

Woodturners of North Texas



35 years



Next Meeting: Thursday, January 25th, 2024
Meeting Start: 6:30 PM. Come early to socialize.

IN-PERSON MEETING!!!

**Handley-Meadowbrook Lions Club
6013 Craig Street Fort Worth, Texas 76112
or Virtual meeting on the Internet.**

Join Zoom Meeting

[https://us02web.zoom.us/j/86406](https://us02web.zoom.us/j/86406929325?pwd=blpwZIBsNzU0RzBCQnkzbnh5TmhfQT09)

[929325?pwd=blpwZIBsNzU0RzBCQnkzbnh5TmhfQT09](https://us02web.zoom.us/j/86406929325?pwd=blpwZIBsNzU0RzBCQnkzbnh5TmhfQT09)

Paul Tiefel

Spider Box



[Click for detail instructions Page: 24](#)

Paul Tiefel

Woodworking seemed a natural activity since my dad was a commercial construction manager and had a home workshop that was always accessible. My youth was spent in a rural area near Oklahoma City where treehouse construction was a frequent pastime for my brother and me. My first experience with woodturning came in middle school shop class when I turned legs for a small table. Of course, it was all scraping with carbon steel tools, but I really enjoyed it.

My carpentry skills developed as I worked on construction jobs for my dad and for a friend who built homes. At age 19, I became a journeyman carpenter in the Oklahoma City Carpenter's Union and worked on several commercial jobs in the area when not in school. I also worked on some home construction and remember on one job setting on a stack of lumber working out the rafter cuts with my slide rule - it just seemed easier than the framing square.

My goal when I started college at Oklahoma University was to become an Architectural Engineer, but I was lured to enroll in Petroleum Engineering by the availability of scholarship funding. I never changed my major and after graduating began a 40+ year career in the Oil and Gas Industry. But I always kept a small woodworking shop even when there was little time to use it.

After moving to North Texas in 2001, I set up a woodworking shop in our three-car garage. I had an old Craftsman lathe but after trying to turn a few projects I realized my skills were severely lacking. I enrolled in a class at Woodcraft taught by John Horn and that became my introduction to the world of modern woodturning. I joined Woodturners of North Texas ("WNT") and began learning as much as I could about tools, equipment, and techniques. I served as president of WNT in 2005 and 2006.

Over the years I have been fortunate to take hands-on classes with a number of master woodturners. While I enjoy all spindle and bowl turning, I am intrigued by the complexity and challenge of multi-axis turning. The idea for the Spider Box project came out of hands-on classes with Michael Hosulak and Jean Francois Escoulen.

The Spider Box entails a variety of woodturning and related skills including spindle and bowl turning, multi-axis turning and an accurate layout. The best beginning for this project is to draw it out full scale including a layout of the legs. This will help visualize the finished product and work through the steps needed to complete it. Not every woodturner would enjoy this kind of project. My hope for the demo is that even those who would never undertake the Spider Box might see a technique or two that would be useful in some other project.

Please note our web site is continuing to be refined. Our library items continue to be uploaded.

Take a look:

[URL: https://wntx.org/](https://wntx.org/)

To get help with your woodturning project, please go to our **Mentor** page at:

<https://wntx.org>

Click Mentor tab for details

Also check out our Facebook page:

<https://www.facebook.com/wntx.org>

The Woodturners of North Texas newsletter is published monthly. Inputs are due to the editor by the tenth of each month for inclusion in that month's newsletter.

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WNT WEB SITE: <http://www.wntx.org/>

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Member-at-Large	Keith Adams	Cell 817-271-1617

Calendar of Events

January 25th Regular Monthly meeting 6:30 PM

Location: **Handley-Meadowbrook Lions Club**

Demonstrator: Paul Tiefel

Subject: Spider Bowl

Meeting Link:

<https://us02web.zoom.us/j/86406929325?pwd=blpwZIBsNzU0RzBCQnkzbnhiTmhFQT09>

February 7th Board of Directors Meeting 6:30 PM

Location: **Remote - Zoom meeting**

Meeting Link:

