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PLUS

NICK OFFERMAN

Our celebrity guest editor
on why old-school
woodworking still matters

PLYWOOD FURNITURE
BUILT TO IMPRESS

15 SHOP HACKS OUR
READERS SWEAR BY

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HOME BAR

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Do you really need RV insurance on your travel trailer?

As RVers, we know the allure of the open road and the freedom it offers. However, with freedom comes responsibility, including the important decision of securing insurance.

What is RV insurance?

RV insurance is designed to cover various types of RVs, including travel trailers, toy haulers, motor homes, fifth wheels, and camper vans. While liability insurance is not required for most travel trailers, having RV coverage could benefit you and your adventures.

How can RV insurance protect you?

- **Protection against accidents:** May provide financial protection for repair costs, medical expenses, and liability in case of an accident.
- **Coverage for theft and vandalism:** Could help with repairs or replace your trailer with less out-of-pocket expenses if it's lost or stolen.
- **Natural disasters and weather events:** May cover the cost of damage from storms, floods, or other natural disasters.

Is your travel trailer covered under your home or auto insurance?

While your home or auto policy can protect your trailer in certain instances, it can also leave you with gaps in your coverage.

For example, your auto policy may only cover your trailer while you're on the road, not if you're parked or at a campsite. The same goes for home insurance—if you're on your home's property it might be covered, but damage from a storm at a campground wouldn't be.

What specialized coverages does Progressive offer?

Progressive offers a variety of specialized coverages that aren't included on a standard auto insurance policy like:

- **Roof Protection Plus[®]:** Covers repairs or replacements for RV roofs, including if the cause is wear and tear.*
- **Pest Damage ProtectionSM:** Covers the cost of repairs from pest infestations.*

Confidence on the road

Having RV insurance gives you confidence you're protected no matter where you roam. From remote national parks to bustling campgrounds, RV insurance ensures you have the support and financial protection you need if something goes wrong.

While insurance for your travel trailer may not be legally required, it's a crucial investment in protecting your RV, finances, and peace of mind.

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*Available for RVs less than 6 years old, and a \$250 deductible applies to any claim.

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WHY MAKING MATTERS

BY NICK OFFERMAN AND LEE BUCHANAN

Hello, curious Handyman and women. Nick and Lee here, offering up for your consideration an agrarian point of view we both grew up with: We believe that good citizens know where our consumables come from—whether it’s food or garments or other retail items or, of course, charming objects built from wood. Further, we believe that we have a responsibility to monitor and ration the conscientious consumption of our planet’s resources. Pretty hilarious take in modern America, right? What a couple of dreamers.

Still, we persevere. The category of making to which we two woodchucks contribute the most is, of course, woodworking. In this time of technological and industrial dominance in the marketplace, when we’re all assured that any minute now we’ll arrive at our lives of leisure, pleasuring ourselves with online diversions while the robots and AI take over all the “drudgery,” we think we know better. Getting our hands dirty is not a thing to avoid; it’s one of the greatest privileges of human life! Like Theodore Roosevelt himself, we too advocate for “the strenuous life, the life of toil and effort,” because we know that nothing great can be achieved without mighty efforts.

In woodworking, every project is a series of puzzlelike problems to be solved, and that requires strength, determination, coordination and cleverness. Making things from wood is a great way to master the tools that should inhabit every home.

Plus, it’s fun as f—! ●



➔ MEET THE GUEST EDITORS

Nick Offerman is an actor, author and woodworker best known for playing Ron Swanson on *Parks and Recreation*. He founded Offerman Woodshop in 2001. Woodworker Lee Buchanan ran the shop for a decade and now makes bespoke furniture as LeeBuild. Together, they wrote *Little Woodchucks*, a guide for young makers.

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FROM TOP: TMB STUDIO, LOAM MARKETING

SACRED STONE OF THE SOUTHWEST IS ON THE BRINK OF EXTINCTION



Centuries ago, Persians, Tibetans and Mayans considered turquoise a gemstone of the heavens, believing the striking blue stones were sacred pieces of sky. Today, the rarest and most valuable turquoise is found in the American Southwest—but the future of the blue beauty is unclear.

On a recent trip to Tucson, we spoke with fourth generation turquoise traders who explained that less than five percent of turquoise mined worldwide can be set into jewelry and only about twenty mines in the Southwest supply gem-quality turquoise. Once a thriving industry, many Southwest mines have run dry and are now closed.

We found a limited supply of turquoise from Arizona and purchased it for our **Sedona Turquoise Collection**. Inspired by the work of those ancient craftsmen and designed to showcase the exceptional blue stone, each stabilized vibrant cabochon features a unique, one-of-a-kind matrix surrounded in Bali metalwork. You could drop over \$1,200 on a turquoise pendant, or you



could secure 26 carats of genuine Arizona turquoise for **just \$99**.

Your satisfaction is 100% guaranteed. If you aren't completely happy with your purchase, send it back within 30 days for a complete refund of the item price.

The supply of Arizona turquoise is limited, don't miss your chance to own the Southwest's brilliant blue treasure. Call today!

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RENOVATING AND RESTORING PARADISE

Follow Bryan and Sarah Baeumler's most ambitious project ever: a boutique Bahamas resort

While on vacation in the Bahamas, veteran contractor Bryan Baeumler and interior designer Sarah Baeumler saw potential in an abandoned property. After falling in love with the community and the area, the couple bought the rundown resort, determined to transform it into a luxurious getaway.

The clubhouse (shown here) went from a weathered eyesore to a warm, welcoming gathering space. "With a property like this, the clubhouse sets the tone for the entire resort," Bryan says. "Our goal was to create something timeless, relaxed and authentic to the island while still being durable enough to survive the climate long-term."

While most homeowners won't be renovating an entire property, Bryan says the same principles apply to any major home project. Many lessons from the clubhouse overhaul are the same ones DIYers can use at home.

A dramatic before and after is exciting, but the real work begins with the bones. "Start with the things you can't see before the things you can," Bryan says. "Water management, structure, electrical, plumbing, HVAC—those systems determine whether a house is safe, efficient and durable."

—KIRSTEN SCHRADER



Watch *Island of Bryan!*

Follow the highs, lows and unexpected lessons of the Baeumlers' journey on *At Home with Family Handyman*, streaming free on Samsung TV Plus, the Roku Channel and more. Visit FamilyHandyman.com/tv for details.

