

Issue 31 Autumn 2022

2

A New Development Officer

6

Research, Roller Mills and Rediscovery

11

Flat Caps for Millers and Millwrights

20

Women in Milling: Betty Sullivan

24 Twenty-One Years and Still Counting

Mill Memories

The Newsletter of the Friends of the Mills Archive



Electricity from Wind Power ~ p. 15

A New Development Officer



My name is Nathan. In August, I joined the Mills Archive Trust as its new Development Officer. If I had to condense my current task into one sentence: I am writing appeals to fund the space and time our staff need to preserve and make our milling heritage accessible. Some degree of vagueness is necessary to convey the scale of the task. Using numerous archives during my BA and MA History degrees, I could easily browse the menus of online

Nathan Trill

catalogues and be served neatly prepared documents. Little did I know of the inner workings that made this possible.

Thankfully, I have an excellent team who have remedied my naivety. Our archivist and volunteers have kindly shown me their work to catalogue, package collections and assist visitors. Combined with everything from the smallest envelope to our yearly rent, a huge amount of time and money is needed to keep up with the quantity and quality of their work.

But where do I fit in with the team at the Mills Archive?

I had previously worked to advertise my brother's carpentry business. Focusing on traditional woodworking, I created a website to attract projects in old and listed buildings. In my spare time, I volunteered to promote Reading Museum and the Museum of English Rural Life in the local area. It was incredibly rewarding to convey my passion for history while tutoring A-Level students during the pandemic. The sum of my work with old structures, in heritage and education equates to the Mills Archive Trust's mission: expanding the world's understanding of mills, the people surrounding them and their significance. Even in one of my areas of interest, the French Revolution, significance was easily found. What better way to seize control of a country than through its bread? By extension, the revolutionary government was keen to create an inventory of mills to rectify shortfalls in flour production. In the department of Lot-et-Garonne, this took the seemingly counterintuitive form of destroying certain watermills, which were blamed for the floods afflicting local peasants^{*}. I am excited to continue learning about how the world revolves around milling, at the Mills Archive Trust.



Painting by J B Mauzaisse depicting the Battle of Valmy, 1792. From a postcard in the Mildred Cookson Collection.

Having already enjoyed speaking with some Friends and supporters of the Archive, I am looking forward to meeting more of you in the coming months.

*Hendrik Degraeve, 'Inventaire des moulins de Lot-et-Garonne', *Fédération des Moulins de France*, <u>https://fdmf.fr/inventaire-des-</u> <u>moulins-de-lot-et-garonne/</u>

Hanging with the Chimp

Nataliya Vine

I have been with the Mills Archive since 2013. I started as a volunteer, and I enjoyed being with such a great bunch of people soaking in the atmosphere of the three hundred year old Watlington House and the beautiful garden. A few months later I was offered a role of Administrator. My duties include working on Mailchimp, which I started learning from scratch. Mailchimp is an all-in-one marketing platform that helps us to connect with our supporters.



Since then, the Chimp has been hanging with me and every week we dive deep into the beauty of the software to design our newsletter that goes out every Monday to our wonderful audience including our supporters on social media.

We've had some witty comments from the public. A recent post on social media was about one of our gems, a postcard produced by the Belgium publisher Marco Marchovici in the early 20th century. The illustration depicts elderly women entering the 'Mill of Old Age'. On leaving the mill they have been transformed into glamorous young ladies. The middle chute is for those who were rejected in the process.





Some surprises

The postcard plays on the common theme of the transformative power of mills.

One of our readers commented on this picture of the young lady admiring herself after the transformation:

"She's on her phone! 🙂 "

An article by Hayden Francis-Legg on our millwrighting exhibition has had the biggest response. Almost 10,000 people saw the post on social media.

It really shows how crucial it is to highlight the importance of the preservation of our milling heritage and increase public interest in millwrighting not just in Britain, but all over the world.

It has been most rewarding and uplifting for our team at the Mills Archive to receive your comments. Thank you for all your support.



