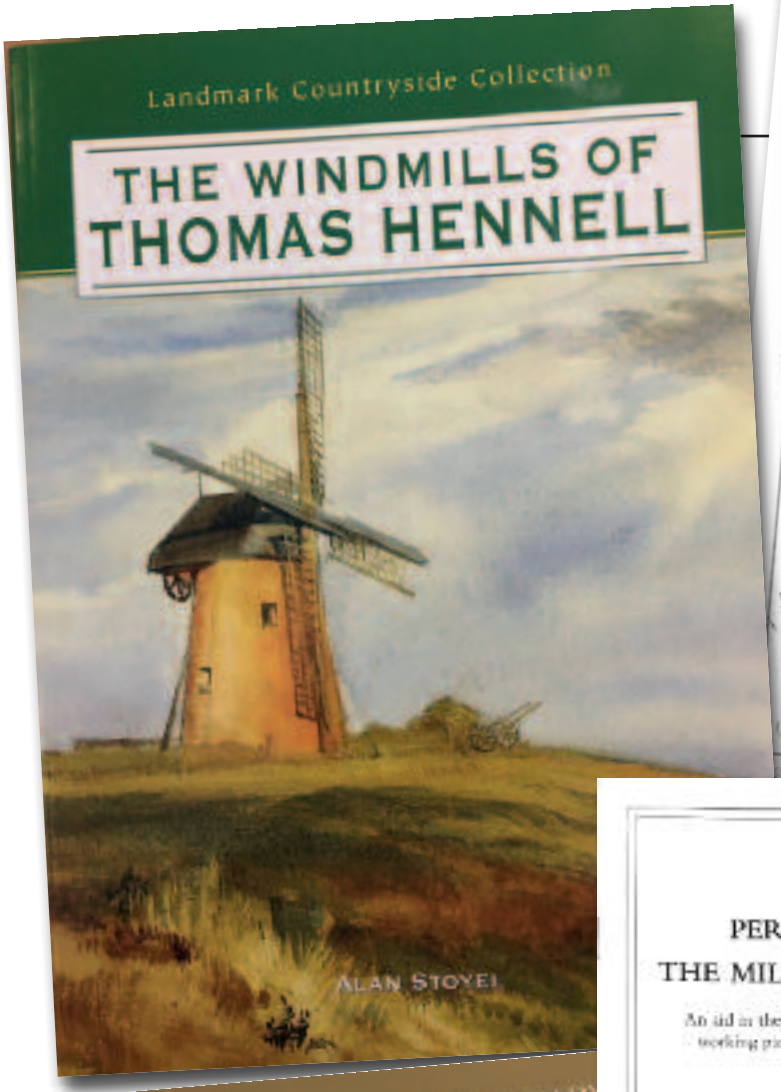
However, Alan is not discouraged or deterred.

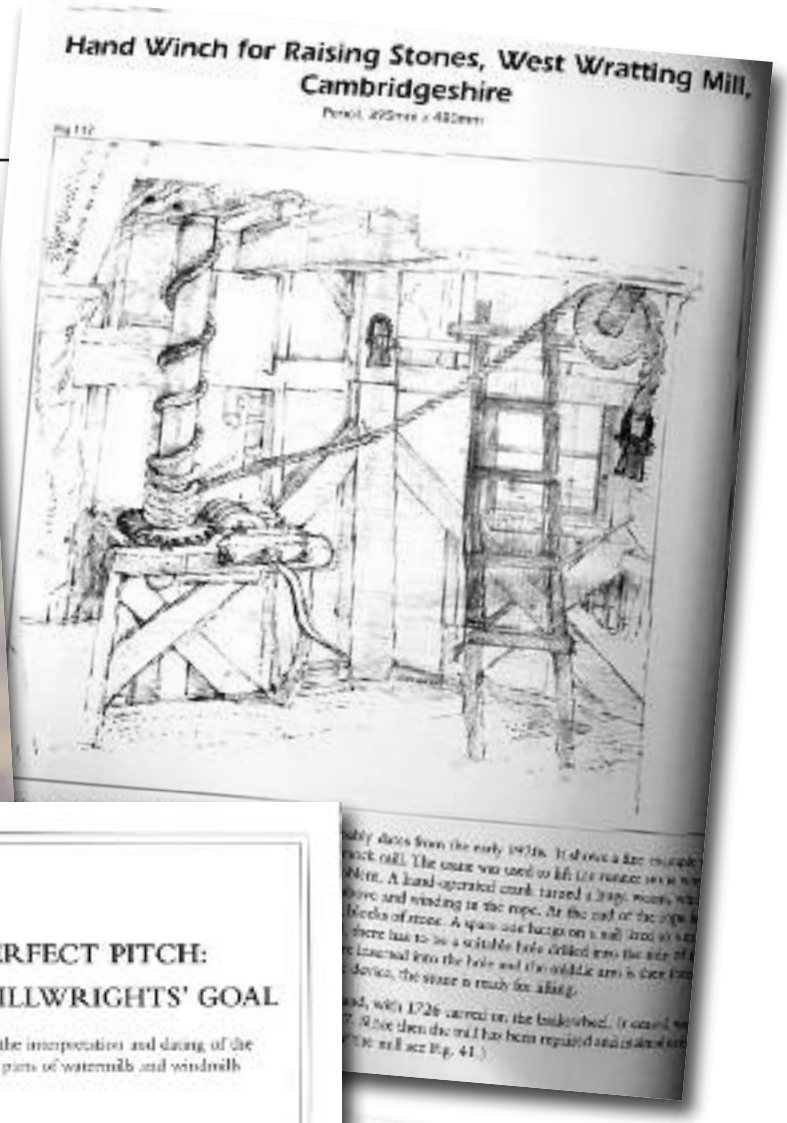
With his Land Rover, Alan slowly starts his search for scrap. He collects pipes from a disused tin mine, a Victorian heating system from a church and five tons of scrap from South Crofty Mine where he worked.

Gradually, the scrap pile rises and rises until finally there is enough to appease the scrap man.

