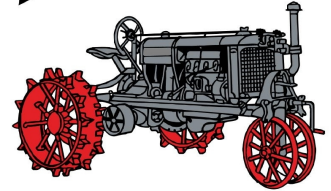


# QUINEBAUG VALLEY ENGINEERS

Zagray Farm



Museum

## The Zagray Quarterly

June 13, 2012

### President's Notes

The major event since the last newsletter was the May show. We had record attendance despite threatening weather. Although it did not rain during the show it had rained enough leading up to the show to make the parking field slick and muddy in spots. With lots of help from members we had a very successful show. Must be doing something right.

A couple of donations to talk about. One was a stone picker from an old farm in East Hampton. Odd looking machine. It rakes the soil to pick up the rocks and then dumps them into a bin. When the bin is full it then dumps the bin. Both operations are done with one hydraulic cylinder. This unit comes in handy around here. The other donation is still pending. I received an e-mail message from a lady who has an Atlas Imperial 4cyl. Diesel engine that needs a home. She attached her phone number so I could contact her. I didn't recognize the area code so I did a reverse number check. To my surprise it is in the British Virgin Islands. I'm thinking how are we to get a big old engine from there to here. I did contact her and found out that the engine is in Willington CT. The family had an old button manufacturing business there and this engine was brought in to upgrade from water power. I'm assuming it powered a line shaft. This has to be a very old engine and would be a very nice addition to the museum. It's going to take a while to work out the logistics.

One of the purposes of the farm museum is to educate the public and especially young people about how things were done on a farm in the early 1900's. We recently had an opportunity to do this. In conjunction with the Historical Society we hosted approximately 180 third graders to visit and tour the farm over three days. A great success.

We have made a change to our monthly meetings. We now have only one combined meeting and the time is now 7:00 PM. The general member meeting that was held after the board meeting was mostly a repeat of the board meeting, so we combined them. I hope this works for everyone who attends.

This is the last newsletter before the July show on the 21st and 22<sup>nd</sup>. Hope to see you there.

## FROM THE DESK OF THE TREASURER – Art Chester

It was time (OK, it was past time!) for me to change the accounting for the QVEA from Excel spreadsheet format to Quickbooks. It started with the accounting computer at my office that was in desperate need of updating, but our Peachtree accounting software would not run on a new Windows 7 machine. My accountant girlfriend at the time (now my wife, but that's another story), set me up with Quickbooks at the office and helped with the conversion. Then she said "you might as well do the same for QVEA so that you learn it". Since I don't consider myself too old to learn new tricks, I couldn't very well say no. Besides, the price was right. It will require a little adjusting to, but the bottom line is that it makes my job and our CPA's a lot easier.

If you have an email address, please email Dianne Tewksbury at [dtewks@sbcglobal.net](mailto: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

We have met with the CHS Zagray Farm representative on what we call the drying shed. Our plans will go to the full CHS for approval on the 22<sup>nd</sup> of this month. We also need to check with the Town of Hebron as to the necessity of obtaining a building permit. It is a repair of an existing structure and when we checked with the Town of Colchester, no permit was required. Hopefully, that will be the case with Hebron as well.

The portable sawmill ran and made a few cuts to check it out. It was quickly determined that the blade was turning too slow and a pulley change was required to speed it up. The Minneapolis- Moline engine turns more slowly than the Detroit 353 that came with the mill, so that's not surprising. Otherwise, things are looking quite good. The majority of the credit goes to Jim Strong and Dave Dziomba for the refurbishment work, and to Ed Bezanson for his unique talents fabricating the exhaust manifold and other parts.

The Clark Forklift has returned from my Rocky Hill shop - finally!! It has been sorely missed at the farm particularly with the finicky nature of the 580 Case transmission. Now when you put it in gear, it goes. A huge thank you to Cliff Bridgeford for rebuilding the transmission for this unit! It will allow us to keep one forklift up front and the Case out back. Perhaps one day we will address the issue with that transmission.

