THE Woodrack May 2024





LIW BOARD OF DIRECTORS

| President | Mike Daum |
|------------------------------|----------------------|
| Vice President | Corey Tighe |
| Secretary | Michael R. Mittleman |
| Treasurer | Steve Fulgoni |
| Trustees | Robert DeMarco |
| | Ed Piotrowski |
| Membership | Steve Kelman |
| LICFM SIG President | Ben Nawrath |
| Turner's Guild SIG President | Jim Moloney |
| LISA SIG President | Patti Lerner |
| SSOW SIG President | Frank Napoli |

| Newsletter Editor | Daryl Rosenblatt |
|-------------------|----------------------|
| Associate Editor | Michael R. Mittleman |
| Website | Jim Moloney |
| Show Chair | Bob Lerner |
| Raffles | Ed Piotrowski |
| Refreshments | Jean Piotrowski |
| | Charlie Felsen |
| Audio/Video | Rich Riedel |
| | Jim Moloney |
| Programs | Corey Tighe |

THIS MONTH:

Photographer

Joe DiCristina

SECRETARY'S NOTES

LISA

TURNERS' GUILD

LICFM

SSOW (NOT A MISPRINT!)

LOCK, STOCK & DARYL

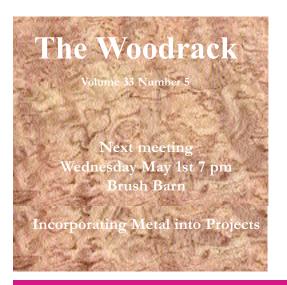
CHIP CARVING WORKSHOP

JUMP TABLES

THE BURN BARREL

MAKING A SIMPLE MALLET

PUZZLE



THE WOODRACK

SECRETARY'S NOTES



MICHAEL MITTLEMAN

LIW President Mike Daum called the April 3rd General Meeting to order at 7:05 PM. The session was in-person at the Brush Barn and live-streamed via Zoom.

ANNOUNCEMENTS Mike D. said he would email volunteers regarding the Canine Companions project about the "jump table" construction dates. The build will occur at Corey Tighe's shop in East Patchogue. Details about a larger second project for Canine Companions will be forthcoming.

Corey Tighe provided details about an upcoming chip carving workshop with Steve Meltzer. For more information, see the LIW website: https://liwoodworkers.org/wp-content/uploads/2024/04/Steve-Meltzer-Chip-Carving-Class-Flyer.pdf.

Mike D. asked members about amending current LIW Bylaws to allow membership for minors aged 14 < 18 years. All present indicated support for the idea. The exact wording for such an amendment and further discussion will occur at the 4/15/2024 board meeting. If the board agrees, the amendment will be brought to the attention of all members for a vote.

SIG President Jim Moloney reported that the Totally Turning 2024 symposium in Saratoga on March 23 – 24 had a good turnout and much better vendor presence than the previous event a year earlier. SIG President Patti Lerner was very impressed by the presentations offered by Matt Monaco – possibly a future LIW speaker? Matt is a *Fine Woodworking Contributor & Ambassador* with over 20 years of experience as a professional turner.

Dues for 2024 need to be submitted now. Dues for 2024 need to be submitted now.

MEMBERSHIP REPORT No report, but several people still have not paid their 2024 dues.

TREASURER'S REPORT No report.

OTHER BUSINESS

LICFM Meeting, Ben Nawrath, SIG Pres., 4/9/2024. Table Leg Shaping – Daryl Rosenblatt, Presenter.

LIWG Meeting, Jim Moloney, SIG Pres., 4/11/2024. Basic Introduction to Turning, Part 2.

LISA Meeting, Patti Lerner, SIG Pres., 4/18/2024. Painting Mother's Day flowers.\

SSOW Meeting, Frank Napoli, SIG Pres., 4/25/2024. Open individual carving. Meeting location: The Woodturning Store

Warehouse: 81A E Jefryn Blvd, Deer Park, NY 11729. Time 11A – 1P.

SHOW AND TELL Dean Dauplaise displayed wood sheaths he made from sycamore for draw knives and chisels.

Ben Nawrath showed clamp stands he had purchased from Woodcraft, which he found helpful.

Steve Eckers – Presented a tray he had made from cherry and other woods over 50 years ago.

RAFFLE Joe Pascucci and Steve Applebaum were winners. Way to go, gents!