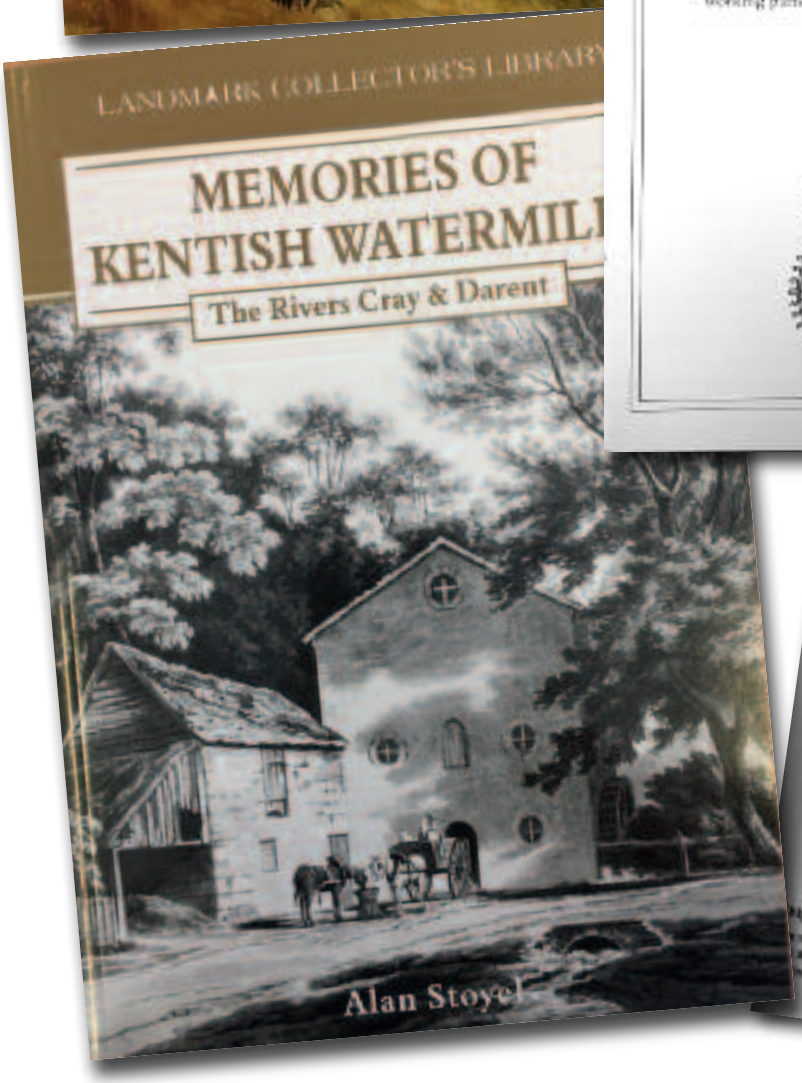
The waterwheel is saved! This is just so typical of Alan.

Later the ruined mill is Listed Grade II and the waterwheel given the status of a Scheduled Ancient Monument.


Landmark Countryside Collection
THE WINDMILLS OF THOMAS HENNELL
ALAN STOYEL


Hand Winch for Raising Stones, West Wratting Mill, Cambridgeshire


PERFECT PITCH:
THE MILLWRIGHTS' GOAL
An aid to the interpretation and dating of the working parts of watermills and windmills
Alan Stoyel


LANDMARK COLLECTOR'S LIBRARY
MEMORIES OF KENTISH WATERMILL
The Rivers Cray & Darent
Alan Stoyel


The River Darent
Paper Mill, Sundridge. Demolition of the houses; Alan Stoyel, 23rd October 1969.
Roused Mill, Chevening. House from the Southeast. Alan Stoyel, 3rd October 1964

Kibworth Harcourt update

Mildred

Work has been progressing well at the mill and at the Dorothea workshops in Bristol. In November, Silvia, Steve Temple and I went on site to see the work for ourselves. Geoff Wallis, from Dorothea, showed us around the site and gave us an update on the work.

The project is on time and hopefully will be completed at the end of 2021. However, it will depend on weather conditions for the sails to go on. In the meantime, the buck will have been lowered back on to the post with a new collar fitted.

Main post with the top of the post exposed.
Picture – Mildred Cookson.

The old weather beam.
Picture – Mildred Cookson.

Also, the four exterior brick piers that cover the ends of the cross trees round the roundhouse will be finished off in the spring as the lime mortar will set better then.

Work on the trestle is now almost complete, the new weather beam is in place and the new weatherboarding is going on.

The new curved tailpole has been finished off at the workshops and is ready for transporting to site.

Quarter bar and cross-tree repair.
Picture – Mildred Cookson.

New weatherboarding going on.
Picture – Dorothea Restorations.

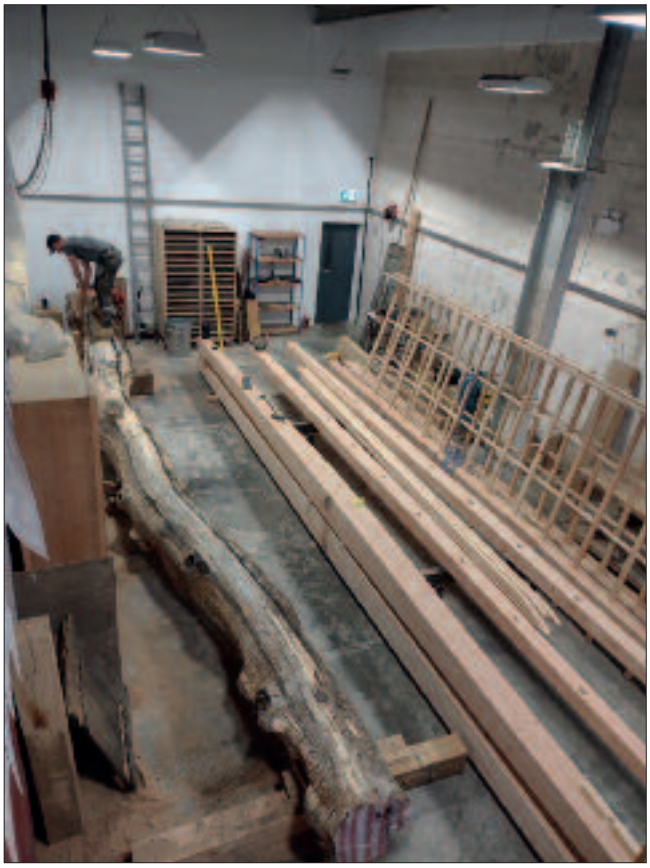
Kibworth Harcourt update – continued

Removing the old tail pole.
Picture – Dorothea Restorations.

