



Next Meeting Details	
<b>Topic:</b> Renowned guest woodturner, <b>Jimmy Clewes</b> , will demo turning techniques. No business meeting this month so Jimmy can start at 6:30. \$5 fee per person to attend.	
<b>Speaker:</b> Jimmy Clewes	
<b>Date:</b> Thursday, May 5th 2011 6:30 p.m.	
Learn & Turn	
5:00 to 6:25 p.m.	
<b>Topic:</b> <i>No Learn &amp; Turn is scheduled for this month.</i>	
<b>Leader:</b>	

**Minutes** 4/72011 *Eric Holmquist*

**Attendance:** 33

**Visitor:**

Greg from West Boylston

**Secretary:**

Minutes of previous meeting accepted.

Received an offer from Woodturning Magazine (The UK magazine) for discounted subscriptions for club members (new subscribers only). Instead of the normal price of £63 (which equals to about \$100 based on March exchange rate) for 12 issues, you would only pay £37.80 (\$60) - a discount of 40% only available to clubs' and associations' members!

**Treasurer:**

Technical difficulties prevented reporting of finances, will report next meeting.

**External VP:**

Jimmy Clewes at May 5 meeting, \$5 a head, demo starts at 6:30 with no business meeting.

Kirk Deheer will demo in September.

**Internal VP:**

June Learn & Turn will be performed by Bill Leclerc

June demo on Hollow Forms by Frank White

July demo on Airbrushing by Eric Holmquist

*Worcester Center for Crafts* craft show on October 1 (10:00 AM to 5:00 PM) & 2 (11:00 AM to 4:00 PM), outdoors at a location closer to Boston. 10x10 booth \$350,

**President's Message** *Charlie Croteau*

May is finally here, let's hope the nice weather will come with it. Now is also the time when many folks get out the chain saws to trim trees and clean up the yard. Hopefully several member will bring in some wood for the swap. Seems like we go in cycles on wood. Feast or famine.

This month we won't have a regular business meeting, so you won't have to listen to me drone on and on. Jerry Sambrook has brought in a top name turner so we can sit back and soak it all in.

Hope to see you Thursday.

charlie

**Editor's Note** *Ron Rocheleau*

I'm running out of articles for future issues of the newsletter. Why not take a shot at writing an article about a turning technique, as you start a new project you could document the whole experience, maybe a review of a new tool you just got, or anything of interest to the club? Throw in a few pictures if you can so we can see what you are saying. Thanks in advance.

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10x15 booth \$500. Tent needed. Several members interested in participating. Reid Gilmore is organizing this.

We need a Learn and Turn photographer, we got a volunteer, I think it was Arnold Paye, but not sure.

## **Librarian:**

New mostly flat board DVD donated by Charlie C

Russ Fairfield videos will eventually be donated by his estate.

The old paper library (books / magazines) has gone missing.

## **Wood Swap:**

Several items sold via Silent Auction ran by Gene Spadi

## **Field Trips:**

*Bad Dog Burls* - Saturday April 16. Rob Doyle will provide a BBQ (the meat portion) CNEW members to provide the rest of the stuff, drinks, salads, snacks etc.

*Old Schwamb Mill* – Saturday May 14. \$5 a head plus \$150 from CNEW to pay to have a demonstrator there to run the equipment.

*Starrett* – in the works

*Hardwick Post & Beam* – in the works

*Norton Abrasives* – in the works

## **New business:**

Dominic Leroux's new meat store open at 624 Main Street, Holden MA. 10% discount on purchases of \$20 or more for paid CNEW members.

Reid Gilmore has a Jet 1236 lathe available for a new turner with no lathe.

## **Show and Tell:** (ed. *Pics follow and at cnew.org*)

Art Bodwell: Segmented Urn and Tubular Sculpture

Richard Hunt: Banksia Pod boxes and some Antler pens

Dominic Leroux: Segmented platter

Buzz Haws: Segmented Pedestal Bowl

Eric Holmquist: Pierced / Airbrushed Bowl, Box Elder Bowl, Eastern Red Cedar Bowl

Jerry Sambrook: Several Bowls (Walnut, Apple, Black Locust, Maple, Monkey Paw), Weed Pots, Red Oak Plate

Reid Gilmore: Textured Rim Bowl and Hollow Form

Paul C: Ambrosia Maple Cookie Jar

Al Gilburg: Dyed Platter, Pet Urn, Ambrosia Maple Bowl

Frank White: Ambrosia Maple nested bowls and Hollow

form

Rick Angus: Three bowls

Rex Baker: Walnut bowl (his first bowl)

## **Demonstration:**

Jerry Sambrook demonstrated aspects of advanced pen turning including between centers (instead of mandrel), acrylics and closed end pens.