Presentation Norm Bald on Joinery

Norm is a long-time LIW member and master joiner. For the past several years, he has displayed various joinery types at LIW Annual Shows.

Norm opened the presentation by recommending Gary Rogowski's book *The Complete Illustrated Guide to Joinery* as his go-to joinery reference. Members may recall that Gary was a LIW speaker a few years ago.



Norm continued by describing several joint types and provided models of each type. Examples included stretchers using dovetails; face frame joints using pocket screws; half-laps; splined miters; dowel joints; mitered half-laps; trestle table stretchers; mortise and tenons; lock miters; and box joints. Norm explained situations that best suited particular joinery types.

Finally, Norm discussed a box joint jig he had made that assured perfect fits.

It was an informative and exciting meeting, and thanks to Norm for making it so.

UPCOMING EVENTS_The next General



Meeting will be held in person at the Brush Barn at 7 PM on May 1, 2024. The meeting topic is Incorporating Metal into Projects.

There will be a Board Meeting on April 15, 2024. The session will start at 7 PM at the Hauppauge Palace Diner, 525 Smithtown Bypass, Hauppauge, NY 11788. Interested LIW members are invited to attend.

The meeting adjourned at 8:45 PM.

LISA



BOB LERNER

President Patti Lerner called the April 18th meeting to order at 7:10 PM.

ANNOUNCEMENTS The 2024 dues are now due. You can print a renewal form from the website, mail it to Steve Kelman, or bring it to a meeting.

Bob Carpentier has arranged for the SIG to display our work at the West Islip Library during July. Setup will be on Monday, 7/1, and the breakdown will be on Wednesday, 7/31. A meet-the-artist reception will be held on 7/27/24 at 3 PM, and refreshments will be served. All pieces will be displayed with a card to include your name, the piece's name, and the type of scrolling. Sawtooth hangers may not fit the library-supplied hanging system. We will use a small piece of wire or paper clip to adapt.

The 2024 show at the COA will be on September 7th and 8th, with setup on September 6th. Please start working on your projects to display.

UPCOMING MEETINGS

May - Steve Gazes will build a whirligig.

June – Bob Carpentier will do a presentation on scroll saw bowls.

Sept - Patti Lerner will do a presentation on painting your projects.

July - Compound cutting (tentative)

Aug – Assemble toys for the show.

110



During this meeting, we painted the flowers that we had made. We had a new record this year. Last year, we made 110 flowers. This year, we have 169 and will have about 205 by the time we make the donations. This will be enough

to present to all the women in two nursing homes. We have selected White Oaks in Woodbury and Daleview in Farmingdale. We had members from all four SIGS contribute flowers and help with painting them. This wonderful charitable tradition started over ten years ago by Ed Piotrowski and will continue indefinitely. A big thank you to Jack Curio for the large amount of scrap wood he collected and provided to us. Thank you to all who participated and for your hard work.





TURNER'S GUILD



BOB LERNER

The April 11th meeting was called to order by the President Jim Moloney at 7:10 PM.

ANNOUNCEMENTS Dues are now due. You can download the renewal form from the website and mail it to Steve Kelman or bring it to a meeting.

The club members get a 10% discount from Penn State Industries. Contact Jean Piotrowski to be added to the list.

SHOW The show dates are Sept 7th and 8th, 2024 with setup on Sept. 6th.

MAY MEETING Jim Moloney will turn a bowl from a log.

CHAPTER CHALLENGE The challenge for April was to make something from a pen blank, but not a pen. The May challenge is to make something relating to spring.

SHOW AND TELL

Bob Lerner – Honey dipper (Chapter Challenge CC)

Patti Lerner – Honey dipper (CC)

Joe Pascucci – Coffee scoop; Pill vial (CC); sycamore bowl

Rob DeMarco - Bowl from a blank he cast with epoxy and pen blanks

Gary Mayhew - Muddler (CC); 2 cored yew bowls with walnut bow tie repairs

Bob Urso – Pepper mill (CC)

Tony Fuoco – Bowl made from butternut?

Mike Josiah - Vase made from a root ball cast in epoxy

Ben Nawrath – Apple sauce grinder made from cherry

DEMO - Part II of Intro to Turning

Joe Pascucci - Joe demonstrated how not to be afraid of the big bad skew chisel.