Timber for the new tail pole.
Picture – Dorothea Restorations.

Work on the zinc roofs of the roundhouse and buck started in late November.

Timber repairs to roof of the roundhouse.
Picture – Mildred Cookson.



New tailpole at workshop starting to be shaped.
Picture – Dorothea Restorations.

Martin Bridge from Historic England has been at the mill to see if new dendrochronology can reveal more of the dates of the timbers. The trestle and post have both had new dendrochronology cores drilled to see if a date could be given as none could be established the last time samples were taken.

See page 27 for details of the timbers from which it is proposed to take samples.

continued overleaf>>

Top of the post after the dendro core extracted.
Picture – Mildred Cookson.

Kibworth Harcourt update – continued

David Holmes, a resident in Kibworth Harcourt and part of the Kibworth Management Team, has been on site every Wednesday for some weeks now to talk to visitors about the history of the mill. The visits will continue throughout December and nearly all are fully booked.

We are all really grateful to him for his commitment, along with the whole team from Dorothea who are doing such great work to repair the mill.

It was good to see all the visitor days fully booked up to Christmas and for so many people to be able to view the progress of work on the mill.

Toby Slater, the 2021 SPAB Millwright Fellow, has been kept busy after making the exterior steps for the mill by helping to make the sails and other timber repairs on site.

He has also been working with Owlsworth IJP and is hopefully going to be visiting working mills to gain more experience.

Please do look at our website where there are many images and videos of the ongoing work.

Residents of the farm watching the ongoing work!
Picture – Mildred Cookson.

Martyn Taylor filming and interviewing John Wallis of Dorothea Restorations for the Mills Section.
Picture – Daniel Bridge.

Scaffolding and protective covering on the mill on 17 November 2021.
Picture – Mildred Cookson.

Possible timbers to be cored at Kibworth Harcourt

Reproduced with permission of Martin Bridge who is doing the work

"Results will be a little while yet, but when received they may tell us more about the age of the mill and when various major timbers were replaced.

"We won't get an accurate felling date for the main post as there is no sapwood, but we should be able to get a good approximation. A date after which the tree was felled will be the outcome, but given the nature of the post this should give a good guide to felling date – perhaps a 50-year slot or so, which when compared to the known history of the site may point towards a particular date."

Martin

Options for testing

Two cross trees – the ends of these have been cut off back to good wood and slices are available that should be suitable for dendro from one of them – the other could be cored if necessary.

Crown tree – this large timber has around 100 rings and sapwood.

Side girts – these large timbers (about 14in deep) are two halves of the same tree – as indicated by knot and slight rot positions – so only one need be sampled – around 80 rings.

Unsampled sampled corner posts – the SE post has around 50-plus rings and sapwood on the outside edge – which can be got at while the weatherboarding is off and possibly from the inside too. Other two posts similar.

Rear door threshold and lintel – the two timbers forming the upper and lower parts of the frame including the door opening are accessible. The upper frame member is c8in x 5in and has around 60 rings, the lower is a larger timber (c10in x 10in) but is faster grown.

Meal beam – large timber, probably has a good number of rings, but access very difficult, lower inner surface has a later section of wood bolted to it. Upper surface may be suitable, outside surface not visible, covered by weatherboarding.

Windshaft – possible at widest part, though no sapwood, should at least indicate if contemporaneous with other timbers.

Main post – this was previously cored but a reading was not forthcoming – the core was taken in a logical position at the widest part of the post below the buck – it may be worth trying a similar position on another face. It may also be worth going lower on the post to avoid possible rot – but the lower section is very knotty.

Other possible timbers to sample: mid-rails to lower buck – approx. 8in x 8in with around 50-plus rings; front jowelled posts under the meal beam – approx. 12in wide but only c4in thick, 30-40 rings; less suitable – the two side top plates are fast grown and less suitable, but might be considered for radiocarbon or oxygen isotope studies.

Martin Bridge drilling the core taken from the main post.
Picture – David Holmes.

The core sample taken from the main post.
Picture – David Holmes.

Mostert's Mill update

Andy Selfe

It's about time (1 November 2021) for an update on the progress on Mostert's Mill here in Cape Town, South Africa.

First, the all-important permission from Heritage Western Cape (HWC) to proceed with the restoration has been received. A copy of this and the plans must be on site throughout the restoration for any official to inspect. HWC didn't require anything with respect to the working parts, so I've been pressing on anyway although the Public Works Department still has to give its permission.

Work is proceeding on three fronts:

Mike, here in Grabouw, is busy with the curb rings. He's been on holiday for two weeks but is back now, so I expect lots more progress on that front! He'd thicknessed and cut many of the arcs before he left;

Some of the segments of the curb rings which Mike has been cutting.

Jon has been busy lengthening the Bilinga beams for the sheers.

In Cape Town, Jon is busy with the cap frame. The two long sheers needed scarf joints to make them long enough. He is attaching the outriggers to them with tenon joints and making the fancy 'ogees' at the ends. He's busy with the tail beam which supports the heavy stone bearing at the back of the wind shaft;

One of Jon's scarfs in the massive sheers, made from old Bilinga wood which he had.

One sheer has its outriggers fitted. The four bolt holes for the clamps at the scarf can be seen. The second sheer is in the foreground. The outriggers will be cut to length when we have worked out how long they must be, and finished with fancy ogees.

An ogee at the end of a sheer, or maybe the Burgemeester?

The beginnings of the tail beam, which will be beefed up, back and underneath.

Mostert's Mill update – continued

Here at home, I've used up 9kg of epoxy resin on the 'shakes' in the spruce beams, and I'm happy with them now. So now I've been busy with the scarf joint in the middle of the long stretcher which will stick out on both sides of the cap, for turning it into the wind.