The 1953 GMC Dump truck at my shop is still waiting for its push rods, and now that the Clark is out, we'll get to it next. Finishing that up won't take much, as the head is already on. We were waiting on the correct push rods for the engine, and those were a little difficult to locate. We have them now, so nothing else would appear to be in the way of completion. I can't move it when complete, so we'll need to find someone to help us out there. Let me know if you can help.

We will be getting another scrap dumpster or two shortly, so if you have any scrap iron to get rid of we'd be happy to recycle it for you. No air conditioners, tires, or white goods (stoves, refrigerators, etc) please!

## Zagray Saw Mill

We ran the mill at the May show, of course, as well as for demonstration to three days of third graders from Colchester. CHS organized the event and handled most of the logistics along with the school, I presume. For our part, we provided two hay wagons for transportation around the farm, operated the sawmill, and arranged some of our antique tractors in the field for the kids to get close to. To borrow a phrase from the firefighters - **touch a tractor day**. The first day we were a little short on help and were not able to provide docents to talk to the kids, but the turnout for Monday and Wednesday allowed us to have a full complement on the mill as well as a docent or two. Thanks to all who participated. We hope this kind of activity will be repeated and expanded in the future.

Our softwood log pile is quite robust, but we are very short on hardwoods, so keep an eye out for them. We have enough pine and spruce to provide siding and 2X stock for the drying shed, and then some. Most has been cut at this point, stacked and covered.

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 have trees taken down, please keep the sawmill in mind and cut the logs into lengths preferably 8'6", 10'6", 12'6", 14'6" or 16'6", depending on what will yield the best timber. We can arrange to pick them up if necessary. Most all species can be used, but hardwoods in particular are in the shortest supply.

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

We have slab wood, sawdust, and planer shavings (makes great fire starter!) as byproducts of this demonstration area available.

## Fordson Accessory Guide, Volume 1

It's not often that anyone you know becomes a published author, but our Vice President, Ed Bezanson has completed the first volume of his Fordson Accessory Guide. Now, I'm not a Fordson buff, but the sales literature collection in this volume makes for very interesting reading, regardless of the 'color' of your favorite tractor! A must have for winter reading!

While I'm talking about books, there is a new one out about the Coolspring Power Museum in PA. If you have not been to the museum, you need to go. Don't think about it, go! I have not yet seen a copy of the book, but it ought to be another 'must have' for all of us who have enjoyed a show at Coolspring, Pa. copies can be ordered from Farm Collector Magazine.

## ITEMS NEEDED!!!!

There are always a few new items on our 'needed' list. Call Art at 982-5158, or Ned at 537-2252. The help we've received in this area in the past has been terrific! Thanks to all of you!

Two track pads for our 1929 Universal Shovel

A pair of 6788 IH front wheel weights (fits A,B,C,H,M,W4,and W6)

## DONATIONS

Cecil Diamond from Valatie, NY donated a corn separator in as good a condition as you could ever ask of a wooden machine nearing 100 years old. The varnished lettering is still visible on the sides. It appears to separate various sizes of cracked corn. Beyond that, we need to contact the Historical Society in the town of the manufacturer to see what they have.

Leon Burch donated three liquid 'totes'. They are the cubed white plastic tanks with the wire cage around them.

I heard about an Atlas Imperial engine we've been offered. No further information is available at the moment except that it's old and in 'stored inside' condition, both desirable characteristics. More on this engine later - but it's a great find!

We appreciate all donations from museum quality to tag sale items to scrap iron, they all help us immensely develop and expand the Zagray Farm Museum.

