



Next Meeting Details
Topic: ** Pot Luck Holiday Party & Yankee Swap **
Speaker: none
Date: Thursday, December 1, 2011 6:30 p.m.
Learn & Turn
5:00 to 6:25 p.m.
Topic: <i>No learn & Turn this month</i>
Leader: none

Minutes 10/6/2011 **Eric Holmquist**

Attendance:

Around 30

Visitor:

Bob Poulliet

Demo:

This month: Jerry Sambrook

Next Month: Bill Leclerc

The Fruitlands sales just barely covered booth cost

After discussion, there was a motion passed to buy a new Vicmarc chuck for the lathe

Mickey and Jerry looking into new wheel options for the lathe

Show and Tell

- Jerry Sambrook 3 Thin Walled Vessels and 2 Platters
- Steve Jewel 4 Bowls, one with pyrography
- Art Bodwell 2 Segmented Bowls, 1 Segmented Urn
- Buzz Haws 1 Segmented Bowl
- Ray Asselin 1 Butternut Vase wrapped in vines
- Gene Houle 3 Bowls
- Bill Leclerc 1 Pepper Mill
- Al Gilberg 1 Dyed Ash Bowl
- M Peters 1 Maple Bowl
- Ron Rocheleau 1 Birch Bowl
- Eric Holmquist 1 Gilded Wing Box, NE Burl Vase, Bowl thru Board

Treasures Note:

The clubs balance has been slowly decreasing all year. At

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President's Message **Charlie Croteau**

December is here!!!! Time for our annual elections and party. Please bring a pot luck dish to share or something to drink. Also bring a gift item for the Yankee swap. Put it in a paper bag with a string on it and you will be in business.

Election of officers. Put on your thinking caps. If we want to have a club, everyone needs to do a little something. YES, EVERYONE. These tasks are no big deal, 15 mins. to an hour a month.

Hope to see everyone on Thursday.

charlie

Editor's Note **Ron Rocheleau**

This month's articles are from various sources. Since there was no meeting last month, we have no photos for this issue. As always, now would be a great time to write and article and email it to me or the newly elected newsletter editor. If you did not receive the newsletter mailing let me know, at rocheleau2591@charter.net, and I'll do my best to make sure you're on the list.

the next meeting we should discuss ways to raise more money or reduce our spending.

Upcoming Events:

May 3rd 2012—Jerry Sambrook has extended an official invitation to Malcolm Tibbetts for a demo next May. Stay tuned to details from Jerry.

2013 - Kurt Theobald demo on segmenting

Practice...Practice...Practice...

At Woodturning

By Ernie

(Reprint from CNEW September 1997,

revised by Ron Rocheleau)

No one would think of running a marathon, entering a golf tournament, or hiking to the top of a mountain without a lot of preparation, so why do woodturners think that they only need to switch on the lathe and start turning? The answer is that it looks easy! So why should we warm up?

Most professional turners I know almost always turn a sample before cutting the customer's stock. After all, when you are given the number of pieces the job requires, you have to return the same amount you were given. You can practice on a common wood before attempting to turn a rare and expensive exotic. Practice is a way to loosen up and get your rhythm going before jumping in!

Turning a sample or part of one will give you an idea what tools will be best to use, or maybe you have to improvise a special tool. You will learn how the approach the turning and think through the design in greater detail than with a pencil and paper.

I find that if every so often you turn a "story stick" you can keep your skills sharp. A "story stick" is only a piece of scrap wood about 1-1/2 to 2 inches in diameter and about 1-1/2 to 2 feet long. If you practice turning coves on one, beads on another, and maybe tapers on the third, using no calipers, using only your eyes to space the cuts, you will soon find you have enough skill to be able to make cuts that will be even a smooth.

Mark the date on the ends and store on a shelf. By repeating at various intervals and comparing them with those you did previously, you will notice that the first ones will seem crude compared to the most recent ones.

As woodturners, we are lucky that we have an abundance of wood all around us, so we can't use that as an excuse. So make it a habit to spend a little time every so often to practice, and especially before starting a special project. The time spent won't be wasted as you will soon have enough skill and confidence to turn quickly and safely.