Selecting the straightest pair of spruce beams for the long stretcher.

Filling the 'shakes' in the spruce beams for the stretchers with epoxy resin.

Scarf marked out, many downward cuts then the offcut chiselled off, then more. I cut the second one 33 times over the 900mm overlap.

The first 'table' finished and the second 'table' roughed out.

I also spent a weekend making a jig for cutting the slots for the 14 'shins' in the neck bearing, although the tree we hope to use as a windshaft is still in a river!

Two 8m beams laid end to end. Now they must be joined!

Left: Second 'table' finished – will they fit together?
Right: Now to drill the holes and hope they come out in the right place!

Mostert's Mill further update

Andy Selfe

There's plenty more to report on regarding progress on the restoration of Mostert's Mill!

On 17 November I visited Jon at his workshop for the first time since he started making the cap frame, which is the framework on top of the tower which is turned into the wind. Progress there and his skill in turning some old beams into a work of art is most impressive!

I had to give him the news that I hadn't realised that the front framework which he's just completed needs to lie over backwards at 10 degrees, but he quickly saw a way to correct that without spoiling work that he'd already done.

The Dutch call this 'Het voorkeuvelens', the front gable, perhaps? The middle two uprights which will hold the neck bearing in place are Stinkwood! Jon made it as if it was going to stand vertical, but it must lie over at 10 degrees, so he will deepen the dovetails he's made in the sheers and Burgemeester at the front.

He's ready for the long and short stretchers which I've been making in the yard here. The long one just needs to be painted at the ends, it has wood sealer in the middle section which will be inside.

The bridges have been made to hold the sprattle beam, which must also be able to move laterally and fore-and-aft, by adjusting the wedges.

This is the long stretcher which I've made, hanging from the forklift in the middle. It's spruce, 12m long and 200mm square.

Each end of the long stretcher had to be drilled at 45 degrees for the bolt which attaches to the long brace which reaches down to the bottom of the tail pole at the back. Nervous moments, but it came out at the right place!

I met Chairman John Hammer at the mill and he handed over paint for the stretchers, kindly donated by Greg at LT Paints in Woodstock, and more metal parts to wire-brush and prime and paint here.

Mostert's Mill further update – continued

We also needed to do some measurement on the top of the tower, so I brought a ladder. We did some checks and planned how to do the 32 measurements between the eight studs so that we can drill holes in the curb ring in the right places. There were some very enthusiastic hoots and waves from passing vehicles!

The studs on the top of the tower are ¾in diameter. I will have two discs machined to make measurements more accurate.

Jon and I will do the measurements from stud to stud, 32 times like this!

Back here, I visited Mike to check on progress on the curb ring, which is coming on nicely. We then discussed the making of the brake wheel and pinion, which will be right up his street, having done the impressive engineering at Elgin Railway Market.

Two more arcs to add to make up the second layer. Mike will machine the outside surface, then the wrought-iron band can be fitted. Then the inside surface must be machined very accurately round. He must then make another ring which rotates inside this curb, which will be fixed down on the tower with the studs.

In the week I went to look at the tree in the river from which we plan to make the wind shaft. It's now high and dry and Alex le Roux says he'll come up from Gordon's Bay when he has a gap and cut it up for us. So yes, progress on all fronts!

High and dry! It's a eucalyptus, but we're not sure which! Hopefully, this will be our wind-shaft.

By 25 November the stretchers were finished, painted and rather in the way here.

Jon needed the short one at least to build the rear gable into. The long one just needs two shallow lap-joints cut and holes drilled through it and through the sheers. The half-rings of the

continued overleaf>>

Mostert's Mill further update – continued

rafter-support ring were also ready at Mike's and Jon needed these to be able to cut off the outriggers and form the ogees at the ends.

There were still three beams of the same length as the long stretcher to collect at ITM, paid for long ago. I organised Sarel and his lorry again and he came prepared with three stacks of pallets firmly strapped to the back of his Nissan. I was ready for him.

We had just loaded the short stretcher flat on the bed.

At Mike's to collect the rafter-support ring.

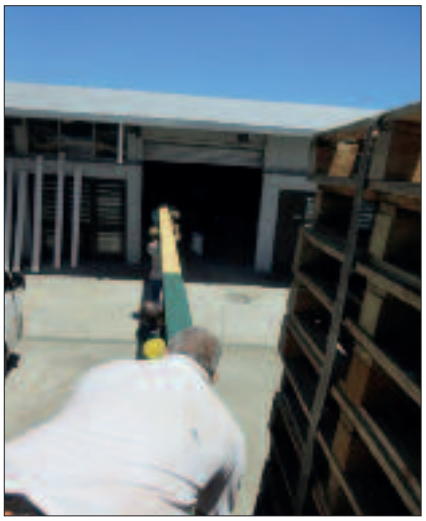
Mike attached metal rods to the half-rings to hold their shape. Most of the material here is sliced offcut from the big beams, kindly done by Abie at Somerset Timbers.

This is the sprattle beam and the bridge, both cut out for the half-bearings for the pintle bearing at the top of the vertical shaft. Jon will use African Blackwood, which has even better properties than Lignum Vitae.

From there we went to the Strand to collect the other beams which will be the long and short braces. I had asked Jon to store these so that everything is in one place for the move to the mill itself.

So we then travelled to Jon in Maitland, near Wingfield, to offload by hand.

We were then able to discuss a few more points like how to mortise the half-rings into the sheers, and I must still look through pictures to see how the outriggers were cut off at the ends.



Offloading at Jon's.

The dovetails have been modified in the sheers and Burgemeester so the front gable can lie over at 10 degrees.

Mostert's Mill further update – continued

The bridges are finished and in position over the ends of the sprattle beam and more work has been done on the tail beam which I'm now happy is bulky enough.

Jon now has everything he needs except the cap circle and says he could be otherwise finished with his in-workshop work within a week.

I then visited Mike again to check on progress with the sizing of the curb ring which he has decided to do with a router, as we did for the brake blocks.

