



The Combe Yard

Newsletter of the Combe Mill Society



February 2021

Membership matters

It's the end of another month and I would like to thank all those members and friends who have already renewed their membership for this year. This is especially gratifying when one considers that the museum must remain closed for the foreseeable future. In addition, a number of members have generously provided a further donation that will help towards our survival during this coming year.

What comes next, but a plea to those who have yet to re-join to consider our plight. You supported us last year and I hope the benefits this has brought will allow you to continue to support us through this difficult time. Even with the Mill closed, there are numerous costs that still have to be paid, such as rent, insurance, telephone, electricity and water plus annual contracts for fire safety and lift maintenance etc. As soon as we are able, we want to bring Combe Mill back to life for people to enjoy.

Subs to be paid either by cheque payable to Combe Mill Society or by BACS to account 00213458 sort code 30-19-83. The fees are: single member £8; family members £12 and friends a minimum of £20. There is an additional charge of £10 if you wish to receive a paper copy of the newsletter. Please post your cheque to Membership Secretary, Combe Mill Society, Blenheim Palace Sawmills, Combe, Oxfordshire, OX29 8ET

Terry Bailey

Where are some costs going?

It was mentioned in last month's newsletter that on-going maintenance needs to continue at the Mill. This is required for several reasons: some work needs to be undertaken to prepare the Mill in readiness for re-opening; some things are required for legal reasons and other tasks are necessary to keep the Mill safe. The main task at present is to prepare the steam boiler for its annual exam, which must take place before we can steam again. Another on-going (and expensive) task is to bring our emergency lighting system back up to legal standards. It was installed ten years ago and is beginning to show its age.

All this requires money. We always try to keep costs low, but when we have no income other than member's contributions, any cost is a drain on our resources. You'll remember the recent article about one of our picnic tables being washed away: fortunately it got lodged upon the tailrace fencing and didn't float off downstream. Once the water had receded it was rescued off the fencing, but was found to have broken its frame, owing to age and rotten wood. It has been temporarily repaired using a piece of spare patio decking, at no cost. However, a replacement will be needed when finances permit.

Terry Bailey

Best wishes to Gilbert

Gil Standage has been a member for many years and due to health issues has not been able to visit and demonstrate his wood turning for quite a while.

We wish Gil and other members not seen at the Mill for some time, all the best - we haven't forgotten you.

Thank you for renewing your subs.



Gil Standage with visiting pupils

Tony Simmons

Steam raising boiler work

In December 2019, the steam raising boiler at the Mill had its 10 year inspection and tests which were completed successfully and a boiler certificate issued. As a result, the annual inspection and safety valve test was due in December 2020. Usually the annual inspection and testing is carried out within the twelve month period. Under the regulations, following the anniversary of the certificate being issued, there are two months when the boiler can be steamed. During 2020 we only held one Steaming Day and as the potential steaming was uncertain, in consultation with our Boiler Inspector it was decided to use this two month window, the safety valve testing being scheduled for February 2021.



Photos Richard Newman

Boiler tubes ready for inspection



Inside of boiler door

Unfortunately, this was called into question with the latest COVID-19 Lockdown. The Mill Trustees studied the guidance and deemed that the work was essential for the future well-being of Combe Mill and that it could go ahead subject to the boiler inspector and volunteers agreeing and that essential precautions were taken.

I drew up a programme for the preparation, starting with the steaming of the boiler during the first full week of January. This highlighted a few issues as a result of the long layoff. These were resolved by taking time to raise the steam, the whole process running over four days.

Following the steaming and after cooling, the boiler was dismantled by Charlie Rich, Terry Bailey and myself to allow us to clean the boiler tubes and internal areas with the final job being the draining of the boiler.

The feedwater for the boiler is stored in a stainless steel tank which is preheated using steam being passed through a device called a sparger. The sparger is a tube with holes drilled around its circumference and a venturi cone within the device. The steam is passed through the sparger venturi, drawing water through the holes therefore transferring the heat and condensing the steam. During the previous work, the water level in the feedwater tank was reduced below the normal operating level revealing the pipe feeding the sparger and the condensate drainage pipe to be severely corroded.

