



Minnesota WoodTurners Association

A LOCAL CHAPTER OF THE AMERICAN ASSOCIATION OF WOODTURNERS

AAW | AMERICAN ASSOCIATION
OF WOODTURNERS

Volume 2019 No 5



Gary Mrozek

“Baby Rattle
with Captive
Rings”



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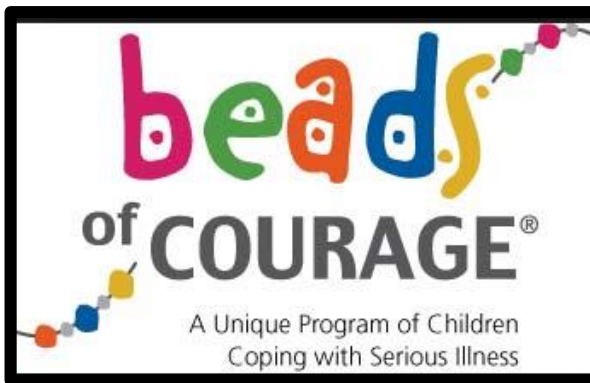
Paul Laes – Sales at Meetings

Mike Rohrer - Newsletter

In This Issue

1. May Meeting	
a. Pre-Meeting	
i. Beads of Courage	p. 3-6
ii. Instant Gallery	p. 7-10
iii. Before the meeting	p. 11-16
b. Meeting	
i. Announcements	p. 17-19
ii. Future Classes	p. 20-21
iii. Main Presentation	
Gary Mrozek	p. 22-33
iv. Member Challenge	p. 34-39
v. New Members	p. 40
vi. Tool Raffle	p. 41
vii. Next Meeting	p. 42
3. Turning Tips	p. 43
4. Ask a Turner	p. 44-50
5. Area & Regional Meetings & Gatherings	p. 51-58
6. Member Mini-Class	p. 59-74
7. Wooden Name Tags	p. 75
8. Editor's Notes	p. 76



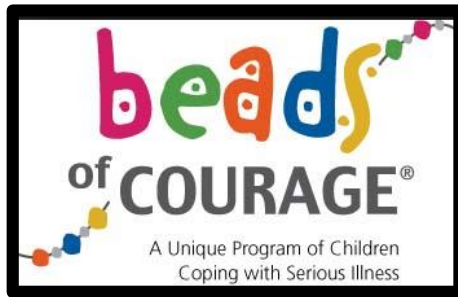


Diane and Bob Puetz direct this program for the Minnesota Woodturners Association.

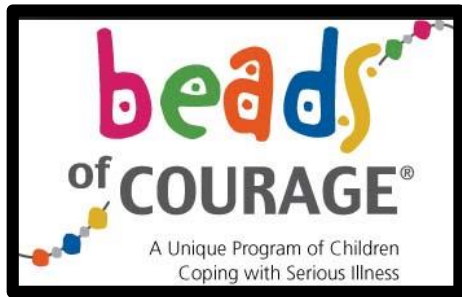


Great donations this month.
We can use more!





The Neonatal Intensive Care Unit at North Memorial Hospital appreciates our BoC bowls and loves giving them to the patients and their families.



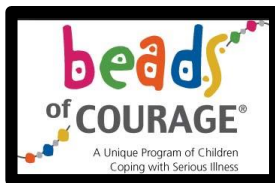
Claire Stolee is a volunteer with the University of MN Masonic Children's Hospital. Recently he delivered these three bead bowls to be given to children in the Beads of Courage Program at the hospital.

Here is Teage Maxwell, some of his beads and the wonderful woodwork he received. A few days prior to his delivery we learned he has Ebstein Anomaly and I was able to be transferred to Mayo Rochester to prepare for his arrival. Once born he went to the NICU and had a stent placed by a cardiac catheter a few days later. He spent 9 days in the NICU and we were able to come home.

Just last month at 5 months young he had his first open heart surgery in Rochester. He did so well! He only spent 6 days in the hospital and we were home! He is continuing to do incredibly and while this isn't his last surgery and he won't remember any of this, the beautiful gift he received will be a humble reminder to him of his journey and how courageous this little heart warrior really is.



We thank Greg from the bottom of our hearts I'm just so happy and grateful there are generous souls that take their time to make the bead bowls. We will cherish it for life.



Instant Gallery



Bill Breckon



Ellen Starr – new member

Instant Gallery (cont'd)



Russ Loucks - black
walnut/tung oil

Bob Bodness-125 pieces, cherry,
maple, walnut, black palm &
purple heart



MN Woodworkers Guild
Northern Woods Exhibit



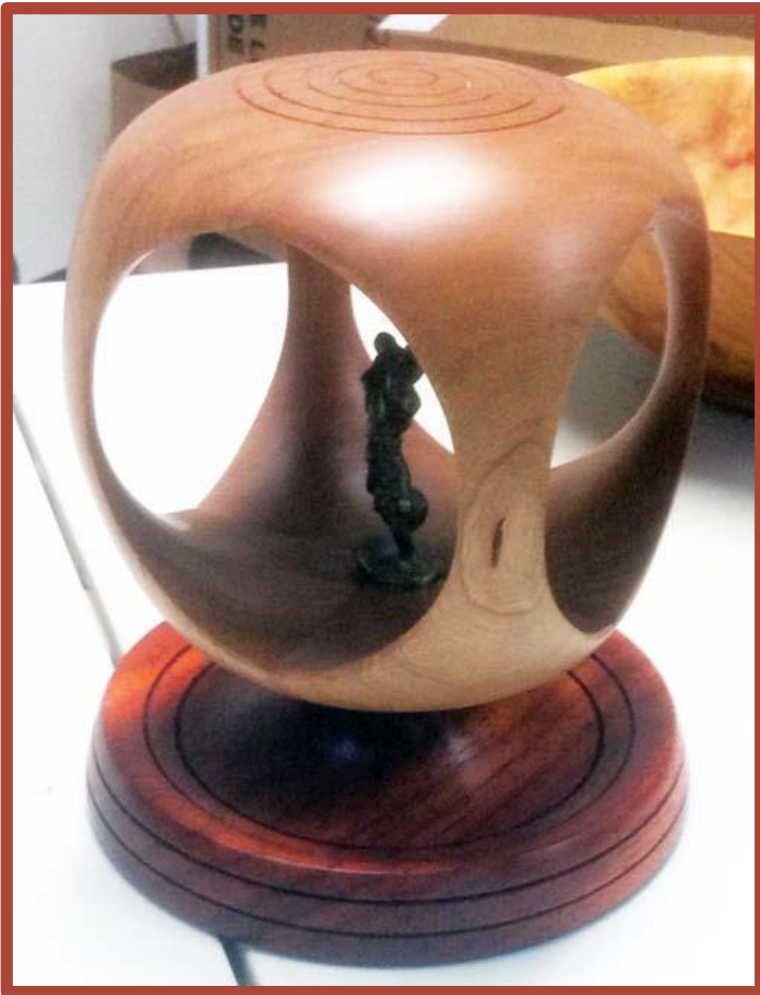
Mark Debe-"Wood Turned Treasure Boxes Hidden in a Fairy Tale" (285 hrs., 11 new materials or processes)

Instant Gallery (cont'd)

Paul Laes – cremation urn
(oak, maple, walnut & more)



Instant Gallery (cont'd)



Ken Hallberg – inside-out
sphere (homage *au*
Düsseldorf); padauk & cherry



Lee Luebek

Before the Meeting



Dan Larson & Past Pres. Rick Auge working on swing-out tailstock



Lee Tourtelotte takes advantage of coffee & donuts
- a popular "before the meeting" perk



Vic Spaulding & new member,
Dave Stefans



Before the Meeting (cont'd)

Immediate Past President making preparations for the meeting's demo. Rick is standing behind the club's new tool chest, which Rick donated.

