

THE TIDE MILL

LIVING MUSEUM



Patrons of the Tide Mill: Lord & Lady Framlingham

TWEAKS AFOOT

This is the first newsletter of the New Year, and you are welcome to it.

As you were warned in the previous issue, some minor changes are being made: the series entitled "The Story Behind..." has gone, although this newsletter is here for anyone to tell their story, or stories, so the essence may remain. In fact, to demonstrate how painless it can be, Wendy Reid is going to give us a series of further episodes from her eventful life, which are entitled "Wendings". We will also be running a series of features about other types of traditional mills, for all you grain-heads out there, with a bit about their products and a recipe using them. The series has kicked off with the only other surviving and flour-producing tide mill in the UK: our friends at Eling.

We will also be running an occasional series of extracts from a super, unaffordable to most of us, book about bread - see page 7.

That's about all the tweaks.

You will still get a comment from our Chairman, together with the new Curator's Coruscations, Miller's Chronicle, Engineering Gazette, Warden's Digest (in season), Wordwheel, School Reports when applicable, and any New Faces that turn up, and you will still be stuck with Glenn Miller and the Busker (try as we might, they will not take the hint!).

Oh, and this month you have to suffer another Puzzle Page - fortunately they only seem to come as brackets between the old and New Years.

Finally, if you plan to celebrate the New Year, try to do enough to make it memorable, but not so much that you can't remember it!



VIEW FROM THE BRIDGE

My best wishes for a Happy New Year to all our supporters.

We are using the winter months, as I said in my last "View" to review our plans for 2019. There are two groups which some of you may be interested in joining. One covers Education and is led by our Education Officer, Heather Sheehan, and the other is about Communication and is led by me. Education is about our plans to have more school groups visit us and Communication is about how we advertise and market ourselves to potential visitors.

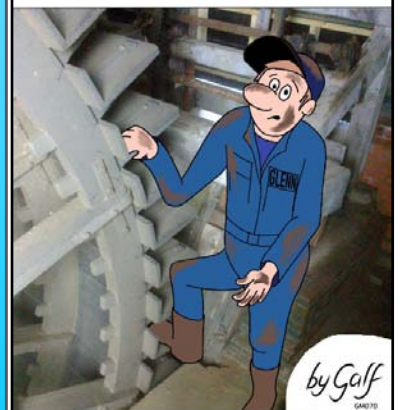
We thrive because of our volunteers and I do hope that a few of you will find these subjects interesting enough to join us in one of the groups. It won't be onerous. If you are interested do mail me on jcc@carringtoncom.com

John Carrington
Chair of Trustees.

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NEW BEGINNINGS



I KNOW ALL GOOD THINGS MUST
COME TO AN END.
I JUST WANT TO KNOW
WHEN THEY ARE GOING TO START!

In 2018, may your neighbors respect you, troubles neglect you, angels protect you, and heaven accept you.

www.woodbridgetidemill.org.uk

[If you read last month's newsletter, you were warned that we will have a new series of articles about traditional flour mills. This is it, and we start our new series with the only other surviving and producing tide mill in the UK. As you'll see, a parallel history to ours, in many ways. Ed.]

Eling Tide Mill is situated on the edge of Southampton Water beside the renowned New Forest.

It is the only other fully working and productive tide mill in the United Kingdom, producing flour as it has throughout the last millennium. In fact one of a handful of tide mills in the world still producing flour on a regular basis.

Workings

The Mill is located on the seaward side of a dam across a tidal river. When the tide comes in, it pushes open one-way gates and fills up the millpond. When the tide turns and starts to go out again, it slowly uncovers the waterwheel, but the sea gates are closed, trapping the water in the millpond so the level in the millpond stays at the high tide level.

When the tide has dropped to well below the waterwheel axle, the sluice gate can be raised. Water from the millpond strikes the lower blades of the waterwheel, spinning it round and allowing the milling to begin.

