



*The*  
**NEMES**  
 NEW ENGLAND MODEL ENGINEERING SOCIETY INC.

# Gazette

No 276

June 2019

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### June Meeting

The June Meeting will be held at 7 PM in the conference room of the Charles River Museum, on Thursday evening, June 6, 2019. The meeting room will be open at 6:30PM, so members can socialize before the meeting.

There will be a brief poster session, where members can discuss current projects, share experiences, and perhaps enlist the advice of NEMES members. Members are encouraged to bring current projects. to discuss

Our speaker will be NEMES own Dan Eyring, who's talk is entitled:

### A 19<sup>th</sup> Century Factory in the 21<sup>st</sup> Century

The MM Rhodes and Sons Company of Taunton, Mass. operated from 1860 to 2014 under the continuous management of six generations of the Rhodes family. This small factory complex is a rare survivor, containing an array of belt-driven machinery operated by antique electric motors. Dan Eyring's talk will provide a tour "back through time" of this unique company, the products it made and the family members who kept it in operation for 160 years.

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## Club Business

*Rich Baker*

**Dues.** We are now collecting 2019 dues. Please bring your \$25 check to the June meeting, or you can try out our credit card system. Or mail me a check to Rich Baker, NEMES, 288 Middle Street, West Newbury, MA 01985.

See Rich Baker for the NEMES merchandise.

### President's Corner Dan Eyring



### Election of Officers

June is election of officers. The proposed slate is:

President	Dan Eyring
Vice President	Victor Kozakevich
Secretary	Todd Cahill

The post of Treasurer is vacant. Nominations from the floor will be accepted for Treasurer.

### Machinery for Sale / Wanted

As a service to members, we continue to put listings of machinery for sale or wanted by members in this space from time to time. The notices of machinery for sale are not restricted to NEMES members, as members will benefit from the widest possible exposure to information on used machinery. Requests for machinery wanted are restricted to members. Send any information to me at [RWTimmerman@gmail.com](mailto:RWTimmerman@gmail.com)

New Listing as of June issue:

Becker (made in Hyde Park, MA) size 4b vertical milling machine. Further information below. Appears to be in poor but salvageable condition; owner will probably take a nominal sum (say about \$200), just to get rid of the machine. Belongs to a co-worker of our webmaster, James Scheffler III. Contact James at [James.Scheffler@gmail.com](mailto:James.Scheffler@gmail.com).

Further data: A brochure on the Vintage Machinery website has the following data:

Table size: 36" x 10 1/4"

Longitudinal power feed: 28"

Cross Feed: 14"

Knee travel: 19"

Head travel: 5"

Spindle speeds: 12

Equipped with 2 hp motor, appears to be single phase 110/220 volt, but which the nameplate lists as 50 cycles.

Spindle taper: #10 Brown & Sharpe taper

I am told that the owner has collets for it.

[Don't let the B & S taper scare you off. End mill holders for #10 B & S taper are available from Travers Tool. I just bought some for my Brown and Sharpe #1 Universal mill. ---Editor]

Here is a photo:





## From the Editor's Desk

Bob  
Timmerman

Buying some new wrenches got your editor to thinking about mechanic's tools, and how the brands have changed over the years. I am leaving out SnapOn, as they are sold through specialized distributors, and are very expensive.

Before discussing individual tool brands, I need to talk about the big holding companies that dominate the market today. The Cooper-Bessemer company, a former builder of large Diesel engines, formed Cooper Industries, a diversified conglomerate, and proceeded to buy up a number of hand tool manufacturers, most notably Crescent Tools, makers of the well-known Crescent wrench. Danaher is another conglomerate, who bought up Armstrong, among others. Cooper and Danaher formed a joint venture out of their tool divisions, and around 2012 it was sold to Bain Capital, it's present owner. The present name seems to Apex Tool Group, after Apex, who make the familiar screwdriver insert bits. Stanley Black and Decker is another large company in the tool business, but unlike Cooper and Danaher, they have more or less stuck to tools.