The rough but accurate finish will be cleaned up with a belt sander.

He will iron out any problems before tackling the inside surface which must be very accurate and smooth. He will simply slide the rig off the bar and turn it around.

Then he'll start with the cap circle which will rotate inside the curb ring but will only be half as high.

Sizing the curb ring.

The curb ring after sizing.

Millie mills again

Richard Shircore and Stuart Fassnidge

We last reported on our "Millie", a mobile corn-grinding machine (from around the 1860s) in Mill News in October 2018. We said we had new framing timbers made, had reconstructed the framing and had a specialist to dress the stones. We had high expectations for the following year and we ended our report s by saying "Next summer we might have it up and running at a local show? We would like to think so".

This, our third report on progress to date – and, as for many mill projects, the Covid-19 pandemic has played a part.

October 2018 – Prussian Blue and Venetian Red?

Prior to installing the crown wheel and raising the grind stones, Stuart set to work researching Millie's colour scheme. He informed us that Hampshire wagons of this era had a distinctive colour scheme, the basic colours being Venetian Red for axles and wheels and Prussian Blue for framework. Stuart discovered that Prussian Blue was very dark but would have been lightened by adding various quantities of Lead White. Further research revealed that whatever the shade originally painted, any lightening of Prussian Blue would fade further due to the action of sunlight. After extensive investigation we all agreed on a lightened Prussian Blue that would reflect what the mill probably looked like in the 1860s and painting began.

February 2019 – installing the running gear

Before raising the mill stones we overhauled the running gear including bearings. We stripped all moving parts down cleaned and, where appropriate, regreased them. We had a challenge when installing the stone shaft and ensuring the brass bearings that supported the cockhead were a good fit. Before installation we checked the weight of the vertical shaft – 230 kg or 4.5 hundredweight.

The crown wheel being lifted into place. Trial traces of Prussian Blue and Venetian Red are visible on the rear axle.

Raising the stones

We pondered the dangers of lifting them into place and we decided on the cautious approach. We used a large number of wooden blocks to lift the bedstone a couple of feet at a time.

With the bedstone in place we now needed to lift the runner stone into position. This is, of course, much more difficult as we needed to get the bar to fit neatly on to the cockhead.

Raising the stones– one block at a time.

Nearly an accident

It was during the end of this operation that we had our only "untoward event". We were just about to make the final visual confirmation that we were spot-on to engage the cockhead when the sisal rope we were using broke and the runner stone fell about two inches – exactly on top of the cockhead. Previous to this incident we had been using specialist slings as featured in the photos. The old sisal was consigned to the bin. It was a lucky escape all round.

July 2019 – balancing the stones

With the runner stone mounted on the cockhead the challenge was to achieve a dynamic balance. This was a real problem. Stuart informed us that other runner stones had pre-formed slots for inserting weights. Such luxuries were denied us. Putting weights on the stone was fine for a static balance but, of course, once the stone turned the weights were thrown off. After much thought we hit upon the idea of using the strapping found to secure loads on trucks. By putting the strapping around the stone and then using flat lead sheets bent over the strapping we could experiment with various weights at different points around the stone.

We could then ratchet tight the strap and trial the stone at speed. (A bit like having your car wheels balanced when having new tyres fitted.) We then checked where the runner stone came to rest. By shifting the weights around, we identified three balance points that needed attention. We were then able to mark up the segments of the stone where permanent lead weighting needed to be added.

Using sheet lead and strapping to identify balance points.

Adding the weight

Adding the weights was by the traditional method of chiselling out the plaster of Paris of the runner stone and pouring molten lead in the depression and covering with more plaster.

August 2019 – on power supply

All mills need a power supply, usually wind or water. With Millie the power supply originally came from a traction engine which could both move and power the mill. Our mill dates from the 1860s. It is no coincidence that Thomas Aveling built the first traction engine in 1860. Clearly someone had an eye to the future.

We do not have a traction engine, we use a 1960s' Fordson Super Major tractor that has a side power take-off (PTO) with a Balata belt running from the PTO to Millie's main drive shaft. We could write a story about our experiences with getting the Fordson to run reliably. Suffice to say a major breakthrough came when we found copious amounts of nuts – cob, almond and hazel – in the radiator and cooling channels of the engine block. Probably the result of this radiator being swapped prior to our purchase and the mechanic who swapped it not appreciating that it was used as a winter nut store by a rodent! No wonder the tractor readily boiled when running.

Some of the nuts retrieved from the radiator and engine block.

3 March 2021 – milling at last

Of course, there was still more to do. A replacement tunn, fit a flour paddle, construct a chute for flour etc. but in March this year after weeks of tweaking our first usable batch of flour was produced. What we had not appreciated before was that once the stones were dressed, they needed a bit of "running in" to ensure any lose bits were literally ground off. Our first attempt at milling did lead to some gather "gritty" flour. We also came to appreciate that milling is both a science and an art. Then the Covid lockdown came and all slowed to a "care and maintenance" routine.

When the vaccinations began, we were all able to return to Millie and began to practise the challenges of milling in a reliable and efficient manner.

Now, in the autumn of 2021, we can grind corn and be confident it's well ground and will make terrific bread.

Conclusion

We now have a working mill. It has taken longer than expected but Covid did not help. We are looking forward to 2022 and to the opportunity to visit some local shows and demonstrate how Millie would have worked and looked in the 1860s when first made.

Along the way we have learnt much in respect to milling, carpentry, engineering and host of other disciplines. If anyone has any questions or wants to know more please feel free to contact us.

Richard Shircore – 07943 404 388
Stuart Fassnidge – 07925 164 230

Ups and Downs in East Kent

Luke Bonwick

The accompanying photographs show the tall smock mill at Regent's Place, close to the centre of Ashford, being dismantled by local millwrights Hill's in 1872. The parts were transported to the parish of Badlesmere, about eight miles north of the town, where the mill was reconstructed on a site close to Bound(s)gate Corner.

Of a similar appearance to Cranbrook Mill in its pre-20th century form, the white-painted smock tower of Regent's Place Mill stood on a three-storey brick base, with an elegant mill house adjoining. A wide reefing stage at third-floor level gave access to the tips of the four spring-shuttered sweeps.

