

QUINEBAUG VALLEY ENGINEERS



The Zagray Quarterly

JUNE 2013

PRESIDENT'S NOTES

Our May show was very successful, especially Saturday where there were no vacancies on the show field by late morning.

At the May meeting, the membership voted in favor of adding five members to the Board of Directors, bringing the total to twenty Directors. Any QVEA member wishing to be nominated for election to the board should submit their names before the August meeting. Candidates have to meet the qualification requirements of Article 3, Section 2, of the bylaws (member in good standing, of majority age in CT, two years membership) and shall have attended at least 60% of the previous year's meetings. In connection with that, a review of the applicable Standing Rules identified a need to make changes to them. They currently state:

"Nominations for the next term shall be published in the June Newsletter with additional nominees accepted until the regularly scheduled August meeting."

A vote needs to be taken at the June meeting to change, or not change the rules to read:

"Vacancies on the Board of Directors shall be published in the June Newsletter and members that wish to be candidates should submit their names before the regularly scheduled August meeting."

After receiving my emails and our letters objecting to the CF&G harrowing activity, CHS has decided that they have to resolve the ongoing conflict over the size/extent of the no mow zone mandated by the June 2011 court decision. Any action by CHS regarding our building proposals is on hold until they complete their conflict resolution effort. Toward that end, Steve Kane (CHS treasurer) met with me and Frank Blume (CF&G) to understand the conflict prior to meeting with an attorney. He has, since, made a proposal as a last stab at settling the dispute by mutual

agreement rather than ending up in court again. A discussion and a vote is needed at the June meeting on accepting or rejecting the following CHS proposal:

“QVEA will concede that the no mow zone begins where it is currently, i.e. where the CF&G has harrowed and planted approximately 500 feet from the farmhouse. CF&G will concede that the now mow zone ends where it currently ends where the antique tractors are displayed, approximately 500 feet from the saw mill. The width of this no mow zone will be 175 feet as outlined in Judge Koletsky's decision.”

You'll find a picture at the end of this newsletter. It's an aerial view of the farm from some time after January 2012. In that picture, you can make out the new 175 foot no mow zone and the new cornfield that had been made in the corner of the field. The original cornfield and the seldom mowed swath between the new cornfield and the original cornfield can also be seen. CF&G has currently harrowed and planted the 175 foot no mow zone, the new cornfield, the original cornfield and the swath in between the two cornfields. You should keep this picture in mind for the June meeting discussion and vote on the CHS proposal. The original no mow zone was a 100 foot swath that started at the saw mill end roughly even with the children's play area, or about 500 feet from the saw mill. It extended southward to the trees seen on the southern border of the new cornfield. The swath between the cornfields was mowed with the bush hog, but was only mowed a few times during the spring/summer season because the ground was so uneven and strewn with large rocks. Therefore, CF&G got that additional non-mowed area as a bonus. It was not included in the original 100 foot no mow zone. I hope you find the description I've given to be clear and helpful.

FROM THE DESK OF THE TREASURER – Art Chester

We had terrific weather for the May show, and the results certainly showed. On Saturday the field was completely full with overflow into the auction area. More than 125 vendor spaces were reserved or sold by 9AM! Easily our best show since HCEA in 2007! Thanks to all who make it possible, time and time again!

If you have an email address, please email Dianne Tewksbury at dtewks@sbcglobal.net to change from snail mail! That will save our printing-sorting-folding-mailing crew some labor, and save your club a **lot** of money, as well as being environmentally 'green'.

For those of you who contribute to the United Way campaign, QVEA is now listed as a charitable organization allowing you to direct your donation to us for the support and expansion of the Zagray Farm Museum. Pfizer Foundation also has a volunteer program that provides QVEA with substantial donations each year, based on the volunteer work of members who work or are retired from Pfizer. We appreciate all donations in any form or size.

Happening at the Farm

Drying Shed

Several members got together on two weekends to get the siding underway on this building. We finished the front, back and one side except for the gable, and started the last side. Pressure treated materials are on site for the stairs and platform, but before we can build those we'll need to pour a couple of piers to support it. Perhaps the weekend of the 15th, weather permitting, we can continue. The sawmill crew was busy cutting more long softwood to finish the last side. Long (12' to 16') lengths of softwood are still needed, although lifting them onto trailers is sometimes difficult. Hopefully, we'll have this structure completed for the July show.