Armstrong in Chicago: They started out as a forge shop, and invented the famous Armstrong lathe tool holder. They also made very good wrenches. They were one of the first to make a modern type ratcheting box wench similar to a regular box wrench. I have a set of Armstrong ratcheting box wrenches that I recall buying in the mid 1990s. They were bought by Danaher, but sadly, closed down in 2018, along with Allen, who originated the Allen head wrench.

Channellock (original name Champion-DeArment): has been in business since 1886, moved to Meadville, PA in 1904, and in 1933 invented the now-legendary Channellock pliers. Their pliers are still made in Meadville, PA, although some of their other tools are made in Taiwan or China. [Editor's

note: I have two pairs of other adjustable pliers, but my favorite is Channellock—I own so many I have lost count.] Channellock is still owned by the DeArment family.

Crescent, maker of adjustable wrenches: They were bought by Cooper, who is now part of the Apex Tool Group. Their wrenches seem to be made in China.

Gearwrench, a firm that started in Taiwan in 1995, and now part of the Apex Tool Group (also owners of Crescent). They claim to have originated the 5-degree ratcheting box wrench. [I am not so sure of that, as I bought a set of Armstrong ratcheting box wrench about that time.]

Klein, a legendary plier maker, is still family owned, and continues to make very good electrician's pliers and screwdrivers, mostly in the US.

Proto (originally Plomb, after one of the founders), changed to Proto, short for Professional Tools, to avoid trademark infringement with Plumb hammers. In the 1960's bought by Ingersoll-Rand, who did not really know what to do with them. Now making high quality tools under Stanley-Black and Decker ownership. They have continued to innovate, and developed a slight modification of the common open-end wrench that reduced the tendency to slip. I recently purchased a Proto adjustable wrench made to aerospace standards. It is well made, has the Proto trademark on both sides, but lacks any country of origin which may be an indication they are resorting to global sourcing for some of their tools.

S-K: They were popular in the 1960s, but seemed to go into hibernation in the 1970s or 80s. They are back, under the ownership of Ideal Industries, another family-owned firm. I have no experience with their current products.

Williams, another well known legacy tool maker, is now owned by SnapOn. I purchased a set of Williams wrenches a year of two ago, and was disappointed to see that, while well made, they were made in Taiwan.

## Summary of May Meeting:

The meeting was titled: Fire and Ice, the last Voyage of the Ship Montana". Our speaker chronicled the history of the ship, which safely carried cargos and crews to destinations in the Americas, Europe, and Asia. In early 1872, in the midst of the Indian Ocean and nearly 1000 miles from land-fall, fire was detected in the Montana's cargo hold. That cargo consisted of over a thousand tons of ice loaded in Boston and destined for Hong Kong. We joined the Montana and her crew on the evening of Tuesday, August 20, as they race against time and the elements to survive. Our speaker was Clarisse A. Poirier, Ph.D., Professor Emeritus of History, Merrimack College.

Dr. Poirier stated that the insulation was likely straw. At the formal hearing after the sinking, the Captain testified that he believed that the cause of the fire was likely spontaneous combustion of the straw insulation. [Editor's note Straw and hay are known to spontaneously combust if they contain too much moisture. This is likely what happened. Even though the ship was watertight, it was not airtight, and there was likely sufficient air flowing into the hold through cracks to support the fire.].

## Future NEMES Meetings

At the December, 2018 meeting, Dan Eyring took over responsibility for programs, and began the effort to recruit a program committee, so that no one person would have to do all the work of programs. Anybody who wants to serve on the program committee, or has ideas for programs, please talk to Dan.

## Adventures with Old Machine Tools

Our Webmaster, James Scheffler III, bought a used Bridgeport. The previous owner seemed to prefer grease to oil for the oil holes. The work James has to do to clean up the machine is shown in the following picture of the gear drive for the knee vertical feed:



## Shop Tips: Removing Threaded Lathe Chucks

Some of us have smaller and/or older lathes with chucks that screw onto the spindle nose, rather than fitting onto a special tapered nose. This article was inspired by videos on both Keith Fenner's and Keith Rucker's You Tube channels about making new back gears for lathes whose owners were too enthusiastic in applying force to free a stuck chuck, and stripped teeth out of the back gear.