Origins

The earliest surviving reference to our mill is in the Domesday Book – a survey of England in 1086 AD. It's possible there was a mill here as far back as Roman times (c200 – 400 AD), but any evidence of this will be underneath the mill and the bridge. Our current building is over 200 years old.



Heyday

The mill was always owned by the Lord of the Manor. Originally this was the King of England, as Eling was a royal manor. In the 1200s, King John sold the manor and mill. They went through various hands until 1382 AD, when they were purchased by the Bishop of Winchester. He gave them to a school he was founding as a source of income. The school – the famous public school Winchester College – owned the mill from 1382 to 1975 AD, though they didn't run it directly, but leased it out on long leases.

Some of the grain for milling was from local farms, but more of it came from the Eastern side of England *[Air-punch! Ed.]* and travelled several hundred miles round the coast by barge. When the tide was in, the barges could sail right up to the mill. Running both waterwheels and all four sets of stones at full speed for both tides, the mill's maximum output would have been about 4 tonnes of flour in a day.

Rebuild

Tide mills were often rebuilt every two or three hundred years. We don't know exactly when the first mill was built, but it has been rebuilt many times over the years, the last being in the 1770s when it and the bridge were completely rebuilt after a series of storms and floods.

The milling machinery was last replaced in 1892 AD. The old, wooden undershot wheels were replaced with cast iron Poncelet-type wheels which were more efficient. The main gearing was also replaced with cast iron axles and gears. It still has the same style of parts working the same way as they have done for centuries.

The end ...almost

The invention of steam power plus cheaper imported grain arriving in the mid-1800s resulted in steam-powered roller mills in docks across the country to mill grain from Canada and elsewhere. Small mills using millstones (whether tidal, wind or river-powered) found it very difficult to compete. Eling, like many others, struggled on by producing animal feed. By 1936 the machinery was broken and the last miller was using a diesel engine to power the machinery. In 1946 production in Eling Tide Mill came to a stop, but the mill remained a local landmark.

Resurrection

In 1975 the mill was bought by New Forest District Council who, working with dedicated volunteers and professionals, began to restore it as a site of industrial archaeological importance. Eling Tide Mill Trust was established to oversee the final phase of the restoration and ran the mill as a working museum once it opened in 1980. In 2009 the mill, along with the nearby heritage centre and local outdoor spaces Goatee Beach and Bartley Water, became part of the Eling Experience, run by Totton & Eling Town Council. The Eling Experience gives visitors the opportunity to experience a working historic mill, to discover the mill's story and how tidal power could be used in the future, and to explore our wildlife and find out why our local habitats are so important.

The mill originally had two waterwheels, which each drove two sets of millstones. One waterwheel has been restored, along with one set of millstones.

<https://www.elingexperience.co.uk>





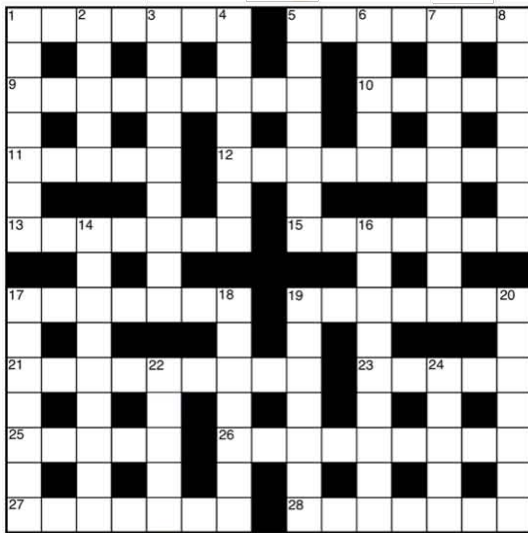
And again, for the New Year.

Fortunately, these puzzling treats are very rare.

Sortunate for you, to not have to face them too often, that is.

An A4 size print of this page will make the answers easier to write.