Millwright Malcolm Cooper rewedging the wooden waterwheel onto its shaft, Mapledurham 2010. Photo Mildred Cookson.

Research, Roller Mills and Rediscovery

Liz Bartram

We aim to bridge the gap between traditional mills and the modern industry. Finding ourselves approaching the end of a three-year project funded by the Millers' Mutual Association, we thought it timely to provide you with an update on the project.

It is vital that our library and archive holdings reflect the whole industry of milling and the varied interest areas. This project has involved liaising with the modern milling industry to better understand what they would like to see reflected in our holdings. This is helping us structure the library to reflect the history and continuing development of roller milling. This will put us in a stronger position to accept future donations of material from some of these companies and private collectors.

Development of our Research Centre

Purchase of library shelving doubled the publicly accessible space for books. This has meant that as we reopen to visitors, for the first time they will have easy access to more than 2,600 publications specifically on the milling of cereals. This number will increase as we progressively catalogue our very extensive journal runs.



The investment in software development for our digital library was planned not only to markedly increase our digital content but also to emphasise contemporary publications relevant to modern millers.

Digitising our journals

We have begun to experiment with digitising some of our journals, in particular the *Milling* journal, which has a prestigious history covering more than 100 years of milling, running continuously since 1891. The current incarnation is *Milling & Grain*, produced by our Archive Patron Perendale Publishers.

	THE MILLERS' SUI s CHAPEL STREET, LI
MILLING Milling	Memory and the Future that many that
	For the second s
Martin Martin Martin Martin	Engranme of Human returned to this country at the declaration of the over of which the first head Sourcesson with the well by properties of the over the state of
SPENCER MEL KOMANETO MELKOMAN MILTO	The second seco

There are several challenges involved in digitising such journals. Their large and fragile nature makes the already laborious process of scanning challenging. Scanning is not enough. To make the journals discoverable and searchable, we have experimented with different approaches. All of this requires people to make things happen – if you live locally to Reading and fancy the chance to help make these journals accessible, do get in touch with us!

With thanks to the Millers' Mutual Association, for whose support we are most grateful.

My Role at the Mills Archive Ashok Vaidya



Above: Ashok and Tom Hine inspecting the turbine at Ashok's Newbury home.

Right: The turbine.

Having entered the world of mills and milling, I soon found my way to the Mills Archive. As a research scientist by training, it was natural to want to gather, study, organise and publish information.



another time.

Up until the year 2000 I had no

special interest in mills. Then we

moved into a mill house in

Newbury, which unusually had the

mill leat, sluices, and remains of the mill machinery included. This had

last worked in 1920 when a fire (the

third in its lifetime) destroyed the

mill. Faced with a 3 ton cast iron

turbine, dating from 1892, resting

on decayed wooden cross beams,

my interest was piqued. First I needed to find people who knew

about mills - and here I was lucky,

the Hampshire Mills Group (HMG)

was thriving and expert, and I

joined. Over the years we have

worked to preserve and restore the

turbine ... but that is a story for

And when coupled with the urgency to capture the wealth of knowledge of key people who had worked through the last century the Archive was the right thing at just the right time and I was hooked.

I have ended up with three roles – Trustee, Advisor and Volunteer, and added to my activity as Chairman, Archivist and webmaster of the HMG

means that quite a lot of my time is now mill related. So what do I actually do?

I won't say much about being a Trustee other that I think I bring a business and management perspective to the Board to complement others who have great specialist knowledge of archiving and milling. As an advisor I have been someone who is independent but involved and can occasionally help staff and volunteers deal with day to day issues.

My volunteering started when someone was needed to lay out and format for printing our third Research Publication. As I had just edited and published three volumes for HMG it was a natural extension. Today I am just finishing my fifteenth – so that is what comes with volunteering! But what a good way to read and learn about all sorts of aspects of mills, millers, millwrights and many others. And practice does make it easier!