Screwed on chucks have two problems: they can come off if the chuck is not well seated, and one reverses the motor quickly, as can be done with three phase motors and special instant reversing single phase motors; more commonly, they can jam on the threaded spindle, making them very difficult to remove.

I have been in the room when a machinist reversed the three-phase motor on a big lathe to stop it quickly. The roughly 10" diameter chuck came off the lathe, bounced off the ways, and rolled across the floor. Anybody slow to dodge it would have been hurt. Worse than having a chuck come off when the motor is reversed is to realize one's mistake, and put the lathe into forward again. I have read of a case where the machinist had reversed the lathe to stop it, which started to unwind the chuck from the spindle. In order to keep the chuck from crashing to the floor, the machinist reversed the lathe. The chuck wound back onto the spindle, and slammed hard enough against the end of the spindle to lock the chuck backplate in place. The shop

removed the chuck from the backplate, and had to machine the backplate off the spindle.

The more usual problem is removing a chuck from a threaded spindle that is stuck due heavy cuts, or not having been removed in some time. The South Bend manual, *How to Run a Lathe*, suggests putting a piece of wood between chuck jaw and the lathe bed, putting the lathe in back gear, then pulling on the belt by hand. This limits the strain on the back gears, but may not develop enough force to remove the chuck.

The problem with loosening a threaded chuck is locking the spindle, so force can be applied to the chuck. A common, but damaging way to lock the spindle is to simply put the lathe in back gear with the back-gear pin engaged.

Tubal Cain's (Mr. Pete 222) You Tube channel, episode 281, has some suggestions for removing screwed chucks. A British You Tube channel has a suggestion for locking the spindle of the Myford lathe that can be applied to other lathes. The author suggests use of a strap wrench on the gears if a V belt drive, or directly on the pulley if a flat belt drive. The channel recommended a British made strap wrench going by the brand of "Boa". Fortunately, it is available from MSC at a reasonable price. Both aluminum and plastic handles are available. I bought both kinds to try out. The strap is rubber, but does not stretch. It grips the pulley tightly. In my tests, it did a good job of gripping the pulley, permitting the chuck to be removed.

The photo below shows the wrench at work removing a chuck on an old 10" Seneca Falls lathe. Note that the chuck is held from turning by a piece of brass hex stock, with the hex stock held by a box wrench:



The following photo shows both the UK "Boa" wrench and the common Ridgid strap wrench. Note that the "Boa" wrench has a longer strap, and will grip larger objects.



## Future Events

Thanks to a lot of hard work by our President, Dan Eyring, we now have a list of future events. If you do not see your favorite show on the list, give the information to our webmaster, James Scheffler III, and he will put it on our website