PARADISE AWAITS



Scan the code to escape to the island Fridays at 8 p.m. ET.



*An exceptionally
beautiful watch!*

*Michael M.,
Greenwood Village, CO*



Finally After 20 Years We Are Offering a Limited Release of the “Only Watch”

A few decades ago, when I first began my journey into watchmaking, I asked my top watchmaker to create something truly special just for me—a timepiece that embodied timeless elegance. The result was a masterpiece: a three-eye chronograph with a date display, a sun and moon indicator, a beautifully detailed guilloché dial, and raised Roman numeral hour markers.

When a seasoned watch salesman first saw it, he guessed its value at around \$7,500. Since it was a unique, custom creation, my watchmaker charged me \$1,700—a price I happily paid, especially after hearing that flattering estimate.

Since founding this company, we’ve produced over three million timepieces, but I’ve never offered my personal, one-of-a-kind design—until now. For the first time ever, I’m releasing a limited edition of just 4,999 pieces of this stunning watch. And because I’m feeling generous, I’ve set the price at only \$59.

But once these 4,999 are gone, they’re gone forever.
Don’t miss your chance to own a piece of history.

—Mike Bisceglia, Founder, Stauer

Watch Specifications:

- Precision Movement, Water-resistant to 3 ATM
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What's New



NOW TRENDING

Building Bravely

It's no secret that construction is a male-dominated field; 93.8% of workers are men, according to the Construction Employers Association. But Girls Garage, based in Berkeley, California, is looking to change that. The nonprofit school for girls and gender-expansive youth offers programs in carpentry, welding and more, plus real-world building experience. "As a young woman of color in construction, I longed for a supportive community," says founder Emily Pilloton-Lam. "At Girls Garage, we're changing the authorship of our built environment and making the world more equitable and beautiful for all." —ERICA YOUNG



GEAR UP

YARD WORK MADE EASY

Whether you're pulling stubborn weeds or reviving a dingy deck, these editor-tested picks help lighten the load

TMB STUDIO



Bag Leaves in No Time

**BILLY GOAT LEAF
& LITTER VACUUM**

Fall is right around the corner—and along with crisp air and pumpkin spice comes a yard full of leaves. That's where the Billy Goat shines. This gas-powered, self-propelled, walk-behind leaf vacuum delivers powerful suction to clean up yard debris. Despite weighing 112 lbs., it remains easy to maneuver, and it's loaded with features such as adjustable height settings, an onboard 2-in. chipper and optional add-ons such as a hose kit, a shredding screen and a felt bag for dust control.

To test it, we scattered about 30 gallons of leaves across two 10-by-4-ft. patches of grass—one with dry leaves and one with wet. The Billy Goat aced both tests, sucking up everything in its path in just two passes. Once full, the 40-gallon zipperless leaf bag was easy to remove, though it was a bit unwieldy for one person to empty alone.

Associate product tester Dylan Fischer says, "If you have a big lawn that requires heavy-duty equipment, you'll find a lot to like about Billy Goat's surprisingly maneuverable walk-behind leaf vacuum." Find local dealers at billygoat.com. —MARISA HILLMAN, shopping editor

A Hose That Puts Itself Away

**FLEXI HOSE LIGHTWEIGHT
EXPANDABLE GARDEN HOSE**

As a gardener, I love expandable hoses. They're lightweight, agile and kink-free. But after sending way too many inferior hoses to the landfill, I've become picky.

The Flexi Hose expands up to three times its length and glides easily through tall, dry grass and around rocks—not so for other expandable hoses I've tried. Its four-ply inner tube resists punctures, and the solid brass fitting has a convenient on/off toggle for water control.

Best of all, there's no need to wind it up after use. Instead of sitting heavy on the lawn like a standard hose, the Flexi Hose quickly shrivels into a soft little pile you can fit in a flowerpot. Find it on Amazon in a range of lengths starting at \$40.

—SHERI KAZ, product tester



Garden Kit for First-Timers

GARDENUITY THE HERB GARDEN SUBSCRIPTION

I've always been intimidated by growing plants at home, but Gardenuity's herb subscription box gave me the tools and support I needed to finally get started. The subscription includes three deliveries of seasonal, ready-to-plant herbs, plus everything you need to help them thrive: an easy-to-move planting tote, coir blocks, potting soil, nutrient serum, a dropper, a spray-bottle waterer, support sticks and a protective screen.

The instructions were easy to follow, and planting took only about a half hour. A month in, my herbs are thriving, and I've harvested several for home-cooked meals. Find The Herb Garden Subscription on gardenuity.com for \$168. —EMILY WAY, deputy shopping editor



FROM TOP: VIA FLEXI HOSE, VIA GARDENUITY

**Pull Weeds
Without the Backache**

**FISKARS STAND-UP WEED
PULLER (4-CLAW)**

If you hate bending and kneeling to pull weeds, try the Fiskars Stand-Up Weed Puller. It arrives fully assembled with instructions printed right on it. Just step on the pedal to drive the claws into the ground, tilt to pull the weed, then hit the eject button. Its light yet sturdy aluminum construction, serrated claws and handy eject feature make it stand out from other weeders on the market. The Fiskars Stand-Up Weed Puller (4-Claw) is available for \$49 on Amazon, as well as at Ace Hardware and Home Depot.