Answers on last page



ACROSS

- 1 Tell son to make Teutonic sweet loaf. (7)
- 5 Jestful piece. (7)
- 9 Of earth, water, air or fire. (9)
- 10 Hellenic domain. (5)
- 11 Oral figurative power. (5)
- 12 Revealing to a Trustee. (9)
- 13 Seven centres of Indian power. (7)
- 15 Alterations to the toll. (7)
- 17 Dream of holidays cries us away. (7)
- 19 Late Greek folded painting in two. (7)
- 21 Whoop and weep after a robber has struck. (9)
- 23 The brightest star in any constellation. (5)
- 25 Work comes before time of entertainment. (5)
- 26 Latin American oddball here at Christmas. (9)
- 27 Standing attempt at basketry. (7)
- 28 Supinely crapolent. (7)

DOWN

- 1 Pyrrhonic Thomas? (7)
- 2 The too easy outcome of a good Yule. (5)
- 3 The too easy outcome of a foul wind. (9)
- 4 Spots negative freezing. (7)
- 5 Furious organ blowing. (7)
- 6 A third of Hispaniola. (5)
- 7 How 15A should be perceived. (9)
- 8 Essential stocking toe fillers. (7)
- 14 "Life would be tolerable but for..." — G C Lewis. (9)
- 16 If 7D applies, this should be so. (9)
- 17 Colluding leads to chaos. (7)
- 18 Dismiss conjunction to evoke old trombone. (7)
- 19 Casual boat trip said lay aside. (7)
- 20 Where Milton imagined cricket? 'Il Penseroso' (7)
- 22 Lower than a noble, thane perhaps. (5)
- 24 Six of these makes a tanner. (5)



SPOT THE TEN DIFFERENCES



WORD SPIRAL

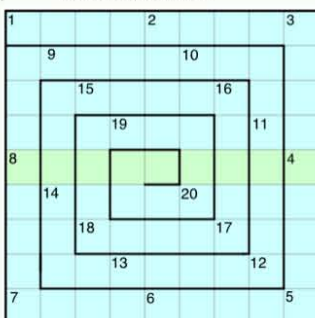
Start at number 1 and form five-letter words around the spiral, with the last letter of each word forming the first letter of the next, to find the keyword in the centre row.

Clues

- 1 Currents
- 2 Channel
- 3 Submerge
- 4 Magnate
- 5 Instrument
- 6 Fibre
- 7 Sorcery
- 8 Hawser
- 9 Heron
- 10 Pollex
- 11 Cook
- 12 Line
- 13 Strand
- 14 Chaos
- 15 Joker

- 16 Approximately
- 17 Backwards
- 18 Holy Book
- 19 Alimant
- 20 Vision

Keyword Clue:
Collateral sailer?



WORD LADDER

Turn SPELT into STALK in five one-letter steps.

SPELT	Clues
	Charm
	Slop
	Inert
	Kiosk
STALK	

WORD WHEEL

The Word Wheel in each issue (which can be done on a scrap of paper), uses a nine letter word from the Mill Guidebook. Use a minimum of four letters for each word, one of which must be the hub letter. Give yourself ten minutes, and don't use

proper nouns, plurals or foreign words.

15=average;
25=good;
30=v.good
Answers on last page.



CURATOR'S CORUSCATIONS

By Fraser Hale

Not Littlewoods, but close.

As part of our bid for accreditation, the Tide Mill Museum must show that it has a Collection – a group of objects that are kept in trust by the museum for the benefit of the public. The objects must be accessible to the public and the museum must show that it is caring for them.

As well as its machinery, the Tide Mill currently has around 100 objects that

constitute its collection. The first step on our road to accreditation is to identify the scope of the collection, and the location of all the objects that constitute the collection. This is the Inventory. And the Tide Mill's is now complete! All objects within the museum have been uniquely numbered, and their location within the Mill recorded.