<https://us02web.zoom.us/j/83748506862?pwd=N3RtVUVzSjk3UGVGczRJVpTL1ZqQT09>

February 3rd Home Open shop

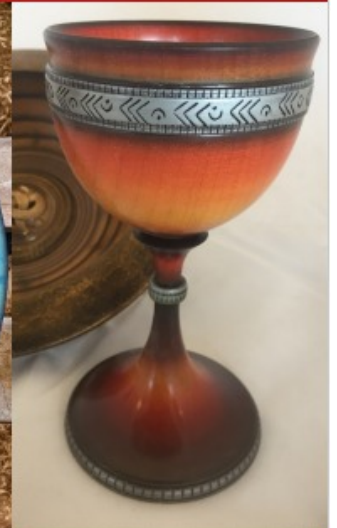
Location: Greg Stehle shop

Details : Greg and Kathy Stehle's Shop

360 Chandler Drive, Aledo, TX 76008



Hands-on Classes with Nick Agar



The Woodturners of North Texas will host Hands-On classes with Nick Agar - April 22nd to 26th, 2024.

Viking Bowl (2-day class) - Monday and Tuesday 4/22 & 4/23 - \$500

Airbrushed Platter (2-day class) - Wednesday and Thursday 4/24 & 4/25 - \$500

Viking Goblet (1-day class) - Friday 4/26 - \$250

All Classes will be held at Greg Stehle's shop in Aledo and include all materials.

Sign up online at WWW.WNTX.ORG

or contact Jeff Allen by email activities@wntx.org or by phone (817)706-4543

... making

President's Notes for January, 2024



Good Shavings

Greetings as we embark on a New Year.

For those of you who don't know me, my woodturning began back in 1964/65 with a Mattel Power Shop, the four in one wood working tool for a kid. I want to say it came with a piece of Bass wood that you could turn beads and coves with. The design of the lathe and the way the tool met the wood lent itself to lots of sanding. Like many taking wood shop in junior high and high school, the lathe sat in the corner where instructors were adamant that it was a dangerous tool to use. Looking back, we were using all kinds of electric saws that are much more dangerous than a lathe.

By the time I began college I had an old lathe I had picked up at a garage sale for \$5 -\$10 with a set of carbon steel turning tools that I did not know how to sharpen. Looking back, I was doing a good job of scraping and honing my sanding skills. While in an Art History class reading the textbook, I came across a wood turner, Bob Stocksedale, who I interviewed for a class assignment and gained inspiration to improve my own wood turning.

If you look up Bob, you will see he is most famous for his bowls that are piece in many prestigious collections.

Speaking of bowls, I want to urge each and everyone to help with our annual donation to the Tarrant Area Food Bank and turn some bowls for the Empty Bowl project. Bob is also using this as the monthly challenge, and for those participating you will receive two tickets for the challenge drawing.

Blake

WNT BEANCOUNTER'S BULLETIN-JANUARY 2024

PERSONAL NOTE:

I want to thank each of you for your texts, emails, and thoughts and prayers during my recent medical emergency and surgery. Your concern and support was greatly appreciated. I am about back to normal and plan to see you at the January meeting.

WNT 2024 MEMBERSHIP DUES WERE DUE JANUARY 1.

About 70 members have prepaid their 2024 dues. Not sure if you have paid your dues? Check at the treasurer's table. Payment with a credit card may be made online on the WNT website. Payment by cash, check, or credit is accepted at the regular meetings.

ANCHORSEAL

Anchorseal is now available at our monthly meetings. Price is still \$15. Please do not bring empty containers. They are not needed at this time.

LACQUER AND SEALER

We have a supply of lacquer and sealer with a breakeven price of \$10.

RESIDENT BEANCOUNTER
JAMES HAYNES, TREASURER

CHALLENGE FOR JANUARY MEETING

The challenge for January will be to turn a bowl for Empty Bowls donation.

Have fun folks!

Bob Nelson

2023 Holiday Banquet



Good food and conversations



Many awesome auction items







Many drawing prizes



Some Kids helped and all got gift bags.







To all Members,

Open Shop- Home

This is a free once-a-quarter opportunity to get together at a member's personal shop to see their shop, exchange stories, possibly observe some skills or techniques and perhaps learn about a new toy (um Tool) or possibly receive some instruction from a club member.

This does not replace the existing quarterly open shop events held at the lion's club, before one of our regular meetings.

