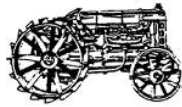
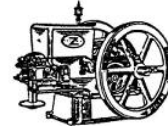


THE QUINEBAUG VALLEY ENGINEERS



↑ UPDATE



MARCH 2009

President's Notes

The calendar says that spring is just over two weeks away. But looking out the window there's about a foot of new snow and the thermometer is hovering in the teens. The farm was starting to dry out a little and I was thinking of projects to do at the farm. Nature can be cruel. However my winter garden is doing quite well. People laugh when I say I have a winter garden you just have to grow the right things like snow peas, winter squash, iceberg lettuce, and icicle radishes do well. Things like summer squash and hot peppers don't do so great although you could try chilly peppers. There are other advantages also like no weeds and no bugs. The deer seem to like the lettuce so there is always a pest to contend with.

With the saw mill about done our next challenge is find enough logs to saw up. If someone would like to donate some we would appreciate it. We would like to do a couple of demos a day during our shows and this thing eats logs like a Humvee eats gas. I'm sure this will be a great crowd pleaser.

Some folks have kept busy this winter by taking projects home. The Chesters have worked on a number of tractors and Paul Towne has restored a log splitter, a walk behind bush hog and a walk behind trimmer. We can use all these tools to help keep the farm looking great. If someone is looking for something to do just contact me and I'm sure there is something that needs fixing.

We continue to receive a number of great donations. I think Art is going to say something about that so I won't duplicate. I would like to thank all those that have donated whether its items, cash or their time they are all appreciated. We are fast running out of storage space for the items donated so I think we are going to have to put up some temporary shelters. We certainly don't want to discourage people from donating just because we don't have a place to put them.

The May show is just two months away May 2nd and 3rd. We may have to feature snowmobiles instead of tractors if the weather doesn't change.

Please don't drive across the fields and soft areas until they firm up. Thanks.

Hope to see you around the farm.

MORE LOCAL HISTORY

BY Dave McClary

Yankee Toolmaker is the name of a small book published by The Bullard Company of Bridgeport, CT, in 1955. In it, the career of Edward P. Bullard (1842 -1906), born in Great Barrington, MA, and two succeeding generations of Bullards is described. Edward served an apprenticeship at the Whitin Machine Works in Whitinsville, MA, starting at age 17. In 1861 he hiked down to Hartford, CT, and found work at The Colt Factory. Two years later he moved to Pratt & Whitney. In 1864 he started his business career with another P & W employee as a general machinery company. A major flood of the Connecticut river destroyed his inventory and he moved the operation to Bristol in Gray's Foundry and later Sessions Foundry Company. He next became a dealer in used machinery in Cincinnati, OH, after the Civil War. Difficulties there resulted in moving to New York City where he opened a new business dealing in used machinery. Recognizing a need for more precise machine tools he designed a 16 inch lathe and contracted out the manufacture. Still unsatisfied he set up a machinist, A. D. Laws, in Bridgeport, CT, to produce his designs and Bridgeport Machine Tool Works got started in 1880. Two hundred of the new lathes were sold within two years. Bullard took over control of the expanding business in 1881 and the following year acquired the entire building on Railroad Avenue in which space had been rented. The new concept of a vertical boring mill was his next contribution in the advancement of machine tool design. About 1890 he sold his still growing New York business to long time employee J. J. McCabe (whose nameplate is on my own F. E. Reed lathe made in the late 1890's). The Bridgeport Machine Tool Works business continued to grow and in 1894 Bullard incorporated and renamed it as The Bullard Machine Tool Company. He established representatives in Europe and his son, E. P. Jr., initiated sales in the French auto industry. After his retirement in 1903, that son became president and several other sons were involved in the business as well. About 1914, Henry Ford became interested in his tools when he was told by Bullard that he could cut the time to machine a flywheel from eighteen minutes to less than two minutes using a new multi-spindle machine called the "Mult-Au-Matic". That started a major shift in tool design and manufacturing in the auto industry. World War I caused further expansion of the business and additional space was acquired in the Black Rock area of Bridgeport. A 155 mm gun was their major direct support of the war effort aside from furnishing machine tools to industry. The Mult-Au-Matic and a spiral drive vertical turret lathe were the tools they agreed to concentrate on with the War Department. Another new machine developed at that time was the Man-Au-Matic, meaning manual or automatic control at the option of the operator. This control mechanism was invented by third generation E. P. Bullard, III. The control was initially applied to the vertical turret lathe and later a three spindle horizontal lathe. The founder established principles of leadership and concern for employees which were continued by the later generations and contributed to their steady growth and profitability. The company was later purchased and expanded into several divisions. Today's well known "Bridgeport" machine was made by another company, Bridgeport Machine, Inc., incorporated in 1939 by Rudolph Bannow and Magnus Wahlstrom after a decade of developing that machine design.