—MARY HENN, shopping editor

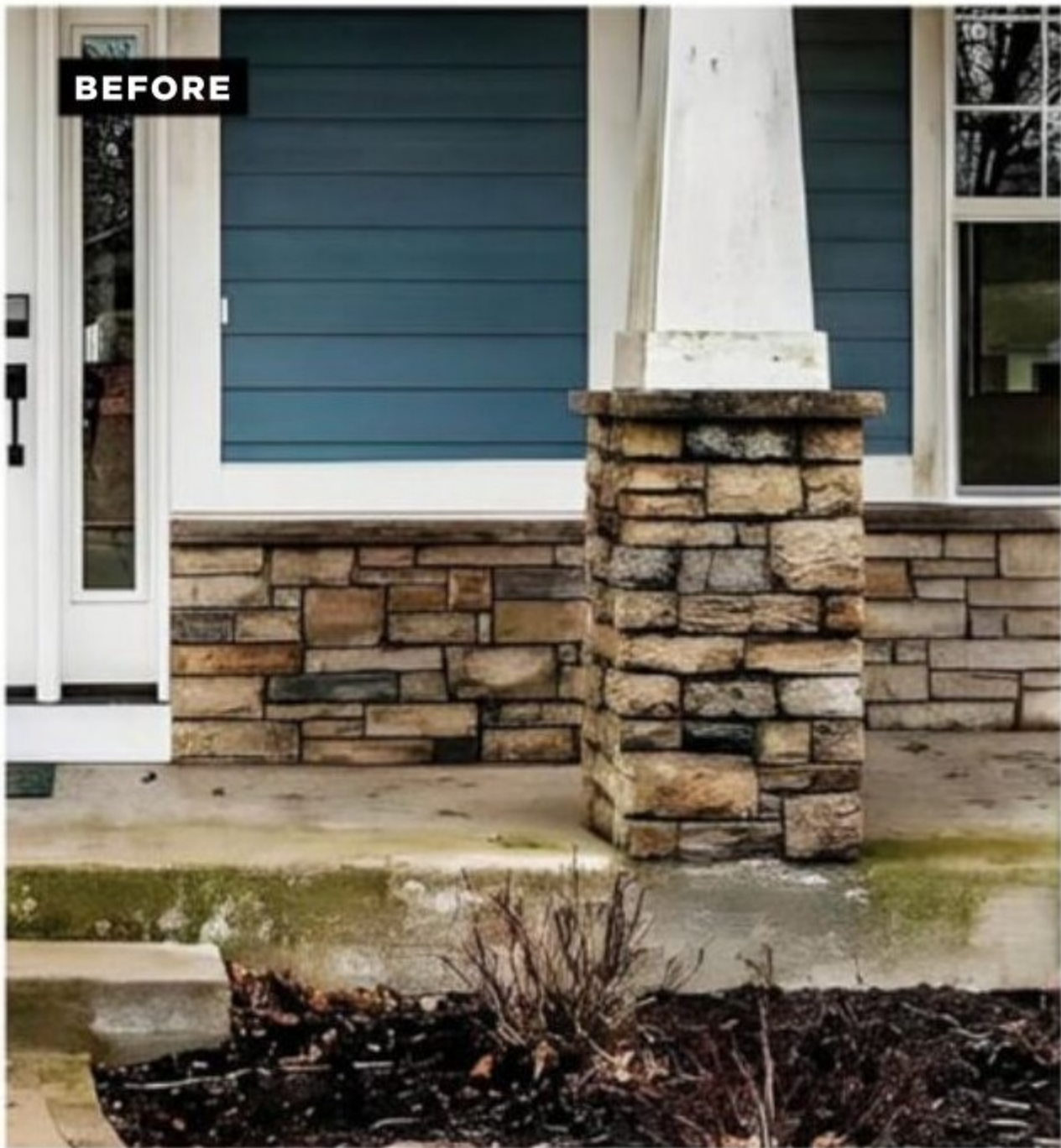


Mildew's Worst Enemy

30 SECONDS OUTDOOR CLEANER CONCENTRATE

This plant- and garden-safe cleaner makes scrubbing even the grimeiest outdoor surfaces a breeze. It's affordable, easy to use and removes mold, mildew, algae and grime from Trex, stucco, concrete sidewalks, tile roofs and more. Just dilute the solution and put on gloves to protect your hands from the bleach. I used it on a pair of colorful plastic-based Adirondack chairs that had grown dim from rain and dust storms. No more than a teaspoon of the stuff and my chairs were like new. To say I was thrilled is an understatement! 30 Seconds Outdoor Cleaner Concentrate is available at Lowe's for \$12; it's also available at Ace Hardware and Walmart.

—BRYCE GRUBER, lifestyle shopping expert ●



FROM TOP: VIA WALMART FOR FISKARS, VIA FISKARS, VIA UBAY FOR 30 SECONDS



DIY MUST-HAVES

The right protective gear doesn't just make projects easier—it also makes them safer.

Whether you're tackling quick fixes or full weekend projects, these essentials are designed to protect and perform when and wherever it counts most.



1



YOUR FIRST LINE OF DEFENSE

From splinters to solvents, these durable, 2-layer Nitrile Gloves are built to handle the toughest projects without slowing you down. Designed for superior grip and puncture resistance, these gloves are as tough as the jobs you take on.

- ✓ 6 mil thick Nitrile, 70% thicker than ordinary Nitrile*
*Compared to typical 3.5mil nitrile gloves
- ✓ 2 layers for added toughness and break and wear indication
- ✓ Micro-Texture throughout glove for grip

2-LAYER
NITRILE GLOVES

2



CLEAN UP THAT KEEPS UP

Big mess or tough cleanup, these heavy-duty workshop wipes are made to scrub and power through without falling apart. Extra-large, thick cloths are saturated with cleansing agents and feature different sides: one for scrubbing & one for a smooth finishing touch.

- ✓ 50% thicker and larger than the competition for a more efficient cleaning solution
*Compared to Grime Boss Heavy Duty Wipes
- ✓ Double cleaning action with tough scrubbing beads to help cut through tough grease, grime, oil, dirt, grime, adhesives, caulk and latex paint

WORKSHOP
WIPES

3



WE'VE GOT YOU COVERED

Tough yet breathable, this disposable coverall keeps both wet and dry particles out. Zip on these coveralls and you'll be covered from the top of your head to the top of your boots. Perfect for spray painting without worrying about ruining your favorite work clothes.

- ✓ Head-to-ankle coverall made of microporous, breathable material
- ✓ Tough, abrasion-resistant fabric breathes for your comfort
- ✓ Designed to provide protection from dry & liquid particles consistent with ASTM 1670 standards

HEAVY DUTY
COVERALLS

4



GLOVES THAT HELP YOU GET A GRIP

Venom Steel Flexible Fit Industrial Latex Gloves were built for the long haul. Whether you're painting ceilings or cleaning gutters, these form-fitting, latex gloves feature textured fingers to help you keep a solid grip on your tools and materials for hours on end.

- ✓ 8 mil thick strong latex glove with form-fitting, flexible latex
- ✓ Textured fingers for solid grip on tools and materials
- ✓ 70% thicker than traditional Latex gloves
*Compared to typical 4.5mil latex gloves

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LATEX GLOVES



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MINI MAKEOVERS

THE CORNER BAR, AT HOME

Experts guide you through designing and stocking your dream bar. Just be warned: Your friends and family might never let you off hosting duty.