**Last quarter we met at 8:00AM on September 30, 2023, at:
Howard Johnson's Shop
1041 Blueberry Court
Crowley, TX 76036**

My thanks to Dewey and the Johnson family for a wonderful day of storytelling showing off his shop and lots of sharing of woodturning tips and tricks! We got a demonstration on how to turn extremely long finials, and how to build a jig to hold finials from wobbling using nails and string/wire.

13 members attended and had a great time. Donuts and coffee were provided. Dewey showed us his shop and the history of its growth from small to multi rooms over time. We talked about working with the HOA. Many unique stories were told. Not all these stories were about woodworking/woodturning as many there were active or retired military & aerospace industry employees and we see the design impact from their experience in the woodturning designs and tooling they produce.

**Next quarter we will meet on February 3, 2024, at:
Greg and Kathy Stehle's Shop
360 Chandler Drive, Aledo, TX 76008**

We typically meet and start at about 10:00 the Stehle's may adjust this and announce it in the meeting on 1/25/24. So, please attend later this week.

Be sure to bring some great stories about your woodturning adventures and possibly your favorite beverage or snack items to share as well. This is an informal meeting with no specific agenda other than a great time to meet with other club members.

Thank you,
Keith Adams
BOD - Member at large
Woodturners of North Texas

September Open Shop at Dewy Johnson's



Librarian Notes
(librarian@WNTX.org)

The WNTX library is available to club members at the library table during club meetings. The library consists of two main resources: 1) an online library of videos including many club demos; and 2) a collection of print books on a wide variety of turning related subjects. The need for having a book collection is under discussion due to the low level of use and the vast amount of digital information available. Club member input is always appreciated.

Lists of the books and videos are on the website as well as a print copy at club meetings.

Book check-out:

1. You may check-out 4 Books for 60 days.
3. Fill out a card with: Name, E-mail Address, Phone Number (for text).

In addition there are many excellent resources on the AAW website. This is a major benefit of becoming a member of AAW.

Important note: Be aware that some turning videos found on random web searches may contain unsafe and potentially dangerous methods. Safety education is a vital part of turning.

Peruse the list of Books and Videos check them out and enjoy.
Any suggestions for new content can be sent to the Librarian who will share your ideas with the Board.

librarian@WNTX.org
Jim Barkelew

Affiliate Membership **FREE** Worldwide

The **free** Affiliate membership offers access to the complete collection of AAW online resources, including the *American Woodturner* journal, for a **full three-months**.

Free: Affiliate Membership

Membership features:

- Online access to *American Woodturner* and Woodturning **FUND**amentals, both current and archived, as well as other online publications.
- Online access to learning portals including Woodturning Fundamentals and Demonstrator Direct (develop a demonstration).
- Online access AAW produced videos and video series.
- Find online projects, articles, and tips using AAW Explore! and a few keywords.
- Locate a wide selection of curated online woodturning videos that have been pre-screened for quality content and safety using Video Source and a few keywords.
- Members-only or discounted access to AAW hosted online and live events, including AAW symposia.
- AAW email newsletters: AAW Tool Box (weekly), Keep Turning with AAW (bimonthly).
- Member galleries for inspiration and ideas: Maker Photo Gallery, AAW Forum Gallery, and more.
- Directories: Members, Chapters, Demonstrators, Schools, Educators, and more.
- Discounts in AAW online store.

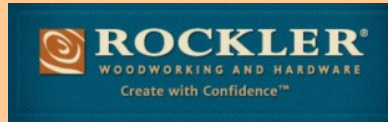
Support these businesses that support us!



10% discount to current Woodturners of North Texas members.

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

13650 TI Blvd.
Dallas, TX 75243
(972) 669-9130



10% discount to current Woodturners of North Texas members.

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

3810 S. Cooper St.
Arlington, TX 76015
(817) 417-0070

Craft Supplies
[woodturnerscatalog.com](http://www.woodturnerscatalog.com)

1-800-551-8876



10% discount to current Woodturners of North Texas members.

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

754 Grapevine Hwy
Hurst, TX 76054
682-334-1025

Penn State Industries

<https://www.pennstateind.com>

1-800-377-7297

The Regular Monthly Meetings are held on the last Thursday of each month at 6:30PM via Zoom.

Board meetings are held on the first Tuesday of each month at 6:30PM on Zoom. All WNT members are invited to attend.