These are being replaced with stainless steel tubes purchased and threaded by Derek Goddard. In the interim, temporary tubes sourced by Terry Bailey were used. The corrosion of the pipes called for the tank to be completely drained and debris being removed from the bottom of the tank by Charlie. The tank was designed such that the outlet is high enough allowing the debris to be contained.

The boiler was successfully inspected on 27 January therefore allowing re-assembly by Charlie and myself. It is planned to steam the boiler again to check that everything is operating correctly prior to raising steam to test the safety valves and allow inspection of the steam piping to the Beam Engine.

Thank you to Charlie Rich, Terry Bailey and Derek Goddard for their involvement and cooperation with this work.



Photos Richard Newman

Cleaned inside of feedwater tank

Richard Newman

Another lockdown project

After getting to grips with 3-D printing I have recently turned my attention to laser cutting and engraving. My first couple of attempts showed the need for smoke extraction so I have just finished building a plywood enclosure to shield others from the laser light and with an extract fan to handle the smoke.



The enclosure uses a scissor lift to raise or lower the work table which will accommodate different size objects and also facilitate beam focusing.

The next steps are to focus the laser beam and begin experimenting on different materials such as cardboard and plywood.

The makers claim that the ORTUR Master 2 laser is capable of cutting 3mm plywood and acrylic.

I hope to be able to use the laser to engrave craft-made wood souvenirs of Combe Mill for sale to our visitors. Perhaps a 'made at Combe Mill' stamp?

Tony Simmons

Fancy some light reading during this lockdown ?

We have received a large box of old magazines, leaflets and books to do with as we wish.

Some are relevant to Combe Mill and will be retained for the library.

Derek has grouped the rest.....

1. Practical Mechanics Magazines.

60 copies from 1945 to 1959. Range of articles from The Story of Radar to Build your own printing press.

During the second world war it included "The Cyclist", to save printing costs and paper.

2. Electronic Books, Magazines, Valve data.

Approx 20 items.

3. Radio Service sheets for Emerson, Sparton, Belmont,

General Electric, RCA Victor, Crotech radios.

Approx 80 items.

Is any member interested, or know of someone that would be interested in taking any of these groups, in return for a donation to our low funds?

Get in touch with Derek if you need a copy of the lists. derekgoddard@btopenworld.com

Derek Goddard

Forthcoming events

Monday 15 February - 18.00hrs ZOOM Board meeting

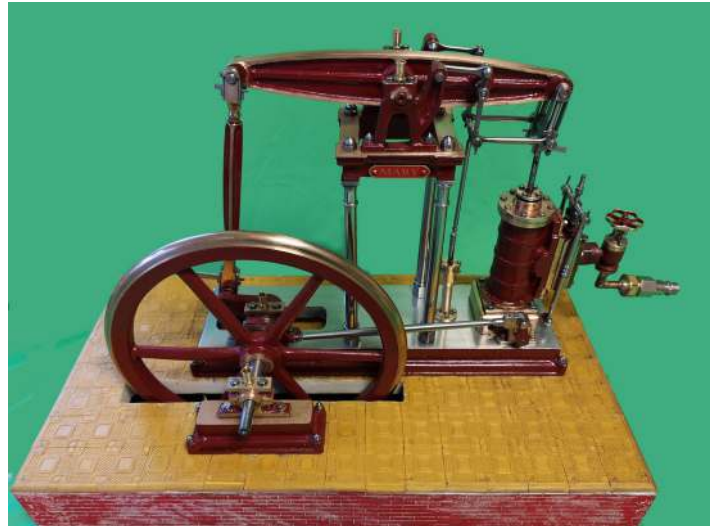
Further progress with 'MARY'

Bob Wheeler has kindly sent me the latest photos of the beam engine model he is building. It has been run on compressed air and featured recently on Facebook.



Governor drive is only 50mm wide

He is now working to complete the governor that will regulate the steam flow to the engine and maintain speed under varying loads.



Beam engine model 'MARY'

Photos Bob Wheeler

During the course of the work, Bob has needed to make tools to help manufacture specific parts.

Progress is steady and I thank Bob for keeping us updated with his work.



Jig for milling angles

Tony Simmons



Lathe tool for making steel spheres

IMPORTANT REMINDER

It is still very important to put your name in the signing-in book on arrival at the Mill every time you visit. The log book is located in the Tea Room.

WE CAN BE FINED FOR NON-COMPLIANCE