Use a safety drive to allow wood to slip if you get a catch

Use bottom 1/3 of the cutting edge

Practice peeling cuts

Use a roughing gouge to cut on a skew

Gary Mayhew - Discussed safety gear and assorted accessories

Gary uses a full-face mask/helmet Powered Air Purifying Respirator (PARP). The unit seals around the face. It has a HEPA filter with a fan to supply clean air for breathing. It also has an impact resistant full-face shield.

Chuck reverser can be used to mount a chuck in the tailstock.

Make your own jamb chucks by drilling a hole in the chuck blank with a Forstner bit and tapping to the size for your spindle. Typically, that is 1 1/4" X 8 for full size lathes.

Use lathe chisels where the chisel can be removed from the handle to make sharpening easier. Robust makes a collet system that can be attached to your handle and allows attaching various chisels.

Gary talked about the very large pedestal he turned for a table that Harry is making.

Steve Maiele – Demonstrated a Robert Sorby texturing tool.

THE WOODRACK



Clockwise from top left: Tony Fuoco nd a butternut bowl; Joe Pascucci demonstrating the skew chisel; Steve Maiele using a Sorby detailing tool; Gary Mayhew and his PARP respirator mask.



Patti Lerner with her chapter challenge honey dipper

LICFM



BOB WOOD

The April 9th Cabinet and Furniture Makers meeting started with Ben Nawrath mentioning the show in September.

SHOW AND TELL Bob Urso showed a mahogany cabriolet leg that he made following instructions from a class by Mario Rodriguez. The leg was a good introduction to the evening's presentation.

PRESENTATION Daryl Rosenblatt was the presenter of the evening. He showed us a leg for his new table. Daryl began by showing us a jig he made from a bar clamp and removing the screw ends of the clamps themselves. These ends were then sharpened to act as holding points. The ends of the leg are positioned with holes that align with the sharpened ends of the clamp screws. Daryl recommends, as usual, that you always make extras. The holes in the legs can again be used when attaching the legs to the tabletop.

Daryl free-handed the shape of the leg and used that as a template for the other legs. Daryl then traced the shape onto the rough leg and sawed the rough form on the bandsaw. Daryllrecommended practicing on a bandsaw with poplar to shape the leg; repetition is key to build muscle memory. Once you get the technique it stays with you.. Daryl mentioned that convex shapes are easier to cut than concave because concave arcs have more difficulty with the grain. He said it may be easier by hand, though it would take longer.

The only power tool that Daryl used was a die grinder with a special bit. Clamp the tool onto the bar clamp jig and then pencil the outline of the shape you want for refinement on the leg.

With the die grinder, use a very light touch. Next, Daryl uses Shinto rasps with rough and fine edges. Daryl also recommends using gloves when using these rasps. He incorporates hand-stitched rasps, specifically Liogiers, which guard against tool marks because of the irregular pattern used. Daryl also mentioned that a random orbital sander is good on the concave parts of the leg. Daryl next used some spokeshaves, specifically a Stanley 115 with a Hock blade or a Lie Nielsen block plane on the concave parts. The next step was using sandpaper. He put duct tape on the back and used finer and finer grits. The duct tape extends the sandpaper's life.

Daryl also showed a shop jig made to sharpen the spokeshave on stones. It is relatively simple- a piece of plywood with a slot and two wing nuts. He clamps the blade in the slot to sharpen it on whatever is used for sharpening: Stones, diamond plate, sandpaper on glass or any other surface.

Daryl's presentation was clear and concise, which should encourage some of us to try it.

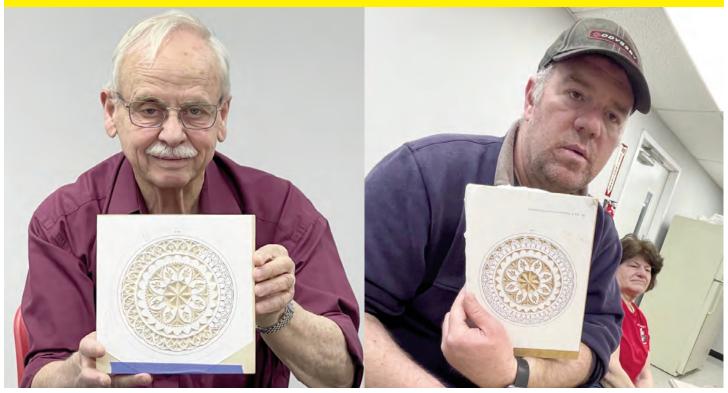
SECRET SOCIETY OF WOODCARVERS



Top: Our SIG is growing

Bottom Left: Alain Tiercy showing his chip carving from the workshop (see later in this issue.

