

Long Island Woodturner's Association Newsletter



October 19, 2019

Presenter

Michael Kehs
Turning a Celtic Drinking Horn



LIWA is a chapter of the American Association of Woodturners. Our purpose is to foster a wider interest and appreciation of woodturning on Long Island and in the Metropolitan area. We generally meet on the third Saturday of each month from 9:00 AM until Noon at the Old Bethpage Village Restoration, Bethpage, L.I. See listing below for 2019 scheduled meetings:



Upcoming Meeting Schedule for 2019. All meetings run from 8:00 am to 12 noon

PLEASE NOTE: Nov meeting date change

November 16: Nomination and election of officers. Member survey to be conducted. Ray will be turning pens
December 21: Holiday party. John will be our demonstrator.

Current Club Officers

President Les Hoffman (516) 431-2280
Vice President Peter Richichi (631) 218-2481
Secretary/Newsletter Barry Dutchen (516) 443-5342
Treasurer Joe DeMaio (516) 766-5189

Thanks to Bob Fentress for taking photos.

Summary of Meeting

From Les:

Long Island Fair:

Thanks to Ken and Jodi, Mitch and Suzy, Larry and Sofia, Don Lindsley, Pete Richichi, Ed Schneiderman, Ed Moloney and Barry Saltsberg. Six members sold \$711 worth of TR Tree Project pieces and other turned items. More importantly, the sale resulted in a ten-fold increase in tent traffic. We plan to do this again next year.

Beads of Courage Boxes (BofC):

29 boxes from LIWA and from the LIW were delivered to NY Presbyterian Children's Hospital Oct 13 By Les Hoffman, Jim Moloney and Barry Saltsberg. We were given a tour of the neonatal cardiac unit and had a photo op. As Stony Brook and NYP hospitals ask for more boxes we will be happy to oblige. Meanwhile, we will be donating about \$400 to BofC after we finish selling our donated wood and supplies in November,

MAWTS (Lancaster, PA)

Les attended the show and reported "they had a terrific group of demonstrators; the lunches were excellent as was the camera work. The trade show was sparse, and the Instant Gallery was good but not full." He said he will attend again next year.

Board Meeting:

The LIWA board met oct 15 at Steve Fulgoni's house (10 members present). Minutes will be presented at the November general membership meeting. The By-Laws committee will be meeting to prepare revised by-laws for the LIWA.

New Members: Kathy Francos (Valley Stream)

Raffle

No Show and Tell this month to have more time for our presentation



Today's Presenter: Michael Kehs
Topic: Turning a Celtic Drinking Horn

Summary:

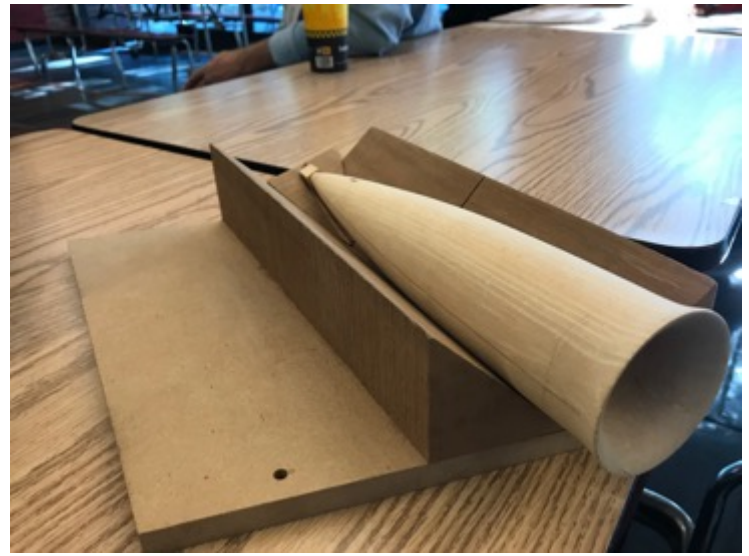
Using a block of Bass wood, turn a champagne flute. Use a jig to cut the flute into small angular segments. Re-assemble the segments by rotating and gluing them together to create the horn.