The mill must have been a prominent landmark in the town, as the process of its removal, which would have taken several weeks, attracted sufficient attention to be recorded by a local photographer.

The original site, now occupied by a print shop, is located at the junction between Regent's Place, Apsley Street and Drum Lane. The mill and house stood at the corner of a small field, close to the Friends' Meeting House, and overlooking opposing rows of terraces on Regent's Place.

The houses on the north side, visible in Fig. 1, have now gone, but the terraces on the opposite side of the street survive. The original walled Mill Lane, which led west from Hemsted Street, was widened to form an extension of Regent's Place soon after the mill and its brick base were removed. The mill house remained standing for at least another 50 years.

At Badlesmere, an existing large barn is shown on late 19th-century maps. An octagonal base of two storeys was added to this to support the wooden smock tower. In this form, the mill worked until its sweeps were removed in 1921. The superstructure was demolished in 1938. Part of the barn and the truncated lower storey of the base survive today.

Dismantling and re-erecting an existing windmill was clearly just as economical as building a new one from scratch, even at this late date. The sequence of dismemberment is interesting. Fig. 2 shows the mill with the windshaft, sweeps and cap roof already removed. Part of the roof has been lowered whole and lies on the reefing stage. Four millwrights are visible above the exposed curb, one of whom is in the process of breaking up the cap frame. A pair of slim timbers has been knocked through the boarding just below the curb, probably in order to create a working platform inside.

The photograph also shows square holes cut into the wall panels at the positions of the main floor beams. Early removal of the beams would have created a large internal void through which large parts such as the brake wheel and spur wheel could have been lowered.

Fig. 3 shows the dismantling at an advanced stage. The reefing stage has been completely removed and large holes in the brickwork indicate the former positions of main beams, joists and struts. A long timber, probably a sail stock or 'middling', has been set vertically and tensioned with ropes to act as a derrick pole. The pole is being used to remove the last of the side panels, which has *continued>>*

Fig. 1: Regent's Place Mill, Ashford, in working order pre-1872.

Fig. 2: Dismantling Regent's Place Mill.

Fig. 3: Dismantling at an advanced stage.

Fig. 4: Regent's Place Mill as rebuilt at Boundsgate Corner, Badlesmere.

News from the mills

The day the Hairy Bikers came to Heage Windmill

During the spring of 2020, Heage Windmill Society was contacted by a crew of film makers, working with the BBC, enquiring if we were willing to receive a private visit from the Hairy Bikers, as part of a projected forthcoming series centred on the North of England. Of course, we agreed. The months rolled by and we wondered if it was to happen?

Eventually we had notice that they would be with us in late August that year – but we had to keep it secret!

The celebrity duo, Si King and Dave Myers (The Hairy Bikers), actually visited the windmill on 29 August 2020, filming for their latest series, Hairy Bikers Go North, recently shown on BBC 2.

Our team tasked with meeting them were millers Anthony Sharp and Tim Castledine, whilst Lynn Allen, who bags much of our flour and is Visitor Centre Manager, was on hand as a guide.

Picture – Ashley Franklin.

The weather was very kind for the event, with a brisk northerly wind positioning the sails directly overlooking the car park, enabling Si and Dave to have a full-on view of the mill as they arrived on their bikes.

After formal introductions the sails were set in motion and they were taken on a tour of the mill to explain the layout of each of the floors, with answers being provided to their many questions.

After the tour, a short milling session was carried out. Although they were in an environment new to them, their professionalism helped us to share the technicalities and joy of milling in a 224-year-old mill. It is well worth noting that while chatting later in the day, they did compliment us on the quality of our stoneground flour, which they had previously used for making Derbyshire oatcakes at Chatsworth.

Following the milling session, further discussions were held regarding more general matters such as volunteering and operating issues, including the need to attract younger generations to join in safeguarding the mill's future.

It must be said that the Hairy Bikers and the film crew were so friendly towards us, putting our team at ease, which resulted in it being a tremendously rewarding and memorable event.

The programme was shown on BBC2 on 4 November 2021 and the details of their visit had remained a secret until we had the confirmed schedule. All who then watched the broadcast were very pleased with the programme, and of course, the coverage of the windmill and her flour; we have subsequently had many messages of support from followers of the windmill and the general public. Overall, it was a very pleasant and satisfying experience for all involved with the operation of our dear 'old lady'.

Alan Gifford

<<continued from previous page

been preserved intact. Also visible is the fine timber upright shaft with its wooden cogged wallower still in position; these have been lowered and moved to one side.

The mill would have been similar to Cranbrook in terms of its internal layout. The third (stage) floor would have been the meal or spout floor with the overdriven millstones on the fourth floor and the bins on the fifth. This is confirmed by the detail of the remaining wall panel in Fig. 3; the fifth floor has been boarded internally to act as the side of a grain bin.

Figs. 1 and 4 show the mill as it stood before dismantling and as rebuilt at Badlesmere. There are subtle changes – eg. side clamps on both middlings instead of just one. On the whole, however, the rebuilt mill is very similar to the original, although the dark colour of the weatherboarding suggests it was tarred and not painted in its new location.

Pictures: Figs. 1 and 4 – Mills Archive Rex Wailes Collection; Figs. 2 and 3 – Ashford Museum

Mill Group News and Newsletters Review

Tom Derbyshire

This report is produced by Tom Derbyshire. Will all groups please send copies of publications to Tom at derbyshire.tom@gmail.com, or by post to him at 15 Kinderscout, Hemel Hempstead, Herts, HP3 8HW. The next copy date is 1 March 2022.

Hampshire Mills Group Newsletter Winter 2021

The newsletter starts with an appeal for a new Chairman to take over from Andy Fish and also someone to take over from Pam Moore as Secretary. This is now a serious concern as since lockdown the group cannot function in reality without these two.

Wilton Windmill along with Fulwell and Stock mills are reported as having been invited to participate in a high-tech project designed by Friends of Upminster Windmill. They have built an online system to monitor cap rotation. The system is now live and can be viewed here:

smartmolen.com/

Ruth Andrews has been travelling again, this time to Gayle Mill in Wensleydale, which claims to be the oldest structure unaltered for cotton spinning, dating from 1776 when the mill got a licence from Richard Arkwright. It was powered by a 22ft overshot waterwheel.