The MWA members sincerely thank Rick for his generosity in donating this mobile tool chest, which will be a great aid to demonstrations and classes.

Thanks, Rick!



Before the Meeting (cont'd)



This trailer was free wood



Typical front room activity before the meeting



An abundance of excellent wood
for the wood raffle



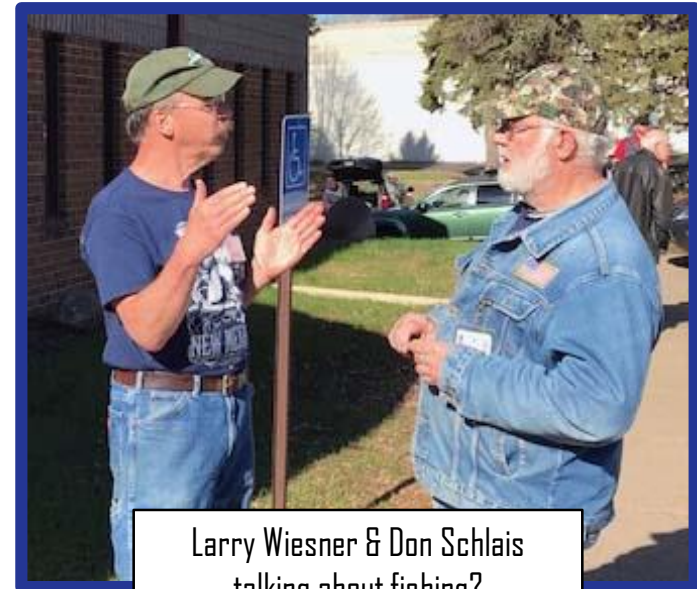
Before the Meeting (Swap Meet)



Lee Tourtelotte &
Colleen Schneider



Lots of interest in bargains and hard to find items



Larry Wiesner & Don Schlais
talking about fishing?



Before the Meeting (Swap Meet)



Janese Evans looking at the items on Lee Tourtelotte's table



Andrew Ferris getting an overview of all the items for sale



Don Schlais, Steve Mages & Neil Robinette



Danny Judd and granddaughter, Vanessa Wickstrom



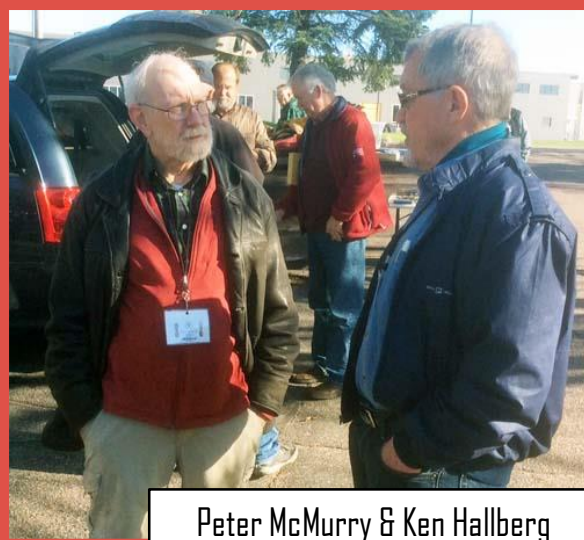
Before the Meeting (Swap Meet)



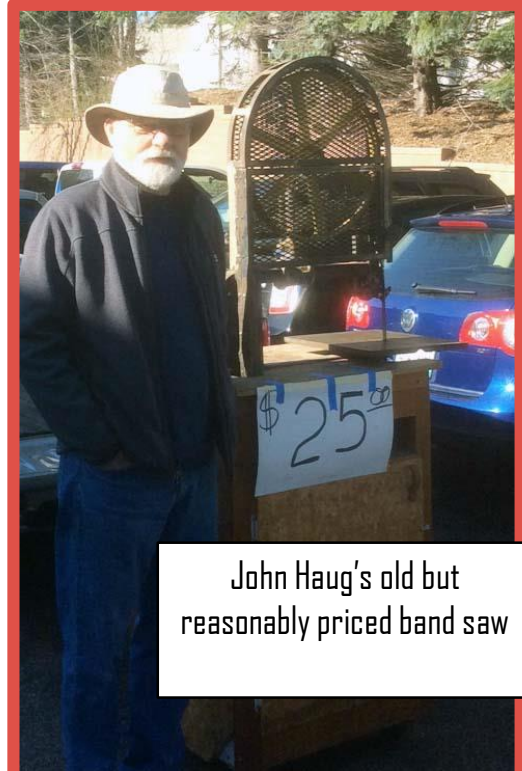
Do I really need these tools?



Some interest in Jim Jacobs' offerings



Peter McMurry & Ken Hallberg



John Haug's old but reasonably priced band saw



Announcements



President Lee Luebke

1. Youngblood's Lumber in Minneapolis is closing – there may still be some bargains in fine & exotic wood
2. Todd Williams brought a trailer full of “free” wood from the widow of an MWA member
3. Immediate Past President Rick Auge was awarded a \$1500 grant from the AAW for education. Congratulations, Rick and thank you for your efforts!

Announcements (cont'd)

We are updating our Mentor List for all areas of the Metro

We need Mentor Volunteers of ALL levels. Volunteers are needed to spend a few hours with a fellow woodturner member.

Send an email to lgluebke@comcast.net with your email, phone number and area in the Metro you live if you are interested.

This is a very satisfying activity for the mentor, a great way to encourage and improve the turning activities of our club, and a good way to make strong friends among turners.

Anyone looking for mentors is encouraged to join Area and Regional Groups to help with finding a mentor.

Lee Luebke
President MWA



Announcements (cont'd)

From George Vondriska

I'm hosting a Meet the Makers event June 22, 1-7 pm at my shop in Hammond, WI. It's open to the public, providing the opportunity for people to meet and chat with makers they follow from the Twin Cities and western Wisconsin. There will also be door prizes provided by Rockler and The Family Handyman Magazine, and demos running.