1. Begin by turning a piece of Northern Bass wood or Holly.
2. Turn a cylinder using a 1 1/4" spindle roughing gouge.



3. Then use a 1 1/16" Forstner bit to hollow it out. (@400 rpm)
4. Aim for 3/8 to 1/4" walls. A ring tool make this easier (900 rpm)
5. Continue shaping outside with a Spindle R.G. Use a peeling cut to taper the cylinder





6. Mark 2 lines on the base, 180 deg apart.
7. Cut on the bandsaw @75 deg., using a simple jig, then reassemble alternating the segments.



8. Use a disk sander to get each segment very flat.
9. Changing the angles of reassembly changes the overall shape of the horn (shofar)
10. Use tape to hold the parts together.
11. As you progressively add segments, carve out the inside of the horn using a Dremel or similar tool with a bull-nose bit to achieve a rounded over (convex/concave) appearance.



12. On the outside, fair the curves with the Dremel, files and sandpaper.
13. Michael likes to use a Foredom brand flex shaft.





14. Disassemble, apply glue size (50:50 water to glue) to each end. Use a rub-joint to assemble.



Texturing:

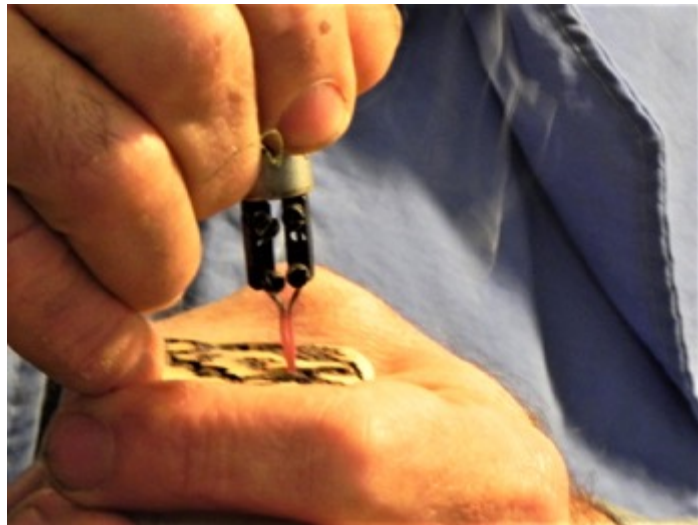
15. He displayed a beautiful coppered horn.
16. He laid out the form he wanted to produce on the cone, then covered it with small pieces of paper. He taped the template together and then removed it from the horn. He opened up the template and spread it out on a sheet of copper. He cut out the form and textured it. He used GIP tacks to hold it.
17. Look at the photos to see the different methods he used to achieve beads, teardrops and more. The tools were modified cup burrs (40,000 rpm) from MDI.com in a range of sizes.
18. He pressed the tool into the wood form a bead and bead patterns (this was very dusty and smokey – use dust collection).



19. At the end he brushed with a brass or horsehair brush.
20. The finish is India ink and a



fixative, then colors





Thank You Michael Kehs
And friends:
Keith Holt and Ed Kelle



Surface embellishments

In this rotation I'll show the burn texturing technique I use to embellish turned surfaces.

What I make and use are basically branding irons, not your typical burning pens. These branding irons are used sometimes in patterns but more often in a random if not chaotic fashion. Some of the branding irons are used in such a way as to create fossils, insects, or other recognizable designs. Once a field has been filled, then color can be added. Depending on the design you may want to add some metal or semi precious stones (turquoise, opals, etc.).

Some textures are burnt in with friction. I use cup burs

<http://www.ottofrei.com/Store/Cup-Burs/Swiss-Fig-77B-Cup-Burs-4-00mm-10-00mm.html> to create a bumpy surface (think lizard skin). These are spun at 35,000 to 40,000 rpm.

The coloring I do is normally either dry brushed acrylics or gilders paste.

Power carving textures covered here will include the use of ball cutters rotary chisels etc. These are used to fill in certain panels laid out on the turned piece, or as background texture to highlight a carved feature.

<http://www.rotarychisel.com/info.html>

<http://stores.jaymescompany.com/drill-bits/>

Lastly vibratory textures, I use an adjustable speed engraving tool. You'll need to blunt the tip so that it dents the wood instead of separating the wood fibers. Slower speeds seem to work better.