Segmented Turning Comes of Age

By Malcolm Tibbetts

(Reprinted from Woodturning Today

– A Dramatic Evolution pg. 192-193)

Visiting any symposium Instant Gallery is always a huge treat. Nowadays, as part of the display, you will undoubtedly be intrigued by a multitude of segmented woodturnings, that is, assemblies of many small blocks of different kinds of wood.

In recent years, segmenting has enjoyed a very noticeable increase in popularity. In the fall of 2008, the first segmented woodturning symposium was held at the Marc Adams Woodworking School in Indiana, and as a result of attendee discussions, there is now a specialty, web-based, segmented woodturners chapter within the AAW. What has inspired so many turners to tackle the challenges of accurately assembling many little pieces of wood before they approach the lathe?

I'll share my perspective. In 1973, Emmett Brown and Cyril Brown co-wrote *Polychromatic Assembly for Woodturning*, published by the Society of Ornamental Turners of England. Later, in 1982, Richard Sorsky of Linden Publishing made the Browns' work available to all woodturners. For many years, this was the bible for segmenters – there was very little else available.

In 1975, the very first issue of *Fine Woodworking* displayed a segmented woodturning. Paul Roman, the magazine's founder, told me, "I was intrigued by a couple of segmented turnings at a craft show. I was able to borrow them to take a few Polaroid pictures on my kitchen table." Irving Fischman was the maker, and how lucky for all of us that his work grabbed Paul Roman's attention. But segmented work has a way of doing that.

I'll bet that I was not the only woodworker that became intrigued by the possibilities presented by that black-and-white cover image. Ten years later (1985), another *FWW* cover showed two exceptional southwest-style segmented vessels by Addie Draper and Bud Latven. Addie and Bud shared their techniques with the world, just as turners have always shared. Perhaps no other magazine issue

has had as much impact on the growth of segmented woodturning.

There are many pioneers and events that deserve credit. Albert LeCoff of the Wood Turning Center, the force behind countless exhibitions, introduced Lincoln Seitzman's work to the woodturning community. Lincoln was an innovator, and with Albert's support, he inspired me and hundreds of turners to pursue segmenting. At the First Segmented Symposium, Lincoln was honored for his pioneering innovations.

Current-day segmenters, whether they be hobbyist or full-time professionals, owe a huge debt of gratitude to the segmenting pioneers. In the late 1940's, long before Bud Latven started to make miter cuts, people like Howard Wipple were pushing the art form. Wipple very successfully incorporated intarsia techniques into his segmented pieces. His work made people stop and look. In the early 1970's, Canadian Stephen Hogbin, someone not typically associated with segmenting, produced an amazing set of chairs and tables from a huge six-foot diameter laminated turning. Hogbin's work definitely caught my attention, and it opened up all sorts of possibilities. As if six feet was not big enough, years later, two Austrian turners stunned the turning world with a world record, 14-foot diameter segmented bowl – once again bringing attention to segmenting.

In 1975, Rude Osolnik, the grandfather of American woodturning, started experimenting with laminated material (plywood). Rude gave respectability to the use of glue. Then, Virginia Dotson took inspiration from Rude's work and continued pushing the use of laminations. Early books by Dale Nish offered many pages of segmenting instruction. Dale's books inspired people like Mike Shuler of California, who started from Dale's angle-cut ring instructions and spring-boarded to his distinctive style. Mike shared his technique with the AAW Symposium attendees in 1995. Ray Allen also read the Latven/Draper article, and he found what he was looking for – a challenging hobby that allowed him to use his prior woodworking skills. Ray perfected his art quickly and then began to share. In a conversation with Curt Theobald, I found it interesting that we both met Ray at the same time – at the 1994 AAW Symposium in Ft. Collins, Colorado.

In 1993, another eye-opening book, *Beyond Basic Turning* by Jack Cox, detailed segmenting techniques that were far more advanced than anything previously documented. More recently, Dale Nish wrote a segmenting how-to that profiled his friend Ray Allen. As turners, we now have ultra-specialty books such as Bill Smith's *Segmented Woodturning*, which details "open" techniques, and my own book,

The Art of Segmented Woodturning, which introduces ribbon and tubular constructions. Everyone shares and everyone benefits as they push the art form into new areas.

Today's novice segmenter has so many more learning opportunities that simply didn't exist just a few years ago. There are now numerous how-to books, DVDs, computer design software, club mentoring programs, Internet discussion forums, magazine articles, and YouTube videos. A quick Google search for "segmented wood turning" reveals over 62,000 items – that's a lot of information. A segmented/laminated turning by Ted Hodgetts has even been featured on a Canadian postage stamp.