If you would like to attend the Board meeting, email your request to Greg Stehle at president@wntx.org

Anchorseal

The club has purchased a 55-gallon drum of Anchorseal sealant for green wood and it is available to members for \$15.00 per gallon. It is available at the club meetings.

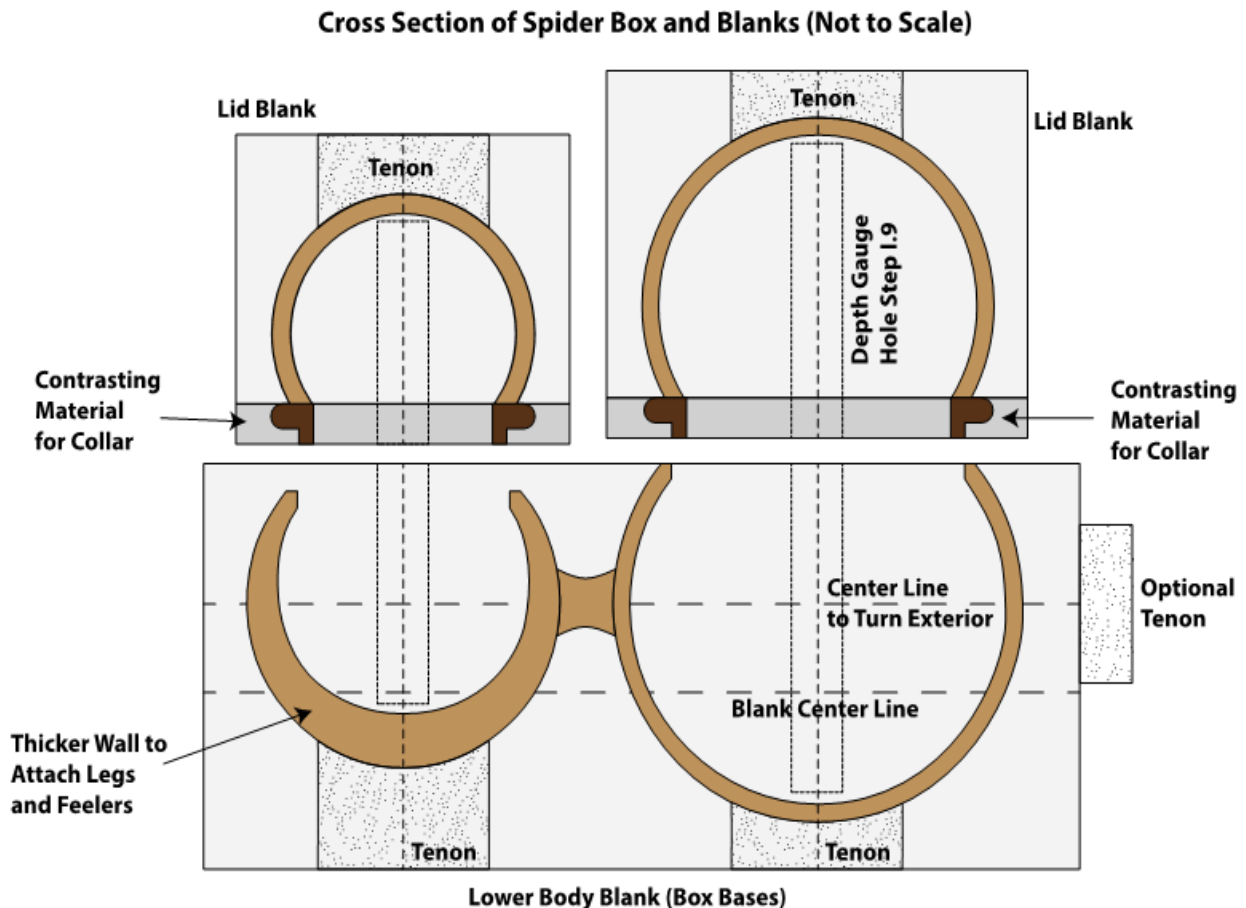
Rules for advertisements: Free ads are available only to WNT members. The deadline for submission or cancellation of an ad is the 10th of the month to be placed in that month's newsletter. Ads will only run for one issue unless notified (email wntnewsletter@gmail.com) by the 10th of the month. Also, if you decide to cancel an ad, please notify the editor (have you spotted the trend yet?) by the 10th of the month.