Bottom Right: Tim Dorsey also showing his workshop chip carving.





Top: Frank Napoli working on a new carving

Middle: Another group shot.

Bottom: Amy Napoli starting a relief carving



LOCK, STOCK & DARYL



BEN NAWRATH, MICHAEL
MITTLEMAN & DARYL ROSENBLATT

Contributor: Daryl Rosenblatt

Website: https://www.youtube.com/watch?v=mtIJcaLbR7Q

Presenter/Author: Process Maestro

Title: How Japanese Wooden Ladles are made.

Description: This is a new channel. I became subscriber no. 812, it's only been around since January or so. I wrote about this since it's the one that YouTube and it's Alphabet Meisters' algorithm knew I would like. This one is very well shot, good lighting, a few captions, but you get to see Fumio Yokohoata, someone with 70 years' experience and the strongest hands on Earth work his trade.

Contributor: Mike Mittleman

Website: https://www.youtube.com/watch?v=vzhILT7axcA&list=WL&index=6&t=10s

Presenter/Author: Lee Dumond - Busted Knuckle Woodworks / 9:25

Title: Rockler Doesn't Want You to See This Video

Description: This video is a delightful watch. The narrator (Lee Dumond) injects his zany sense of humor, but he also presents a solution that can make you feel resourceful in your woodworking endeavors. He demonstrates how to use Superstruts as cauls, a cost-effective alternative. Mr. D. suggests purchasing sections of 14 ga. and 10 feet in length. Using just a hacksaw or angle grinder, you can cut the Superstrut to the needed length. Each strut is then fitted with two ½ inch-13 X 5 carriage bolts, two ½ inch flat washers, and two ½ inch-13 wing nuts. Since cauls are often used in pairs, the previous hardware list quantities should be doubled. If your project requires long cauls exceeding 3 - 4 feet in length and/or extra compression, the caul should use 12 ga. Superstrut. Furthermore, instead of wing nuts, you can use standard hex nuts and a wrench to increase the pressure.

Editor's Note: If you've counted and can't find the third review, you haven't gone mad. Ben simply decided that his cruise vacation took priority over keeping all the members happy. It should be noted that the intent of this column was to not only inform our members, but also inspire one or three or more of you to include any videos you've seen that you think might be of interest to us all. Please accept this missive as a request for all of you to add your own thoughts to The Woodrack, and Lock, Stock and Daryl.

WEEKEND WORKSHOP: STEVE MELTZER TEACHES CHIP CARVING







JUMP TABLE PROJECT



MIKE DAUM

Dorian Stern from Canine Companions in Medford contacted our group in February this year through association with LIW member Dr. David Menchell. She requested that we meet to discuss building "jump tables" for the facility, among other projects that could involve the LIW. As we always look for charitable projects for our group, I asked Dean Dauplaise to visit the facility on March 5th.

We were indeed not prepared for what we experienced that afternoon. Greeted by Dorian and Ellen Torop, the program director, we could have easily been mistaken for royalty. I do not recall looking down much, but a red carpet might as well be beneath us. But we were quickly introduced to the true stars, the canines, who demonstrated how impactful their service is to humans in need.

We were then given an introduction and thorough tour of the massive facility, which was once a town hall building. Meeting the furry residents in training along the way, you would swear that they were trained to persuade visitors to accept any request made by Dorian.

We were shown the "jump tables," a simple project yet vital to the animals' training. It turns out that Neal Ferguson, a former LIW member, designed and built the original two tables! We took notes and planned to fabricate three more!

Dorian easily obtained the donated materials, and Corey Tighe graciously offered his shop for the build. In five hours over two evenings, over a dozen LIW members quickly completed the build, each time visited by Dorian for encouragement, gratitude.... and canine-related goodies! Bob and Patti Lerner offered to paint the tables, and they were quickly ready to be delivered!

Looking ahead, our group's involvement in this project will continue to evolve. We are now preparing to design, fabricate, and install a series of desks for the staff. To ensure the success of this next phase, a committee will be established in the coming months to spearhead the project.





THE BURN BARREL

BOB SCHENDORF

"REINVENTING THE WHEEL, OVER AND OVER AND OVER AND OVER..."