The other aspect of volunteering is to work to digitise, catalogue and prepare for uploading to the web the tens of thousands of photos, articles, notes, drawings that have been delivered to the Mills Archive and which need attention. My natural focus has been on the extensive materials collected by Tony Yoward, which I hold for HMG since his death. I am in the process of transferring all his collection (850 documents and 9000 photos) to the Archive and scan photos and catalogue files where necessary. More recently I have been working on parts of the Rex Wailes collection and the Millers' Mutual photographs too.

So my thanks to the Mills Archive and to all the Trustees, staff and volunteers for participating in a valuable and valued enterprise and giving



me so many interesting things to do and learn. Bring on the next book!

Left: Ashok, Mildred and Nathanael with Tony Yoward on one of his last visits to the Archive.

Boxes and Bytes

Liz Bartram

Earlier this year, the Foyle Foundation kindly awarded us with £15,000 to go towards some of our digital and physical storage costs for our archival material.



We continue to receive material, sometimes quite unexpectedly and in a variety of packaging. We also have to accommodate deliveries of empty boxes! These boxes are made out of material that is acid free so reduces any potential negative effects on the archival material stored therein.

Here is our new Development Officer Nathan helping Archivist Nathanael with a recent delivery; we are all used to helping out with heaving boxes in and out, up and down, it comes with the territory!

Our digital storage activities are much less visible and require less muscle power. Digital preservation efforts are usually only made apparent to the observer by the fruits of digital storage, that is, digitised images and documents uploaded online for people to explore. The exponential increase in digital records, such as emails, presents a challenge for all archives. We remain vigilant, scanning for new solutions and keeping abreast of digital developments.



Flat Caps for Millers and Millwrights

Mildred Cookson



Staff of Thomas Robinson and Son Ltd, milling engineers, Liverpool.

The flat cap can be traced back to the 14th century in Northern England, when it was more likely to be called a "bonnet". This term was replaced by "cap" about 1700, except in Scotland, where it continues to be referred to as a bunnet in Scots.

A 1571 Act of the English Parliament was enacted to stimulate domestic wool consumption and general trade. It decreed that on Sundays and holidays, all males over 6 years of age, except for the nobility and "persons of degree", were to wear woollen caps or pay a fine of three farthings (0.75 penny, or about £0.003) per day. The Act was not repealed until 1597, though by then the flat cap had become firmly entrenched as a recognised mark of a non-noble subject, such as a burgher, a tradesman, or an apprentice.

Mill MemoriesFlat caps for millers and millwrights - continued

In the 19th and early 20th centuries, when men predominantly wore some form of headgear, flat caps were commonly worn throughout Great Britain and Ireland. Versions in finer cloth were also considered to be suitable casual countryside wear for upper-class Englishmen. Flat caps were worn by fashionable young men in the 1920s. Boys of all classes in the United Kingdom wore flat caps during this period.

The flat cap (or "flat hat") is typically associated with older workingclass men, especially those in Northern England.



Above left: Millwright Jesse Wightman with brakewheel from Saxtead Green Mill. Above right: Vincent Pargeter and Philip Barrett Lennard at Herne.



Mill Memories





Far left: R Wright, miller in Friston, Suffolk. Photo copyright University of Kent.

Left: Percy Trower and Fred Sayers millers, Cobb's Mill, Hurstpierpoint.



Millers were traditionally seen wearing a flat cap along with millwrights, and coming myself from Northern England it was appropriate that I wore one! At the end of the day it would be covered in flour and I had to either hoover it or bang it against the wall outside to clean it. It also proved a good place for a mouse to make a home in when I left it in the mill on one occasion!

Electricity from Wind Power

Nathanael Hodge

Since the start of 2022, the Archive has been exploring the opportunity of recording and telling the story of electricity generation by wind and waterpower. There is a growing interest in renewable energy around the world, but this is not just a recent development. In fact the use of wind and water to generate electricity dates back for more than a century, and there is need for the story of the pioneers in this field to be told and the records that exist to be preserved

Our Director Liz is exploring this opportunity through conducting market research and discussing the subject with archivists and other non-profits, trade associations and institutions connected to the area. In this article we take a look at some of the items already held by the Archive relating to wind turbines.

