woodturners guild of ontario

Woodturner n. one who makes lots of chips and occasionally ends up with an object of art

"ask not what your guild can do for you; ask what you can do for your guild— you get back what you put in"

NEWSLETTER

*** Click here for a complete listing of previous Newsletters ***

March 2014 VOLUME 10 ISSUE 1

Message from Colleen Samila, President

Hello everyone, welcome to the Spring edition of the WGO Newsletter. If any of you are like me, (not the ones that are lounging down south) we have had enough snow! The temperatures could come up a bit – I don't remember it being this cold since I was a child.

2014 is going to be an exciting year. I need to extend a heartfelt thank you to Trinela and Brian for all their work on bringing some great turners and other crafts to our Thursday night meetings. They have even gone so far as to have backups in case of bad weather. Way to go team! Let's all thank them next time we are at a meeting; finding guest speakers is not an easy task and I will dare any of you to step up to the plate and try to organize what I think a lot of us take for granted. On that note, we have some great guests coming over the next couple of months. Our own Brian Campbell in March with "Cube on the Bias" Bowl (see photos on left) and then Bob Rollings in April with Femisphere made simple (I want to add hopefully, simple, somehow doubt it) – two presentations we should not miss.

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Brian and Trinela's job didn't stop with just the Thursday meetings season. They also arranged for Michael Hosaluk March 30 at Humber (http://www.michaelhosaluk.com) and then Betty Scarpino (American Woodturner Journal Editor) on May 4 - see her wonderful work here: http://www.bettyscarpino.com/about.htm

Both are all day events at Humber College. We are really encouraging our members to support the efforts that our program team put forth for these events. If you need a lift, please let us know. Car pooling is a great way to save on travel expense. John Buccioni puts on a fabulous lunch is great with coffee, tea, water and pop flowing most of the day. Please, let's spend a day learning what we all love to do: ***TURN***.

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See page 12 for a full list of WGO Executive Officers and volunteers

IT's YOUR GUILD - BE INVOLVED !
Share your talent and learn from others at the same time.

Do you have ideas for us ?
Please tell us how you can help -
e-mail the editor at:
WGOeditor@gmail.com

Streptohedrons
Bob Rollings

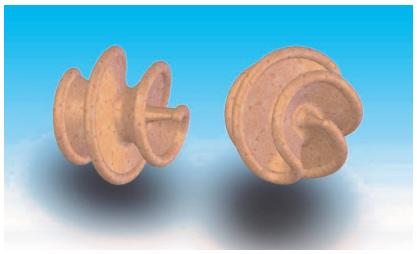


Figure 1

What are the objects in Figure 1?

On Monday November 4th 2013, I had the pleasure of giving a demonstration at the Toronto Woodturners Guild, at the Humber college wood shop. The subject was streptohedrons (according to David Springett, aka twisted polygons). Here I present the theory behind streptohedrons. For those who would like a brief demonstration on the basic technique for a simple streptohedron click on the following: http://www.youtube.com/watch?v=qLSY1Nk9wg8

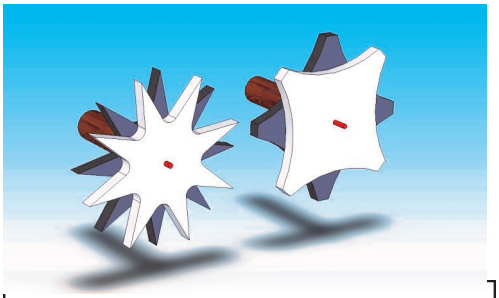


Figure 2, Rotational Symmetry

In the past as I talked about these interesting models I used terms which the layman found difficult to relate such as "rotational symmetry" and "optional centers of rotation". I made visual examples of these forms (Figures 2 and 3). I held these up and rotated them either by hand in the case of rotational symmetry and rotated them on the lathe in the case of optional centers of rotation.