DIY IT

Lathe-Turned Tap Handles

Pour a little personality into your setup with this customizable wood-turning project

BY CARMEN DE LA PAZ

MATERIALS

- 3/8" threaded insert for tap handles (brass or silver)
- 2 1/2" x 2 1/2" x 12" cherry
- Assorted sandpaper
- Clean shop rags
- Medium CA glue
- Walnut oil

TOOLS

- Center finder
- Center punch
- Four-jaw chuck
- Mallet
- Measurement gauge/caliper
- Morse taper drill bits or a Jacobs chuck
- Nail set
- Parting tool
- Roughing gouge
- Skew chisel
- Spindle gouge
- Wood-turning lathe

KEGERATORS AND OTHER KEG SYSTEMS are popular fixtures in home bars, and it's easy to see why. Pouring draft beer at home is cost effective, convenient and just plain fun. Whether your setup is in the basement, garage or out on the patio, a handmade tap handle adds custom character to every pour. I'll show you how to turn a simple wood blank into a finished handle. You can keep it basic or take your design to the next level with custom carving, paint and other personal touches.

TMB STUDIO

1/MOUNT THE BLANK

Use a nail set to create a divot at the center point of both ends of a 2 1/2 x 2 1/2 x 12-in. wood blank. The more accurate the location of the center point, the less vibration you'll encounter when you start the lathe to balance the wood.

Use a mallet to seat the spur drive into one center point, making sure all four prongs dig into the wood. Place the end with the spur drive into the headstock, then secure the center point on the other end of the blank into the tail drive. Turn the tail drive tightly to secure the blank.

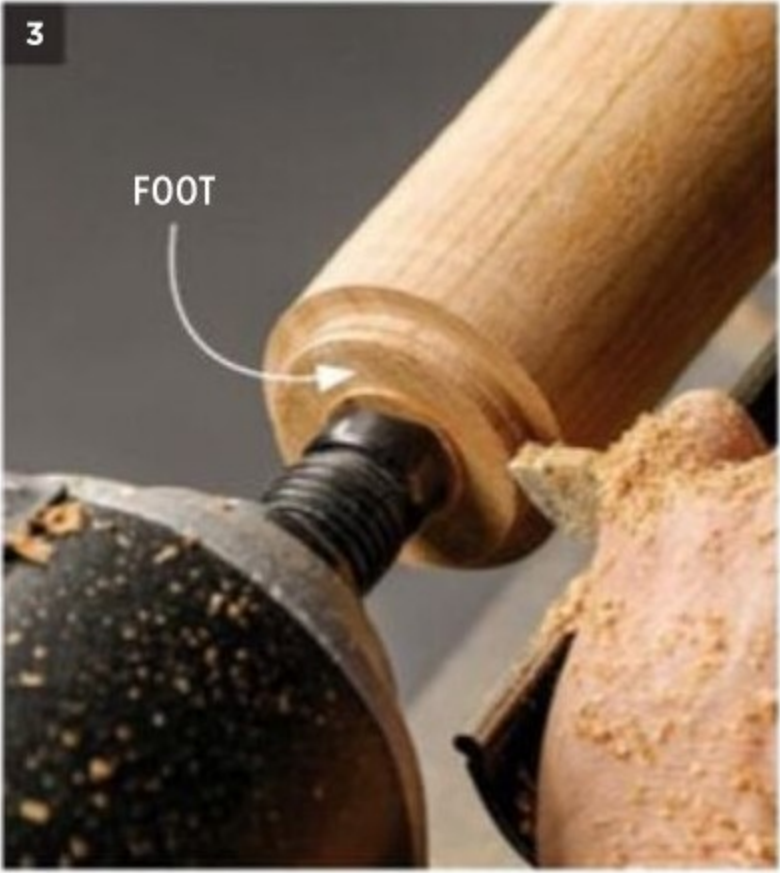
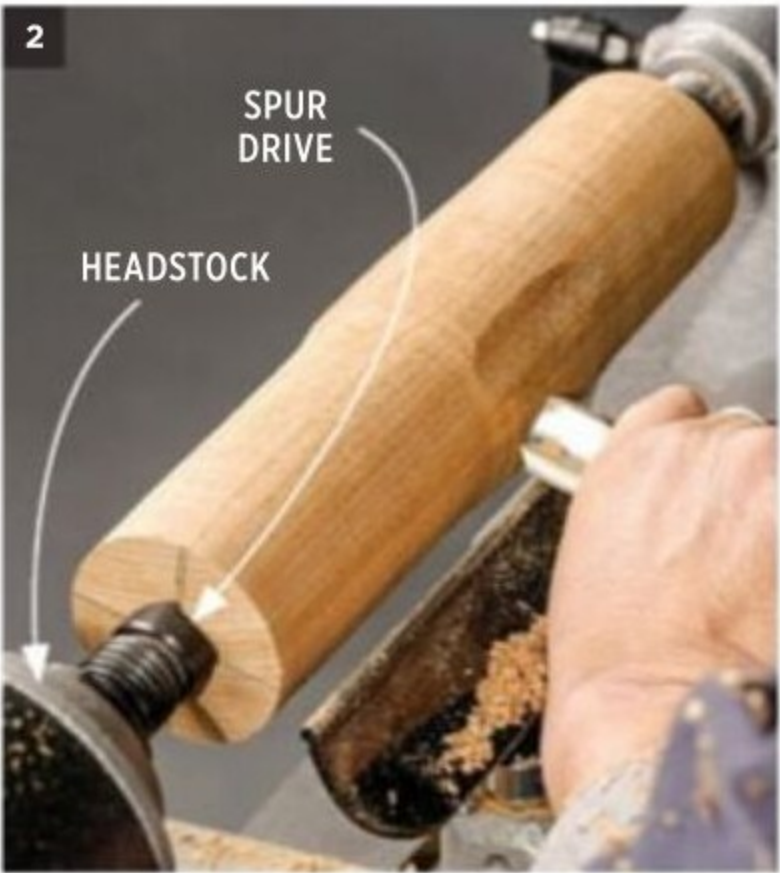
2/BALANCE THE BLANK