The event web page is <http://www.vondriskawoodworks.com/meet-the-makers.html> and on

Facebook <https://www.facebook.com/events/1763831233717095/> Thanks

George

(715-796-5221)

George@gvwood.com



Future Classes

- May 11, Wounded Warriors Class
- May 18, 9:00 am - 3:00 pm, Advanced “Wing Bowl”, Dan Ernst
- May 24, 9:00 am - 3:00 pm, Intro to Segmenting, Jim Jacobs
- June 22, 9:00 am - 3:00 pm, Learn to turn a Sushi Tray, Steve McLoon

There will be fewer classes during the summer. Check the website for upcoming classes & details

Check the Website *Quick Links* for details and signing up
for
all classes



Dan Larson, MWA
Class Coordinator
(without a sling)



Future Classes (cont'd)

Dan Larson encourages new turners to jump in and try a class or two. He encourages more seasoned turners to take a class to have some fun turning with a group.

- Also, we are always looking for Lead Instructors who have a specialty project they want to teach; please contact Dan and share your skills.
- In addition, if you don't want to be "The Lead Teacher", we would love it if you would volunteer as an assistant. There is no better way to increase your own skills than to teach someone else. So PLEASE VOLUNTEER.

Thanks, Dan Larson MWA- Class Coordinator





APRIL
Demonstration

Baby Rattles with Captive Rings

Gary Mrozek

Gary said he'd start with the finished piece and then show us how he got there. He passed around a couple of finished rattles to the group so we could handle the finished product before we went from the beginning, step-by-step.



Gary finishes the rattles with Mahoney's Walnut Finish so they are food/baby safe. See later in the article for safety guidelines about choking hazards.



A quote from Gary: “Mistakes can be good.” The vessel on the left almost ended in the burn pile because of a major defect during turning; but after thinking about it for quite a while, Gary salvaged the “mistake” resulting in this outstanding piece.



Gary started with a 1 ½" diameter cherry round cylinder long enough for the rattle. Laying it out to make it long enough for 3 rings, Gary makes 7 divisions 3/8" wide, which will be enough for creating the rings and the adjacent working spaces.

Gary suggests making a jig with all of the divisions and measurements you will need for the entire piece and so you can easily set up the calipers without using a ruler.



Gary starts with a parting tool with the lathe turning fairly fast. He turns the cylinder 1" in diameter at either end. He then sets the remaining dimensions for the caliper from his jig.

Gary marks off 7 widths so he can get 3 rings with space on either side of the future ring.



Gary likes to do “production runs” so he can improve from one piece to the next.



Making the space on either side of the future ring with the parting tool.



He likes to make the center ring slightly larger than the adjacent rings.



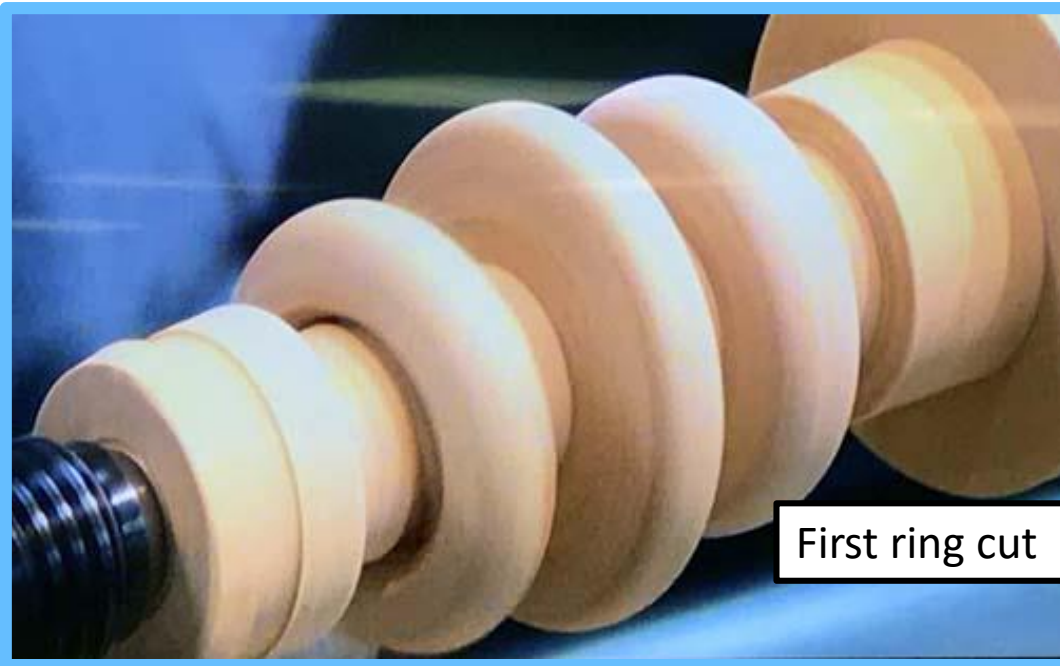
This is the best time to finish the rings, BEFORE they are separated from the cylinder. He wants the mass of the piece in the area of the rings.

Use a spindle gouge (or a skew if you're comfortable with it) to profile the rings. Gary just roughs the shape first. He shapes and then refines the profiles of the rings with 100g sandpaper. He considers sandpaper a "tool" that he uses in creating his pieces, not an admission of a failure in his use of turning tools.



Gary makes the ring parting tool from an Allen wrench. He leaves it a little blunt on the end. It is sharpened by “lapping” the top and bottom of the tool. Gary flattens the special parting tool for stability on the tool rest.

This tool can tear the fibers but at this time he is just trying to separate the rings from the cylinder.



First ring cut

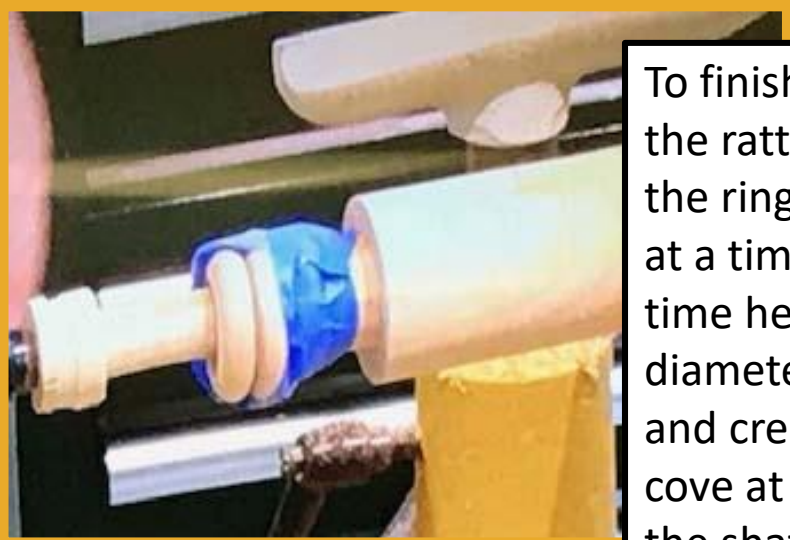
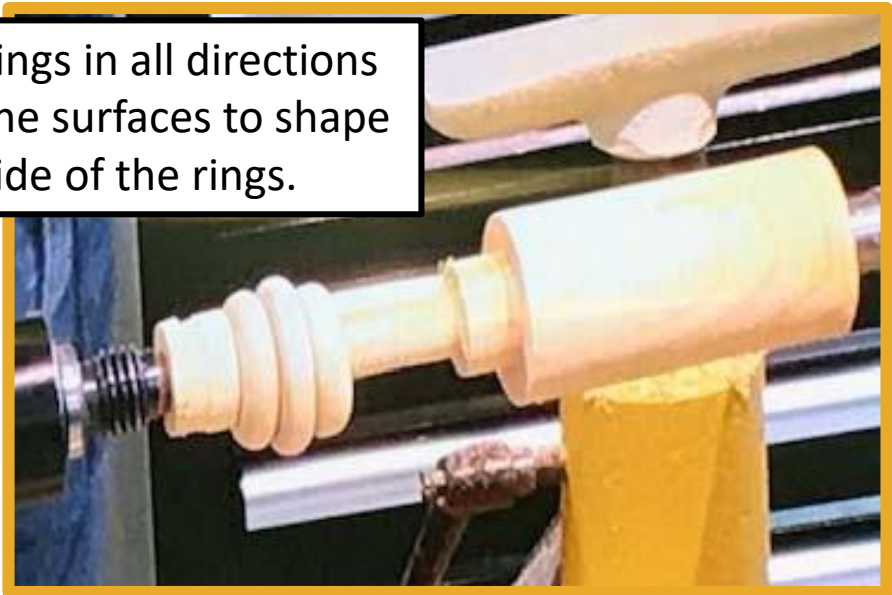