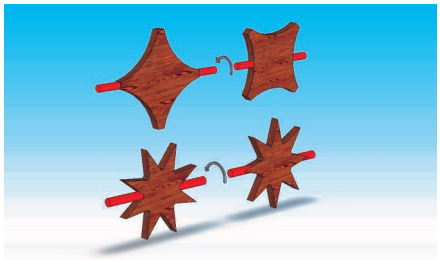
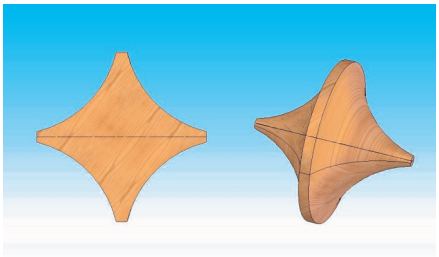


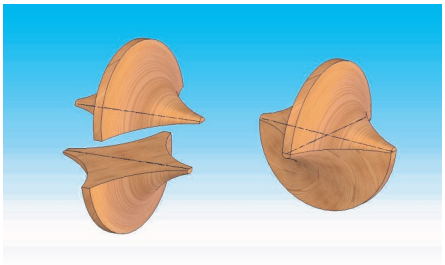
Figure 3, Optional Centers of Rotation

I think after having shown the above examples people got an understanding of the cross sections (foot prints) of the pieces I was about to show them. I had a display of the many examples I made over the years most of which had been published in David Springett's book, **TURNING THE FULL CIRCLE.**

I certainly recommend this book to anyone interested in making the more complex examples, although the simpler one presents little difficulty.



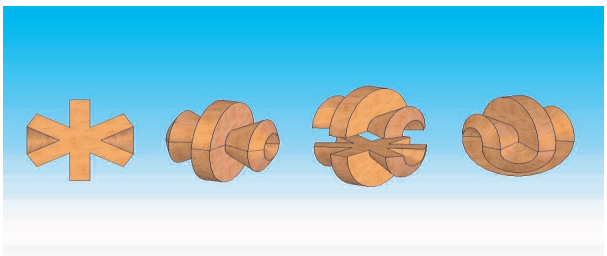
Turned On The Lathe



Separated And Rotated

I had made, for the purpose of the demonstration, several new models which I had connected with magnet catches so they could be taken apart after turning and rotated into their new forms ready for gluing together.

Also at this point I was able to show models which I had on different rotational axes and put together to make hybrid models provided they had the same cross section.



Turned on Lathe Separated Rotated to New Form

I concluded the demonstration by turning a simple sphericon (a sphericon is a three dimensional solid with one side and two edges), then posing the question **why would anyone want to turn one of these *things*?** Answering my own question I suggested the following: **1)**Most people are fascinated by their shapes, interesting way that many of them roll. **2)** They make great one of a kind gifts for family and friends. **3)** Kids like them and most of us that still have a lot of the child left in us. **4)** They are good conversation pieces on coffee tables and other places; .

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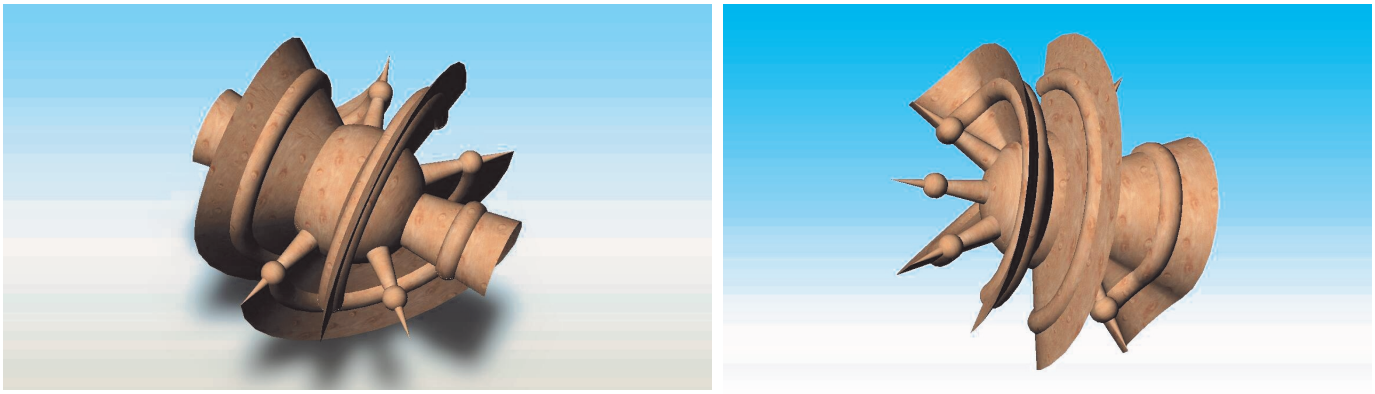
although they may need dusting from time to time.

