



Long Island Woodturner's Association Newsletter

September Issue

September 12, 2020

Jim Moloney

Segmented Turning



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 8:30 AM until Noon at the Old Bethpage Village Restoration, Bethpage, L.I. However, during the COVID crisis, we meet virtually on Zoom. See listing below for 2020 scheduled meetings:



Upcoming Meeting Schedule for 2020. All meetings run from 8:00 am to 12 noon

Oct 17 (Lyle Jamieson)
Nov 28
Dec 19

Club Officers

Chair of the Board: Ken Deaner
President Les Hoffman (516) 431-2280
Vice President Barry Saltsberg (516) 349-1914
Secretary/Newsletter Barry Dutchen (516) 443-5342
Treasurer Joe DeMaio (516) 766-5189

Members at Large

Steve Fulgoni
Jodi Gingold
John Kowalchuk
Jim Maloney
Paul Permakoff
Pete Richichi

Thanks to photographer Bob Fentress for his screen shots.





Summary of Meeting

We streamed our meeting and demo via Zoom.

Good and Welfare

Carl S is doing better and is back home. We wish him a speedy recovery

Treasurer's Report

\$3697.96

Editor's Note:

Les announced that 62 members responded to his survey regarding members' concerns about whether to continue with online meetings or return to in-person meetings. Since only 40% of our members are willing to attend a live meeting at this time, we will continue to have Zoom meetings with either professional or member demos. I have so advised OBVR.

Also:

October is nominating month for board members (November is when we vote). If you are interested in serving as a member-at-large, please contact Les. The Board has nominated the following slate for 2021:

President: Barry Saltsberg
 Vice Pres: Paul Permacoff
 Secretary: Barry Dutchen
 Treasurer: Tony Fuoco

Show-and-Tell







Main Event

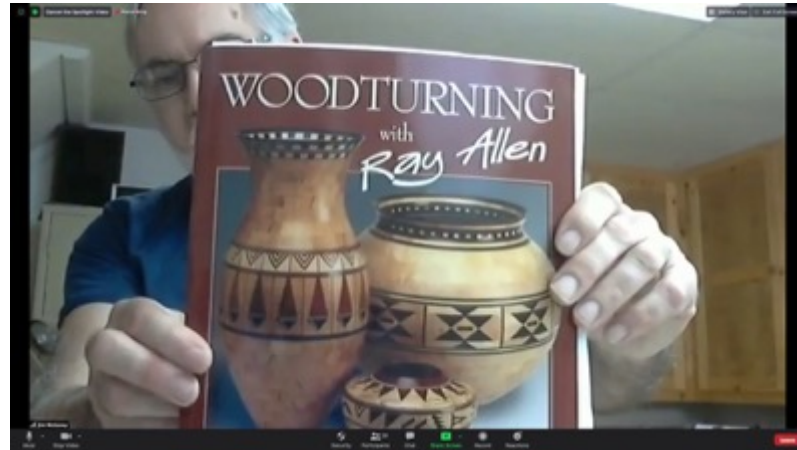
Jim Moloney

Presents:

Segmented Turning

Jim began his presentation by suggesting turners get a copy of *WoodTurning with Ray Allen* as an excellent reference. He also reminded everyone that a long-time member of the club, Peter Schultheiss, introduced segmented turning to club members many years ago.

Several computer programs are available to help with design and layout of your segmented bowl ideas. These include: Segment Pro, 3D Design Pro and the website WoodTurnerPro.com. Lamination Pro can help with feature ring layout.



This design consists of red oak and mahogany, laid out in a basket design with maple, yellow and purple heart.

To start, Jim uses a homemade sled, set to a specific angle (depending on the number of segments to be used). He also referred to a design made popular by Jerry Bennett (from Seg Easy) called a *wedgie sled* (go to Jerry's website for free plans). Also available are angle templates, which makes setting the angles much easier and accurate.





The general steps for making a segmented bowl are as follows:

- Decide on design
- Put design on graph paper (shape of bowl, size of rings, number of segments, construction of feature ring)
- Cut the segments for a ring
- Assemble ring
- Repeat for all additional rings
- Sand and glue the rings into a stack
- Turn the inside, then outside
- Finish



Now it's time to make the segments. Draw a line on the wood so that when you assemble it, you know top from bottom. Place the strip of wood that you are going to use on the sled (which has been set to the correct angle). Cut the pieces, alternating on the front or rear fences (for wedgie sled) or flipping the strip over for the other sled shown.



For example: if you are going to use 16 segments, then each segment pair would need to be $360/16 = 22.5$ degrees -> therefore, each piece needs to be cut at 11.25 degrees, EXACTLY! That's why we really love using a sled.

Often, the pieces have a fuzzy edge so a very light touch up with sandpaper helps.

When done, place them (alternating the drawn line face up and face down) on a flat (melamine, works well) surface.