The AAW's journal, *American Woodturner*, has contributed tremendously to the advancement of segmenting. Since its inception, there has been a segmented turning on an *American Woodturner* front cover every year (and countless back covers). There have been frequent how-to articles but two issues particularly stand out. The December 1989 issue displayed a piece by Virginia Dotson on the cover, and inside there were nine different articles all on segmenting, and in the fall issue of 2006, eight pages were devoted to a photo gallery of current segmented work. And to add to the information pool, in 2008, the journal included a three-part series on segmenting by Jim Rodgers. With all this attention and exposure, how could the popularity of segmenting not flourish? Segmented work has a way of grabbing people's attention. Perhaps that's why a recent AAW membership promotional flyer displays one of Bill Smith's segmented pieces on its cover.

This has all led up to the formation of Segmented Woodturners, a specialty web-based chapter within the AAW. The future of polychromatic assembly has never looked so good. If you would like to view the current state of segmenting, I invite you to visit www.segmentedwoodturners.org.

Nine Things I Wish Somone Had Told Me

by Jon Siegel

This article first appeared in The Old Saw, the journal of the Guild of New Hampshire Woodworkers (www.gnhw.org) April 2006.

After more than four decades of woodturning, it is difficult for me to remember how I first learned. I do remember seventh grade shop classes and also my father showing me the little bit he knew. Mainly, learning was by trial and error. As years went by, I got better at it, partly because I was exposed to some good books such as the classic by Frank Pain, *The Practical Woodturner*, but it became clear



to me that woodturning was an obscure specialty. Many of the tools I saw in old books were not available. Today woodturning is no longer obscure. The woodturning renaissance has had 30 years to mature – we have the American Association of Woodturners and hundreds of books and instructional videos. As a result, no one has to learn by trial and error in isolation as I did when I was a kid starting out in 1960. Nonetheless, in this article, I will attempt to help beginners not by giving simply a set of “tips”, but a list of items which fall into one or more of the following categories:

- Things I did incorrectly at first, and later had to “unlearn.”
- Things I should have learned sooner rather than later.
- Things I had to figure out on my own, because they were not in any books I had seen.

While I will jump around to many different topics, these represent some of the high points in my odyssey of

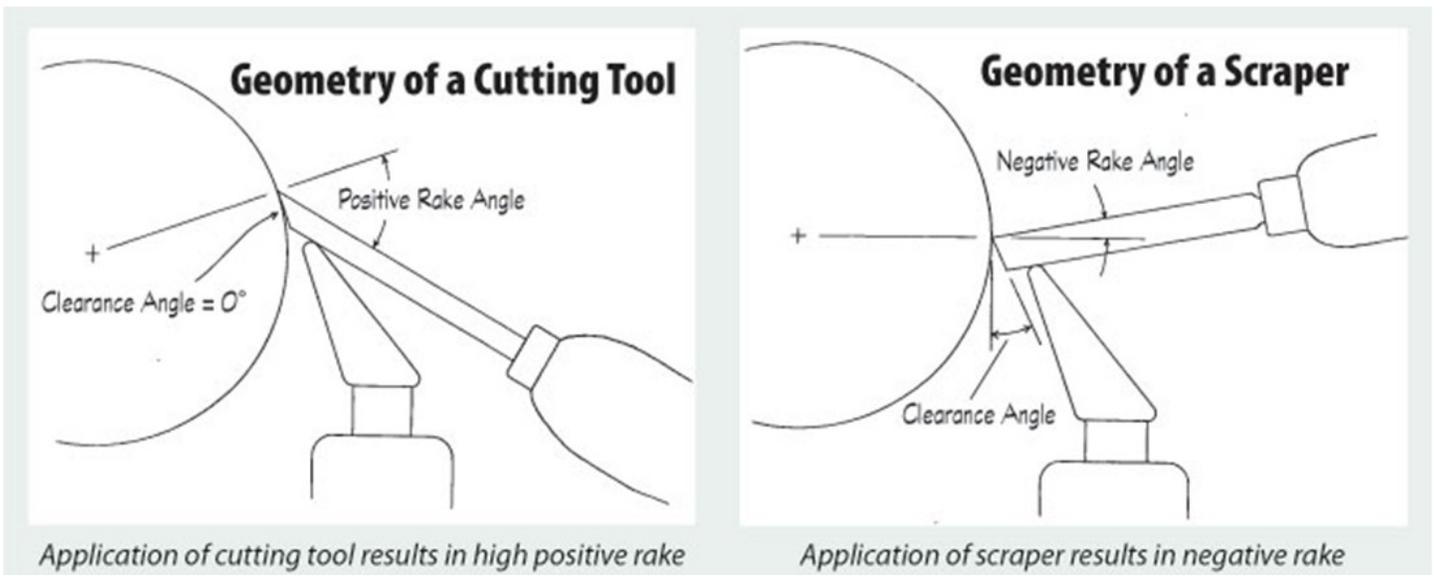
discovery.