How complex are they to make? The answer is from very simple to very complex; it depends only on ones own imagination.

What are they? Beautiful!

I believe they are very well received and am offering this presentation to any of our other local Guilds, or to any other international clubs. I do enjoy to travel.

As noted above the form of a streptohedron is limited only by one's imagination. (Editor's note: the figures below used a tremendous amount of imagination, it would seem.



Two views of the same Streptohedron

Presently I am booked at the following Guilds to demonstrate turning streptohedrons:

Golden Horseshoe Woodturners Guild - Burlington, Ontario, March 2014
Woodturners Guild of Ontario, April 10 2014.

(Continued from page 1)

On another note, for those of you who are on Facebook, we now have a Woodturners Guild of Ontario (WGO) Facebook page. Yes, that's right, in conjunction with trying to get some younger people involved in woodturning, I thought this might be an opportunity to show off what one can do with wood. I will keep everyone informed on how many "friends" we have.

Please don't forget the Annual Salon is coming up in May. We have confirmed Mark Salusbury as a judge, as well Louise Bonnycastle and children are sponsoring a category in Michael's memory. There will be a special prize for, what we believe will be in the Novice category, if you are still a novice turner, such as myself, let's put on a great show for Michael.

All in all it has been a great season so far 2013/2014 for the WGO; I always look forward to our monthly meetings, both general and skills. It is exciting to see the happy faces of all our members, the anticipation of seeing the guest speaker and the wonder of watching everyone learning a little something new on skills night – here's to seeing you on a Thursday very soon.

Frank Cheung of Custom Airbrushing

Anne Wallace

On Thursday January 9 2014 we were treated to another artistic endeavour that we might be able to apply to our wood turnings, at least some of the more adventuresome of us in the club might try! There was obvious interest in this topic as the turnout was good and we were scurrying around looking for extra seats for the laggards like myself.
Frank Cheung of Custom Airbrushing Design presented a comprehensive demonstration of airbrushing. If you don't have any of this needed equipment he notes that there are many available brands and even no name brands and the best is not necessary the most expensive—that is a change!

He suggested that given the many options one has it is a bit like buying a car. Think about what you want to do with the airbrushing technique and the size of pieces you are going to decorate as size does matter. Even the number of pieces is a consideration when deciding the number of brushes to buy. So a small bowl v.s. a fancy helmet or skateboard will take different equipment and money!

There are single pen-style airbrushes v.s. a double action small nozzle needle type with a top and bottom feed. Remember that after using 1 paint one must thoroughly clean the airbrush and this is in itself is time consuming so maybe you need 3,4 or 5 airbrushes to speed things up a bit especially if you are into multi-coloured pieces and you think you are really going to make a habit of using this technique. He mentioned the hand action and particularly that his finger is constantly working to keep the proportion of air and paint at the density that he wants. The rapid finger motion might just make it sore for a few days! It takes practice! A day of doing just straight lines is not unusual for the beginner in order to develop some semblance of proper technique.

An air compressor is next on the list of needed tools and one that will give somewhere between 25 and 65 PSI is necessary as the pressure used varies with the application.

Designs can be your own or bought but simple things like old Halloween masks work. Pieces of straight board are in order to make straight lines. He had many samples and like a true professional had catalogued them all so he could pull one or two out of a book.

For our evening of demonstration Frank had a skate board that was decorated with a skull (from one of those old Halloween masks). There was room for about 3 skulls so the middle one was created the strongest colours and each of the other two were "fades" of the first, done in different colours at each end of the board.