Damn social media! Why do I waste my time? With all of those "reels" and videos of scantily clad women dancing, working out, fishing, and in general allowing themselves to be objectified, setting the women's movement back fifty years, why oh why do I waste my time watching woodworking videos?

I get that the tap, tap of a time-lapsed hammer striking something over and over is really cool, but that's about all you'll get out of the average wannabe internet woodworking star's newest video.

I am constantly being reminded of my favorite woodworking quote from our good friend Rich, "If you want thirty years of woodworking experience, then work wood for thirty years" ...or something to that effect. We happened to be sitting at a bar at the time. Maybe it wasn't even Rich who said it! I'm pretty sure it was, anyway!

All of these hooples and "crafty girls" are trying to teach you how to make a construction grade two by four from a home center into a quality piece of lumber and how to straight edge without a jointer ...you'll be fortunate to have any project come out good and still have all ten fingers. (Speaking of missing digits, excepted from my blatantly biased rants are the videos of obvious third-world woodworkers. You know the videos that I am talking about. They usually involve a table saw, real or improvised, with zero safety equipment, not even a fence, and make you cringe with fear. Those guys are doing what they do for survival, literally. And they show a great aptitude for woodworking and make you wonder what they could do in a real shop. It's the first-world commentators that really scare the Hell out of me! "Nice job! I'm going to try that next time I'm out in my shop!")

Don't get me wrong, thirty years ago (and even more recently), I myself was a gold medalist in The Woodworking Boob Olympics. And I freely discuss my ignorance and boobery when I am with fellow woodworkers. While I rarely write about those misadventures, when I do, it is because I need to see the knowing looks on the faces of my friends so that I feel that I am not alone in my misadventures, kind of like an ad hoc support group.

Let me list a few of my biggest grievances (feel free to add some of yours should I miss any);

- 1. You cannot ignore moisture content and wood movement—they're a factor in everyone's shop! Chances are that you will eventually be very disappointed if you take a log off of the firewood pile, send it through your band saw, and start gluing up those boards the same day that they are sawn.
- 2. Epoxy will not prevent moisture from moving through your boards, nor prevent seasonal wood movement (it also tends to yellow over time in my experience). And for the love of Sam and in the name of everything sacred and holy, can we please go back to discussing how to apply an appropriate and quality finish?
- 3. Speaking of firewood, chances are that any "log" that you can get through your bandsaw is probably a branch that is still holding onto natural tensions. Especially if the log is shaped like your elbow and lower arm! Just wait and see what those boards want to do!
- 4. Straight-edging a board. Yes, I've built sleds and have used track saws to achieve a reasonably good straight edge on long boards. But in my opinion, you can't beat a good (free standing) jointer as well as a planer. You get out

THE WOODRACK

what you put in. Now, I know that there are at least two hardcore hand plane guys reading this that mill all of their lumber by hand. And they get nothing but respect from me, and not just because they have forearms like Popeye; no sir, it takes a lot of skill and patience to master the old traditions. I'd also like to take this opportunity to remind them that we do now have electricity... and indoor plumbing.

- 5. Actual building materials. There is nothing at the big home centers that will advance your pursuit of fine wooworking. Nothing, not even screws! Pay for properly cut and dried lumber in the correct species appropriate to your project. (On a side note, please, please, PLEASE don't be the guy that makes cheapo comments on woodworking posts! "Well, if I could spend that much money on tools..." Oh yeah, I'm coming for you in a future column, guy; just wait!) If you got into woodworking to save a couple of bucks on home furnishings, then you may as well go out and buy a boat to help ease your household food budget! ("Gee honey, this flounder tastes great! And it only averages out to about \$156 a pound!")
- 6. Oh, and the latest rage! Making square wood round without using a lathe! It's bloody insane and usually involves a table saw. And round blanks aren't enough for these fools! Now they are rounding and "carving" (hollowing) them out on fancy homemade plywood jigs and fixtures. Scary!

Of course, there are exceptions to every rule. I find that YouTube is actually a pretty good source of information, whether I'm trying something new or reviewing a process to see if my idea is the best one for the situation. And by "pretty good," I mean about fifty percent of their videos are actually helpful. You take what you can get, I guess... I wonder if they have any girls in bikinis on that platform.

Yet another annoying editor's note: I don't have a lathe, so yes, I do things like make handles out of square stock using flatboarding tools, like planes and spokeshaves. Not on a tablesaw, I'm insane but not crazy.