Shop made burning pen

I use shop made burning pens that are simple to make. (see fig. 1 and 2) You'll need a switchcraft 280 1/4" jack

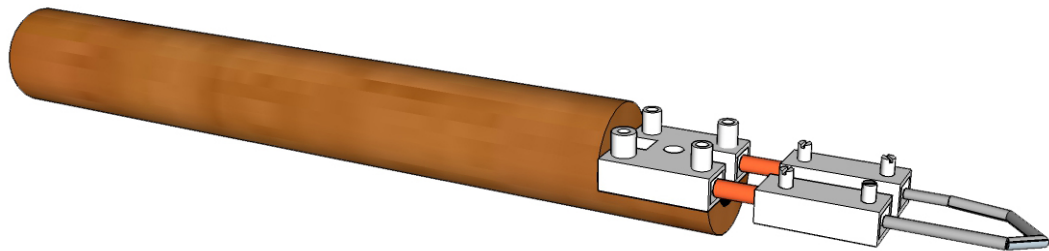
<https://www.amazon.com/Switchcraft-280-4-Inch-Guitar-speaker/dp/B00C5B1S44> some 16 gauge lamp wire a terminal strip

<http://www.lowes.com/pd/Utilitech-Quick-Wire-Connectors/999953966> and a short piece of 12 gauge solid copper wire.

Drill a 3/8" hole down the middle of a 1" square by 6" long block of hard wood, center that up and turn to about 5/8" to 3/4" dia. On one end cut a piece off through the middle back about 3/4" to attach a section of terminal strip with two connectors. You'll connect the 16 gauge lamp

wire to one side and two pieces of 12 gauge solid wire 1.25" long to the other side these act as a heat sink. Now cut two of the connectors out of the terminal strip plastic and screw onto the end of the 12 wire, this is where you attach your NiChrome tips (see photo)

I make my own tips from nickle chromium (NiChrome) wire in gauges from 22 to 16. Razor tip makes woodburning sets that are fine. If you find you need more power you may want to look up plans for a Graeme Priddle wood vaporizer on the internet. I use an Avalon Foam Sculpting Detail station It's old and they don't make them any more.



Source of supplies

<http://stores.jaymescompany.com/>

<http://www.woodcarverssupply.com/Steel-Carbide-Burs--Bits/products/57/>

<http://www.arizonagourds.com/CarvingBurs.html>

<http://www.ottofrei.com/Store/search/?search=cup+burs>

<https://www.riogrande.com/category/tools-and-equipment/burs-and-drills>

<http://www.treelineusa.com/>

www.rotarychisel.com

www.dickblick.com

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Celtic Drinking Horn

The drinking horn seems to originate in the early 8th or 9th century in northern Europe where they would have used an auroch bulls horn. Since they are now extinct I'll be using wood for this project.

The blank should be about 3" square by 12" to 24" long. Between centers round this to a cylinder and put a 2.5" tenon on one end. Mount this in a chuck and drill a 5/8" hole three quarters of the way down the blank. Turn a lip on the edge like a wine glass then hollow the end to about 2" deep, (leave the wall about 3/8" thick) then put a cone center in the tail stock to support the opened end of the horn and turn something of a large champagne flute type shape into the rest of the blank. Put a line down the length of the turning and another 180 deg. from that one.

Cut the horn into gradually shrinking pieces starting at the wide end using the VEE block (see fig 1 and 2) on the bandsaw. Take a piece of wood under the small end of the horn to prop it up so the horn stays somewhat level. The VEE block is cut to about a 75 deg angle on each end. Use this against the fence to cut the pieces at 75deg. The first piece should be about 2.5" on the long side. When cutting keep the center line (one of the two lines drawn while still on the lathe) facing directly up. When making the second cut turn the horn over so as to put the other line on top. This will keep your cuts centered and aligned. As you cut these pieces gradually make them shorter as the diameter gets smaller. You'll need to re position the prop block to keep the horn level as the diameter gets smaller.

The ends if each piece now needs to be sanded flat, a disc sander works well for this.