The water supply still uses the original stone and timber above-ground launder, making it an impressive sight from the road bridge.

The mill has changed its use a few times, from spinning cotton to flax, and then by the late 1800s it was converted to a sawmill. The waterwheel was replaced by a Gilkes turbine powering a rack saw bench, circular saw, planer and lathes. The sawmill operated up to 1988 when it closed. The turbine also generated electricity for the village up to 1948. In 1925 a second turbine was put in followed by a third one in 2006 and now generates for the National Grid. The mill after renovation opened again in 2008 with funding from HLF and other sources for heritage skills training courses.

Fairfield Mill Sedbergh was another repair project undertaken by volunteers as a community project. This has been written up in a book by Maureen Lamb entitled The Story of Fairfield Mill Restoration.

Another interesting article is about the Pump House in Old Basing and also one on Barry Mill in Scotland owned by the National Trust.

Nearer to home, Longbridge Mill is not working at the moment due to Covid restrictions and the weir has become overgrown with weeds. This will not allow sufficient flow to operate the wheel and the mill itself. The group are working on it at the moment and hope to approach the Environment Agency about any future work.

Hockley Mill is also having to clear out the weeds from their trash grill to allow the wheel to turn freely again, and on top of that are having to contend with a large number of spiders which are infected with a fungus which kills them and leaves a white corpse known as a 'zombie spider'.

Whitchurch silk mill is having work done to the waterwheel, the old timber paddles, backboards and starts were removed and replaced with green oak. The work is being funded by a crowd fundraising campaign, hoping to raise the £6,000 it needs.

Sussex Mills Group Newsletter No. 192, October 2021

The chairman reported on the effects of the ongoing coronavirus and said there would be no face-to-face meeting this year. He also expressed his sadness about the recent death of Derek Kenward, an active volunteer from Odland Mill.

Justin Brice reported on his research into Rusper Smock Mill. He had contacted Margaret White, who lives close by, and submitted a short article which included the fact that the original site of the windmill now contains council houses, built in 1951.

Peter James reported that the Blackstone 41hp engine has been running again thanks to help from members of SEAMS (Sussex Engine and Associated Machinery Society).

News from Sussex mills

Ashcombe Windmill – Experimental methods of painting the mill continue and a full report will appear in a future copy of the News.

Chailey Windmill – The mill will appear in the ITV programme *The Larkins*, which will also feature the Bluebell Railway. The mill and rural life museum will be closed until April 2022.

Duncton Windmill – There are plans to refurbish and waterproof the roof of the roundhouse which stands alongside Jack Mill at Clayton.

Washington Windmill – Wiston Estate has submitted an application for landfill and sand extraction close to the windmill, which is now seriously under threat. Anyone who can offer help please contact Russ Fowler at Chanctonbury Landfill Action Group on 07411 981 190.

Lowfield Heath Windmill – The mill was open for the first time ever for Heritage Open Weekend in September. Visitor attendance was brilliant and £420 in donations was given. Self-guided tours due to Covid were the order of the day. A couple of half-day work-ins have been planned this year and more next year.

Punnets Town Windmill – Richard Howes submitted several good shots of the mill now without scaffold.

Rottingdean Windmill – Local artist Amanda Rosenstein Davidson put on an exhibition at the mill, which attracted 1,060 visitors. The mill was open all summer on Sundays – the mill is in good condition.

Jill Windmill - Three weeks after the 200th anniversary

two sweeps were removed for refurbishment and painting – the overall condition was good. A series of excellent photographs by Simon Potter clearly illustrated the work in progress. Open days continued on most Sundays within Covid guidelines. Home-made cakes are back on the agenda. Jill is also featured in the "Soar Tour", a unique virtual flight over 20 stunning panoramic Sussex landscapes. The experience is located at The Colonnade on the sea front at Bexhill-on-Sea.

A mystery mill – Brigid Pippin submitted two watercolour paintings done by the English artist-poet Helen Saunders (1885-1963), asking the group if they could confirm if the pictures are mills and if so can they identify which it may be. Photographs of the paintings were included.

Alex Vincent wrote about his research into early Brighton (Brighthelmstone) windmills. On a 1545 drawing of the French attacking the town, two *wynde mylles* – Brighthelmstone North and South – are visible.

The town mill of 1580, east of the Steine

Five windmills were marked on Richard Budgen's map of 1724. Also on his map was Church Hill Mill. On the old Steine was Coffee Mill and finally Black Rock Mill, dating from about 1750. At one time, it was said, you couldn't see the town for its windmills.

As usual Bob Bonnet presented his "news from other mills groups", much of which is published in the SPAB Mill News. He concentrated this time on the Suffolk Mills group newsletter and Mill News itself.

Finally, he published an advertisement from the Sussex Advertiser placed in 1827 after High Down Windmill, Goring, was demolished. It lists mill gear, husbandry implements, a granary, washing, brewing and dairy utensils and other effects – quite a comprehensive list. In Bob's own words, it is everything a man might want – milling collectibles, brewing and cheese-making equipment, tools and machinery, a blunderbuss and seedlips (whatever they are).

Published books – *A Miller and His Mill* by Judith Cooper can be obtained from the Midland Mills group.

David Clarke submitted two pictures, one from the front and one from the back of a model of Bishopstone Tide Mills. It had a windmill in the centre of the building and was made as part of the Tide Mills Heritage Celebration week.

Welsh Mils Society Newsletter No. 145, October 2021

There are two fascinating guest articles in this edition: the first by Dr Adam Coward of the Royal Commission on the Ancient and Historical Monuments of Wales; the other by Sheila Miles Viner of the Hampshire Mills Group.

A new member is welcomed, Ms. Victoria Embrey from Market Drayton.

News from the mills

Y Felin, Llandudoch – Emma Williams has been repairing the waterwheel. A local customer offered the oak from his own garden, which is now being cut and installed into the wheel.