## ***Simplified Tool Making***

*By Jim Kephart*

The first thing I must do, like Norm Abrams in New Yankee Workshop series on PBS, is to warn you about shop safety. An active wood turning shop has more than normal amounts of very combustible materials. Wood dust and shavings are not a fire marshals dream environment for using open flame torches. I recommend you either clean your shop, or take your tool making outside or to a more fire safe area. This does not necessarily say that your garage with its gasoline cans and lawn mowers is a safer area. Use some common sense and examine the area before proceeding. It is also a good idea to keep a bucket of water available and or a large fire extinguisher. Oh, and like Norm says, remember the safety glasses. Other items like leather gloves etc. may be advisable if you plan on doing a lot of this sort of thing. One additional rule from an old chemistry teacher, "Hot things look like cool things."

The principle is relatively simple, you heat a good piece of steel until it becomes non-magnetic (i.e. a magnet will not stick to it), then quench it in the right material. It will harden. The problem is that it is usually too hard for practical use. It is too brittle for our use; any shock and it will shatter leaving a broken grainy surface between the two or more pieces. So to make the steel handle shock and stresses better, we have to temper or remove some of the hardness, in hopefully a controlled manner.

What you need to make a couple tools: pliers fire proof backdrop preferable, firebricks (avoid regular bricks they may explode if damp) magnet torch propane or better still map gas torch safety glasses, fire safe area to work quenching bucket with either old automobile oil, or water as appropriate steel prefer high carbon or high speed steels a fine file to test hardness after grinding wheel Set up a fireproof backdrop in a safe area. I used to use a map gas torch to heat metal being held in a pair of pliers, but most of the heat just blows by the tool and is wasted. I now use 3 fire bricks set up to form an "L". This helps to hold and reflect the heat back to the metal being heated (see below). □ Set up a bucket with the correct quenching material. You may ask what is the difference. Some steels

call explicitly for either oil or water hardening. Some oil hardening steels may develop fine cracks in sections thinner than the main piece of metal (like knife edges) if quenched too quickly, so oil may be preferred. During oil quenching, the oil may catch fire on the surface, which is easily blown out. In any case, hot metal in cool oil will smoke profusely and smell up the house for hours. So now, I usually use water or quench outside. Unless you are making edge tools with the edges forged versus ground, water should work fine for most materials.

Using the map gas or propane torch, heat the tool evenly until it glows red. At this point any bending should be done with pliers and bench vise. If the tool must be drilled or otherwise rough machined, the steel should be allowed to cool very slowly, this is called annealing. It will leave the material soft enough to drill or file.

If it seemed to get harder from annealing you may have found a weird material called air hardening steel. I found some the hard way. After the shape has been formed (see sample below), the tool must be hardened. Reheat the tool to red heat then start checking the material to see if it sticks to a magnet. If it has become non-magnetic, quench the tool in the bucket of oil or water by swirling the tool continuously until the tool stops sputtering. Once the tool is safely cool enough for handling, it should be tested with a fine file to determine if it is hard enough. If the steel is a good high carbon steel and was heated/quenched appropriately, the file should just skate over the surface of the newly hardened tool. If the file bites into the tool and removes material, the steel is either not hardenable or was hardened incorrectly. At this point the tool is too hard to be used as is for most applications and should be tempered or softened slightly.

The principle calls for a reheat of the tool to about 300 to 400 degrees Fahrenheit. This can be done by baking the tool in your home oven for an hour or more depending on the thickness of the metal, or reheating with a torch. Someone at the 1993 Symposium suggested using a "Fry-Daddy" deep fat fryer with vegetable oil. Until I find one at a tag sale, I dip the tool in water, then heat it until the water boils off, then guess. If it is a thick tool, I'll wait 10 to 15 seconds more, if it is a thin 1/8 inch or so, I'll remove it sooner. Quench the tool as before. Now all that is left is to grind whatever cutting or scraping surfaces required to finish the tool and glue it into a handle. Handles, well now maybe that's another article.