The next step is to begin the process of Accession – information about each object is copied from the Inventory into the Catalogue. Cataloguing is an open-ended process; not

only does the Catalogue record detailed physical information about each object (size, weight, colour, materials, location, etc.) but also where it came from, how it was once used, how it came to be in the Mill's Collection etc. etc...

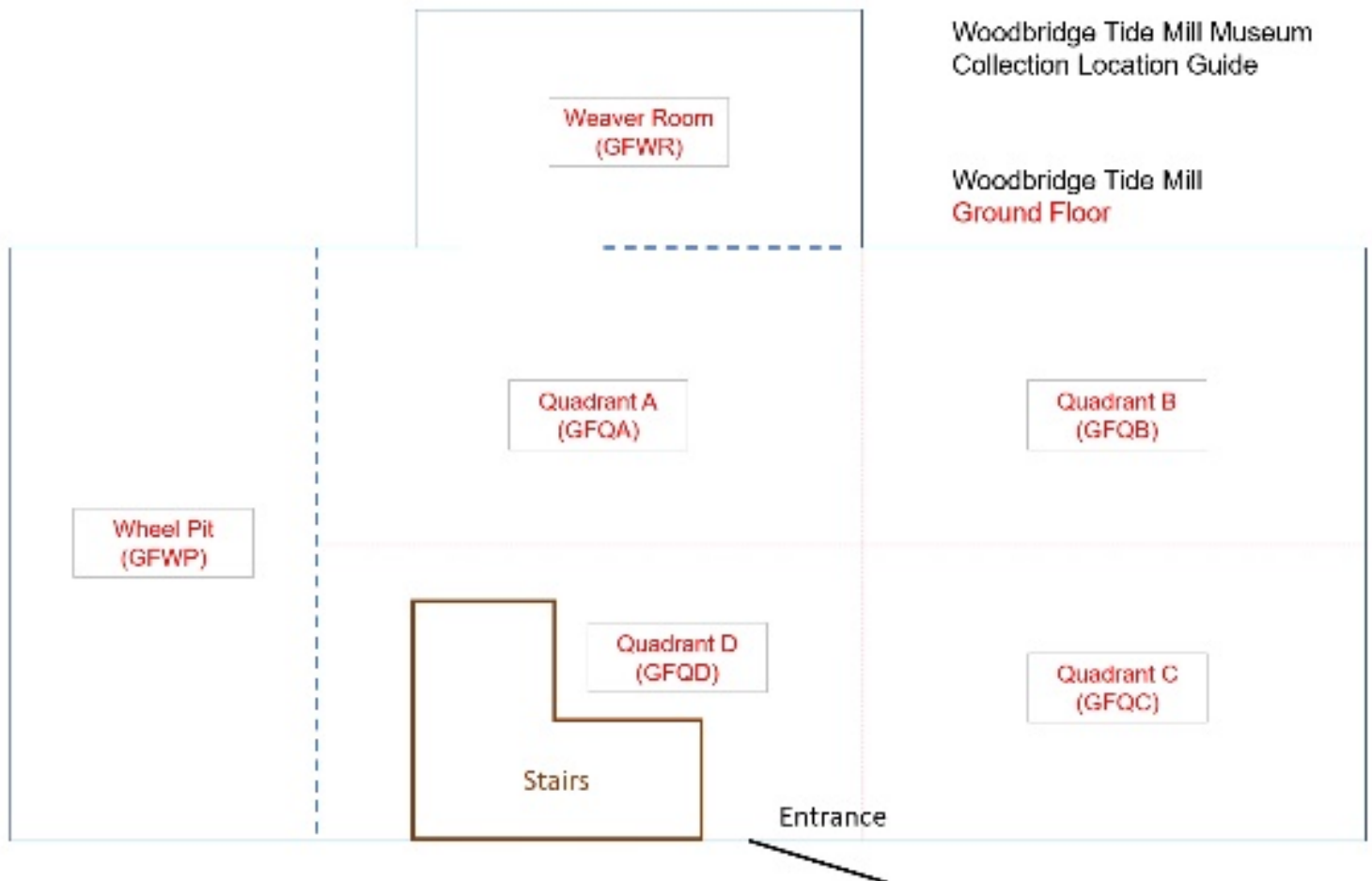
Research into Collection Objects may never be considered complete; there is always more to learn.