TRAVELS WITH CHARLIE

After years of holding onto my radial arm saw and trying to sell it, I finally gave up and gave it away to a city shop. It's been an anchor for most of us that have gone on to buy other less dangerous tools. There is now a \$50 rebate and recall for safety's sake for certain makes and models so check into it if you don't use it and want to get rid of it, Charlie This one is for Sears http://radialarmsawrecall.com/

Yes, it's another Editor's Note (a new LIW record): Although thelink is dated 2019, Charlie has reported that rebate money is STILL coming, so see if you are eligible for the big bucks.

MAKING A SIMPLE MALLET



MICHAEL R. MITTLEMAN

What woodworker doesn't need a wooden mallet? It is a ubiquitous tool found in shops worldwide. Parts assembly, glue-ups, dovetails, mortises, tenons, and other types of joinery almost can't be done without a solid, dependable mallet.

Have you ever considered crafting your own mallet? It's not just a practical tool but a satisfying project accommodating power and hand tools. The materials you'll need are easily obtainable: hardwood, glue, BBs, or flat washers, and a suitable finish. A detailed plan follows. Let's get started on this rewarding endeavor.

SOME BASICS AND TIPS

Essentially, the mallet can be deconstructed into two parts: the head and the handle. The selected hardwoods often have contrasting colors, such as walnut and maple. This is done solely for aesthetics. Softwoods should not be used because the mallet would self-destruct after pounding on chisels.

BBs or flat washers are used to add weight to the mallet head. A pocket is created in the head's interior, and the washers or BBs, along with ample glue, are added to prevent the metal parts from rattling when the mallet is used.

Choosing the right adhesive is a key step in crafting a durable mallet. A good-quality wood glue such as Titebond Ultimate is recommended. However, wood glues are slippery until they set, which can make assembling and clamping parts challenging. A handy method to combat parts slippage is to use wood glue in combination with a few drops of CA glue and an activator. Use the wood glue in the usual amounts, but add a few drops of CA glue, give a quick spray of activator, and hand-hold the parts in precise placement until the CA sets, usually in less than a minute. Follow up with clamps until the wood glue cures.

Before we start, I have a final suggestion. While this project is simple, it has several steps. Instead of constructing a single mallet, consider making multiples. The extra cost of materials and effort is minimal. The additional mallets can be saved, traded to others, or sold to offset project expenses.

| Wood | Species* | Final Dimensions | | | 1 Mallet | 4 Mallets | |
|--------|----------|------------------|--------|--------|----------|-----------|--|
| | | T | w | L | # Pieces | # Pieces | |
| Head | | | | | | | |
| Sides | Hickory | 3/4" | 3" | 5 1/4" | 2 | 8 | |
| Center | Walnut | 3/4" | 3" | 5 1/4" | 1 | 4 | |
| Shims | Hickory | 3/16" | 3/4" | 3" | 4 | 16 | |
| Handle | Walnut | 1 1/8" | 1 1/8" | 12" | 1 | 4 | |

^{*} Maker's choice.

MATERIALS AND DIMENSIONS OTHER USEFUL ITEMS

- ✓ Flat washers or BBs
- √ Wood Glue
- ✓ CA Glue medium
- ✓ Activator
- √ Finish

STEP 1

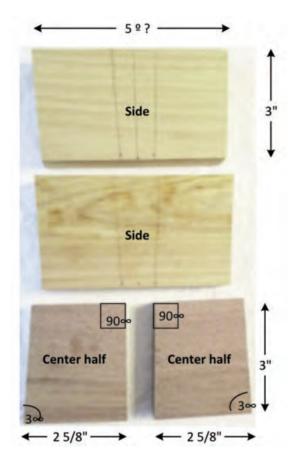
Prepare lumber by assuring it is flat and the edges square. Saw the mallet head pieces to size, i.e., 3" X 5 $\frac{1}{4}$ ". At this point, it is okay if the parts are slightly oversized (1/8"), but undersized won't work.

STEP 2

If you use power tools, set the miter gauge to 3 degrees and cut both ends of the mallet head pieces. Hand tool enthusiasts should use a protractor to determine the 3° angles.

STEP 3

Assuming that the center section is 5 1/4" long, cut it in exactly half. Thus, two pieces, each 3" X 2 5/8", should result.