The only way to determine if the above worked is to use the tool, if it holds an edge without shattering, you did good. Found steel is always hard to determine what it is

and if it will harden. High carbon steels can be identified by the spark pattern formed in the air by test grinding. Other steels which are special alloys may work well but may require methods different from above. If the steel is purchased from a supply house, the material hardening temperatures etc. will be known. Unfortunately, unless you get some one like Al Bugby with his metal working furnaces it is tough to measure or heat to exact temperatures formulas. Other books exist on the topic and describe how to judge temperature by the color of the steel in a darkened room. Anyway the above process will work with a lot of materials with fair success if you are willing to experiment and that is just what most hobbies are an excuse for. Sources of materials: drill rod can be oil or water hardening allen wrenches, (prefer long arm) may be used as bent scrapers without hardening or tempering old high speed steel drills long shanks (if bending is not required, may be used as is) old screw drivers steel test with file (useless extra screwdrivers in sears sets.) flea market stuff (test with file) do not use hardware store steel rod (low carbon steel will not harden well) Wholesale tool supply (in Mass.), 800-343-1008 Production Tool Supply 800-362-0142 McMaster Carr MSC ENCO Jim Kephart

### ***Eric Holmquist's Open Shop***

*By Dave Eaton*

This bright Sunday morning I had the pleasure to visit Eric Holmquist on a CNEW open shops visit. Eric had opened his shop in February for the CNEW club members but there were a few of us who end up not being able to make that particular day. Knowing that we are interested in visiting, Eric graciously offered to meet for an open shop visit on some other date. So a few weeks later I showed up along with Jerry Sambrook. At first glance walking into Eric's garage shop you'll see various equipment, and then inside the basement shop he has more equipment, primarily a milling machine. After seeing all this, I took a look at his gallery area.

Recently Eric's work has been transitioning from the "round" bowl work that we all do towards something which is offering him a bit more excitement. He mentioned that if he sold his work, perhaps he would still be interested in round bowl crafting, but since he does not actively sell he said "there are only so many bowls you can give away to family and friends". Now, I'll have to agree with him on that. I've given away my share of bowls to family, friends, neighbors, my dentist, or other people who would take them, and even a few to the wood fireplace-Gods that were bit imperfect. Because of this,

Eric has been dabbling in various surface embellishments. One of these that has been prominent at recent 'Show and Tell' at CNEW meetings has been his piercing, maybe married along with some airbrushing. Many of the objects in the gallery were airbrushed and pierced bowls, as well as



some smaller objects with pen-burning designs and some airbrushing or color enhancement. Eric has been getting very nice finishes

on his artwork as can be seen by the various colors as well as the very smooth surface.

For finishing, Eric is using a multitude of products common to us as woodturners, but specifically he is focusing on Bush Oil brand boiled linseed oil and polyurethane of a wipe-on variety. He even had something which was new to me, a polyurethane made from whey or milk. This is an all organic finish which he says "looks just like milk when you open up a can". I'm skeptical about the water based finishes and maybe even more close-minded to this new organic milk polyurethane, but having inspected a bowl that Eric had finished with this product I can say that, had I not known it was water-based I would have never been able to tell you.

Getting down to some woodworking business, we all collected in Eric's garage area where most of his tools and equipment exist. In the wood working area, Eric has a standard assortment of woodworking machines such as tablesaw, bandsaw, router table, drill press, chainsaw, and a Nova DVR lathe. There are also a few cabinets full of hand tools and a bunch of bins full of wood, some of them labeled for specific types of projects, and then there's a small metal lathe. I believe he mentioned that the small metal lathe, about the size of our woodworking mini-lathes, normally spends most of its time inside the basement shop in the room which houses his milling machine and other tool needs. When he has visitors he'll bring the small metal lathe into the garage shop to allow more room for people to gather around



and see the work that can be done on it or participate in making something useful.

Eric set Jerry up with a Red Oak bowl blank and Jerry started working on a shallow bowl or dish which was ultimately going to be destined for project goodwill. Eric had also asked me to bring examples of work or items that might be of interest regarding metal working activities and so then he and I began discussing the "issues" that I had brought. These were a 1) wide spindle gouge which I was having trouble finding a swept back grinding jig for, 2) a drill bit extension that had a small hole in one end to accept a small bit, but I wanted to use it with a 5/8 inch Forstner bit, 3) a couple of Sorby spiraling and texturing tools which I am playing around with (both the large and small), and a couple of other tool tips mounted in and 3) a shaft with a ball-bearing in them... my attempt to build my own texturing tool. After discussing some of these projects he decided the first project that we would tackle would be simply boring out the end of the 12 inch long drill-bit extension to accommodate the Forstner bits for me. My goal is to be able to use a larger Forstner bit on my big holes for peppermills that are deeper than I can currently cut without an extension. Eric made simple work of this problem by mounting the extension through the headstock in his metal lathe, securing it with a three jaw scroll chuck for metal work just as we would do with our wood operations, and drilling out the end of the rod. We enlarged the diameter using a Jacobs chuck inserted into the tail stock Morse taper.