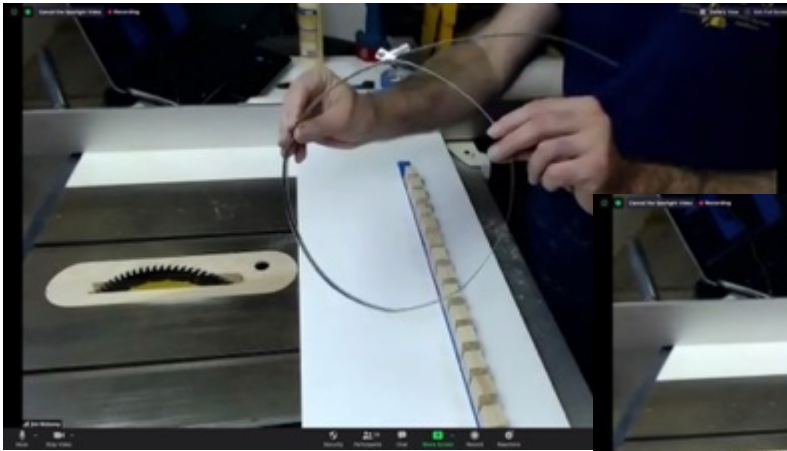
Next to that put a piece of blue painters tape, sticky side up.



Then move the segments on to the tape so that the longer parts are on the tape and the angular cuts are all up, and there are no gaps.

Prepare a ring (hose) clamp (Jim suggests looking in Lowes, in the heating dept)

Apply a generous (but not excessive) coating of glue (Jim uses Titebond II) on each piece of wood.



Next, roll up the segments into a ring. Place the clamp around the circle and tighten the clamp slowly

while making sure the segments stay aligned. Remove any squeeze out.

When dry remove the clamp and tape.





Repeat for each of the disks. Each disk needs to be flattened. There are many methods to do this:

- Hand sand, one side, then the other
- Disk sander
- Lathe
- Drum sander



Jim says he gets the best results from using a home-made drum sander.



For those who don't have one, the lathe can be used: Attach a piece of sandpaper to a piece of flat stock (MDF). Add a faceplate to the other side and mount on the lathe. Hold one side of the ring against the slow spinning disk to flatten one side. Do this for all the rings.



Or, attach a ring to a flat plate and put that into the chuck. Use a gouge to flatten the side.



The rings need to be attached in a stack. Again, there are many methods for this. Jim showed how to use a home-made press.



Jim takes each ring and aligns it to the previous ring, making a small pencil mark for reference later. He then disassembles the stack. He likes using a “Segment Stopper” or a homemade unit (see the photo). He uses the pencil mark to align the rings when he glues and stacks them.

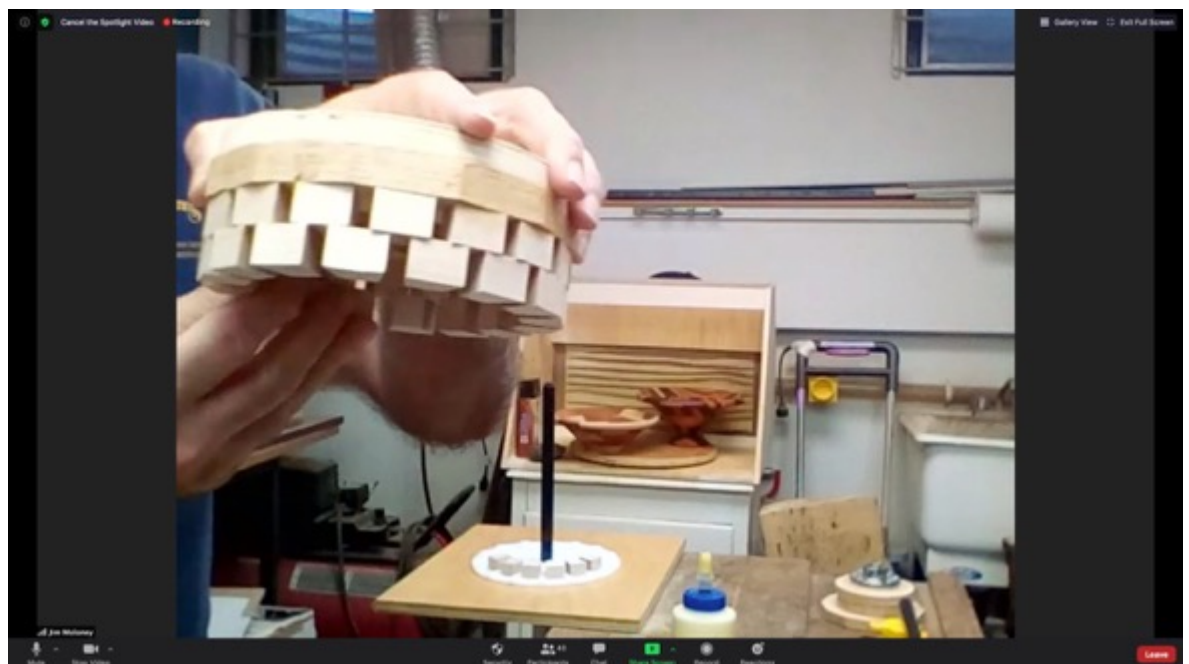
He also showed an alternate alignment jig (I think it’s called a Longworth Chuck) .

A heavy weight needs to be used (~25lb) on top of each method (except to the press) to ensure good glue adhesion.





For making open segmented bowls he uses a safe-easy plate





Some people glue one ring at a time, then turn the inside, before adding the next ring. When done, the outside is turned. Other turners glue up all the rings (as long as the bowl is not too deep) before turning.

Segmented turning is a great way to utilize those small scraps you keep saving. It's also a way to use affordable pieces of very exotic woods.



Thank you, Jim