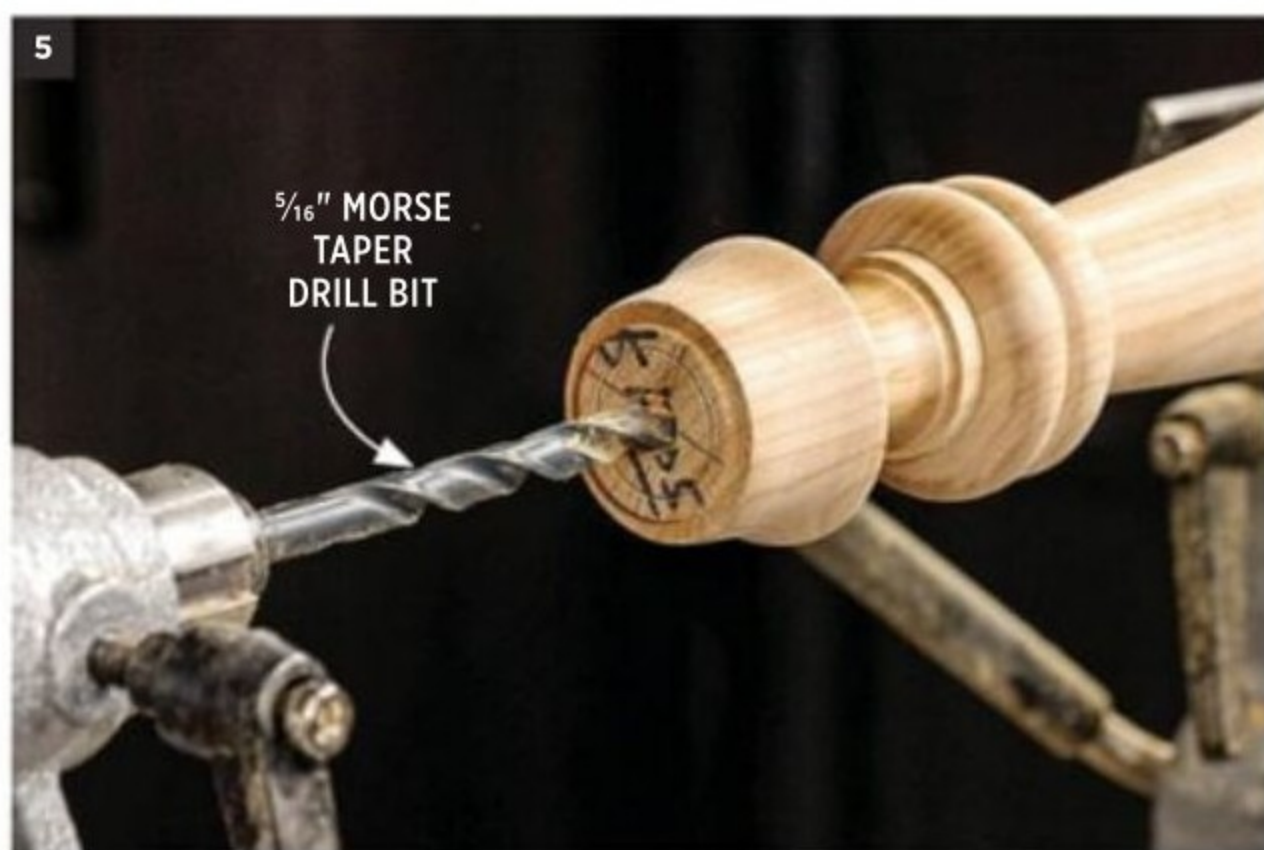
The key to safe wood turning is ensuring that your blank is always well balanced and centered. Use a roughing gouge to work from one end of the blank to the other, slowly removing the sharp, square corners. Once it's balanced, the piece will run smoothly.

3/MOUNT THE BLANK ON THE CHUCK

Cut a foot and a shoulder at the headstock end of the blank for mounting it back on the lathe with a chuck. Your chuck will determine whether your foot should have a dovetail profile or a straight foot. Use a caliper set to the desired chuck size and a parting tool to cut it. Create a dovetail profile by using a skew chisel, resting it on its side on the tool rest.

Take the blank off the lathe and remove the spur drive from the headstock. Attach the chuck to the threaded spindle of the headstock, then insert the footed end of the blank into the chuck. To ensure that





your blank is well centered, secure the tail drive in the divot on the opposite end of the chuck. Advance the tail drive toward the center to secure the blank between the centers (chuck on one end and tail drive on the other). Tighten the chuck end first, then the tail drive end.

4 / TURN THE PROFILE

Use a spindle gouge to shape the now-cylindrical piece of wood to the desired profile. Beads and coves make any piece interesting—they are the secret to an attractive tap handle.

To create interest, combine the beads and coves you make with the spindle gouge with clear starts and stops to the movement of your tap handle. A parting tool makes this easy.

5 / DRILL A HOLE

Leaving the piece secured in the chuck on the headstock side, separate the tail drive. Insert a 5/16-in. drill bit into the tail drive

with either a Jacobs chuck or the appropriate Morse taper drill bit for your lathe. Slowly drill a 1-in.-deep hole into the tail drive end for the threaded tap handle insert, lowering your lathe speed to about 400 rpm when drilling. Mark the depth on the drill bit before drilling, and double-check it with a depth gauge before moving on.

Once the hole has been drilled, remove the drill bit from the tail drive and insert the center. Then, tighten it back into the hole (don't worry, this won't distort or damage the hole you just drilled).

6 / SAND AND SEAL

Starting with 150-grit sandpaper and working consecutively through 220-, 320- and 400-grit, sand the entire handle to smooth out and remove any tool marks. Get into all the beads and coves.

Once you have sanded the handle, apply a walnut oil sealer with a clean shop rag. Run the lathe to heat the oil and help it penetrate the wood.

7 / PART OFF THE TAP HANDLE

Use a spindle gouge to round off the end attached to the chuck, removing material until it is completely cut off from the foot. A parting tool is handy for cutting off the inner 1/4 in. of the blank.

8 / SAND AND FINISH THE TOP

When you remove the tap handle from the chuck, you will find a nub where you have separated it from the foot. This area needs to be sanded and finished to blend in with the rest of the piece. Take your time, run through all the grits of sandpaper and apply the walnut oil finish.

9 / GLUE IN THE HANDLE INSERT

Dry-fit the threaded insert to ensure a good fit. If the threaded insert is loose, add sawdust to the hole before you glue it. Secure the insert with medium-viscosity CA glue. Be sure the insert sits level to the tap handle; otherwise the tap handle will be misaligned when it's connected to the beer tap.