Always start with the lightest colour (so this takes planning!) and work up to the darker colour so those "mistakes" are turned into "just what I wanted" very easily. The closer you are to the subject the more likely there are spots. If you want a spray pattern, you want to be farther away. I sense physics here! The paints were acrylic.

By the end of the evening we were all wowed by the outcome and why anyone would want to step on that gorgeous piece of art I have no idea but…

More information can be found at the website—www.airbrushing4u.com and I understand from our own website there is to be a class at Frank's worksite on Saturday March 15, 2014—check it out!

Turn A Wooden Mallet

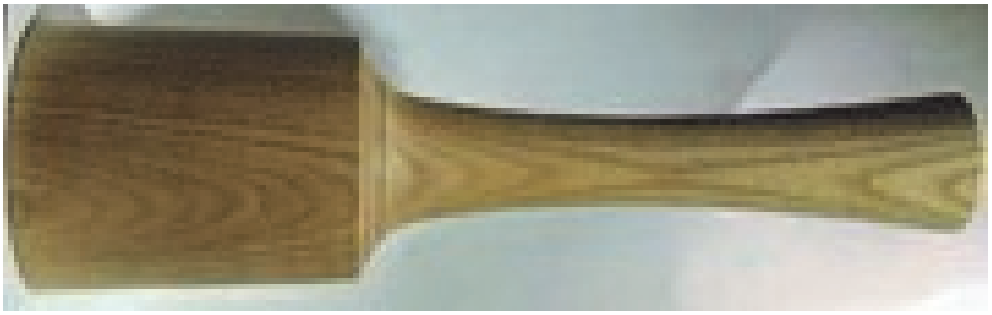
Richard Pikul

mal·let [mal-it] noun
A hammer like tool with a head commonly of wood but occasionally of rawhide, plastic, rubber or other non metallic material.
Mallets normally have a relatively large head, sometimes with an included weight to increase striking force.

Wooden mallets are usually used in carpentry to knock wooden pieces together or apart, or to drive dowels or chisels. A wooden mallet will not deform the striking end of a metal tool, as most metal hammers would, and it also reduces the force required to drive the cutting edge of a chisel.

A decent mallet can be an ideal project to help develop spindle turning skills while making a tool that is very useful in a woodturner's shop where it can be used to:

Set a drive centre into a piece of wood without damaging the end of the Morse taper
remove a turned piece from a sticky cup chuck, gently tap off a box top that has seized while being fitted
There is nothing better than a comfortable mallet to drive a chisel or carving tool.



This is the mallet design I like to make. It has a standard 3" (76mm) diameter head, 10” (254mm) long and is easy to turn out of a single piece of inexpensive hardwood. The handle shape is made to stay in your hand, even when gripped lightly. Mallets end up being used for all kinds of purposes that tend to wear out the head's striking surface. Not to worry, just make another one!

TO MINIMIZE YOUR PROBLEMS AND TO AVOID WASTING WOOD, READ THE ENTIRE ARTICLE BEFORE STARTING!

Materials and tools required:
- Wood: Generously dimensioned 3" x 3" x 12" (76 x 76 x 305mm) piece of hardwood. You can use a piece of 3 1/2" (90mm) diameter branch, but the pith should be straight through and centred. If the pith is off to one side, then it should be over half the head diameter away from the inside of the bark.
- Finish: I like to finish the wood with polymerized linseed oil. Not for looks, but to keep the handle easy to clean. A finish is not a requirement, the mallet will function fine 'naked'. Don't use a varnish finish, it will start chipping off during the first use.
- Tools, suggested list: roughing gouge, spindle gouge, 3/4" (19mm) skew chisel, parting tool, calipers (that can open to 3” (76mm)). You could also use some of the new carbide type scrapers for finishing cuts, or use standard scrapers for finishing head and handle surfaces with shear scraping. Note: if you do not have calipers, make individual gauges for each different diameter by cutting slots in hard cardboard (like a cereal box) that match the individual diameters.
- Drawing: the drawing included with this article is 'actual size'. To have a copy that you can directly scale from, simply check off the “print actual size” box when printing this article or the drawing page.