The Tide Mill Collection is a modest one, but defining its limits is an important step on our journey, and as we learn and record more about each object, their interest and cultural value only grows.

T 0009	2	Artefact	Pair of chromed steel flour grading paddles	GFQD	FH	02.11.2018
T 0010	1	Ceramics	Melton Brewery Beer Jug	GFQD	FH	02.11.2018
T 0011	1	Artefact	Chained Sack	GFQD	FH	02.11.2018
T 0012	1	Artefact	Fragment of 18th century Wheel Shaft	GFQD	FH	02.11.2018
T 0013	1	Picture	Small framed pen and ink sketch of WTM	GFQB	FH	02.11.2018
T 0014	1	Book	Miller's Log Book	GFQA	FH	02.11.2018
T 0015	1	Book	Miller's Log Book	GFQC	FH	02.11.2018
T 0016	1	Artefact	Fragment of 1932 Water Wheel	GFQC	FH	02.11.2018
T 0017	1	Artefact	Iron Stone Nut Frame c/w newly fitted wooden teeth	GFQA	FH	02.11.2018
T 0018	1	Picture	Framed Pencil Sketch of WTM by John Western	GFQB	FH	02.11.2018
T 0019	2	Artefact	Cast Iron Balance Scale Weights	GFQD	FH	02.11.2018
T 0020	1	Artefact	Cast Iron Pinion	GFQD	FH	02.11.2018

Woodbridge Tide Mill Museum Collection Location Guide

Woodbridge Tide Mill Ground Floor





Eling Tide Mill now sources its wheat from a local farm called the Manor of Cadland; the latest variety is Skyfall, which their Miller, Matt Painter, said, "Has served us well". Skyfall is currently the most widely grown wheat in the UK market, with excellent baking quality, with a bold grain and high protein level and with outstanding growing performance on lighter and more drought prone soils.

In the past, Eling have typically produced about 10 tonnes of flour a year and hope to increase that amount up to 20 tonnes, following the recent refurbishment - but only if they can sell it.

We both need all the help we can get, so next time you are in the New Forest visit Eling, look around and buy some flour. Do yourself a favour!

Eling Wholemeal Loaf

- 400g (14oz) Very strong wholemeal bread flour
- 100g (3½oz) Strong white bread flour
- 1 Easy bake yeast sachet ((7g))
- 1.5 tsp Salt
- 50g (2oz) Butter (melted)
- 1 tbsp Unrefined light muscovado sugar
- 300ml (½pt) Warm water

MIX Mix the flours, yeast and salt in a big bowl. Mix together the melted butter, sugar and water, then mix in with a cutlery knife.

KNEAD Tip onto a lightly flour dusted surface and knead for 10 minutes (or use the dough hook attachment on your mixer).

RISE Lightly grease the mixing bowl with some oil. Put the dough back in, cover the bowl with a clean tea towel and leave to rise until doubled in size.

SHAPE Knock back the dough by gently kneading just 5 times to get the air out. Mould into a smooth oval and lift into a lightly oiled 900g/2lb loaf tin.

PROVE Cover the dough again with a clean tea towel and leave to prove until doubled in size again. Preheat your oven to 200°C (fan 180°C, gas mark 6).

BAKE Lift the tin onto the middle oven shelf and bake for 35-40 minutes, until you can lift the bread loaf from the tin and when you tap the base it sounds hollow. Cool on a wire rack.



Eling Tide Mill flour.



This is a picture of Eling's lovely quern stone interactive, where visitors can have a go at milling their own flour.



A typical wholemeal loaf.