Felin Hescwm, Dinas, Pembs – In November 2020 a steep bank near the car parking area slid and blocked one of the two streams feeding the millpond. The stream has been moved to the centre of the lawn leaving the leat to flow along close to the bank. To strengthen the bank, a retaining wall has been built where the slip had occurred, with a low wall along the rest of the bank. There were leaks along the leat and new sections of wall are being built where necessary.

Felin Ganol, Llanrhystud – Orders have picked up and the mill is receiving twice as many orders as it did before the pandemic. Anne Parry reports that there is more interest in flour from heritage grains – some supplies are going to London.

Pontdolgoch Sawmill, Caersws – Tim Chilton reports that he is to hire an 8-tonne excavator to clean out the pond.

Y Felin Fach, Blaenpennal – A new wooden pentrough is nearing completion. This involved fabricating new sluice gates to divert the water from bypassing the wheel, as well as a pentrough itself, and allowing control of water to the wheel in a traditional manner. The graduated arm water control that operated from inside the mill still remains a mystery, perhaps suggesting that a unique system had been installed as part of the oatmeal production process. This may have required a more precise water control system than the usual sluice gate to achieve a specific wheel speed.

Another online mill owner's forum was being planned for November to follow the WMS AGM in October. Any WMS member who wishes to be included can express an interest by emailing wmszoom@gmail.com or phone Andrew Findon.

Welsh Wool, Slavery and the Built Environment
by Dr Adam Coward

Slavery was an integral part of the early modern economy, deeply linked to local national and international and economic activities including in Wales. The built environment's relationship with Imperialism including transatlantic slavery has been highlighted in several recent reports from Historic England, the National Trust and Welsh government. Sites associated with "Welsh plains" (known locally as "webs") – a course fabric produced in mid-Wales and used to clothe enslaved people – can be difficult to identify but can nevertheless demonstrate the importance of the economy of slavery to some Welsh communities. In early times the main product was flannel, with Welsh plains of second importance. They were made in a few small districts of Wales. The industry grew throughout the 18th century and peaked at the end of the century. From the 1820s woollens production shifted to flannels. Initially the product was made in domestic spaces; factories only appeared at the turn of the 19th century. Welsh plains were exported to slaveholders in the 1820s to 1840s and c.1880.

The exception to late mechanisation was fulling. Not all fulling mills could cope with flannels and Welsh plains. The proliferation of fulling mills gives a general impression of the industry's strength. Place names including the word

"pandy" show the distribution of fulling mills. A quote by Thomas Pennant describes "The abundance of sheep, which enliven these hills, brought, at the time I visited the country, great wealth into it. The flannel manufacture and that of course cloth for the army and for covering the poor [black people] in the West Indies is carried on in most parts of the country." It appears that the production of cloth for sale to slaveholders was a vibrant industry. The story of Welsh plains and its connections with slavery contextualises the textile industry that grew later, but it is not the totality of that industry.

This article was originally published at – rcahmw.gov.uk/welsh-wool-slavery-and-the-built-environment.

Bisham Temple Mills by Sheila Miles Viner (Hampshire Mills Group)

Three heavily industrial Temple Mills at Bisham milled, hammered and manufactured domestic wares, plus items for the construction industry and naval marine items over several centuries, utilising the power of a particular stretch of the River Thames. Today it is a quiet island of expensive gated housing. In around 1710 it was engaged in the heavy industrial use of a copper foundry. The upper bank works were initially used in the production of lead and zinc, but in 1782 ownership was transferred to Thomas Williams of Llanidan, who converted it to copper smelting and operated it on behalf of the Parys Mine Company – the ore coming from Cornwall. The foundry hammered out copper sheathing for the hulls of wooden sailing ships.

Mr Williams, known as "The Copper King", became the elected Member of Parliament for Great Marlow in 1790. He built a mansion – Temple House – where he entertained people such as the Prince of Wales (the future King Edward VII), who reportedly had an affair with one of the Williams family daughters, the Countess of Aylesford, and brought a favourite mistress Lillie Langtry to Temple House.

The works were transferred in 1802 to his son Owen Williams, a long-time associate of Pasco Grenfell and Grenfell's brother William. Trading as Williams Grenfell & Co, this firm continued to smelt copper at the works into the 20th century. In

1848 T. Weeden & Sons took over the site, altering at least one of the mills to manufacture brown paper. Among the items they made there "in secret" was the latest

innovation for faster communication: ticker-tape. After the war the site was used for wastepaper storage and a brand-new utility – pitch fibre pipes, which traded as Temple Tubes – and eventually closed in 1969. A fire swept through the old Bisham Temple Mills site and it was eventually sold to developers for superior housing with no sign of its industrious past.

Twenty-five years ago

In Newsletter 46, with Christmas greetings, the editor introduced his inventions of molino-oenology and molino-philately – the former, the science of wine and winemaking, the latter of stamps depicting windmills. Geralt Nash reported on the difficulty that new mill owners were having in making ends meet.
Derek Williams mused about the name *Cae'r ddeinter* (Field of the Tenterhooks). The rest was made up of current news cuttings.

Mills for sale

– Y Felin, Mydroilyn, Ceredigion; Ty'r Felin, Llangorse, Powys;
– Melin-y-Ddol, near Llanfair Caereinion, Powys;
– Hundred House Mill at the eponymous village east of Llandindrod Wells, Powys:
– The Town Mill, Llanidloes, Powys;
– Rhydlydan Mill at Aberhafesp, near Newtown, Powys;
– mentioned in the previous newsletter and still on the market, The Mill, Llancarfan, Vale of Glamorgan, and Maenan Mill, Vale of Conwy.

On the back cover were photographs of Hundred House Mill and Melin-y-Ddol; on the front cover, a picture of the new wooden pentrough from Y Felin Fach, Blaenpennal.

Mill News no longer lists mills for sale that are converted. Only mills that have significant machinery will be featured.

A list of all known mills for sale will, however, be put on our website for members to view:

spab.org.uk/members/mills-for-sale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MAY 1951 BRING SUCCESS AND PROSPERITY TO
ALL OUR FRIENDS IN THE MILLING INDUSTRY