The Spider Box Steps by Step by Paul Tiefel

The Spider Box is two boxes (hollowed out bases and lids) shaped to emulate elements of a spider. The bodies of most spiders have two lobes: a smaller front lobe (head and thorax) and a larger rear lobe (abdomen). Spiders have eight legs all of which are attached to the front lobe. Usually, each leg has four segments. Also, most spiders have two “feelers” attached to the front of the head.

The Spider Box entails a variety of woodturning and related skills including spindle and bowl turning, hollowing, multi-axis turning and an accurate layout. The best way to start such a project is to draw it out full scale including the layout of the legs. This will help visualize the finished product and work through the steps needed to complete it.

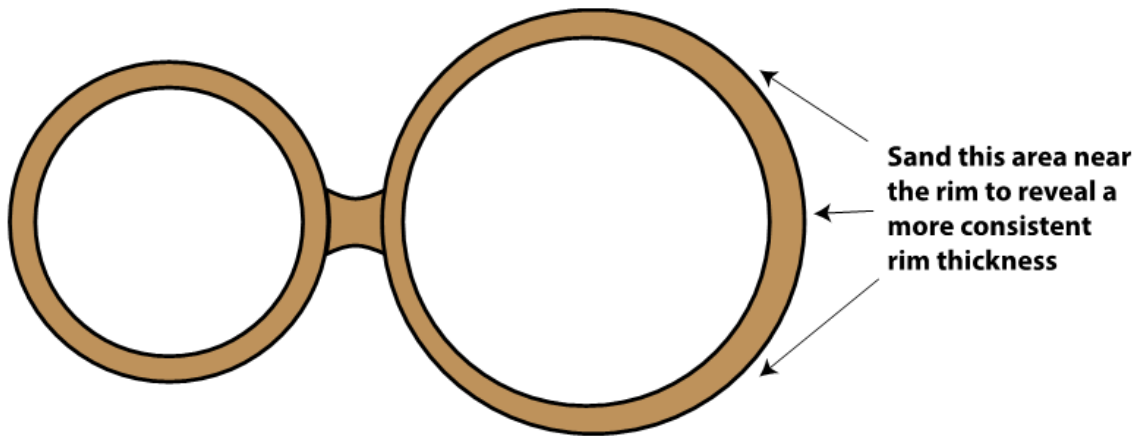
The body of the spider is comprised of three pieces. The lower body is one piece with two partial spherical lobes that are hollowed out to form the bases of the two boxes. Two partial spherical shaped hollowed lids form the upper body. A contrasting material is glued to the bottom of the lids to accent the form. The front lobe of the lower body has a thicker wall to accommodate attachment of the legs and feelers. See the cross section of the body below.



I. The Lower Body (Box Bases or Bottoms):

1. The lower body contains the two bases of the boxes.
2. After drawing the spider body, start with a rectangular blank of wood long enough to turn both lobes of the lower body and have enough waste on each end to remove mounting marks. The cross section of the blank must be large enough to turn both lobes plus a tenon on each of the lobes to hold the blank while hollowing. Depending on the size of the Spider Box, a blank 6"-10" long with a 3"-6" cross section should do.
3. Select which side will be the top of the lower body (the side from which the hollowing will be done). The opposite side will be where the tenons are turned to hold the blank while hollowing.
4. On the ends of the blank, layout the points for a headstock drive center and tailstock live center. This axis forms the "horizontal" centerline of both lower lobes of the body and is used to turn the exterior shape. Note that this axis is not in the center of the blank. This axis must be shifted away from the center of the blank toward the top to allow waste material for tenons. See cross section above.
5. On the top and bottom of the blank, mark the "vertical" axis of each lobe. These axes will be perpendicular to the axis marked in Step 4 above.
6. (Optional) If the blank is long enough, mount the blank on the "horizontal" centerline of the lobes (Step 4 above) and turn a tenon on one end (it does not matter which end) that can be used for the final spindle turning of the body.
7. Mount the blank between centers on the one of the lobes marked in Step 5 above. Turn a tenon to fit your chuck on the bottom side of the blank. Move the blank to the other lobe axis and turn a tenon on the bottom for that lobe. These tenon will be used to hold the blank for hollowing.
8. Install a chuck and mount the blank on one of the tenons made in Step 7 above.
9. Refer to the drawing and determine the depth to which the lobe will be hollowed out. Note that the front lower lobe must have a thicker wall to accommodate drilling holes for attaching the legs and feelers. (See cross section above) Drill a hole in the center of the lobe a little short of the final depth. This step is not necessary but is very helpful while hollowing to prevent going too deep and to eliminate the need to frequently check the depth.
10. The interior of the lobes are partial spheres. A template can be made to guide the hollowing from a piece of flexible plastic like a booklet or report cover that can be found at an office supply store. Cut a template for each lobe based on the drawing.
11. With your favorite bowl turning and/or hollowing tools, hollow out the inside of the lobe in a partial spherical bowl:
 - a. Use the depth hole (Step 9 above) and the template as guides.
 - b. Enlarge the opening to size based on the drawing.
 - c. The blank will be unbalanced so one may only be able to turn at 700-800 RPM.
 - d. Sand the inside of the lobe.
 - e. If one wants to use a friction finish, apply it to the inside of the lobe.
12. Move the blank to the tenon of the other lobe and repeat Steps 9 – 11.