PLAN IT

Blueprint for a Better Bar

Smart design choices turn a basic home bar into a comfortable, inviting place where guests will want to linger

BY CHRIS DEZIEL

Bar Length

Plan for at least 2 ft. of bar length per seat—30 in. may be more comfortable for larger bodies.

Bar Width

A 16-to-20-in.-wide bar top, including any molding, provides ample space for drinks.

Drip Lip

A drip lip on the service side keeps liquids from running off the bar top. It's usually a thin strip of protruding wood.

Drink Rail

Traditional bars often feature a drink rail—a flat area about 4 in. wide on the service side for pouring drinks.

Lower Counter

A lower counter is the perfect place to install a bar sink. It's also just the right place to slice lemons and set bottles.

Back Bar Organization

If you're right-handed, place glassware on the left, ice in the middle and bottles on the right. That way, your dominant hand is handling the bottle.

Toe-Kick

This recessed space helps you stand comfortably behind the bar. It also helps prevent scuffing.

Overhang

The overhang should be at least 8 in. When it comes to knee room, more is better.

Bar Height

Standard bar height is 42 in. If you stick with that height, you'll have more bar stools to choose from.

Footrail

The footrail should be 7 to 9 in. off the floor. Metal railing can be expensive—save by making a simple ledge from wood.

RESURFACE IT

Best Bar Toppers

A bar designer and educator shares her favorite countertop materials for indoor and outdoor setups

BY RACHEL MAIDL

When you're designing a home bar, few decisions will have a bigger impact than the bar top. It's where guests gather and drinks are served, and it's one of the first things your eye will be drawn to when you enter the space.

The right material should suit your style and budget as well as how you plan to use the bar. An outdoor patio bar, for example, calls for different considerations than a basement hangout. Thinking through these factors early on can help you narrow the field.

To help sort through the options, we spoke with Corrinne Walenda of Perlick, a Milwaukee-area supplier of commercial and residential bar and beverage equipment. She shared her takes on four favorite bar top materials.

Porcelain

Though it's a relatively uncommon choice, porcelain is Walenda's top pick for outdoor bar tops. Available in slabs or tiles, it's cheaper and stronger than many stone surfaces. It's also nonporous,

UV resistant and resistant to spills and moisture. Porcelain usually comes in shades of white, which helps the bar surface (and your drinks) stay cool in the sun.

Concrete

Concrete is a popular choice for its modern look, low cost and versatility. It can be stained a variety of colors and is a relatively easy DIY project, says Walenda. Use caution for outdoor bars in regions that experience freezing temperatures—concrete is prone to cracking in the cold, especially if it's improperly mixed or installed. It can also weigh up to 25 lbs. per sq. ft., depending on the mix and the thickness of the bar top.

Wood with Epoxy Resin

A classic pick for good reason, wood topped with epoxy resin is gorgeous, water resistant and durable, says Walenda. Wood surfaces—from budget-friendly butcher block or stained plywood to luxurious species such as teak

or ipe—are easy to cut and customize for a variety of spaces and can accommodate utilities such as taps or a sink. A tabletop epoxy resin seals and protects the surface with a smooth, durable finish that's easy to clean. For outdoor bars, keep in mind that prolonged UV exposure can cause the resin to yellow over time.

Stainless Steel

Walenda is admittedly partial to stainless steel—her father worked with it, and Perlick offers a range of stainless steel bar equipment. She appreciates that it's highly recyclable and looks fantastic, as long as you avoid abrasive sponges and cleaners that can scratch the surface.

As with concrete, climate is important to consider. "If the bar is in your basement, people might lean on it and go, 'Oh geez, your bar top's cold,'" Walenda says. In direct sun, it can get uncomfortably hot, so Walenda suggests pairing outdoor stainless steel bars with an awning.



Porcelain

Concrete

Wood with Epoxy Resin

Stainless Steel

FROM LEFT: WONGSAKORN DULYAVIT/GETTY IMAGES, JUNHAO/GETTY IMAGES, DARYA KOMAROVA/GETTY IMAGES, WESTEND61/GETTY IMAGES



ACCESSORIZE IT

The Mixologist's Toolkit

Ten essentials that unlock hundreds of classic cocktails

BY RACHEL MAIDL

1. SHAKER

Of the three main shaker styles, the cobbler is the easiest for beginners. Its three-piece design includes a built-in strainer. Look for a shaker large enough to mix multiple cocktails at once. Features such as silicone gaskets or threaded seals can reduce leaks and sticking.

2. STRAINER

Boston and French shakers require a separate Hawthorne strainer. The best ones fit both your shaker and pint glasses for double duty. Tight coils catch more ice and other solids.

3. BAR SPOON

A bar spoon blends ingredients smoothly, with less sloshing and fewer spills. Choose one long

enough to easily reach the bottom of your deepest glasses.

4. JIGGER

Most cocktail recipes call for liquid ingredients in ounces, and there's no easier way to measure than with a jigger. Easy-to-read markings are a must, and dishwasher-safe materials make cleanup painless.

5. CHANNEL KNIFE

Invest in a channel knife to create professional-quality citrus garnishes at home. Look for a substantial, easy-to-hold handle. Knives with the blade set in the middle are more accident-proof.

6. TONGS

Short tongs are great for grabbing small garnishes such as cocktail

cherries, olives and citrus wedges. Stainless-steel teeth offer a solid grip and durability.

7. LIQUOR POURER

Pour spirits and syrups accurately and consistently with a pourer. Look for spouts with rubber seals that fit snugly on a variety of bottle openings. Caps that stay on when not in use keep dust and fruit flies at bay.

8. BOTTLE OPENER

No bar setup is complete without options for both beer and wine. A classic wing-style corkscrew is easier to use than a wine key.

9. CITRUS JUICER

Make quick work of juicing fruit with a reamer or juice press. Countertop squeezers are ideal for high volumes, but handheld tools work well for a few lemons or limes.

10. METAL STRAWS

Reusable metal straws are an eco-friendly alternative to plastic that add polish to any drink. An included cleaning brush is a plus. ●



A SLICE OF SHOP LIFE

Actor and woodshop proprietor Nick Offerman shares sawdust-laden musings on craftsmanship, creativity and biting off more than he can chew

BY CHRISTINE CAMPBELL

TO CELEBRATE *Family Handyman's* 75th anniversary, we stopped by our guest editor's California woodshop to talk about how he got into fine woodworking—and what's kept him at it. Who better to mark the occasion than someone who's spent decades honing his craft and, with his latest book *Little Woodchucks*, is passing on that know-how to the next generation?