Gary then starts to profile the shaft using the spindle roughing gouge. At this time he is holding the rings out of the way with his fingers. He flattens the shaft to “smooth” and using double sticky tape with a piece of sandpaper smooths the inside of the rings by manipulating them over the sandpaper. (Make sure to put the tape on in the correct direction).



This is Jerry Manion's first meeting & he is enjoying Gary's demo

Gary moves the rings in all directions and contacts all the surfaces to shape and finish the inside of the rings.



To finish the shaft of the rattle Gary tapes the rings to one side at a time. At this time he reduces the diameter of the shaft and creates a slight cove at the end of the shaft.





He then refines the shaft with sandpaper and softens all the edges.

Gary shapes the handle with the spindle roughing gouge, finishes it with the spindle gouge and then sands it to final finish.





Todd says: Nick Cook had an article in American Woodturner, Fall 2004, about turning baby rattles. Included is a simple jig for testing. He refers to a CPSC article: "Small Parts Regulation, Toys and Products Intended for Use by Children Under 3 Years Old". Go to cpsc.gov and search for "small parts regulation". This article should be at or near the top of the hits. It includes another design for a testing jig. Note the critical size is 1 11/16" diam.

Two safety issues were brought up. Gary says he avoids all nut wood because of possible allergies and Todd Williams brought up the federal safety standards for prevention of choking of children.

Thank you, Gary, for an excellent demo. Your directions were clear and concise; the timing of your presentation was excellent. Your jokes interspersed in your instructions were enjoyed by those of us who like "groaners".



Member Challenge-Furniture (Last month's demo was a 3-legged stool)



Jeff Luedloff announced that there would be only one category for this month's Member Challenge

Member Challenge

Stool/Furniture



Dan Larson
1st Place



Member
Challenge
(cont'd)



Ken Gufstafson
2nd Place



Lee Tourtelotte
3rd Place

Member Challenge (cont'd)



Steve Mages
4th Place



Reid Zimmerman
5th Place

Member
Challenge
(cont'd)



George Martin
6th Place



John Chance
7th Place

Member Challenge for June, 2019

Captive Ring

captive

[adjective](#)

cap·tive | \ 'kap-tiv \

Definition of *captive*

1a: taken and held as or as if a prisoner of war

b(1): kept within bounds : [CONFINED](#)

(2): of or relating to captive animals, *captive* breeding

2: held under control of another but having the appearance of independence
especially : owned or controlled by another concern and operated for its needs rather than for an open market, a *captive* mine

3: being such involuntarily because of a situation that makes free choice or departure difficult, a *captive* audience



Welcome New Members!



Ellen Starr



Jerry Manion

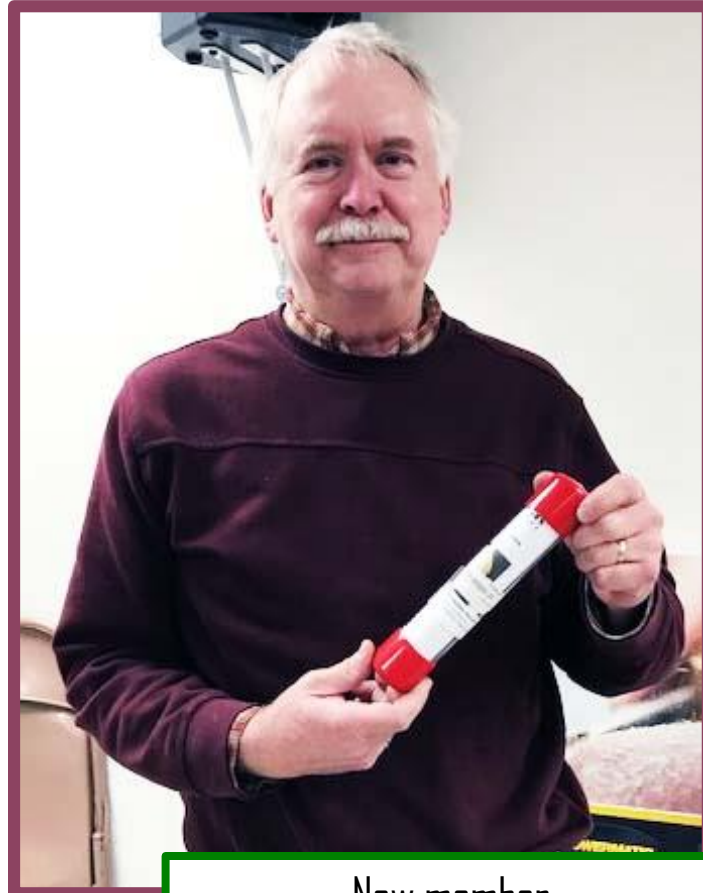
Matej Bajzer

The MWA is
fortunate to have
supporters.
Woodcraft
donates items for
the Tool Raffle
every month.

Monthly Tool Raffle



Pres. Lee Luebke calling
out the wining numbers



New member
Dan Hatteberg
One of the raffle winners



Next Meeting

June 8, 2019 - Saturday morning 9:30 am

(Arrive early for Member Challenge Voting, Instant Gallery, Raffle Tickets, Beads of Courage, Woodcraft Display, Library, Coffee, Membership issues, Donuts and Fellowship)

Location: Houck Machine Co.

12811 16th Ave N Plymouth MN 55441

Demonstration:

Steve McLoon – Spheres & Embellishments

Member Challenge:

Captive Ring



TURNING TIPS*

Rick Auge

I made an assumption that desiccant was all the same material. These were inside a shipping container containing a bathroom cabinet.

I took a pinch and added tap water, rubbed it between my fingers = slippery mud.

Acts like clay.