13. The outside of the body can now be turned using the axis described in Step 4 above.
 - a. The exteriors of the two lobes are partial spheres shaped by interrupted spindle turning.
 - b. If the optional tenon described in Step 6 above was turned, mount that in the chuck then install a live center in the tailstock. If such tenon was not turned, use a friction drive ring center in the headstock.
 - c. The outline of the circular rims of the hollowed lobes should be visible while the blank is rotating, and this can serve as a guide to turning the partial spherical shapes. If needed, put something of contrasting color (like cloth or paper) inside the hollowed lobes to increase the visibility of the shape.
 - d. Carefully turn the neck between the two lobes.
 - e. Use a negative rake scraper to smooth out the shape and remove tool marks.
14. Sand and finish the exterior of the body.
 - a. Be careful when sanding around the opening of the hollowed lobes with the lathe rotating. The sandpaper will remove more material on one side due to the interrupted shape. This can be mostly mitigated by also sanding with the lathe in reverse.
 - b. If after turning the exterior of the body the width of the top edge of a lobe is not uniform, this can be corrected by locking the lathe in position and sanding away the excess material to form a consistent rim width. See diagram below.



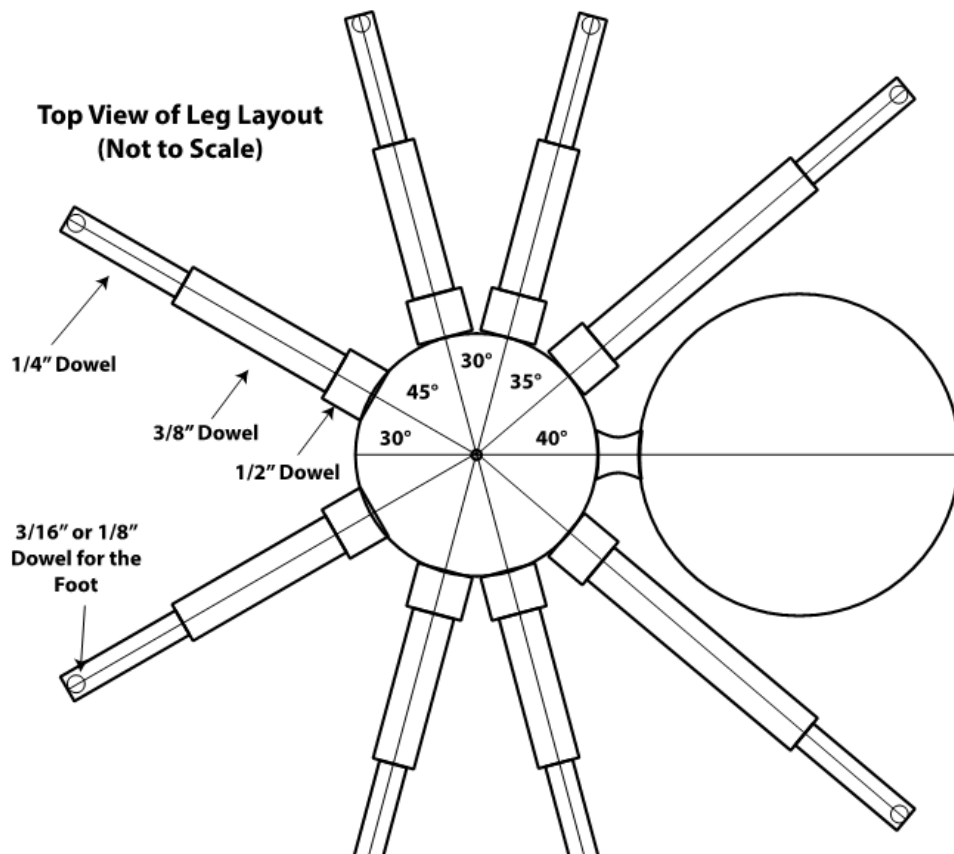
II. The Upper Body (Box Lids):