E Lancaster Burne

Edward Lancaster Burne (1869-1946) was a wind energy pioneer whose first windmill was a working model post mill which sat on his hen house. He went on to build a windmill on the roof of his workshop which powered an electric light, before going into business selling his patented wind turbines. Lancaster Burne's records were passed to his friend Rex Wailes and came to us as part of the Rex Wailes collection in 2019. They include large drawings and plans of his windmills and their components, which we have had conserved and digitised; glass plate negatives of the mills; copies of



Wind generator designed by Lancaster Burne, Colthrop Paper Mills, Thatcham.



"Burne's Patent Windmill. Details of tower and stage".

patents; and notes, correspondence and typescripts including his daughter's memories of the excitement of switching on an electric light for the first time. Many of the items have been digitised and can be viewed on our website: <u>https://catalogue.millsarchive.org/e-lancaster-burne-material</u>

Images of wind turbines

In the 1970s Frank Gregory took numerous slides showing various experimental types of wind turbine:





Mildred Cookson Collection

These are some of the catalogues and pamphlets advertising early forms of wind electricity generation, from Mildred's collection:







If you know of any records relating to the history of electricity generation which need a home please get in touch.

Prioritising Collections

Mike Evans

Mills Archive trustee Mike Evans and former head of the Historic England Archive discusses our approach to prioritising collections for cataloguing.

Since the Mills Archive was founded in 2001, it has taken on the care of over 270 collections and 44 cubic metres of records, covering every aspect of mills and milling. This shows what a crucial role the Archive plays, but also means that difficult decisions have to be made about where to focus our resources. Cataloguing and digitisation are central to making the riches in the collections accessible to our users, and the wealth of detailed content in our online catalogue shows just how much we have already achieved. But these are time consuming activities, and there is always more to do. Even with the help of our volunteers, interns and generous funding from outside the Archive we have to choose carefully what we concentrate on.

Recently a small group of Trustees and staff have been considering how we should prioritise this work. We have looked at best practice elsewhere, and come up with a set of criteria under three broad headings:



Some of Vincent Pargeter's millwrighting drawings.

- **Significance**. How important is a collection? What can it add to what the Archive already holds, and to what we know about mills and milling?
- **Resource**. How much resource is needed to make a collection accessible? Does it need conservation, or particular skills and knowledge to analyse the content?
- **Strategic Issues.** How does a collection fit with the wider strategy of the Archive? Can it help us explore priority topics or reach new audiences?

Reviewing our collections with these ideas in mind has been a fascinating process, generating lots of questions and debate. At the end of it we have come up with a draft list of collections which need substantial investment, but which could have a real impact on the breadth and depth of what we do.

For example, we've highlighted the Martin Bodman Collection and the Vincent Pargeter Collection. The former comprehensively documents the watermills of the south-west – an under-recorded area - while the latter represents the career and achievement of a pre-eminent modern millwright. We'll let you know more about these fascinating collections as our discussions progress, but in the meantime do please browse our online catalogue to see what we've already achieved and let us know what you think.



Gazetteers containing Martin Bodman's watermill research.

Women in Milling: Betty Sullivan

Pru Barrett



BETTY SULLIVAN

Betty Julia Sullivan was a female pioneer in the field of chemical engineering, where she won several prestigious awards against strict competition. Born in Minneapolis, Minnesota (31 May 1902), Betty was by all accounts quite an all-round character, often seen playing in the street with her little brother, and was known as an accomplished baseball pitcher and also as a practical joker! Her mother was a musician and probably hoped she would follow her in this sphere - but was made to realise how talented Betty was in a different field the day Betty was able to repair the mechanical refrigerator in their home.

Educated at the University of Minnesota, she graduated in 1922 with a BA in Chemistry. While studying there, she had come to the attention of the head of department Dr George Frankforter – he saw her potential and took it on himself to counsel and direct her; this friendship was to prove invaluable to her career.