Ask a Turner*

April Question:

I have a question about the size of the tenon or spigot on a bowl to be held by my adjustable chuck. I have heard 2 different opinions. 1) the tenon should be just barely larger than the diameter of the closed jaws so that the maximum surface of the tenon is in contact with the surface of the jaws, and 2) the tenon should be as large as possible so it is stronger and a larger proportion of the diameter of the bowl being held by the chuck.

I'd be happy to hear any opinions from my fellow turners.

Confused Turner



Ask a Turner*

Dear confused turner- I don't view your question as 2 different opinions, I see it more like 2 separate issues.

1-Chuck jaws have the most holding power when the jaws are "almost closed"-jaws are made in one piece and then cut into the 4 sections. So almost closed means slightly bigger to take account of the kerf when the jaws were cut and will make a perfect circle. If you open the jaws all the way and tighten onto a tenon you're only grabbing on the 8 corners of the jaws, not nearly as secure, as when there is full contact with the jaw around the whole tenon (a complete circle). When making your tenon you need to make it slightly larger than the jaws are when almost closed to give you some extra room to tighten the jaws or re-true up the tenon. If you make your tenon too small the jaws will bottom out, or close without sufficient pressure on the tenon. So, you should aim to size your tenon to form "almost" a complete circle when tightened, some woods compress more than others. Is the wood wet, soft, dry, are you going to remount on the tenon after the tenon warps from drying? Many factors will determine the acceptable size of tenon- but to simplify- the jaws have the most holding power when they form a complete circle and are not holding on the 8 corner points.

(cont'd next page)



2-Jaws come in many sizes for a reason, most new turners have 2" standard jaws that came with their chuck and try to use them for everything. If your tenon is sized too small you have a good chance of breaking the tenon off if the wood is wet or soft and you get a catch or are too aggressive. I have seen many "too small tenons" break off cleanly. A very common practice with newer turners is that they let the chuck size determine their bowl's bottom size. For most turnings using the rule of thirds is a good way to determine what size your bowl's bottom is or if a piece is going to be heavily used you can make the bottom about 40% the diameter. Using those guidelines will help make your bowls more aesthetically pleasing. OK, back to your question- for example, if you are turning a 12" bowl, $1/3$ is 4" for the bottom. Now you can decide what size jaws will work the best and make the tenon as large as possible using the guidelines from question 1. Is the wood wet or dry? Are you finish turning or rough turning? All questions used to determine the best jaw size to use. If I was turning a 12" bowl with 2" jaws I would say that I might be asking for trouble. If I was turning a 6" bowl and I had my 4" jaws I would probably end up with a bowl whose bottom was too large and the piece would aesthetically probably not be the best.

(cont'd next page)



To sum up the above - size your tenon to match your jaws and match your jaws to the size tenon you need. In other words, you need more jaws and/or more chucks- welcome to the vortex that is turning. Also make sure you make the tenon properly. Whether the jaws are dovetails or straight and serrated you need to make the tenon properly. I see improperly shaped tenons a lot and if you have trouble with a piece coming loose or coming off the chuck, I will be happy to help answer questions for your specific chuck jaws.

Any questions or anything that isn't clear - please contact me and I'd be happy to demonstrate or offer specific advice.

jeff luedloff

952-818-9117

jlued@q.com



It all depends and it would be good to know the chuck manufacturer's name.

For a Oneway Talon chuck;

- for a small bowl and a light cut, go with a 1 3/4" tenon (2 1/4" spigot)
- for a medium to large bowl, go with a 3 1/2" tenon (4" spigot)

For a Oneway Stronghold chuck:

- for a small bowl, go with a 2 1/2" tenon (2 3/4" spigot) [#2 jaws]
- for a medium bowl, go with a 4" tenon (4 1/2" spigot) [#3 jaws]
- for a large bowl, go with a 4 1/2" tenon (5" spigot) [#4 jaws]
- for 26" bowl 6" deep or a 36" platter, go with a 5 1/2" tenon (6 1/8" spigot) [#5 or #6]

Hope this helps. Otherwise, I'd suggest checking the tenon and spigot ranges for the turner's specific chuck in a catalog like that of Craft Supplies.

Ken Hallberg



Ask a Turner* (cont'd)

My grinder has a CBN wheel on the left and a stone wheel on the right. Today I was grinding on the stone wheel for quite awhile, trying to shape and smooth the upper rack for a new shower door. While I was doing this the CBN wheel flew off the left side of the grinder and took off across the floor. I haven't found the retaining nut yet. I have obviously done something or more than one thing wrong to make this happen but I don't know what and I don't want it to happen again.

Mike Rohrer

Sorry to hear your sad tale, Mike. When you find the nut, my method is to thread on the nut finger tight then fit a crescent wrench on the nut and tap the wrench with a hammer vigorously to tighten.
Good luck.

Neil Robinette



Ask a Turner*

TURNING TIPS*

*These are new features of the MWA Newsletter. All members are encouraged to contact Editor Mike Rohrer (profmdr@yahoo.com) with an answer to the “Ask a Turner” question, with a question to publish in next month’s newsletter or with a “Turning Tip.”



Area & Regional Meetings & Gatherings

•HAMBURGER CLUB

We generally meet the Thursday of the 2nd week following the club meetings. Our May meeting will be Thursday, May 16. We meet at 11:30 am with lunch to be ordered about 11:45 am. No topics ... just an open dialogue of woodturning friends.

50's Grill, 5524 Brooklyn Blvd, Brooklyn Center

Any member who would like to be included on the mailing list please send an email to MLH55410@aol.com.



Area & Regional Meetings & Gatherings

PLYMOUTH AREA SMALL GROUP

The April meeting was held Tuesday, April 16. Discussions included current projects, storing/preserving wood and orienting wood for turning. The May meeting will be Tuesday, May 21. 7:00 pm. Usual format: bring your questions and ideas.

The usual meeting place is [10501 Belmont Rd, Minnetonka](#). To be added to the contact list, call Steve Mages [952-544-5286](tel:952-544-5286) or email him.
smages@juno.com



PLYMOUTH AREA SMALL GROUP (cont'd)



April meeting attendees from upper left: Wade Dunkely, Otto Oelke, Ben Pawlak, Bob Grant, Jeff Luedloff, Ron Majerus, Paul Kaump, Steve Mages
Front row: John Danielson, Julie Abbott, Lee Luebke

Topics: bowl grinds, hollowing systems, wood preparation and preservation, dust collection and finishes

Area & Regional Meetings & Gatherings (cont'd)

Lake Johanna Sub Group

The newest sub group, organized by Gordon Fay, meets in an informal setting in Arden Hills at [3355 Lake Johanna Blvd, Arden Hills MN](#) at Dave Carlson's shop, the big white house on the corner of Stowe (enter from Stowe Ave).

The May meeting is Tuesday, May 14, 1:00 – 3:00 pm

Contact Gordon at fayboy2@comcast.net to be added to the announcement list



Mike Rohrer will be showing some of his work (off-center along with other work).

If you have work that is hard to do, bring it, we will see if we can help work it out.