Hough HA

The little Hough loader is in my shop in Middletown with the engine and transmission removed. The block was sent out for machine shop work, along with the head and crankshaft. All of the parts are cleaned up and ready to reinstall, awaiting the block and crank. Parts for Waukesha engine in this unit are available, but the prices were quite high. Since this machine is not going to be used extensively, we have elected to flat hone the engine and install new rings, rather than boring and replacing the pistons to keep the cost down. The crank needs to be turned also. Hopefully, that will happen soon and I can begin putting it back together.

The 1953 GMC Dump truck at my Rocky Hill shop is still waiting for its push rods.

Allis Chalmers HD5 crawler

Our GM271 powered HD5 is in excellent condition save for track brakes and an engine that was very tired. Ken Avery helped us move it up to my workshop where we proceeded to do an 'in-chassis' rebuild on the diesel and replace the brake bands. This project is completed, except for the radiator that needed to make a 2nd trip to the radiator shop. It's done, I just need to pick it up and install it. It runs great!

Zagray Saw Mill

Softwood in longer lengths (12' to 16') are still needed. We received a substantial amount of oak from George Zitka, and there is more on another site waiting to be picked up. Our supplies to cut are good, but we could certainly use more of some lengths.

We cut 4"X4" s out of red cedar for the playground, as the original posts are just about at end of life. Cutting cedar proved to be trickier than you would think, as the logs had a lot of internal stresses that caused twisting and closing on the saw blade. We learn things every time we run the mill.

Remember that the material cut at the mill may be specific to a particular job or member.

So if you need something, check with Dave @860-982-5158 or Ned @860-537-2252 so you don't inadvertently use lumber slated for another project.

If you need something specific cut – see one of us to discuss it.

We have slab wood that needs to be put to use as firewood, as well as sawdust and planer shavings (makes great fire starter!) as byproducts of this demonstration area available. See any of us if you want some.

No. 1

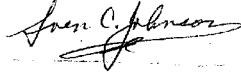
Please put this Adv
in The Newsletter.

-WANTED Old CHAINSAWS
for PARTS OR RESTORATION

Sven Johnson

860-376-9507 E-MAIL
hotsaw@CT.Metroad1316
Net

Thanks



NOTES FROM THE MACHINE SHOP By Dave McClary

June 2013

As stated in previous Newsletters, the hardware for the new pulley system was selected, refurbished and now has been installed in place as two countershafts. Next, it was decided that the planer itself should be inspected further and the head, which holds and positions the cutting tool, was removed and disassembled for cleaning and refurbishment as needed. It was found to be mostly in good condition but badly in need of cleaning to free up the parts from sticky, dirty and dried oil. A gib used to eliminate play from the tool holder had to be driven out with a hammer and drift pin after removing the adjusting screws. Only then could the sliding head be removed. An acme-like threaded screw and hand crank are used for vertical adjustments of the tool to change the cutting depth. The threaded piece that acts as the nut and is bolted to the slide has threads that are mostly stripped. The screw itself appears to be worn slightly but perfectly serviceable. The thread piece can be used for show demonstration purposes but a new task to duplicate it will be undertaken. A special cutting tool will have to be ground for cutting the threads on a lathe. Complicating the task is that it is a left handed thread with eight threads per inch. The tool holder is the same as used for lathes of the period but it was severely used such that the flat washer that the tool is held against was cracked and compressed where the holding screw had been over tightened apparently. It could not be removed from the holder without grinding away some of the deformed metal. Then the holder itself could not be removed through the slider because it was expanded, possibly due to rough handling. That had to be trued up with a cut on a lathe. The flat washer was trued up on a lathe but a new washer was made for a flat support for the tool. After cleanup, a lightly scribed angle index was found on the head for setting cutting tool angles, such as for cutting a dovetail. But there is no index for vertical tool adjustment. Next, the tee shaped belt or clutch operating levers previously shown in a picture as part of the hangers, cannot be reached by a person of average height. To resolve this problem, two shifters have been installed. These are the long tapered wooden levers that hang down to within easy reach. Links were made and connected from these shifters to the existing mechanisms. The planer was leveled with shims under the legs that will permit adjustment of height for tightening a stretched drive belt. For the miller, four jack screws have been used with recesses in the table top to prevent movement of this comparatively light machine. Eighty feet of 1 1/2 inch wide belting were purchased and lengths were laced together for the four applications. A wider pulley was found at a flea market for the line shaft drive to the miller but it required making an insert to reduce the inside diameter from 3 inches to the line shaft size of 1 15/16 inches. Finally, the line shaft was turned on and the two countershafts were turning. The miller was operated but no cutting could be done on the wax block anchored to the table. A means of tightening the cutting tool sufficiently on the homemade arbor has to be devised to prevent slippage. The planer also could not be operated due to too much friction from the gear shaft bearings and the table on the ways. Better lubrication of the ways and better alignment of the three shafts in the