Following graduation, she worked as a laboratory assistant for the Russell Miller Milling Company. This organisation produced various flours and grains for both human and animal consumption and Betty's role was to study the determination of moisture in wheat and flour. This subject – analysing moisture levels and testing different agents to improve the baking qualities of flour – became the focus of her future career. She quickly came to the notice of the chief chemist, Professor Harry Snyder as she was called upon to assist with some analytical details. Within weeks, he had hired her as an assistant chemist. This was the beginning of yet another important association that lasted many years. Betty herself stated that he exhibited considerable courage in hiring a woman – previously no woman had been employed in the mill's operating plant – and that this was the only time she found being a woman a hindrance rather than an asset.

From 1924 to 1925, she took the opportunity of travelling to Paris on an International Education scholarship to study biochemistry. She spent a year at the University of Paris studying under several notable academics, including Madame Curie. The following year was spent at the Pasteur Institute, where she worked as a research assistant under Auguste Fernbach, chief of the fermentation division. Apparently, she still found time to enjoy the night life of Paris, which she found wonderfully exciting but when pressed became reticent on details, only admitting strumming a mandolin in some establishment.

On returning to the USA, as well as carrying on her studies at the University of Minnesota, (gaining her PhD in 1935) Betty took up employment again with Russell Miller Milling Company, once more under her mentor Professor Snyder. But sadly he died only two years later though this led to Betty's promotion to chief chemist. The company's president Harry Helm had also seen her worth and this led to another valuable professional partnership, which was to end only in his death in 1947. However, he lived long enough to see her advance to become vice-president and director of the company.

After Russell Miller became a part of Peavey Company in 1958, she continued her research and executive positions with Peavey while working in food processing to create new products. Professional honours followed her – the first woman awarded the Thomas Burr Osborne Medal from American Association of Cereal Chemists in 1948 and the Garvan Medal from the American Chemical Society in 1954 to name but two. Naturally, her name was to be found amongst active members of several scientific societies.

Besides these accomplishments, Betty has had patents granted to her; one being a "Flour Improver" and another an "Accelerated Moisture Conditioning and Milling of Grain" device. Outside work, Betty became known for having a well-rounded character, with a good sense of humour. She enjoyed living and was known to say that humorous instances had occurred so frequently it was difficult to single out any one! She played the violin, enjoyed reading, swimming and tennis.

In 1967, Betty left Peavey to co-create an agribusiness consulting company called Experience Inc, a company in which she held various high-ranking posts in until her retirement in 1992. She died on Christmas Day 1999. As M J Blish, the Chairman of the committee on the occasion of Betty's award of the Thomas Burr Osborne Medal in 1948 summed up " What is going to happen to Betty Sullivan couldn't happen to a nicer person"!

Hidden Heroes

As the challenge of Covid unfolded, we were privileged to receive a grant from the Garfield Weston Foundation, for our 'Hidden Heroes' project. We have now completed this project and wish to highlight some of the milestones of that project, drawing attention to some of the new resources created.





We have developed new engagement approaches e.g. virtual exhibitions on sugar and slavery <u>https://new.millsarchive.org/exhibition/sugar-</u><u>slavery/</u>, and the role of women in milling (the latter led to launching a national resource on women's historical and continuing contributions on the UK Flour Millers' website <u>https://www.ukflourmillers.org/women-in-</u><u>milling</u>). In the past year, traffic to our website has increased 20%.

We used this grant to test and develop some of the most beneficial approaches to justify creating a senior permanent post responsible for delivering engagement activities. Investment has been worth it in terms of researching key themes, opening up access to related information, creating associated web content and inviting viewing and participation from the public via social media and enewsletter communications.



The has grant empowered us to explore two millrelated issues that we flagged in our application as being of great public concern, connecting the past with the present: the use of renewable energy to generate electricity, and our ability to feed the world.