Gordon Fay

Area & Regional Meetings & Gatherings (cont'd)

SE Metro Sub Group

Steve Miller hosted the April SE Metro Sub Group meeting



Attendees: Steve Miller, Mike Rohrer, Mike Lucido, Jim Jacobs,
Dave Olson, Lee Tourtelotte, Bill Campbell,



Jim Jacobs had challenged members at the March meeting to a “mouse” contest. Mike Rohrer decided to do a rat.



The meeting featured threading and Steve demonstrated the Baxter threading system



Lee Tourtelotte
& Dave Olson

Area & Regional Meetings & Gatherings (cont'd)

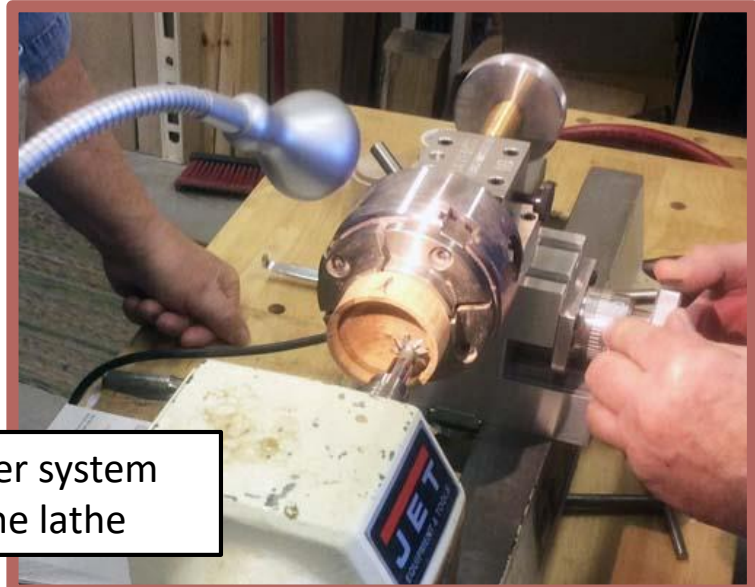
SE Metro



Jim Jacobs checks out the system



16/in threads



Baxter system
on the lathe



Area & Regional Meetings & Gatherings (cont'd)

SE Metro



Bill Campbell
enjoying the
demo



Practicing on PVC pipe

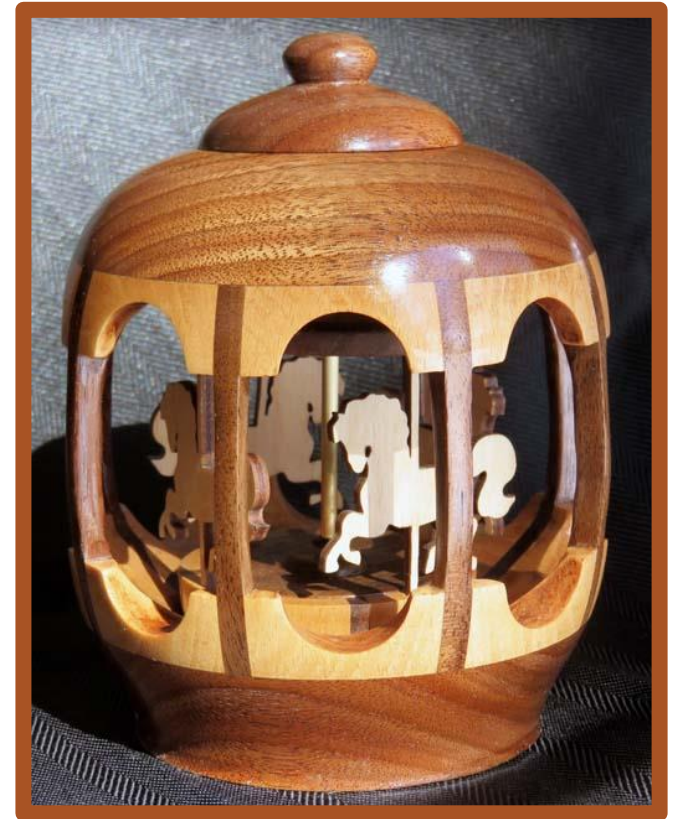


Member Mini-Class May, 2019

Jay Schulz

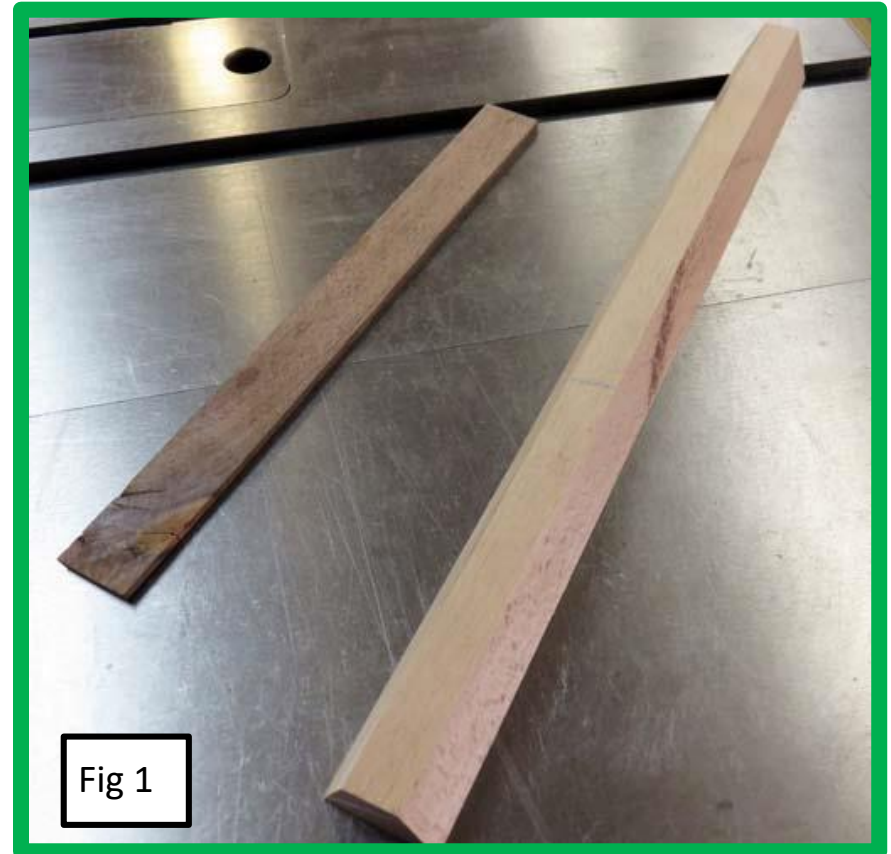
See-Through Lidded Box

Novice to Intermediate Skill Level



Materials

- Wood for segments: This example features 5/4 S2S American Beach (1 1/8" final thickness).
- Rip a 12" piece with opposing 22.5 degree bevels (1 5/8" point to point on the base). (Figure 1)
- (Note 1)



Materials (cont'd)

- Crosscut the beveled stock into eight 1 ¼" segments.
- Bore a 7/8" diameter hole into each segment from the inside (smaller dimension). Leave 1/8" to ¼" of stock remaining to stabilize the ring during glue-up. (Note 2) (Figure 2)
- Use a band saw to bisect each segment piece. Cut perpendicular to the beveled edges (Figure 2)



Materials (cont'd)

- Wood for ribs: This example uses 5/4 black walnut.
 - Rip a 24" length to 1/4" by 1 1/4" (Figure 1)
 - Crosscut into eight 2 3/4" pieces
-
- Wood for top and bottom: This example uses 7/4 black walnut.
 - Use a bandsaw to cut the 7/4 stock into approximately 5" rounds. This should be approximately 1/4" larger than the outer diameter of the segmented blank.
-
- Wood for lid: Your scrap of choice. This example used a 5/4 thick, 2" diameter round scrap (same board as the ribs)
 - Wood glue: Select a glue with long open time such as Titebond III
 - Finishing supplies: Your choice (This example used 4 coats of Minwax wipe-on tung oil.)