Lay a piece of blue painters tape or masking tape on the bench sticky side up. For a simple spiral lay all the pieces largest to smallest on the tape tight up against each other. They will naturally lay with the heavy side down (the wider side) and the lighter side up (the smaller side). Roll the horn into a spiral. This is just for visual reference and to figure out if the spiral you end up with is the spiral you want. Now hand draw line

the entire length of the spiraled horn. This will help in lining up the pieces when gluing. If you want a spiral with a twist turn each one of the pieces either left or right (but always in the same direction) an 1/8" past the last piece. This will turn the spiral out to one side. Redraw a new line in red for reference for glue up.

Mix up a solution of 50% wood glue to 50% water and seal each sanded end. After they are dry put full strength glue on the pieces and press one piece tightly against another rubbing them back and forth a little and lining up the line drawn on earlier. Glue from the tail to the lip one piece at a time (no need to clamp these) you can glue one piece per every 5 minutes. Once the solid tail is glued up then glue one drilled piece at a time and carve the interior to shape, rough shape the outside as well at this time. Glue the next piece and carve to match the previously carved segment. Continue this way until all is glued and carved, be sure to finish carving and sanding the interior as you go or you wont be able to get back to it later.

Decorate as you like with textures, carvings, addition of foreign material (metal, stone, etc.), and color.