TECUMSEH SHUTS DOWN ENGINE BUSINESS

In October 2008, Tecumseh Power informed its customers that the company would shut down manufacturing operations related to its engine business. Antique engine people will recall that Tecumseh bought the remnants of the John Lauson Manufacturing Company in 1956. Lauson began building gas engines in 1895. QVEA member Peter Bezanson has lots of knowledge about Lauson and Tecumseh. The press release from Tecumseh noted that they have found a way forward that ensures all warranty obligations are met and provides long-term parts support into the future.

FROM THE DESK OF THE TREASURER – Art Chester

Membership dues are due at the beginning of the year, unless you are an honorary or life member, of course. Dues are \$20.00 per year, same as for the past few years. An envelope has been attached to your newsletter for this purpose, if your 2009 dues have not already been taken care of. If you receive the newsletter via email, mail your dues to:

QVEA
180 South Plumb Road
Middletown, CT 06457

Newsletters are now printed quarterly – March, June, September, and December.

Please, everyone who can receive their newsletter via e-mail rather than by USPS, make that request to Linda at enwot61@sbcglobal.net It 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. We appreciate all donations in any form or size.

Happenings at the Farm

The 1940 Farmall B that was recently donated is now back out at the farm after having service on most all major components. An engine rebuild, new clutch, brakes, and transmission rework was needed to put this tractor back in working order. It sure does drive nicely now!

Our 1941 Farmall BN replaced it at my shop. This tractor is used to cultivate the corn in the spring, and had transmission troubles. On teardown, the countershaft retaining bolt was loose, allowing the ring and pinion to shuck back and forth. We had a spare transmission from an 'A' that is providing parts for both the 'B' and the 'BN'. The clutch on this tractor chattered severely sooo...once the rear half of the tractor was put back together the engine was removed for clutch service and a new front crankshaft seal.

The Wisconsin VF4 baler engine is completed, running, and ready to reinstall in the New Holland baler as soon as warmer weather permits. It needed the valves ground, carb rebuild, and mag work.

Between all the farm projects, I did find some time to repair a couple of my own tractors!

Chad is working on our F20 electric start engine, with an F30 engine right behind it. Paul Towne has one of our log splitters repaired and painted, as well as our walk behind bush hog. A DR trimmer is in the works, and who knows what's next!

While I'm on this topic, if there is a project that you think you can accomplish over what's left of the winter in your basement or cozy warm workshop, let us know. We'll do whatever we can to accommodate you (and pick up the materials bill).

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 in this area we've received in the past has been terrific! Thanks to all of you!

Fenders for our Farmall BN - ours are beyond repair! (same as Farmall A)

Three nice 12 foot railroad ties, or three 8" X 8" X 12' pressure treated timbers (for the sawmill log deck)

A grain wagon for harvesting the corn

tandem axle trailer(s) for mobile display of steam engine

Two track pads for our 1929 Universal Shovel

A pair of 6788 IH front wheel weights and a steel belt pulley for a Farmall H

PROJECTS

A complete refurbishment of the drying shed – see Andy Milardo to volunteer!

Carriage shed (near the machine shop) rebuilding.

Sawmill interior wood decking, repair and assembly of a bleacher set.

Sawmill site work (re-grading / seeding)

Sawmill framework painting.

Clark forklift transmission repairs (something might be in the works on this!).
Completion of the show field removable plastic posts.
Lighting in the machine shop 'working' area
We have a couple F20's in need of refurbishment / repair.
An engine for an F12 or F14.
Another bleacher set or two for the Garden Tractor Pulling Pit
Fairbanks Morse engine pad - the 4 cylinder will run again in 2009
And a dozen more projects, I'm sure

DONATIONS

Our thanks to all who have donated items or services in the past, those listed here, and for those offers of 'call me when you need something' that allow us to progress rapidly once we identify the project needed. I will try to acknowledge donors in this section as I hear of them. Call me if I miss something!

Russell French has donated a new PTO over-running clutch for one of our tractors without an independent PTO.