Note 1 -

- Calculate project dimensions: diameter, segment angle & length.
- Select your wood(s), determine the approximate project diameter and the number of segments, then determine the segment length either from a 'look-up' table or calculate it using the following formula:
Segment Length = Tangent (segment angle) x ring diameter.
- In the example used for this tutorial, I planned a 4.5" diameter sphere with 8 segments. Therefore, the segment angle = $360 \text{ degrees} / \# \text{ of segments}$ or $360/8 = 45 \text{ degrees}$ and since there are 2 sides to each segment, $45 \text{ degree} / 2 = 22.5 \text{ degrees}$.
- Segment length = $\text{Tangent}(22.5) \times 4.5 \text{ " } = 1.86 \text{ "}$
- In this example each segment is composed of 2 pieces, a $\frac{1}{4} \text{ "}$ (0.25") walnut rib and a 1.6" beech arch. $1.6 \text{ " } + 0.25 \text{ " } = 1.86 \text{ ish "}$



Note 2

- I tried one version of this box without drilling a hole in the segment and after turning the box, prior to sanding, using an oscillating spindle sander to add an arch into each of the 16 segments. (Figure 3) I wouldn't recommend this route as it is time consuming. I also made a version where I drilled all the way through the segment and found that upon glue-up there were distortions that left unwanted gaps so I recommend leaving a little stock in each segment to stiffen the segment up during the glue-up. This excess stock will be turned away in any case.



Fig 3

Equipment

- Table saw (or compound miter saw)
- Bandsaw
- Drill press
- Band clamps (metal hose clamps) adjustable from 4 ½" to 6"

- Bar clamps to clamp the top and bottom to the segmented sub-assembly
- Sandpaper, 100 to 120 grit for glue prep and up to 220 grit for finishing
- Turning tools such as roughing gouge, bowl gouge, hollowing tool(s) (e.g. Hunter Carbides), scrapers and parting tool(s).

- Lathe and other associated toys such as : 4-jaw chuck, Jacobs style chuck, spur drive and live center with cone.
- Forstner style drill bits: ¾" or 7/8" for segments and 1" to 1 ¼" for access for hollowing.
- MOST IMPORTANTLY – Appropriate safety equipment such as face shield, dust collection or mask, etc.



Assembly Process

- Quick sand, scuff, the mating glue surfaces of the segments and ribs with 100 or 120 grit paper to remove the burnish from the saw cuts. A full sheet of sandpaper taped to a flat surface such as your table saw works well. (Figure 2)

- Dry fit the pieces of the segmented portion without glue and adjust the hose clamps to the approximate diameter needed. (Figure 4)

- To assist with fast glue-up some woodworkers recommend either: a) adding a strip of masking tape to both upper and lower rings of the dry fit assembly, then unroll and glue mating surfaces, re-roll and clamp or b) place two strips of masking tape, sticky side up on assembly surface, glue each piece and place onto the tape in sequence, then re-roll and clamp. With either method, work quickly, alternating between segment and rib, apply glue to each mating surface and add to the tape strips.

- Take time to line up the ends flush with the edge of one of the sides of tape so that the tops and bottoms of the final assembly will be nearly flat when dry (this will reduce the amount of sanding to get good mating surface with the box top and bottom in the next assembly step). When all the pieces have a thin coat of glue and are lined up, roll up the assembly into its final shape and add a hose clamp to both upper and lower ring of the assembly. (Note 3)





Fig 4

- Note 3 –
- I found that after the third version of this project that I was fast and confident enough that the masking tape no longer was necessary and actually slowed me down. I also found the use of a foam roll the size of the inside diameter of the segmented assembly, added after the addition of the hose clamps but before tightening the clamps, prevented the ribs from shifting out of place after clamping pressure was added. (right side, Figures 5, 5a)



Fig 5



Fig 5a

- When the segmented assembly has dried, true up the top and bottom of the assembly by sanding (Note 4) until all high and low spots have been removed. A hand plane with sharp blade or disk sander also work well.
- Scuff the mating surfaces of the top and bottom rounds with 120 grit sandpaper. Glue the top and bottom rounds onto the segmented round and let dry. (Figure 6)

Note 4 –

- A sheet of sandpaper taped to a flat surface works well for this.



Fig 6

- When dry, remove from clamps and mount between centers. Rough turn to a round cylinder. Add a tenon (in this case I used a $\frac{1}{4}$: x $2\frac{3}{4}$: diameter tenon) to the bottom end. (Figure 7)
- Remove the cylinder and remount into the 4-jaw chuck in compression mode.



Fig 7

- Using a Jacobs' chuck and a 1 1/4" Forstner-style bit in the live center of the tailstock, bore the access hole for the hollowing. Replace the Jacobs' chuck with a 60 degree conical live center to stabilize while shaping the sphere. Take light cuts, keep your tools sharp, and cut downhill from the center to reduce tear-out especially when exposing the windows of the segments. (Figure 8)



Fig 8

- After you are satisfied with the external shape, reduce the speed and sand the top and bottom of the sphere. Either hand sand the ribs or be very careful in presenting the sandpaper to sand the ribs (fingers trailing not leading against rotation).

- Hollow the project, again making light cuts and less aggressive presentation of tools in order to reduce tear out of the ribs. I found that the use of Hunter carbide tools (C-hook, shoulder, and straight tapered hollowing tools and 2nd Mate carbide chisels) to work well for me. (Note 5) I finished smoothing the inside top shoulders and bottom with negative rake scrapers. Stay away from the ribs with the scrapers and use your eye protection for hollowing. (Figure 9)

- Note 5 –
- Hollowing the sphere is very similar to a tool demonstration on Mike Hunter's web site where he demonstrates his tapered hollowing tools. The demonstration video provides useful tips for tool presentation and use. Website reference is <http://huntertoolsystems.com/hunter-tool-demonstrations-2/>



- Turn a matching lid to fit the box.
- Sand and finish the box and lid.
- Fill with decoration of choice (e.g. cut crystals, amethysts, blown glass, etc. (this example had a turned horse carousel)).