1 CUTTING VS SCRAPING – I wish my seventh grade shop teacher had said to me, “I’m teaching you the scraping method because you’re a beginner, but someday when you get serious about woodturning you’ll learn the cutting method.” If he had done so, I would have realized from the start that he was sending me down the wrong path.

Twenty years later, I found myself teaching shop, and I quickly discovered that you never learn something so well as when you must teach it. I developed this educational philosophy – don’t teach beginners the wrong way just because you think it might be easier for them to grasp. This does the students a great disservice and insults their intelligence. Show students the right way from the beginning, and be honest about the commitment required.

It’s easy to criticize my shop teacher now, but I don’t think he was purposely keeping anything from me. Rather I suspect he was not in possession of that information. In those days, industrial arts textbooks described mostly the use of scrapers. Gouges were used only for roughing out spindles. Many of these textbooks were written by authors whose expertise was mainly in metalwork and pattern making.

2 A LATHE IS NOT A VISE – I once read in what I thought was a reputable magazine that the wood should be placed between centers and the tailstock tightened as hard as possible! Yikes! Excessive force from the tailstock causes a multitude of problems – premature wear on the headstock bearings, premature wear on the tailstock center bearings, and most important, vibration of the workpiece. It took me a long time to realize that excessive force between centers was a major contributor to workpiece vibration of long thin spindles. A well tuned drive center with sharp spurs (as sharp as a chisel) and a center point that is just the right length (or on a spring) will allow turning with minimum force from the tailstock.



3 THE WOODTURNER'S BEST FRIEND – Paraffin wax, sold at grocery stores for canning, makes an excellent lubricant for your tool rest. Break each bar up into small pieces so you have one within easy reach around your lathe. Use paraffin on the tool rest every five or ten minutes. Use it on the lathe bed too. Everything will go better. Paraffin is much more convenient than paste wax from a can.

4 YOU DON'T NEED MANY CHISELS – I wasted a lot of time and money buying chisels I didn't need. As time went on, I realized that there are only about five chisels for spindle turning, and another five (bowl gouges and scrapers) for cross-grain work, that I really need. The chisels I no longer use are mainly the large ones. Refer to my article in the June, 2005 issue of *The Old Saw* for suggestions on the essential chisels.

5 YOU WON'T GET FAR WITHOUT A STEADY REST – Frank Pain's book introduced me to the technique of using my hand to steady the work and reduce vibration. As an unexpected benefit, I also learned that touching the work with my fingers can tell me things about the quality of the surface which my eyes alone could not detect. But for a long time, the flexibility of spindles was a limiting factor in my furniture designs. While I consider use of the hand to steady the work an essential skill, it will only go so far. Once I got a good mechanical steady rest, I could cut as deeply as I wanted, and my turnings instantly improved.

7 YOUR LATHE NEEDS SPEED CONTROL – Years ago, most lathes had step pulleys with four speeds – fast, faster and two more even higher speeds which were so ridiculously fast that no one ever used them. So essentially we had two-speed lathes and used the low speed for bowls and the second speed for spindles. Today, lathes with step pulleys have five or six speeds, but the problem has not changed. The lowest speed is not low enough and the high speeds are still ridiculous. In general, all these lathes would be better if the speeds were cut in half. Variable speed mechanisms are a great improvement, but variable speed motors with two or three speed ranges are ideal.