Mallet Head Components

STEP 4

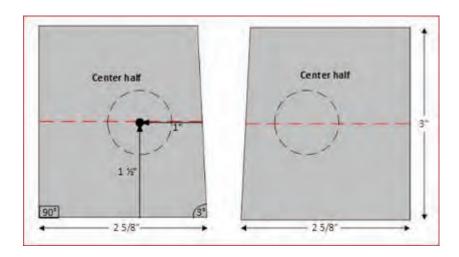
For both side pieces, find the exact center and make a pencil mark. This should be at 2 5/8" along the top edge. Next, mark exactly 7/16" from both sides of the center mark. Using the gluing technique of wood glue first, then a few drops of CA adhesive and activator, carefully position and place one of the walnut center pieces as shown in the photo below. The adhesive will set in under a minute. Repeat the process for the second walnut center piece. Once that has been set, carefully place the second side of the walnut and glue using the wood glue + CA technique. Clamp the assembly and put it aside, allowing sufficient time for the wood glue to cure. If multiple mallets are being made, repeat the previous steps for each.



Note the orientation of the walnut center pieces; do not worry about the overhang.

STEP 5

After the wood glue has been given sufficient time to cure, it is time to add the BBs or flat washers to the mallet head. Measure 1 ½" up from the bottom. This will be exactly one-half the distance between the top and bottom of the glue-up. Then mark and measure 1" from the inner walnut edges. A graphic will help:



Use a 1" Forstner bit and cut the two holes identified in the graphic. Be careful to avoid drilling beyond the thickness of the walnut center pieces. The holes should have a 3/4" depth.



Note the orientation of the walnut center pieces

Back to gluing... Add the BBs or flat washers to the holes. Be careful that the ballast (BBs or washers) does not exceed the hole height. Test this by running the remaining side piece over the filled holes. The side piece should touch the walnut only. Once satisfied with the fit, add wood glue or epoxy to the ballast until filled. This will prevent rattling when the mallet is in use. Then, attach the remaining side with wood glue, CA, and the activator. Clamp the "sandwich."





The "sandwich" of side and center pieces

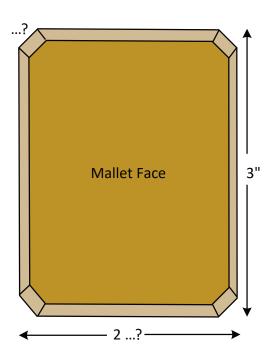
STEP 7

After the wood glue from the previous step has cured, it is time to clean the mallet head. Use a belt sander to smooth the top and bottom edges of the mallet head. A table or miter saw can remove the overhang from the impact surfaces. The sanding and sawing must be done with care. The idea is to smooth the edges but not to reduce the head's dimensions of $2\frac{1}{4}$ " T X 3" W X 5 $\frac{1}{4}$ " L.



The mallet head, after completing Step 7

All outer edges are chamfered to dress up the mallet head and protect it from chipping. A router, hand plane, or table-mounted sander can accomplish this task quickly. The chamfer should be about 1/4" wide. The graphic below depicts the head's face after chamfering. The mallet head is complete except for the final sanding and a few coats of finish.



The mallet face after chamfering

This step prepares the rough-cut handle for shaping and assembly. In this example, the handle is a square walnut tube measuring $1 \frac{1}{8}$ " X $1 \frac{1}{8}$ " X 12". First, draw a line around the handle $3\frac{1}{4}$ " from the top end. The opposite end gets a similar line that is 1" from the bottom. The $3\frac{1}{4}$ " top section (tenon) needs to be trimmed to its final dimensions, $3\frac{1}{4}$ " X $7\frac{1}{8}$ ". These measurements should correspond precisely to the slot at the mallet head's bottom. Verify those dimensions on the mallet head. If they are correct, all is good. If not, you will need to make the necessary adjustments. Cut the tenon's chamfer.



A rough-cut handle top section trimmed to final dimensions of 3/4" X 7/8" X 3 1/4"

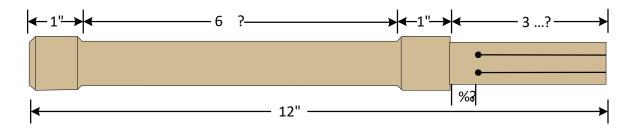
STEP 10

Measure up $\frac{1}{2}$ " from the chamfer and mark a line that circles the handle's tenon. Draw two lines on one of the $\frac{7}{8}$ " wide faces. Each should be perpendicular to the line just drawn and $\frac{1}{4}$ " from each side. The lines should continue to the end of the handle. Drill $\frac{1}{8}$ " holes where these two lines intersect the line $\frac{1}{2}$ " above the chamfer. Carefully saw down these lines from the top to the freshly drilled holes. The photo below depicts the process.