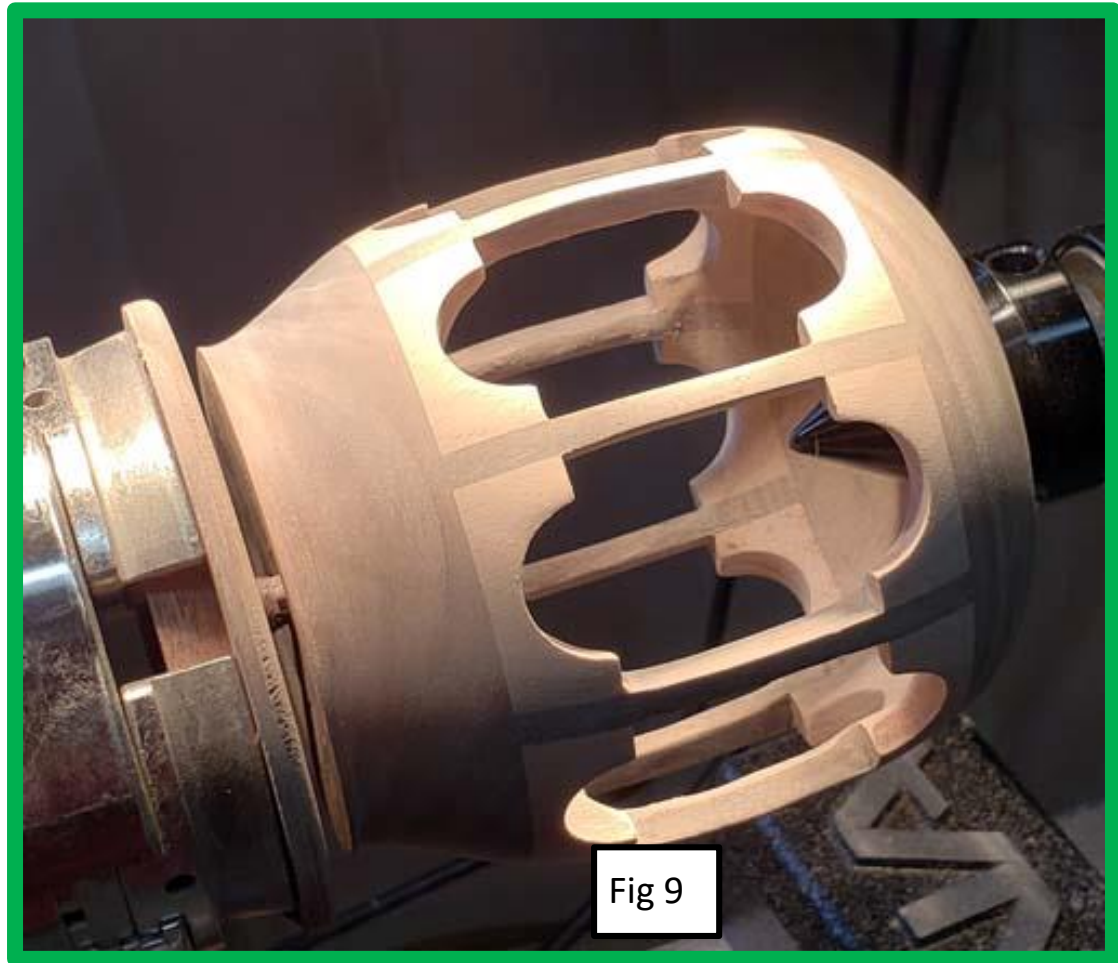
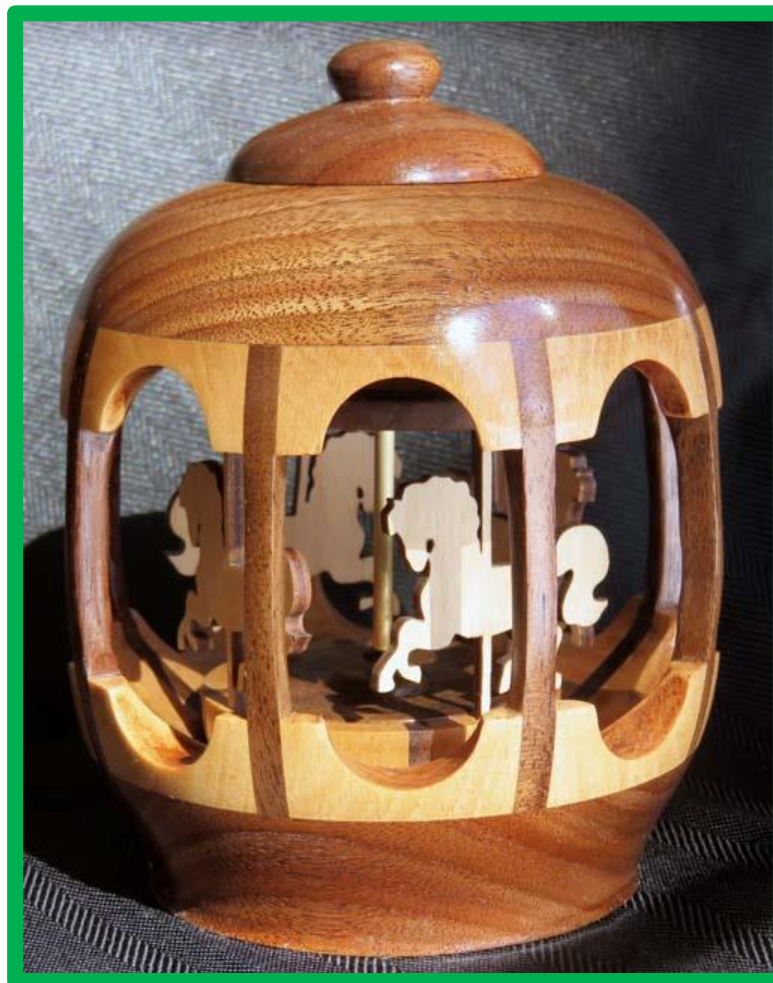


Fig 9

Please feel free to contact me if you have any questions.

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Member Mini-Class

This is a feature I would like to expand and continue in future newsletters. Many of us have something to offer fellow MWA members but do not feel comfortable getting up in front to do a formal demo. I did a Mini-Class on an Emerging Bowl From a Log a few months ago. Danny Judd did an excellent Mini-Class for the December issue. Mike Hunter has solicited several digital demos from demonstrators and I will be using those also but would prefer using ones from our members.

If you will provide text and pictures, I will put it in PowerPoint and PhotoShop the images so we can learn from each other in the newsletter.

Mike Rohrer, Editor



Wooden Laser Cut Name Tags



Wooden laser cut name tags are available from Bill Breckon. If you would like one the cost is \$4.00. You can contact Bill to order yours by calling him at 651-587-8211 or by email at bnlbreckon@aol.com

Editor's Notes

- Please also consider a QUESTION or an ANSWER to the new feature, *ASK A TURNER*
- All of us at our various levels of expertise have come across or developed our own “save time and trouble” methods. Please send me your tips to the new feature, *Tips for Turners*
- Keep bringing your items to the Instant Gallery

I count on the MWA members for comments and suggestions

Mike Rohrer, Editor mdrprof@gmail.com