Turning procedure:
(my way - adjust to fit your methods and tools)

1. For safe turning, ensure that the wood blank has cleanly cut, parallel ends that are at right angles to the length. This will minimize the chances of having the drive or live centres popping out when making deep cuts or experiencing a catch.

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2. Find and mark the centres that you will use at each end, and, using the turner's awl (how about the one you made from a previous WGO project).

3. Make a deep mark for the drive and live centres. If you are using a spur drive centre, there are two ways to set it in place. The most common is to place the blank on a solid bench or on the floor and drive it into the blank with a wooden mallet - oops, you don't have one yet - so use an ugly piece of wood :) Another method is to use a saw to cut grooves for the spur drive to sit in, this is recommended when turning heavy or green wood. DO NOT hammer the blank into a drive centre that is mounted in your lathe's headstock! This can seriously damage your lathe's bearings and/or also 'lock' the Morse spur drive into the headstock, making it difficult to remove.

4. Mount the blank on your lathe, mallet head at the headstock end. Remember the 'holes' you made with the awl? - really easy to locate the tips of the drive centre and tailstock live centre. Excessive force on the tailstock is not recommended, it's better to check and reset the tailstock centre one or more times when turning rather than place unnecessary stress on the wood and lathe headstock.

5. Turn the blank round, down to the head's maximum diameter.

6. Using a copy of the drawing as a template, It's actual size, mark off the transition points indicated to the blank. Remember to centre your mallet in the blank to allow for removing material at each end. Alternately, You can use the mallet end as 'finished' from the blank, it will have your drive centre marks remaining, but this will not affect the mallet's performance.

7. With a parting tool and calipers, groove down to the dimensions at each transition point. Note: the drawing indicates where to place your parting tool for best results. Note: parting tool final positions shown for each end of the mallet are approximate. It is only necessary to ensure that they are closer to centre than the adjacent parting tool positions.

8. Turn down the handle end to about half way to the parting tool reference points (roughing, spindle or bowl gouge). This will make it easier to turn the head.

9. Accurately turn the end of the mallet's head to the final dimension (roughing, spindle or bowl gouge). Do remove wood across the entire length of the head while you do this.

10. Without touching the end of the head (preserving the turned dimension), turn the small slope along the length of the mallet head (roughing, spindle or bowl gouge). When close to the final dimension, shear scrape with a fairly large tool (flat, 90 degree scraper or large skew chisel) to make the length free of tool marks and smooth. You should be able to finish this without resorting to sandpaper. If you end up taking off a little too much, not to worry, a mallet head that is a millimetre or two smaller than the dimensions noted works just as well.

11. Before turning the handle to final dimensions, partially finish the handle end (tailstock end) so that you preserve the location. Do leave at least a 1 inch (25mm) stub for stability while turning the handle.

12. Turn down the handle to final dimensions (spindle or bowl gouge). Take care when turning the curve under the head – KEEP YOUR BEVEL RUBBING TO MINIMIZE CATCHES.

13. Shear scrape the handle part, from the tailstock end to the start of the curve under the head (flat 90 degree scraper or skew chisel). Use very small and light cuts to remove tool marks and to finalize the shape. If you encounter a 'bump' or 'hump', lightly scrape only the top of the hump/bump, repeat until it matches the curve desired.

14. Shear scrape the curve under the head (round end scraper). Use only very light passes – you are not removing a lot of material, just the tool marks and any 'bumps'. Better to make five light passes than one heavy that only adds to the tool marks.

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15. Now, if you were really careful you won't need much sanding. Start with 220 grit and a light touch. If this is not enough, restart with 180 grit. If this is not enough – repeat steps 13 and 14.

16. At this point you can add any decorations such as grooves etc.

17. If you are using the precut mallet end of the blank as a finished surface, that end of the mallet is done. If you have waste at that end, turn down the end (parting tool, skew chisel) to match the diameter of your drive.

18. Turn the end of the handle to about 1/4 inch (6mm), preserving the portion fitted to your live centre.

19. Turn the end of the mallet head to about 1/4 inch (6mm), preserving the portion fitted to your live centre.

20. Remove your mallet from the lathe and cut off the waste from each end, trim with a chisel or your favourite method. Here you will need to use a bit of sandpaper to smooth out tool marks.