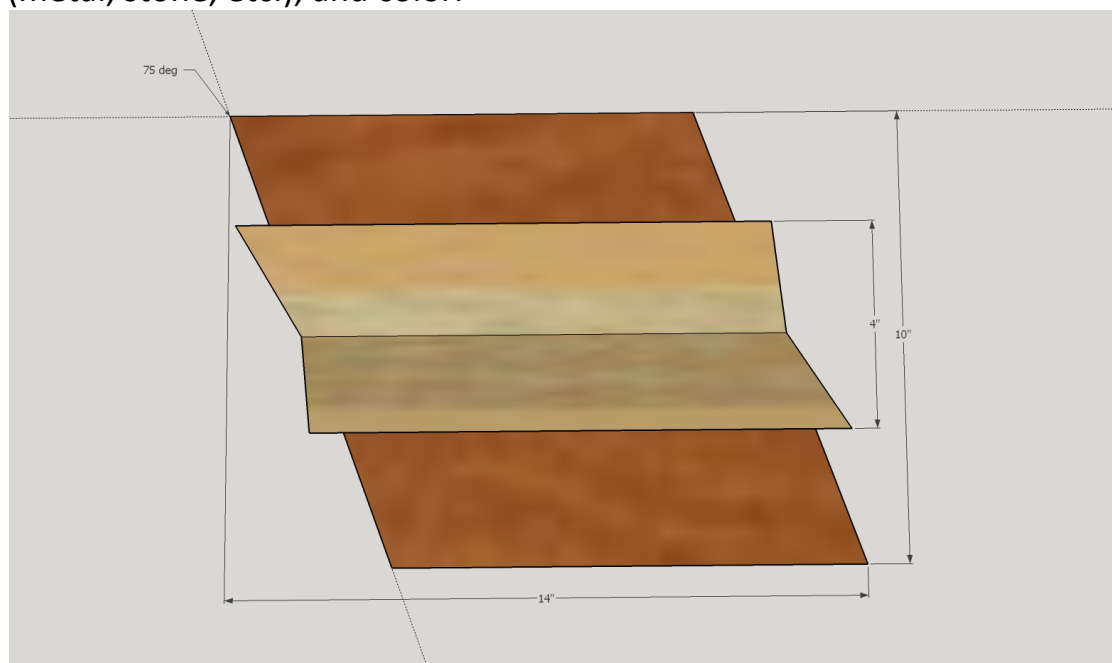


Fig.1

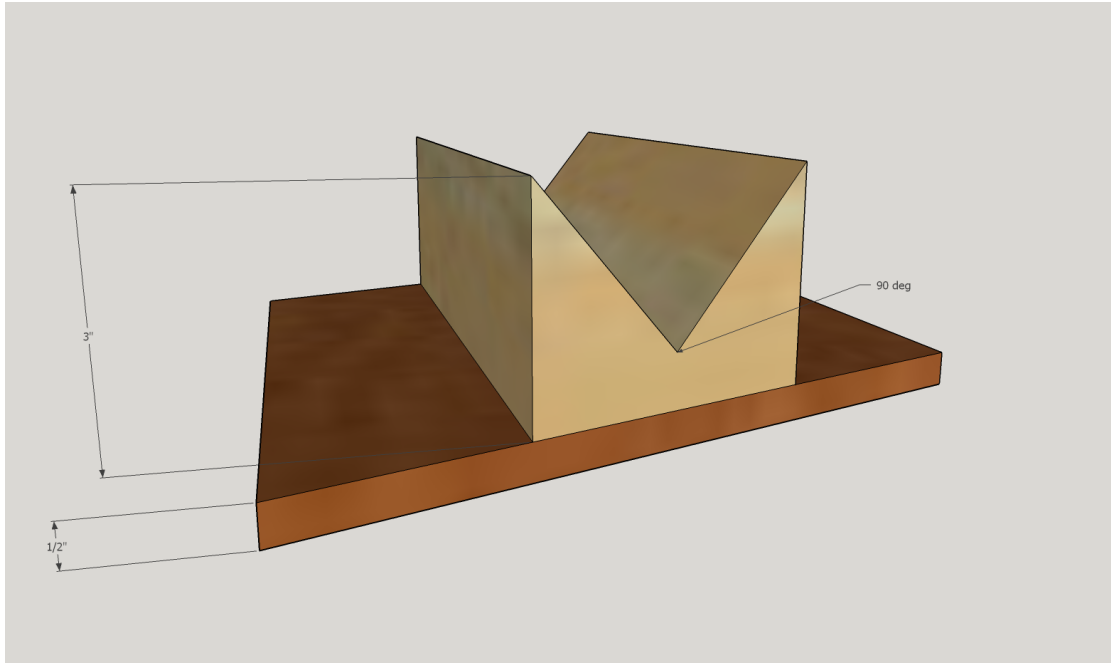


Fig. 2

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Pierced and Carved Hollow Vessels

For this rotation, I will show the techniques I use to lay out, pierce through, shape and detail carved leaves on a hollow form.

Making Patterns:

1. Find leaves that suit your vessel and your ideas. I like white and red oak, also different types of maple. Trace these onto paper or draw by hand a smaller or larger version of the leaves you like. Use spray adhesive to attach this to thin plastic (an old Cool Whip lid, or something similar). Cut out these shapes as closely as possible to the pattern. For salamanders I use photos to make my patterns. I will also hand draw these for smaller or larger versions of the salamanders I like.
2. Take the patterns and lay them one at a time on the vessel surface and trace them. Be sure to overlap the patterns. It makes them look more natural and it also retains the shape of the vessel. When the patterns are overlapped, you must decide which is on top and which is below. Do not draw the portions of patterns that are below other patterns.
3. After you have drawn all of the patterns on the vessel and you are happy with the layout, go over the pencil lines with pen so the don't rub off during the carving. Now color with a colored pencil (I like red), all of the spaces between the patterns that will be removed. This will help make sure not to miss some small spaces.
4. Next, remove all of the spaces
5. In a limited area about 6 to 9 square inches, start to outline the patterns (use a small straight bit) where they overlap. Working in a small area at a time helps keep your focus on which leaf is above or below the next. Roughly contour these outlined leaves or patterns so they look as though they are either above or below the next leaf. Once this area is done, then move on to the next area, until everything is roughly contoured
6. Lay out the leaf veins according to what an actual leaf looks like (it's ok to use only the larger veins). With a small round burr, remove a little wood from either side of the veins, to basically raise the vein above the leaf. Reshape the leaf to this point next to the veins.
7. Undercut all edges (those next to openings and those edges above other leaves).
8. After you are satisfied with the carving, you'll need to refine all surfaces. Small diamond burrs of different shapes will be handy here. Then use small sanding discs and hand sanding. This step is most important to turn this into a beautiful work of art.
9. I use Danish oil as a finish. When wiping this finish off you will need to pay special attention to all the crevices where oil will remain. An air hose and dry brushes will come in handy here as well. After the finish has cured, I will coat the piece with Howard's wax and buff off with a fine horsehair brush (don't use a buffing wheel).

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Carvers Drills
http://www.fishcarver.com/fish_carving_detail_burrs.htm

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