Volunteers have worked hard to create biographies of key people, ensuring improved representation e.g. the contributions of women and representing some of the 'movers and shakers' of the industry. The biographies are a work in progress, and if you think we are missing anyone – and would like to write a biography for us – do get in touch. You can view the biographies here: <u>https://new.millsarchive.org/biographies-home/</u>.

The Garfield Weston Foundation's own origins are closely related to the history of milling, and one key individual featured is W. Garfield Weston himself: <u>https://new.millsarchive.org/2020/05/09/willard-garfield-weston-1898-1978/</u>.



Twenty-One Years and Still Counting

Ron Cookson

For 21 years, many members of the mills community have been contributing to make the Mills Archive Trust what we are today. Next April marks the 21st anniversary of our appointment as a registered charity, but preparatory work started before that. Recently departed stalwarts such as Alan Stoyel and Michael Harverson as well as some still with us such as Derek Ogden, Martin Watts and David Jones provided advice and early motivation both to me and Mildred.

The need for mill enthusiasts to have a specialist archive was underlined by Luke Bonwick, the late Peter Dolman and others, it wasn't just Mildred who was concerned about the fate of major mill collections, with the knowledge, data insights they and contained. As many will be aware, record with their offices. regional priorities were



Our first office, a tiny room in the attic of Watlington House, 2005.

not ideal and several large collections had already become difficult to access.

A small, interested network of individuals formed with differing millrelated interests, ranging from family history connections via photographs of mills long gone to detailed measured drawings useful for repair and renovation. We all agreed we should set up an archive and library and Ken Major introduced us to an attic in Watlington House. From these small beginnings an international source of information, education and enjoyment is taking its first steps as an adult. Our website is now viewed by 10,000 users each month, a wonderful gateway into 270 collections! As interest widens, we are keen to hear what you think we should emphasise. What will you want from us over the next 21 years?





Above: The trustees in 2005; clockwise from left Ken Major, Derek Stidder, Ron Cookson, Michael Harverson, Alan Stoyel, Mildred Cookson.

Left: Some staff and volunteers in 2016.

Below: Our newest room, dedicated to Mildred's collection.



RECRUIT A NEW FRIEND FOR THE MILLS ARCHIVE TRUST



"I am very proud to be a Friend of the Trust ..., it works tirelessly to liberate important historic material and has grown exponentially.... The Mills Archive will always be an institution which is very close to my heart."

- James, Friend of the Mills Archive Trust

"The continuing support of the Friends of the Trust helped us through a difficult period, and has ensured that we can secure our collections, enrich our catalogue and help a new generation of young people to gain work experience and appreciate the wonder of wind and watermills."

- Dr Ron Cookson, Chairman of the Mills Archive Trust

The Friends of the Mills Archive Trust are a special group of people – you share our passion for preserving, protecting and promoting the history of mills and milling. Like us, you want everyone to understand and value the essential role played by milling, not only in our history but in our lives today.

We need to find more people like you, people who are keen to inspire others to learn more about and enjoy our milling heritage, to support our amazing collections and ensure that they remain freely available for everyone.

Do you know of other mill enthusiasts who would like to help us achieve our goal? They might be members of your local history society, academics in your department, friends



who live in or near a mill, or people you know whose family members were (and maybe still are!) involved in milling. Whatever their connection to milling, we'd love to hear from them and welcome them to the Friends of the Mills Archive Trust.

Please encourage your friends, family and acquaintances to support us by becoming a Friend of the Mills Archive Trust. Direct them to the registration form on our website at https://millsarchive.org/friend/register or email friendsamillsarchive.org/friend/register or email friendsamillsarchive.org

We are very grateful to all our Friends for your ongoing support. The archive relies on our community of like-minded individuals who value our milling heritage. Thank you!



Charity No: 1155828



Front cover: Lucas -Freelite wind turbine

Back cover: Wind turbine at Copenhagen locks.

Mill Memories is edited by M Cookson and N Hodge

Copyright The Mills Archive Trust Registered charity number 1155828