Offerman shares the projects, makers and shop philosophies that have shaped his life and work, from framing houses and crafting canoes to assembling a team of collaborators who keep him sharp. And as with any DIYer worth their chisel, he still has a healthy list of builds to tackle and skills to hone. For woodchucks and handymen alike, the learning is never done.

Here's to 75 years!

Early in your career, you built scenery for theater productions. How did that come about?

I went to the excellent conservatory at the University of Illinois to study acting, and while waiting for my talent to surface, I learned I could earn wages with my carpentry skills in their very nice scene shop. It was a thrilling epiphany: I could make a living as a builder in the theater while working toward my dream to perform as a dancing jackass.

I had previously worked on building homes and barns with my family and spent a teenage summer framing houses, but to see my first proper woodshop, complete with milling machinery and dust collection and run by a benevolent genius woodworker named Ken Egan, was like a superhero origin story. With a properly equipped, neatly maintained shop and the knowledge of how to use it, I discovered, I could build anything out of wood.

Do any carpentry or woodworking principles carry over to acting?

As in any craft, the fundamentals hold: Practice makes perfect, and you need to keep your chisels/British accents/somersaults honed for best results. But speaking of

"perfection," another lesson that has grown more poignant with age is that mistakes are inevitable, and an appropriate amount of them is actually a sign of a life well lived.

Whether I am trying to fret a handmade ukulele or convincingly play an emotional scene while maintaining eye contact with Michelle Pfeiffer (and eating a chalupa), I strive to put myself in situations with some stakes, to keep me fully engaged and my blood pumping at the risk of catastrophic failure.

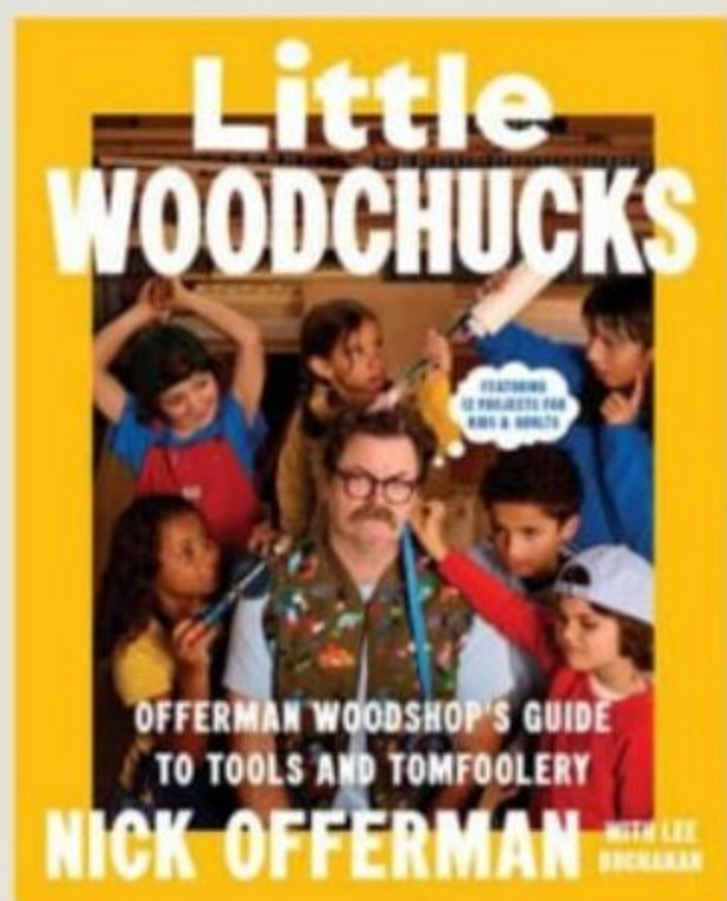
Attacking any artwork or life chapter with the understanding that you're reaching for improvement but hopefully not quite too far out over your skis, I find, applies to the table saw as well as the stage or screen. In the words of the great Wendell Berry, "The mind that is not baffled is not employed. The impeded stream is the one that sings."

In a funny scene from *Parks and Recreation*, your character, Ron Swanson, brushes off a home center employee with a matter-of-fact "I know more than you." Who are some real-life figures you've looked to for mentorship?

This is what I love about real-life community and artistic



Offerman designed two kid-friendly styles of tongs for his latest book, *Little Woodchucks*, including these Cowboy Tongs for builders ages 10 and up.



collaboration—and what I dislike about Google and big-box stores. My dad has been the main source of tool and shop knowledge in my life, but so have several uncles, grandparents and neighbors, along with Mel Phillips, who ran our small-town True Value Hardware in Minooka, Illinois (he was the antithesis of that home center doofus on *Parks*). Mom-and-pop hardware retailers used to have to know the use and application, and subsequent pitfalls, of every last wax ring and wing nut on their shelves, so almost any purchase from them came with a little plumbing or weatherproofing 101, whatever the product.

My shop also thrives on the old adage “Three or four heads are better than one,” and I do my best to curate my choice in collaborators from woodworking disciplines like that of The Krenov School up in Mendocino County. I have had five shopmates who trained there—all women, by the way—because I am smart enough to know who is smarter, and they are the most skilled handcraft woodworkers I have ever known. I surround myself with great woodworkers and then we all pitch ideas for the best way to skin a cat—though I should point out that after some disgruntling from the neighbors, we no longer grill or eat cats at Offerman Woodshop.

What are your earliest memories of building something with your hands? How did your passion for woodworking really take root?

I didn't catch on to fine woodworking until well into my 20s, but I loved carpentry projects as a kid. I built a small barn with my dad, and I loved shingling a couple of new houses that family and neighbors built. My friend Steve and I also built a really crappy treehouse down at our local creek, which cemented for me the lesson that tool skills can make one's life much better without needing things to be so attractive that they can grace the cover of *Popular Treehouse* magazine.

NICKI SEBASTIAN

Our little treehouse was cozy and kept out the rain (did I mention my proclivity for shingling?) but it looked like an absolute butthole.

I never would have lasted in theater school (U of Illinois in “Shampoo-Banana”!) if it hadn’t been for my teenage-acquired carpentry skills, which allowed me to earn wages building scenery whilst hanging about trying to get cast/kissed. I worked with a yeoman’s zeal for about a decade, eventually running my own little shop in Chicago. I suppose I had put in well over my necessary “10,000 hours” to achieve mastery on the table saw, so when I first tried joinery in my late 20s, I was already accidentally well trained in shop acumen. I eagerly leapt into building fine furniture and wooden boats and musical instruments, and the pursuit of those projects as well as maintaining the shop itself remain passions for me to this day.