BUSKER'S CORNER



Where have all the tide mills gone?
 Long time decaying,
 Where have all the tide mills gone?
 Ruin not delayed,
 Where have all the tide mills gone?
 What we know is ours was spared,
 Cos of volunteers that cared,
 And the visitors who payed.

Where have all the tide mills gone?
 Passed into history,
 Where have all the tide mills gone?
 Why it happened a mystery,
 Where have all the tide mills gone?
 Just a couple still make flour,
 A few more now have lost their power,
 The future may help this story.

THE MILLER'S CHRONICLE

By Dan Tarrant-Willis
dantarrantwillis@yahoo.com

2018 has been a good year for milling. We have produced the same amount of flour as last year, yet more of it has been ground during public milling demonstrations. These demonstrations have been cleaner and healthier thanks to our newly-installed dust extraction system, for both us and our visitors.

This year we altered the way we mill with an attitude towards reducing heat from the milling process. The reason for this is to reduce the 'flacking' or small hard lumps of flour polluting the product that has sometimes been a problem in recent years. Although harmless we were wasting grain. We think that these hard lumps are caused by

the wheat's moisture content being released by a process of evaporation due to unwanted heat during the milling process and combining with newly ground flour that would slowly cook in crevices in the stones after we had stopped milling, as these hard lumps would only appear at the beginning of each milling session.

Particularly when we had noticed a build up of heat in the previous session. This reduction, of heat, has mainly been achieved by lowering the speed of the stones' rotation and we also feel the dust extractor has helped as it sucks the dust with the heated air away and out of the chute, reducing heat build up. I am glad to report we haven't had any flacking or hard lumps appearing this last season and for this I am truly grateful.

Our team of millers is strong yet small, so if you would like to have a go in 2019 please get in touch - you will be very welcome.

This year's production of our super flour to date is 5,689.80kg.

(12,543 ⁷/₈ lb)

ENGINEERING GAZETTE

By John Wood

The Engineering Team got together in December to do the final maintenance session of the year.

When all work was finished we ended with a cup of tea and a mince pie and looked forward to a new year at the Tide Mill.

Finally a group photograph as we all wished everybody

A Merry Christmas and Happy New Year.

(Photo L to R - Fraser Hale, Richard Bull, John Smith, Peter Heath, Steve Brereton)



PHOTO: JOHN WOOD



PHOTO: Ed.

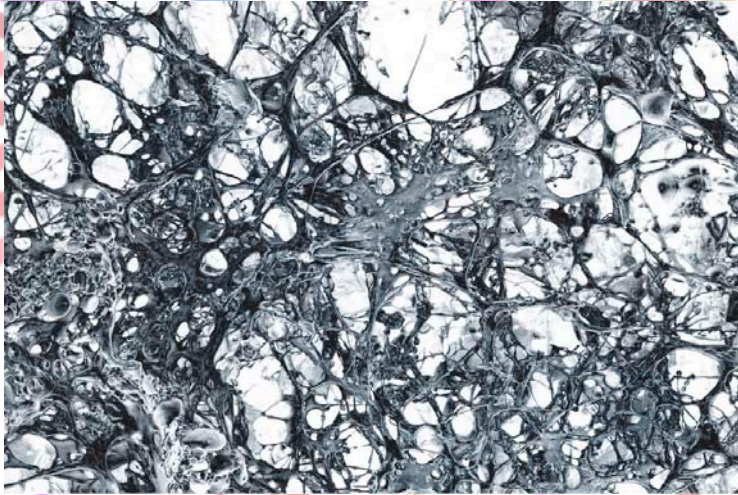
DON'T FORGET THAT THE BEST WAY TO ENSURE THAT YOU CONTINUE TO RECEIVE THIS NEWSLETTER (REGARDLESS OF ALL THE OTHER BENEFITS) IS TO KEEP UP YOUR MEMBERSHIP OF

THE FRIENDS OF WOODBRIDGE TIDE MILL.

