QUINEBAUG VALLEY ENGINEERS

Zagray Farm Museum

The Zagray Quarterly

September 2014

President's Notes

We've had great weather this summer with low humidity and reasonable temperatures. As a result, we had a great July show. A very nice weekend made for the July show being almost equal to the May show in attendance. And the good weather weekends can be thanked for the progress made on the woodworking building construction. It's done!

We also retrieved a good number of donations:

- The Bucyrus Erie 15B from Windham
- The man lift from North Stonington
- The Lane sawmill (parts) from Broadbrook
- Tractors and other old iron from Lisbon
- A cement mixer from Cheshire
- A table saw from North Stonington

It's been a good summer.

There's a lot of pruning and cleanup needed to prepare the farm for the Gathering Of The Orange (GOTO) (Allis-Chalmers show) being hosted at our May show next spring. Weekend work parties will be busy after our October show. Any help from the membership will be greatly appreciated.

Jerry Squire will not be able to attend our October show, so volunteers to collect parking fees at the gate (for an hour or so) would also be greatly appreciated.

NOTE: There are no Board of Directors openings and no one running against any of the current officers, therefore a vote will not be required in October.

FROM THE DESK OF THE TREASURER – Art Chester

Our July Show was another huge success, in no small part to favorable temps and humidity. Thanks to all of you who helped! Income from all sources was nearly 10,000, much better than last year's HOT summer show. Some additional scrap has gone out, but there is still more to do in the fall.

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.

Woodworking Building

The building is complete, roofed, sided, and doors installed. It came out beautiful and is a nice addition to our sawmill and wood processing display areas. As I write this we still need to stain it, but I expect that will easily be done by the Oct Show. I estimate that something in excess of 500 hours went into the actual building, and more to acquire the saw logs, mill and dry the lumber. The rough cut lumber we cut last summer was very nice to work with, straight, dry, and dimensionally consistent. It certainly was a pleasure to work with and a testament to our cutting and handling practices. We spent a little over $12,000 in materials, mostly concrete, plywood, roofing and fasteners. An awesome display of the capability of this group, thanks to all!

Stationary Engine Building

We are cutting lumber for this building so that it can be stickered and dry for springtime. We need long lengths of preferably pine, 16 footers and one or two good sized 18 footer (well 17'1" is the required length for 2 more 6" X 6" support posts) Spruce also works well for rafters as it is strong, but it leaks resin making all the tools sticky and difficult to handle. However, we'll take what we can get as we need to cut 60 more 16' 2X12's!

Happening at the Farm!

Some additional scrap has gone out, but there is still more to do and with a reorganization of the auction area into show display area and brush-weeds-poison ivy-tree trimming-dead tree removal we will be very busy for the rest of the summer. The Case fork lift has been working superbly, and a hydraulic filter housing replacement on our Dynahoe has that back in service. A couple of the Massy Harris tractors brought in from Lisbon have been seen driving around the farm, needing only minor repairs to get started. The major project this summer was of course the woodworking building, going up in less than 3 months working weekends. We can now move the planers, joiner, shingle mill and other machinery into place and begin designing the line shafting for the building.

Fall 2014 Projects yet to do

- Remove line shafting from button factory in Willington.
- Prepare grounds for GOTO show May of 2015
- Routine mowing and trimming
- Move and sort tires to tractor shed upstairs. We'd like to eliminate the ugly and not very useful corrugated tubes, so all clean-up in this area will help us progress in that direction.
- Move insulation panels to upstairs of tractor shed.
- Install additional vendor spots around pond
- Reconfigure and replace fencing around play yard

The good news is that this list is getting shorter as the summer progressed, but there is still some open items. If you can help, or know someone, let us know.

Wanted: Power take-off clutch for Caterpillar D315 engine, a Number 2 bellhousing for electric start engine, and a take-off for a Cat D330 or D3304 may also fit this. This is for the Caterpillar Generator Set the club received from the hospital in Poughkeepsie, NY, a few years ago. Call Sean 860-235-7463.

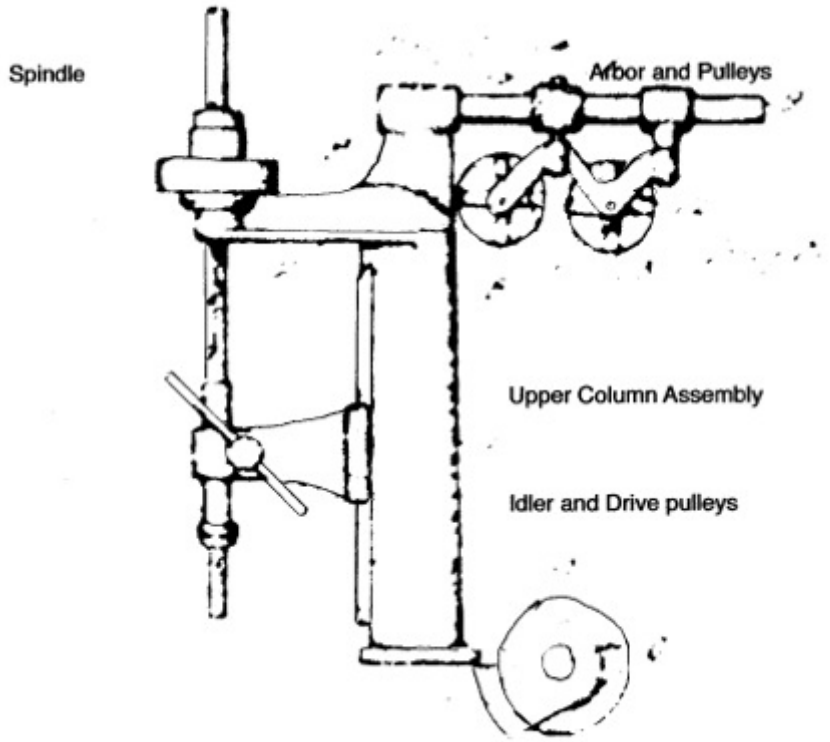
New Machine Shop Project - By Dave McClary 9/2014