1. The lids of the boxes form the upper part of the spider body. Like the lower lobes, the interior and exterior of the lids are partial spheres.
2. The lids can be made from the same material as the lower body or a contrasting material.
3. A "collar" of contrasting material is used on the bottom of the lids to accent the form.
4. Using the drawing, cut blanks for the lids with enough waste material for a tenon on the top. Mount each blank between centers and turn a tenon on what will be the top.
5. Mount each blank in the chuck. Round off the sides and face of the bottom side.

6. Glue a layer of contrasting material on the bottom of each blank which will become the "collar".
7. Mount a lid blank in the chuck and turn a spigot in the collar material that will fit inside the box base. The fit of the lid should be slightly loose so that lifting a lid will not also pick up the lower body.
8. Using the techniques described in I. (9-11) above, hollow out the box lid to a partial spherical bowl.
9. Turn the exterior of the lid and collar to a partial sphere.
10. Fit a waste block into the chuck and turn a jam chuck over which the lid will fit. Don't make this fit too tight for fear of splitting the lid. It is better to have a "snug" fit and secure the lid to the jam block with tape than risk splitting the lid.
11. Turn off the tenon and finish turning the partial sphere exterior.
12. Sand and finish the exterior of the lid.
13. Repeat Steps 7-12 above for the second lid.

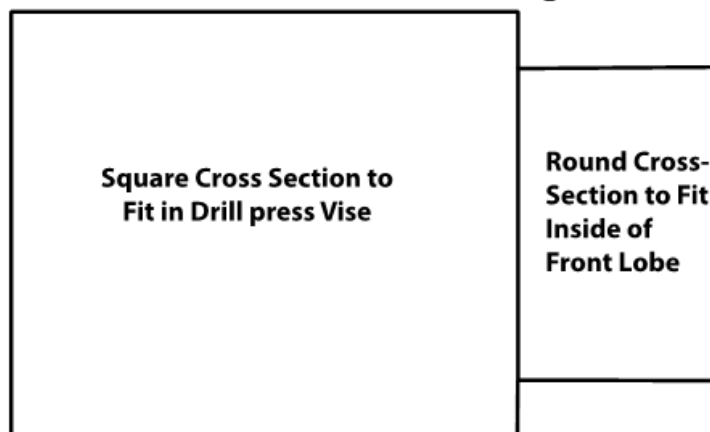
III. The Legs:

1. There are four sections in each of the eight legs for a total of 32 pieces. Don't make this too difficult – use wood dowel rods. A sequence like $\frac{1}{2}$ ", $\frac{3}{8}$ ", $\frac{1}{4}$ ", and $\frac{3}{16}$ " or $\frac{1}{8}$ " should work well. Not all dowels are made the same - make sure the dowels you buy are made to the correct size and are consistent in size.