IF YOU ARE NOT ALREADY A MEMBER, BUT WOULD LIKE TO BE ONE, USE THIS LINK: [BE A FRIEND](#)

www.woodbridgetidemill.org.uk

DO YOU KNOW WHAT THIS IS...



Gluten Up Close

To better see the gluten network at the microscopic level, we washed away the starch granules before looking at the dough under a scanning electron microscope. The resulting image shows an entangled network of gluten strands that resemble a jumble of highway interchanges.

In bread making, gluten is exceedingly important. Think of gluten as the miraculous net that holds bread together; it helps dough rise by trapping gas bubbles during fermentation and gives bread its unique

This is the first of a series of extracts from **Modernist Bread**, a 2,642-page celebration of the art and science of bread. For more information, go to: <https://modernistcuisine.com/books/modernist-bread/>

texture. Although bread begins with many of the same ingredients as biscuits, pastries, cakes, and even shortbreads, it has a completely different consistency. Gluten makes bread airy and satisfyingly chewy—it's hard to imagine enjoying a chewy cake or a bread that crumbles like a biscuit.

Gluten is formed when two of wheat's native proteins, glutenin and gliadin, come into contact with water. Adding water to flour starts a cascade of chemical reactions that can eventually lead to gluten development. When hydrated, the glutenin and gliadin proteins almost immediately bind and form gluten. The longer glutenin pieces link up with each other via disulfide bonds to form strong, stretchy units of molecules. These interlinked strands are among the largest protein molecules yet identified. More compact gliadin proteins allow the dough to flow like a fluid, whereas glutenins contribute strength. Proteases

(protein-snipping enzymes) begin cutting strands of gluten into smaller pieces that are able to make additional connections. Protease is found in very small amounts in wheat flour; an excess of it would cut gluten strands too much and have the opposite effect on the gluten network.

The chains of proteins become more numerous and elongated as the dough is mixed; they organize into a sort of webbing that has both elasticity (the ability to stretch) and extensibility (the ability to hold a shape). Without this little protein tango, bread would be a very different thing: flatter, crumblier, denser, and less chewy. The network of gluten will continue to develop, gradually becoming stronger and more complex, up until the dough is fully proofed.

To expand during proofing and baking, the dough must be strong enough to retain the gas that's produced. Gluten makes the dough elastic enough that the bubble walls can expand like a little balloon without tearing up until the point where the bread overproofs. When carbon dioxide exerts more pressure than a proofed dough can withstand, the gluten structure weakens, releasing the gas and deflating the overproofed dough.

WENDINGS

The adventures of Emily Barratt - Part 3

When I was eleven my father bought a boat....episode the third.

I slept in the forecandle, up the sharp end with my sister and mother. They cooked for the crew in a makeshift galley consisting of camping stove, water containers, plastic bowls and buckets and huge pots and pans. Every meal was delicious and appreciated, as it well deserved to be, if the boat was tied up in a safe harbour.

The cargo hold was only accessible from the deck by removing some canvas and boards and erecting a ladder. It was dark and dismal down there, that's where the volunteer crew slept when they weren't hanging over the side being sea sick. Where did my father sleep? I don't think he did.

We had a little cruise along the way as inducement for the crew. We called at Penzance. This I

remember well, the crew instantly recovered, decided to go swimming off the rocks. They took me even though I couldn't swim and managed not to let me drown. I had never seen water so blue and so clear, the sun so bright or rocky coastline so stunningly beautiful before.

At sea again on our way to Littlehampton. We got given a bucket of mackerel by a passing boat who mistook us for the *Result*, a similar sailing ketch, although as my father pointed out, disapprovingly, built not of wood like us but of iron. My mother and sister fried the mackerel, hmm lovely fresh fish straight from the sea, nothing compares, probably the best fish dinner I have ever eaten.

Next we headed across the channel. This started well. We had a fair wind so didn't need the engine. Falling asleep to the sound of the wind in the rigging and the rocking and rolling of this little ship was wonderfully quiet and peaceful.