Rick Fillback has donated some vintage automotive mechanics and parts books.

Ken Avery donated (in the nick of time!) a Fisher 8 foot snow plow to replace the one on our plow pick-up that broke or lost all 4 springs.

Art Chester has donated a New Idea 323 one row corn picker and a McCormick model 30 corn sheller. Both were used and demonstrated last fall.

Frank Shaw has donated a 3 point PTO Spreader.

Andrew East has donated a restored 1930's McCormick 1020 tractor on rubber. It is a great addition to our collection! Thanks again to all of you!

FOR SALE !

2000 Anderson tandem axle 18 foot flatbed trailer. 7000 lb. capacity. 84" between wheels. LED lights, recently replaced tires, 6 foot flip ramps. LT WT 2000 lb. Good condition. \$2,200.00 firm call Art @ 982-5158

2000 Anderson tandem axle 16 foot flatbed trailer, 10,000 lb capacity. 4 foot flip ramps. Good condition. LT WT 2,500 lbs. \$2,600.00 obo Call Dave @ 982-5163

Model 146 John Deere loader from our 2150 tractor (QVEA owned) \$750.00 call Dave @982-5163

4 hp vertical NOVO. Needs restoration. \$450. Call Alan @860-450-0440

Large engine cart - International. 2 1/4" axle; 30" front wheels; 38" rear wheels; 4" wide wheel strap; 6" channel iron frame. Best offer. Call Alan @ 860-450-0440.

REQUEST FROM THE SAFETY COMMITTEE.

The Safety committee needs volunteers for a Safety Team for our shows. Members will be asked to wear safety vests and in some cases radios, primarily to watch for rules violations as they go about their normal activities. The more volunteers we have the less time each one will be expected to participate. My intention here is to show a safety presence as well as have the means to alert the Safety Officer of any issues which need to be addressed. Those interested in assisting should meet me at 9:00 am at the QVEA trailer on Saturday morning of the show. Thank you.

Stan Barnes, Safety Officer.

NEXT MEETING

The next meeting will be on March 31 at the Colchester Town Hall. The Board of Directors will meet at 6:30 PM and the general meeting begin at 7:30 PM. Hope to see you all there.

FOOT POWERED LATHE RESTORATION

BY Dave McClary

The foot powered lathe donated to QVEA last fall has been restored but is not yet assembled for pictures and trial running. Overall, the lathe was found to be in good condition with very little wear. It is an engine lathe, meaning it is equipped to cut threads. Manufactured by W. L Chase Co. of New York, it is called an Eagle Foot Lathe. Very little information could be found about the company, but some catalog pictures and descriptions of a range of wood lathes primarily and this one engine lathe were found in a book on hand powered equipment by

Kenneth L. Cope. Not dated, the lathe pictures had more elaborate cast legs than this example, indicating it is a later model, probably from the 1880's or 90's. Typical of foot powered lathes, there is heavy flywheel, this one with "S" shaped spokes. That spoke design originated when cast pulleys had spoke breakage problems due to shrinkage inherent in the casting process. Heavier designs and improved techniques later eliminated this problem. The drive is by a link type V belt with three steps on the flywheel and spindle pulley. A single lead screw can be used for power feed of the carriage during simple turning operations, or for thread cutting. There is provision for reversing the lead screw drive with a lever. A Whiton three jaw chuck was mounted but those came at a later date so a slotted faceplate that came with the lathe was mounted as the usual means for tying the work to the spindle using a dog as the commonly used method at the time. A complete set of change gears was provided with a mounting board with marked pegs. Also, a tool shelf mounted off the back of the lathe bed was provided and it has a trapezoidal hole for the drive belt to pass through. Odd size flat head bolts were used to attach the board to brackets and the brackets to the bed. One quarter by sixteen for the board and slightly larger by seventeen for the brackets. These had square nuts and one can only wonder why such nonstandard sizes would be custom made for this simple function. The carriage is quite conventional, except that it is held down by a spring loaded bar with rollers pressing on machined surfaces on the underside of the bed. No gibs are used for the saddle or cross slide although small screws serve that function for the latter. The carriage rides on a separate V way at the front of the bed and a flat surface at the back This feature eliminates tail stock problems due to wear on the two V ways that it slides on. The tail stock has provision for aligning the dead center with the spindle or adjustment for cutting a taper. Both spindles have a No. six Brown & Sharpe taper. As this is written, it is expected to have the lathe in place and operational at the May show at the farm.