### June

**1-2** Granite State Spring Show - JR Bristol's, 80 Witches Spring Rd. Hollis NH 03049

**2** Spring Tractor Show, Painter Hill Rd, Roxbury, CT

**5** CMSGMA Meeting 6:00 (Wed.), Club House, 524 E. River St. Orange, MA

**8** Maine Antique Power Assn. Engine Show, Skowhegan Fairgrounds, Skowhegan, ME

**8-9** Hudson Mohawk Chapter Pioneer Gas Engine Assn., Rt. 443 off R.30, Schoharie, NY

**9** Granby Charter Days Tractor Show, Rte 202, Granby, MA

**13-15** Coolspring Expo & Flea Market - Rt. 36, Coolspring, PA

**14-15** Brownington Engine Show, Old Stone House Rd, Brownington, VT

**14-15** VT Gas & Steam Engine Assn. Brownington Show, Old Stone House Rd, Brownington, VT

**15-16** Hudson Mohawk Chapter Pioneer Gas Engine Assn., Rt. 443 off R.30, Schoharie, NY

**29-30** CMSGMA 43rd Anniversary Engine- Show, 80 Airport St. Orange MA

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## July

**6** Boothbay Railway Village & Tractor Meet, Rte 27, Boothbay, ME

**6-7** Retired Iron Tractor Show, Wisdom Way, Greenfield, MA

**7** Pepperell Crank-Up, Town Field, Rte 111, Pepperell, MA

**10** CMSGMA BBQ 6pm (Wed.), Recap Meeting 7pm Clubhouse 524 River St, Orange, MA

**20-21** Zagray Summer Show & Swap Meet, Zagray Farm Museum, Rt 85, Colchester, CT

**19-21** Blue Mountain Summer Show, Jacktown Grove, 1229 Richmond Road, Bangor PA

**20-21** Owls Head Transportation Museum, Owls Head, ME

**26-28** Eliot Antique Tractor & Engine Show, Raitt Homestead Farm, Rt. 103, Eliot ME

**27** Annual Antique Tractor and Engine Show, Raitt Farm Museum, Rte 103, Eliot, ME

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## Aug

**2-4** VT Gas & Steam Engine Assn Quechee, VT Show at Quechee Village, Rte 4

**2-4** Northeast Rockbusters Antique Construction Equip Show Concord Sand and Gravel Concord/Pembroke NH

**3-4** Owls Head Wings & Wheels Spectacular, Owls Head, ME (Main Event)

**4** Chevy/GMC Truck Meet, Lions Club Field, 11 Billings Way, Hatfield, MA

**7-10** New York Steam Engine Assn. Annual Pageant of Steam Gehan Rd., Canandaigua NY

**10-11** Straw Hollow Engine Works Show, Pine Ridge Farm, Cross St and Rte 70., Boylston MA

**14-17** Rough & Tumble Thresherman's Reunion, Rt. 30, Kinzers PA

**17** Western Mass Antique Tractor and Engine collector show Belchertown MA, Town Common [Jim:413-246-2813]

**17-18** Mystic Seaport Museum, Mystic, CT, Antique Marine Engine Show – [Scott Noseworthy 860-572-5343]

**24-25** Musterfield Farm Days, N. Sutton, NH [ [www.musterfieldfarm.com](http://www.musterfieldfarm.com) ]

**23-25** CRACK [Connecticut River Antique Collectors Klub], Rte 5 South, Ely, VT

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## Sept.

**6-8** Sterling Fair and Engine Show, Sterling Airport, Sterling, MA

**6-8** Dave Whitney's Gas and Steam Engine Show, Rte 101, Dublin NH

**13-15** Tobacco Valley Flywheelers Show, Haddam Meadows State Pk, Rt 154, Haddam, CT

**14** Cranberry Flywheelers Machinery Show, Plymouth Airport, Plymouth, MA

**21-22** Annual Round-up Engine Show, Barker Farm, 303 Barker Road, off Rte 103, Ludlow, VT

**27-29** Connecticut Antique Machinery Assn. Rt. 7,  
Kent CT 860-354-1859

**28** VT Gas & Steam Engine Assn, East Burke Fall  
Festival, East Burke, VT

**Election of Officers Meeting 4pm (Sat.) Club  
House, 524 E. River St., Orange, MA**

**5** New England Wireless and Steam Museum,  
Yankee Steam-Up - East Greenwich, RI

**6** Musterfield Farm Harvest Day, North Sutton,  
NH

**5-6** Zagray Farm Fall Show & Swap Meet, Zagray  
Farm Museum, Rt 85N, Colchester CT

**11-12** Rough & Tumble Harvest Show Rt. 30,  
Kinzers PA

**19-20** Waters Farm Engine & Tractor Show - 53  
Waters Rd, West Sutton, MA.

**17-19** Coolspring Fall Expo & Swap Meet Rt. 36,  
Coolspring PA

**19-20** Blue Mountain Fall Harvest & sawmill  
Show, Jacktown Grove, 1229 Richmond Road,  
Bangor, PA

**19-20** Water's Farm Engine & Tractor Show & Pull,  
53 Water's Rd, West Sutton, MA

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Nov.

No information on meetings

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Dec.

**1** CMSGMA Winter Snowball Chili Cookoff 9am -  
Noon Pot Luck, Meeting 1pm Club House, Orange,  
MA