bearings appears to be needed. However, the expanded belt drive system was complete and the belts were running without coming off the pulleys in time for the May show. The planer shaft bearings will be removed and accurately measured to ensure the best fit on these non-interchangeable look-a-likes. Also, the table will be lifted and the ways honed smooth for a new lubricant, way oil. Shortening the belt a little will be done for more tension. Following the show there were three days of third grader field trips with endless groups coming to the shop for instruction on the functioning of an old foundry and machine tools. It is not clear how much was absorbed but they all liked to see the belts turning and got to see a lathe working and a shaper cutting a smooth groove. Best of all, they enjoyed operating the foot powered engine lathe although their light weight was not helpful for the power needed to make it go.

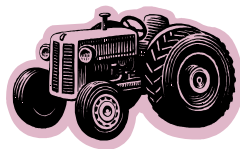
The December Newsletter described the likely-hood of the small planer having been designed and made by Robbins and Lawrence and touched on who their two principle machine tool designers were about 1850. To expand on that information, a book, "English & American Tool Builders" by Joseph Roe, provides more background information illustrating the important role this one gun factory in Vermont played in the machine tool industry in New England. In fact, one whole chapter is devoted to Robbins and Lawrence and the succeeding companies. Characterized as brilliant mechanics, Richard Lawrence, Frederick Howe and Henry Stone were the men who are responsible for tools developed there. Lawrence was a part owner with N. Kendall of a small custom gun shop in Windsor, VT after having made guns at the Windsor prison using prison labor. The company was formed in 1843 when S. E. Robbins, a business man, came into the picture with information of a government contract out for bid for 10,000 rifles. He paired with Kendall and Lawrence on a successful bid of \$10.90 each and began the work in 1844 to be completed in three years. They bought land, built a shop, made or acquired machinery and finished the contract eighteen months early. Kendall was bought out and Robbins and Lawrence proceeded to expand the business into railroad cars. Continuing in the gun manufacturing business, Lawrence, Howe and Stone designed machine tools that supported their emphasis on interchangeability of parts. About 1856 the business failed due to poor business decisions. Lawrence left and took charge of a new Hartford plant purchased by Sharps Rifle Works. Howe went to Providence as superintendent of the Providence Tool Company and later Brown and Sharpe where he was involved in the development of a turret lathe and milling machines. Both men continued to contribute to the advancement of machine tool design. Stone stayed with the factory in Windsor and succeeding companies as superintendent and was involved in design of new machines. The accompanying genealogy chart shows how these companies and men with their knowledge spread to various other manufacturing businesses through the latter half of the nineteenth century. One question left unanswered is who did the foundry work for Robbins and Lawrence.



Dianne Tewksbury
QVEA Editor
90 Park Road
Colchester, CT 06415

APPLICATION FOR MEMBERSHIP

QUINEBAUG VALLEY ENGINEERS ASSOCIATION, INC.



NAME _____

STREET _____

CITY _____

STATE/ZIP _____

PHONE _____

E-MAIL _____

DUES ARE \$20.00/YR PER PERSON. PAYABLE WITH APPLICATION.
INCLUDES QVEA DUES AND INSURANCE.

RETURN TO: QVEA, 180 SOUTH PLUMB RD, MIDDLETOWN, CT 06457