## FREE SLABWOOD

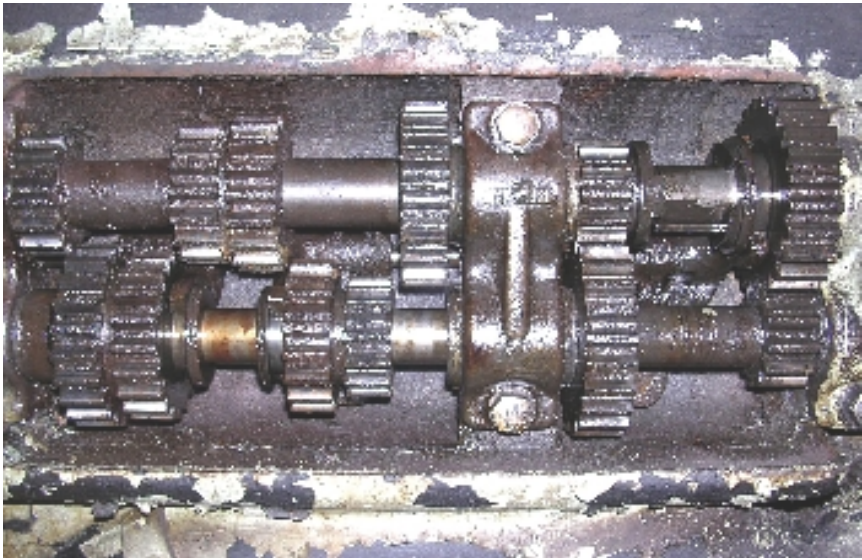
**Mostly pine, some hardwoods, poplar, oak, etc.**

**Contact Dave Chester 860-982-5158**

## **BARNES DRILL PRESS Examined - By Dave McClary June 2012**

A 20" Barnes drill press donated in the fall of 2010 was examined to determine why the drive system would not turn. This drill press was made by Barnes Drill Co. of Rockford, Ill and has a unique slanted shaft drive system from a belt pulley at mid height on the frame. It was freed up with some oil, there was no mechanical problem. The appearance of the drill is marred by a flaking light green paint that was apparently applied to an oily machine at some time in the past. There are three levers on the left side and a cast cover on the right side of the slanted portion of the drive system. When the cover was removed a sliding gear transmission was unexpectedly revealed. This is shown in the top picture below. The three levers are shown in the second picture. Looking at the first picture, on the lower left is the input shaft which extends only as far as the middle bearing. The upper secondary shaft drives the small gear just to the right of the middle bearing. That gear is in constant engagement with the large gear on an idler shaft on the lower right. The large gear on the upper right is keyed to the separate spindle drive shaft and is shown engaged with the small gear of the idler shaft. Or it can slide to the left to engage the small gear, using a dog clutch, to provide a direct coupling between the secondary and spindle drive shafts. In the lower picture, the lever on the left slides that gear between engagement with either of the small gears. Effectively, the idler shaft provides a lower range of spindle speeds. In the second picture, the lever on the right slides the left compound gear on the input shaft to engage one of the two secondary shaft gears on either side. The middle of the three levers slides the other compound gear to engage either of the other two gears on the secondary shaft. This provides four drive speeds for the spindle in both the high and low ranges for a total of eight spindle speeds. Note the rocker arm over the two shift levers. That prevents engaging two pairs of gears at the same time. As shown, both levers are in a neutral position and no drive gears are engaged. The spindle drive shaft extends to the right where bevel gears connect it to the spindle. Also on that shaft is a spiral gear that drives a cross shaft for the power feed system. On the right of the drill is a small gear box that contains two cones of four gears in constant mesh. The lower cone of gears is on the cross shaft which appears to have a short key that engages each gear in turn as the shaft is shifted. The upper cone of gears are all keyed to a shaft so that all turn together. A third shaft has two gears that engage the two

outside gears on the upper cone. A lever slides a dog clutch between these two gears providing a high and low range of feed speeds. That shaft has the gear that engages the spindle rack and provides the feed drive. There is a four position lever to the left of the spindle facing the front of the drill press which shifts the cross shaft using a rack mechanism. That controls engagement with one of the four gears in the lower cone as described above. The four position lever is marked with the eight actual feed rates from .004" to .049". There will be a plastic cover over the main gear box at the July show to allow observation of this complex drive and feed system while manipulating the levers. There is an easily removed small cover on the power feed gear box allowing observation of that as well. Overall, this appears to have been an expensive but very practical drill press for the early 1900's.



Secondary Shaft

Spindle Drive Shaft

Input Shaft

Idler Shaft



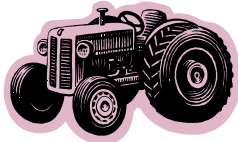
High/Low Range Lever

Compound Gear Levers

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**