Boulogne was a busy port and the French enjoy messing about in boats just as much as we do. Yay, we have something in common after all. Being a lovely, sunny, summer's day they were out in force making full use of the harbour as they darted around each other. As we approached the entrance many of these little boats came to say 'Hello!' They buzzed around us taking a long hard look at this oddity from across the sea. They waved and called out to us in their strange musical language. We waved and shouted back in colourful Anglo Saxon epithets. However, nothing we did seem to deter them from sailing across our bow again and again. A game of chicken or should I say poussin which we all felt sure they would lose. Somehow, though they avoided a direct hit and didn't actually disappear in a tangle of splinters and little white sails.

We tied up safely in Boulogne ...my first foreign soil.

Diary Dates for 2019

Wheel Turning and Milling Demonstrations

Water Powered Milling Demonstrations will take place on the 2nd of Jan at 15:00, the 12th of Jan at 09:30, the 19th of Jan at 15:00 and the 27th of Jan at 11:00.

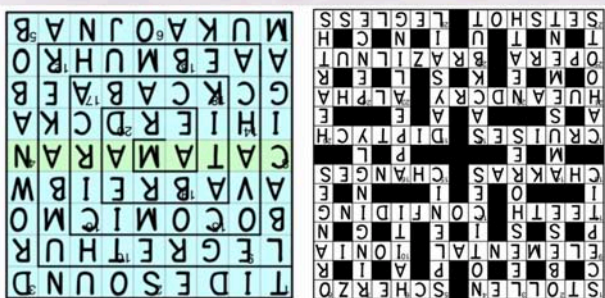
For full general mill working times use this link to the website: [Turning & Milling](#)

Other Events

For now, just put the **Spirit of Beowulf Festival 2019** in your diary on **May 3-6**, and other dates for events will follow when the new programme is agreed.

Correspondents: all copy for next month to be sent to WTMeditor@gmx.com by the middle of January please.

PUZZLE PAGE ANSWERS



WORD WHEEL
 Convined, convince, connived, connive, coined, conned, novice, conic, coned, novel, cover, covin, spell, cone, once, coin, deni, dine, spill, cone, once, coin, deni, dine, still, ride, done, nide, vine, vine, stall, neon, nine, oven, noni, vino, STALK

The Surname Miller

The surname Miller is much more commonly found in the United States of America than it is in England. Why would that be?

Traditionally in England the Miller was seen as an unpopular rascal, cheating the farmer when weighing his grain and the customer when weighing his flour, whenever the chance arrived to surreptitiously apply his thumb to the scales. So, to call oneself 'Miller' was somewhat akin to someone nowadays having the surname 'Landlord'.

However, in America, the name Miller usually was an anglicised (or americanised) version, derived from the flood of immigrants from Germany called Müller, Mueller, Moeller, Muller and Mahler, where it was much more common, and had no such negative connotations. Surprisingly, Miller is the third most common surname among Jews in the United States (after Cohen and Levy).

(Adapted from *Mother Tongue* by Bill Bryson and from Wikipedia)

PURPOSE: The purpose of this newsletter is to support and advance the objectives of the Trustees of Woodbridge Tide Mill. The newsletter provides all supporters a forum of their own, together with information about current and future events and it is hoped it will foster a sense of common interest and shared identity; encourage increased participation and entertain.

EDITORIAL POLICY: The editor has full editorial responsibility for the newsletter. Articles that appear and views expressed are not the official position of the Trustees on any subject, unless specifically noted as such. Items submitted for inclusion may be edited for grammar, style and/or space requirements and contributors wishing to be alerted of any changes prior to publication must notify the editor at the time of submission.

DISCLAIMER: The Glenn Miller gag cartoon does not make a comment about any real helpers at WTM.

Remember: Many things can be preserved in alcohol, but on New Years Eve.

DIGNITY is not one of them.