8 FLAT GRIND – One day I discovered that chisels ground with a flat bevel work better than those that are hollow ground. I quickly re-ground all my cutting tools to the new flat grind, and I have never looked back. It's hard to describe the feeling of that day. Without buying anything new or investing additional years of practice, I had suddenly made great progress in my ability, and I was seeing results that amazed me. If you attended the lecture by Michael Dunbar last September, you may remember he



Using the hand to steady vibration



A mechanical steady rest in use

6 SHARP TOOLS PLUS GOOD TECHNIQUE EQUALS LESS SANDING – In my early years, I thought that it didn't matter much how you got the shape, because in the end you could sand the work into submission. The lesson, which came gradually, is that less sanding is better for many reasons – sanding is boring, sanding dust is horrific and sandpaper cost money. But most important, the work looks better with a minimum of sanding because the surfaces are true and the details are crisp.



The bevel (grind) of a cutting tool should be flat

said the same thing about draw knives, scorps, etc. Any tool which is guided by riding the bevel should not be hollow ground.

9 THE JOY OF WOODTURNING IS DIRECTLY PROPORTIONAL TO THE MASS OF YOUR LATHE – This is not to say that I don't like mini-lathes, I do. Any lathe that is built with all its parts in proportion with each other will function well on work pieces that are also in proportion to its size.



Blount lathe was made in Milford, NH

Back in the 70's, I was fortunate to get a used Blount lathe (made in Milford, NH) which weighs about 500 pounds. My experience with that lathe resulted in a great leap forward. In particular I think having a well designed tool rest on a 300 pound cast iron bed made me realize how turning should feel. Now I have three lathes at 50, 500, and 5,000 pounds, and the Blount holds the middle ground. Whether you are learning from books, magazines (like this one), videos, classes, or symposium demonstrations, be thankful that today there are so many resources and such a tremendous body of knowledge on woodturning to carry you on your own personal odyssey of discovery.

The Reverse Curve

How to Design, Visualize and Produce Complex Curves
by Jon Siegel

This article first appeared in *The Old Saw*, the journal of the Guild of New Hampshire Woodworkers (www.gnhw.org) February 2006.

In recent years, I have taken up playing pocket billiards, commonly known as pool. There are many reasons for this infatuation. For one, I am trying in some futile way to recapture my misspent youth, as I remember how much fun I had playing pool years ago. Pool is such a beautiful game which reveals many aspects of geometry and



physics in a simple and elegant way. My enjoyment of the game is enhanced by playing with pool cues I made myself, and turning pool cues is possibly the only thing (or two) I can think of that is more fun than playing pool.

See What You Are Looking At

But a further reason is that I think my wood-working skills can be improved by playing pool, because pool teaches me to SEE WHAT I AM LOOKING AT. Years ago an old timer said to me, "To be a cabinet-maker, you got to have good eyes." Back then I didn't understand what he meant. But now, decades later, I think I do. You have to learn to SEE things because woodwork-

ing, like all sculptural arts, is intended to create a three-dimensional visual impression.

A simple example of this occurs when we visit the lumber yard and sort through the boards in the rack. We are looking for warp, or other defects in the shape of a piece of lumber. We sight down the board for crook or twist. This is an acquired skill, but with some practice one can do it in seconds without thinking very much.

Seeing a bump in a straight line is one thing, but in this article I will teach you how to visualize complex curves. With this information you can design shapes which present the visual impression you want to project, locate errors in curves, and produce the curve at the lathe using only your eyes and a single caliper measurement as a guide.

The Vocabulary of Shapes

Spindle turnings are composed like music. The various elements are arranged in sequence along a line. Each one leads into the next, and must harmonize with its neighbors and to the whole form. None of the elements mean very much on their own, just as a single note played on a piano doesn't make much of an impression. It is only the way they relate to each other that gives the turning elegance, grace, a sense of proportion, and finally the aforementioned sculptural visual impression we are seeking.

There are a small number of shapes which make up the vocabulary of the woodturner, but of course their variations and combinations are infinite. These are straight lines, simple curves and complex curves. Simple curves are either convex (beads and ball forms) or concave, (coves and hollows). But by far the most powerful shape used in woodturning is the reverse curve, or S-curve, because it is a combination of both convex and concave. This is sometimes referred to as the "vase form", but it should be noted that it is equally effective upside down or on horizontal members such as stretchers.