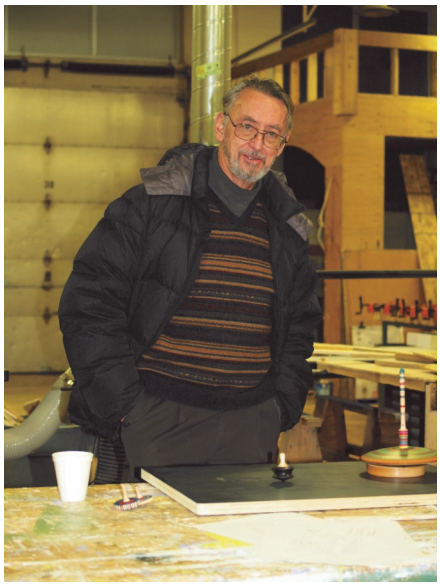
21. Decide whether you want to put a finish on. Do not use any type of film finish (varnish, lacquer, shellac, CA glue etc) as they are not recommended for tools / handles that are gripped with your hand. I like using a good quality, polymerized linseed oil (flax oil) as it will penetrate, seal the wood, bring out the grain and protect against soiling from hand oils and dirt.

DONE! - enjoy a useful and good looking tool.

Go to page 11 for a large schematic of the mallet.

WGO's own Ray Prince's nested bowls was shown in the Member's Gallery of the February 14, vol 29 No 1 issue of the AMERICAN WOODTURNER JOURNAL, on page 54.
Way to go Ray!

Spinning Top Contest Photos



Woodturners Guild of Ontario Newsletter is published quarterly.
The submission of woodturning related articles to this publication is encouraged. All rights to any submitted articles remain with the author of the article. Deadline for articles & advertisements is the 5th of the month prior to publication.

WARNING! Woodturning is an inherently dangerous active activity. Readers should not attempt any process or procedure described in this publication without seeking proper training and detailed information on the safe use of tools and machines.

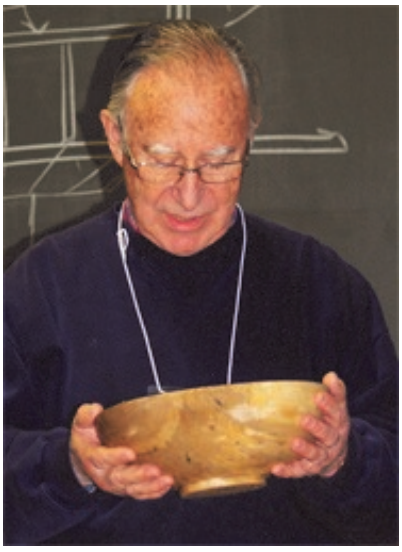
Show and Tell

Fred Klap

Robin Bryan

Bob Rollings

Ron Stuart



Joe Houpt

Peter Kaiser

Carl Durance Demo

Colleen Samila

Carl Durance was a guest speaker at the WGO on Thursday February 13 – what a treat it was to see how he was able, while in front of a group of people, to turn a finial, so delicate. And the finial fit in the box he had measured it for perfectly.

He was able to articulate everything he was doing, understanding and detailing the process while allowing questions from the audience. The comfort that Carl portrayed at the lathe was wonderful to see.

He had a couple of jigs that were homemade, giving us solutions to possible problems any of us could see while at our lathes.