Top handle with completed shim slots

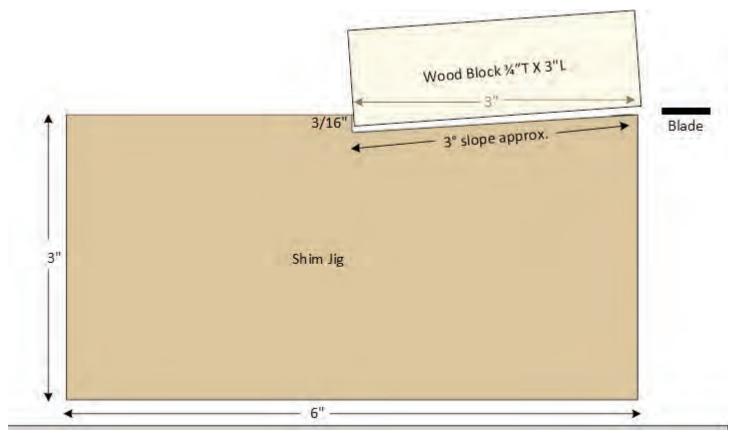
As with the mallet head, the outer edges of the handle are chamfered. This task can be accomplished quickly with a table-mounted router or sander. Note from the graphic below that the butt end of the handle and the 6 ³/₄" sections (between the lines drawn in Step 9) are the only areas for chamfering. The chamfer should be about ¹/₄" wide. The graphic below depicts the handle after chamfering. Handle construction is complete except for the final sanding and a few coats of finish.



Handle measurements - note chamfered sections from Step 11

STEP 12

The "Shim-Maker" jig is courtesy of a Jay Mowder YouTube video*. It is straightforward to make using ½" thick scrap wood and ending with the overall dimensions of ½" T X 3" W X 6" L. While easy to make, uniform, ¾" W X 3" L shims can be rapidly made with the jig and a band saw. This project calls for 16 shims. Typically, the shims are made with the same species of wood used for the mallet head's sides."



Shim-Maker" Jig

THE WOODRACK

After wood glue is applied to the slot (mortise) in the mallet head, insert the handle tenon. The tip of the tenon will protrude slightly from the head's mortise, which will be corrected later. Gently tap in the two middle shims and verify that the mallet head is perpendicular to the handle. Once this is confirmed, tap in the two outer shims and set the mallet aside, allowing sufficient time for the adhesive to cure.



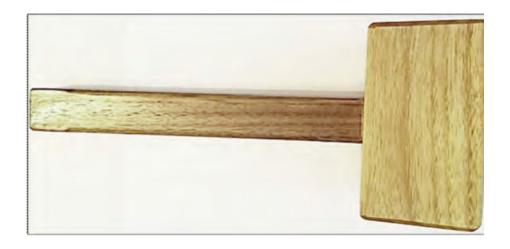
Shims started into the mallet head

STEP 13

Trim the protruding handle tenon and shims from the mallet using a flush-cut saw. A sander will quickly remove any tool marks found on the head.

STEP 14

The final step of the mallet-building process has arrived: final sanding to smooth all surfaces and applying the finish of your choice. I have had good luck using three coats of General Finishes Arm-R-Seal satin. Then, behold your magnificent creation!





A completed mallet

^{*} https://www.youtube.com/watch?v=_6O-ALKHiPw&list=WL&index=5&t=511s).

Mother's Day - Don't Forget!

How to play: Complete the numerical grid so that every row, column, and 3 x 3 box contains all digits from 1 to 9.

| | | | | 2 | 8 | | | |
|---|---|---|---|---|---|---|---|---|
| 7 | 3 | | | 9 | | 6 | | |
| 6 | 5 | 8 | | | | 1 | | |
| 2 | | 5 | | | | | | |
| | 4 | | | 1 | | | 2 | |
| | | | | | 9 | 8 | | 4 |
| | | | | | 3 | 7 | | |
| 5 | | | | | | | | 6 |
| | 6 | | 8 | | 5 | | | |