After dispatching this problem, we next looked at making a duplicate tool shaft for my Sorby micro-spiraling tool. The tool is a nice little device and comes

with a full handle and cutter setup already assembled but also has a second unmounted cutter, which in order to use requires that you dismantle the handle and remove the existing cutter and swap it out. Simply making another steel shaft would extend the accessory cutter ability and allow it to spin freely - as the purchase angle does seem like a fairly straightforward opposition.

Eric grabbed a piece of 303 stainless steel rod of the appropriate diameter and using a metal cutting bandsaw, lopped off about a 6 inch length of it. He mounted this material in the lathe in an identical manner as

previously discussed and surfaced the ends. Next he reduced the diameter on a portion of the rod down to the same as that as to mirror the shape my sample - to allow swapping just the handle from one spiraling cutter assembly to the other.

Next we needed to cut a slot along the end to mount the horizontally spinning cutter head. For this process we started

on using Eric's milling machine, which is a Grizzly model capable of milling parts of to nine or 12 inches in various dimensions. Of

course here we were simply looking to mill a slot in the end of what looks like a "Sharpie marker" size piece of steel rod. Between using a slot cutter which looks like a

miniature table-saw blade and then finishing up with a center cutting end mill to widen the hole or slot to the perfect size to accept the spiraling texture

cutter wheel. After that we drilled a hole in the end for a 10-24 bolt to secure the cutter to.

Meanwhile back at the Nova DVR lathe, Jerry had finished the turning and began to apply Bush Oil finish, which as I understand, is a more refined type of boiled linseed oil. Apparently this finish behaves like regular boiled linseed oil but will not darken or yellow the wood



color quite as much as standard boiled linseed oil finish does. The bowl that Jerry turned looked pretty neat and next thing you know he was putting Eric's vacuum chucking to

work and was cutting the very bottom of the bowl. After finishing this, he did a good job at brushing off Eric's



bench-top of all the chips and debris that were made and then vacuumed it up. Somewhere after he started, I guess he sucked up a big chunk of wood and immediately shut the dust collector off. The wood might have travelled down the dust collection system only to get jammed up in the machinery. As a true soldier looking to stop the problem before it caused damage, Jerry grabbed the bull by the horns and it seems he just reached down into deep dark ductwork quickly and skillfully retrieving the errant block of wood without any further dismay.

Throughout the day we sat around at moments and talked about things like; finishes, art, sanding and staining materials, metal and their properties, wire burning or pyrography, airbrushing, paints, tools, the club, Eric's upcoming demonstration at the Central Connecticut Club doing superglue finish on pens, and probably a few more topics. As dinner time approached we decided it was time to quit for the day, so Jerry and I departed from Eric's house and went our separate ways back to our own humble shops to perhaps put a little of what we learned to work on new projects.