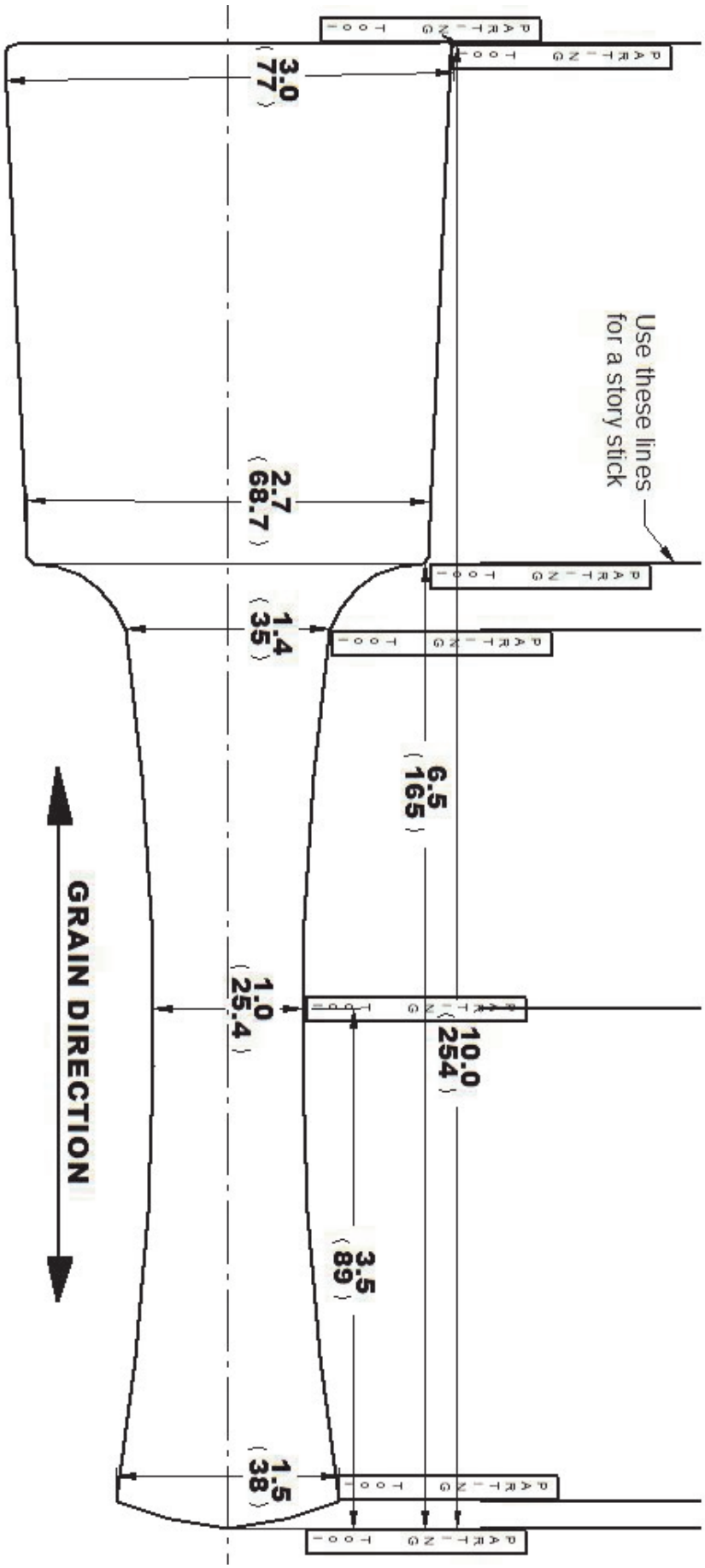
Carl brought a magnificent array of lidded boxes with finials and showed the varying sized finials on different sized boxes, which allowed us to look for that aesthetically pleasing golden mean or golden ratio rule that everyone talks about. In Carl's words, he doesn't necessarily work by that rule, but his products sure seem to naturally flow that way. What a talent!

Figure 1

I couldn't imagine the time and energy spent on some of those finials that were not technically finials, they were Trembleurs. The trembleurs were made of a hard maple stem and included two captive rings (as seen on the left in Figure 1) with a walnut base and hollowed globe; 15" tall.

Meanwhile the one on the right in Figure 1 is a holly stem, with 3 captive rings, a walnut base and two hollowed globes sitting at 19" tall.

I didn't actually Google Carl until after his presentation, but what a craftsman he is besides woodturning, marquetry, and carving; woods, he has delved into working with clay, metals, stone and glass. A true craftsman/artist through and through. Check out www.artistsaroundthesound.com to see some of his creativity. Thanks Carl.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1.5
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GRAIN DIRECTION
Use these lines
for a story stick

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