A rusty old drill press has been on display out next to the wall in the Quonset hut since that was first put to use. Before that it was stored outside and when QVEA got the use of the farm it was found out in the woods near the drying shed. It did not sell at the initial auction and was listed as a potential scrap item until a committee member vetoed that idea. Why? It was made in Hartford, CT, by the Henry & Wright Manufacturing Co., about which little is known, and it has some unusual features. Made in 1911, it has 1904 and 1905 patent dates. These patents were found and copies made to help in restoration and understanding how it works. It is a sixteen inch floor model originally designed to be driven off a line shaft without use of a separate counter shaft. The belt would go to a shaft mounted midway up the column to an idler pulley where the belt could be shifted to a drive pulley as is done on a counter shaft. From another pulley on that shaft a belt went up to a pulley mounted on a horizontal arbor for a turn to a pulley on the drill spindle, back to a second pulley on the arbor and back down to the drive shaft. The two pulleys on the arbor are moveable and pivot freely on vertical shafts. The table is mounted with a dovetail to allow vertical adjustment with a jack screw but does not swing. The column is split at mid height with a flange joint to facilitate assembly in place. Attached to the lower end of the spindle is a No. 2 Morse taper socket for which a matching Jacob's chuck has been found among the inventory of attachments stored in the Q-hut. Having a one and one half inch maximum belt width and with the use of a counter weight for the spindle, this is considered a medium duty sensitive drill. The drawing below was copied from a patent drawing. With its long outdoor exposure many parts were rusted and/or stuck from dried lubricant. Nevertheless it was envisioned as an additional tool to be run off the existing line shaft in the shop and a worthwhile candidate for restoration.

Because of its inaccessible location near the Q-hut wall behind a thread mill, there was no easy way to lift it. An "A" frame was made to lean against the wall with a come-along hooked at the top to handle the lifting. After removing some small parts, the column was split and the top lifted and lowered to the floor. From there it could be moved to the shed by hand although quite heavy and unstable. Next the table was lifted with a farm jack, the jack screw was removed and the table slowly lowered until it dropped free of the dovetail. That was nearly as heavy, the table being a one inch thick casting, but it could be moved to the shed by hand. The lower part of the column was much heavier having a large rectangular base. It was horsed out to the shed with some difficulty. From there the three parts were lifted into the truck with the Kubota and taken home for needed work. It had been noted that the spindle was stuck and the reason was rust where it was supposed to slide through the pulley. That pulley had contained rain water for the time it was unprotected outdoors. The spindle has unusual keyways called a Lewis type with a pair of opposite side rectangular cuts set in tangentially on the seven eighths inch diameter. A bend was noted in the protruding upper end of the spline indicating that the drill had fallen over at some time and one arbor mounted

pulley had a belt guide that had been broken, repaired and broken again. Further disassembly of the upper part was hampered with a stuck arbor, which was subsequently freed, and the spindle pulley with an attached sleeve guide could not be turned in the upper support due to dried lubricant.

The two dovetailed slides for the table and lower spindle support have an unusual feature. Instead of using gibs to adjust for sliding clearance, one side of the moving part is bolted in place with two bolts so that it is removable. The supported item can then be removed without sliding to clear the dovetail. A third bolt can be tightened by hand to lock it in location and prevent movement. To work on the stuck spindle problem, it was cut above and below the pulley and upper support. But it was found that a six ton press would not free the spindle. Extensive drilling and grinding eventually cleared the center of the spindle down below the spline cuts. Another attempt to press the spindle out of the pulley was then successful. The two parts of the column and the table have been cleaned and painted and several other small parts have been cleaned. Looking ahead, a location next to the front door of the shop and a jackshaft for routing belts over and down from the line shaft have been selected. However, it is not likely to be running in time for the fall show.



THE NEW WOOD-WORKING MACHINERY BUILDING

Got it’s coat of paint on Sunday, Sept. 7, 2014.

IMPORTANT NOTICE!

The Colchester Town Hall is **NOT** going to be available for the September 30th meeting. We will meet instead in this new wood-working machinery building at 6:30PM (one-half hour earlier than usual due to lack of lighting).

Dianne Tewksbury
QVEA Secretary & Editor
90 Park Road
Colchester, CT 06415

APPLICATION FOR MEMBERSHIP

QUINEBAUG VALLEY ENGINEERS ASSOCIATION, INC. (QVEA)

Zagray Farm Museum

NAME_____

STREET_____

CITY_____

STATE/ZIP_____

PHONE_____

E-MAIL_____

Dues are $20.00 per person for one year, payable with application.
Dues include liability insurance at the farm.

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