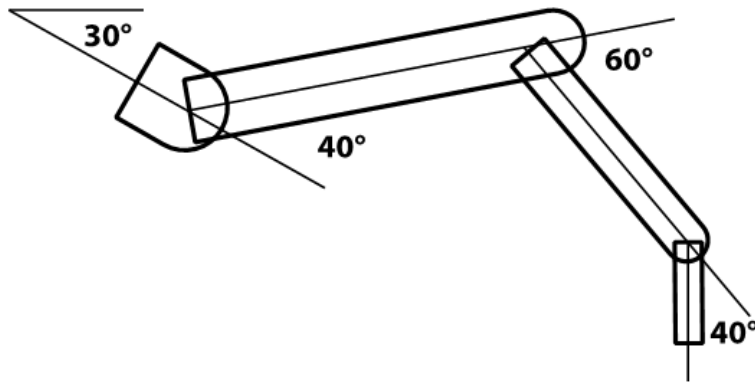


2. The leg segments are held together by drilling a pocket (a hole but not all the way through) in the larger segment near its end. The pocket is sized to fit the next smaller segment and the two are glued together. The largest leg segment (1/2") is glued to the spider body.
3. The most difficult aspect of the legs is drilling the pockets, so this is done first. This is best done using a drill guide and drilling with a drill press.
4. The first step is to drill the pocket holes in the front lobe of the body to attach the legs.
 - a. Start with a rectangular block and mount it in a chuck or between centers.
 - b. Turn a spigot (I don't want to call this a jam chuck) that will fit inside the bowl of the lower front lobe of the body. Only round the spigot leaving much of the block rectangular. This will leave a "square shoulder" to press the work against. (See diagram of spigot below)
 - c. Lightly mark points on the exterior circumference of front lobe where the legs are to be attached according to the drawing.
 - d. Slide the spigot into the bowl and place the rectangular end of the block into a drill press vise.
 - e. Tilt the angle of the block to drill hole at the angle shown in the drawing.
 - f. The spider body will rotate around the spigot allowing holes to be drilled in the same plane of the body.
 - g. Drill eight 1/2" pockets to attach the 1st segment of each leg to the body

Spigot for Mounting Front Lobe to Drill Pockets Holes to Attach Legs

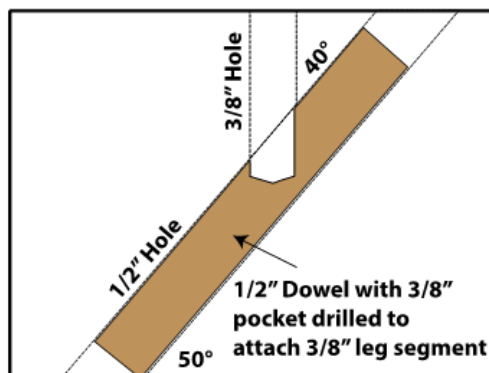


Side View of Leg (Not to Scale)



5. To connect the other leg segments, make a drill guide for the size of the 1st, 2nd and 3rd leg segments. For example, to connect the 1st leg segment (1/2") to the 2nd segment (3/8"):
 - a. Take a small rectangular block and drill a 1/2" hole through the block starting at a long end at an angle determined from the drawing. Drill a 3/8" hole from the top of the block to intersect the center of the 1/2" hole. Split (or partially split) the drill guide with a band saw (or other). (See drawing below)
 - b. Insert a piece of 1/2" dowel with sufficient extra length through the hole in the drill guide.
 - c. Put the drill guide in a vise that has a flat area where the guide block will sit square to the drill bit (like a machinist vise).
 - d. Clamp the vise to help prevent the 1/2" dowel from splitting when drilled.
 - e. Drill a 3/8" hole through the guide block pilot hole partially through the 1/2" dowel.
 - f. Test fit a piece of 3/8" dowel.

3" x 5" Drill Guide Block



-
6. Repeat Step 4 above for the 2nd and 3rd leg segments. The fourth leg segment is not drilled.
 7. If desired, turn a “foot” on the bottom of the 4th leg segments.
 8. The two back legs are the longest and should extend at least past the midpoint of the back lobe of the body.
 9. Turn each leg segment to its correct length according to the drawing. This is much easier done with a set of “long nose” jaws in the chuck.
 - a. Insert a leg segment into the long nose jaws with the pocket hole toward the tailstock.
 - b. Turn the pocket end of the leg segment.
 - c. Sand the leg segment.
 - d. Part off or cut the leg segment to final length.
 10. Dry fit all leg segments and adjust the lengths as needed.
 - a. For the spider to be stable while sitting on a table, it is only necessary to have three properly spaced legs touching.
 - b. It would be extremely difficult to get all eight legs to touch a surface simultaneously.
 - c. Adjust the length of the 4th leg segments as needed for the spider to be stable.
 11. After adjustments are made, glue the leg segments together using “5 Minute Epoxy”.
 - a. This will provide a more flexible bond than CA glue.
 - b. Mix the epoxy in small batches and apply with something like a toothpick.
 - c. Make sure each segment of a leg is aligned properly so the leg will be straight when finished.
 - d. It may take maybe 5-8 batches of epoxy but it is better to mix small batches and take your time to get the assembly right.