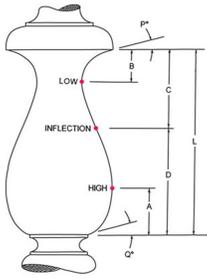


Fig 1 – Five elements of the reverse curve

Elements of the Reverse Curve

Figure 1 illustrates all five elements of the reverse curve:

- 1 Overall length
- 2 Location of the high point
- 3 Location of the low point
- 4 Location of the inflection point
- 5 End point angles

The overall length is labeled (L). It is measured parallel to the axis (axial length) and is not the length of the curved line itself which of course is slightly longer. When commencing to produce the curve at the lathe, the overall length is the first item to locate and mark out.

The high point is labeled in the figure. It is the distance from the end of the curve which is critical, that distance is labeled (A). Nearly always, the high point will have a diameter which is full, that is, the maximum diameter of the workpiece. It is therefore easy to mark this point with a pencil line, and leave it there until the shape is nearly completed. But do not leave a flat spot at the top of the curve. This is a very common error, and it should be noted that sanding worsens this problem, because the action of the sandpaper is more aggressive on the flat grain, right at the top of the curve. So, if anything, it is best to leave a little bump at the high point, since it is easy to fix this in the sanding stage, whereas a flat spot at the high point is almost impossible to fix by sanding.

The low point is labeled, and again, it is the distance from the end that is noted. This distance is labeled (B). The low point has two elements which need to be controlled simultaneously – the distance from the end (B), and the diameter.



Here is where a caliper is essential for setting the most important measurement – the diameter at the low point. Some turners make a parting tool cut straight-away at the low point. I have never found this method to be satisfactory, because for one, it weakens the turning at an early stage which inhibits the roughing out process, and secondly it interrupts the movement of the chisel over the work at the middle of the curve.

In other words, the chisel crashes whenever it crosses over the parting tool cut, making it difficult to maintain a smooth line as you approach the finished surface.

Woodturning's Best Kept Secret

Here is something you won't find in any woodturning books. But it is the MOST IMPORTANT element in helping you visualize the reverse curve. I already mentioned that the reverse curve combines both convex and concave



parts. Some people mistakenly believe there is a straight section between these two elements. But no part of the curve is straight. The convex and concave portions meet at a place called the INFLECTION POINT. Its location is shown with regard to its distance from each end of the curve – the distance from the top (C) and the distance from the bottom (D). In this example, the location of the inflection point is above the center of the curve, and (C) and (D) have a ratio of about 2:3.

This has the visual effect of making the form fuller and more robust than a curve with the inflection point in the middle.

To further illustrate this point (pun intended), Figure 2 show three versions of a turning with a reverse curve. The difference is the location of the inflection point. Notice that these

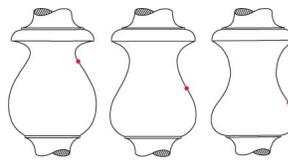


Fig 2 – Shape is affected by location of the inflection point

turnings do not look at all alike even though the length and diameter measurements are the same. This shows how important it is to pay attention to the location of the inflection point in designing and producing reverse curves.

Finally, the remaining element which defines the curve is the END POINT ANGLE. Every curve has two end points. A line tangent to the curve at the end point forms an angle with the radial line and these are shown as P° and Q° in Figure 1. End point angles are critical to simple curves such as beads and coves as well as complex curves such as the reverse curve shown here.

The most common design error is end point angles that are too large. This results in features that are shallow, poorly defined, and do not make sharp lines at their end points – Figure 3. These sharp lines are formed at the intersection of the surfaces and are critical to making the details (with light and shadow) which set off the large features. As I will discuss further in future articles on design, it is the balance of the details to the large features which constitutes the most critical factor in good design.

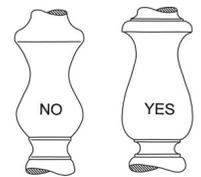


Fig 3 – Effect of too large end point angles

Therefore, curves should terminate in sharp lines, and these lines must not be blunted by careless sanding. The intersections do not have to be 90 degrees, but they should be near 90 most of the time. Therefore end point angles should rarely be more than 25 degrees.

Even something which seems complex, can be easily visualized by breaking it down into its individual elements. I hope this article has helped you understand what those elements are and how to see what you are looking at. Nine ball in the corner pocket!

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

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A Chapter of the American Association of Woodturners



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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? _____