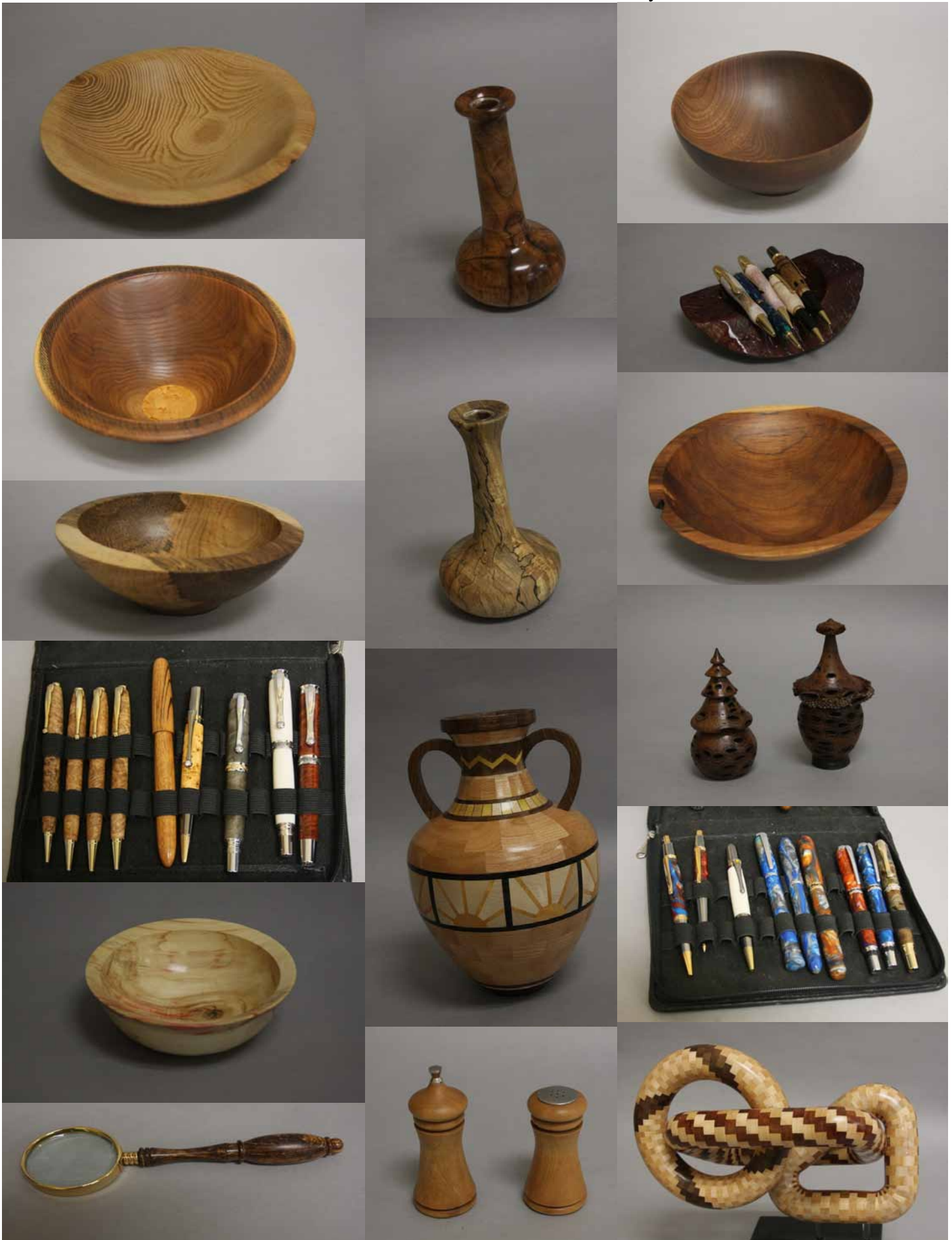
The day spent with Eric's was quite interesting. I got a bona-fide tool handle and also left behind a spare cutter for Eric to build his own tool of the same type. I now see that Eric has indeed widened his hobby activities from simply woodturning to woodturning-with-embellishments, as he has now become somewhat accomplished in the pyrography, painting and piercing. He also seems to be well grounded in basic machining of metal. In fact there are several neat little tools or trinkets that Eric has made as accessories for our wood lathes, especially for mini-lathes or pen turning. If you have any ideas for a product or a problem that you need solve which you could use a metal "Smith", give Eric a buzz as he may be able to help you or may be interested in pursuing the idea as a small invention. He is quite a talented gentlemen and I was very happy to have been able to spend a day in his shop.

Once again as always, I urge everyone to get out and visit another's shops. You WILL learn something new, and if you have the right attitude you'll have a bunch of fun and maybe find out that you have more in common with this new friend than you had expected.



Show and Tell Pictures





**Membership Application**

To join or renew membership, please complete this form and a check made payable to CNEW and bring it to a CNEW meeting or mail it to:

Treasurer, Central New England Woodturners  
c/o Mike Peters  
3 Forge Lane  
Sutton, MA 01590

Annual dues: \$30 including e-mail delivery of newsletter; \$35 for postal delivery of newsletter.



Central New England Woodturners  
*A Chapter of the American Association of Woodturners*



Find us on the web @ [www.cnew.org](http://www.cnew.org)

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Name: \_\_\_\_\_

Please check appropriately below

Street: \_\_\_\_\_

New Member

City: \_\_\_\_\_

Returning Member

State: \_\_\_\_\_ & Zip: \_\_\_\_\_

e-Mail Newsletter (\$30.00)

e-Mail: \_\_\_\_\_

Snail Mail Newsletter (\$35.00)

Please let us know of your interests:

How long have you been turning? \_\_\_\_\_

What programs would you like to see at meetings? \_\_\_\_\_

Would you like to demonstrate at a meeting? Yes/No If so, what topics do you offer? \_\_\_\_\_