Your latest book, *Little Woodchucks*, features 12 family-friendly projects for young DIYers. Is there one that you’re especially proud of?

I am so proud of this whole dang book, but this time I will shine my adoring spotlight on the kitchen tongs, of which there are actually two styles you can make. The Toast Tongs are incredibly simple to build but become immediately invaluable for a blister-free breakfast pastry experience. And anyone who loves to cook meat items on a grill or in a pan will understand that the Cowboy Tongs are as powerful as any wizard’s wand when it comes to manipulating your delicious meatstuffs!

Both versions are very open to interpretation—with a little carving or variation in your saw pattern, your tongs can become a perfect outlet for your personal creativity. If I’m going to make anything out of wood or words or performance, I want to imbue it with my own authentic personality, in the hope that people will respond positively to my offering, and maybe even recognize my



Lutherie—the craft of building string instruments such as ukuleles and guitars—has become one of Offerman’s favorite pursuits in the shop.

voice in the piece—or at least my lack of finesse.

In a hyper-digital world, what can young people gain from working with traditional tools and materials?

No matter how fancy our computers and robots and flying vacuum cleaners get, we will always need human ingenuity and affection for the creation of nature to be the foundation of everything we make. We will never escape our reliance on Mother Nature for our virtual existence, even though many people now spend a lot of their lives in a “virtual space,” and perhaps suffer under the misconception that a human community can live a soft and luxurious life

curated by corporate, industrial interests, and that that way of life is remotely sustainable. It is not. We will always rely on those of us who can use our hands and tools and woodchuck ingenuity to keep our homes cozy and safe and efficient, our food production sustainable and healthy, our vehicles and band saws working in peak condition, and our human civilization doing its best to be good ancestors for the generations to come.

Can you share a moment when you felt you had finally mastered a skill? Is “mastery” something every DIYer should strive for?

One of my woodworking heroes, Christian Becksvoort, wrote an

article about how to hide the mistakes in your hand-cut dovetails, and I took that as my permission to finally try my hand at cutting the pins and tails of that particular joinery. I did some absolute beauties and also of course created some carnage, but using his techniques for filling gaps and generally bandaging unsightly wounds, I was able to make a gorgeous blanket chest for my sister that had several dozen dovetails in it, and no visible flaws! And so I learned that, as has been said before me, “mastery” simply means becoming better at hiding your mistakes.

I feel mastery is in the eye of the beholder, within reason. You can leave flaws in your drywall or your porch steps that signify “this was made by a person and not a freakin’ factory or robot” that can appear very charming, or you can tear it down and try again to make it “flawless.” I find that the less I worry about absolute perfection,

the happier and more stress-free my life is.

What’s a technique you are still working to master?

My obsession right now is with string instruments. My ukuleles sound like ukuleles, but I still feel like a beginner when installing frets and tuning knobs. I very

“If I’m going to make anything out of wood or words or performance, I want to imbue it with my own authentic personality.”

much hope to improve my skills in lutherie to the point that I can build an acoustic guitar that will hold its tone and allow me to tour the world and play my songs upon it for an audience. While I know it will never be as good as a Collings

or Santa Cruz or Martin, I hope it will be sweet enough that somebody might give me a Cubano sandwich after the show.

Are there any memorable shop mishaps that still stick with you?

Having made it to the ripe old age of 56 with all 10 fingers intact, I am here to shout that any tool use, inside the shop or garage or out, should begin with safety first. The closest I came to irreparable damage was one very late night when I tried to catch a spinning router that was falling off the bench. I took off half a fingertip, and never worked to that point of exhaustion again. Your eyes, ears, lungs and appendages are all worth way more than any project or deadline or wage. The more you respect your tools (keeping the cutting edges sharp and sliding surfaces waxed) and your workspace (keeping it neat, well organized and clean), the better chance you have of keeping your fingers. ●



Offerman's Berry Stool, made from red eucalyptus and inspired by writer Wendell Berry, appears in his 2016 book *Good Clean Fun*.



OFFERMAN WOODSHOP



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PLYWOOD, UNLEASHED

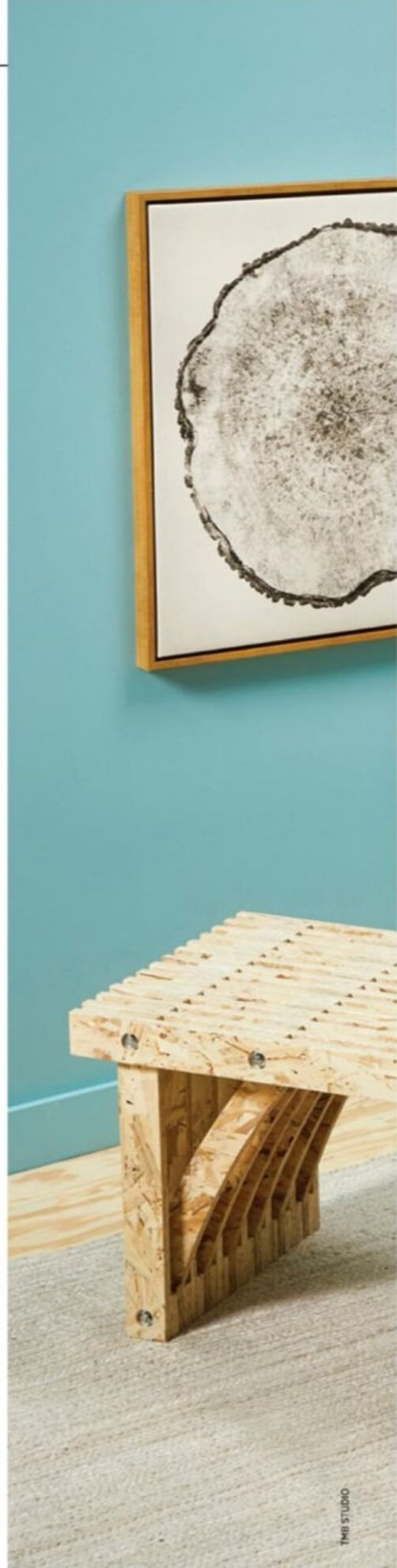
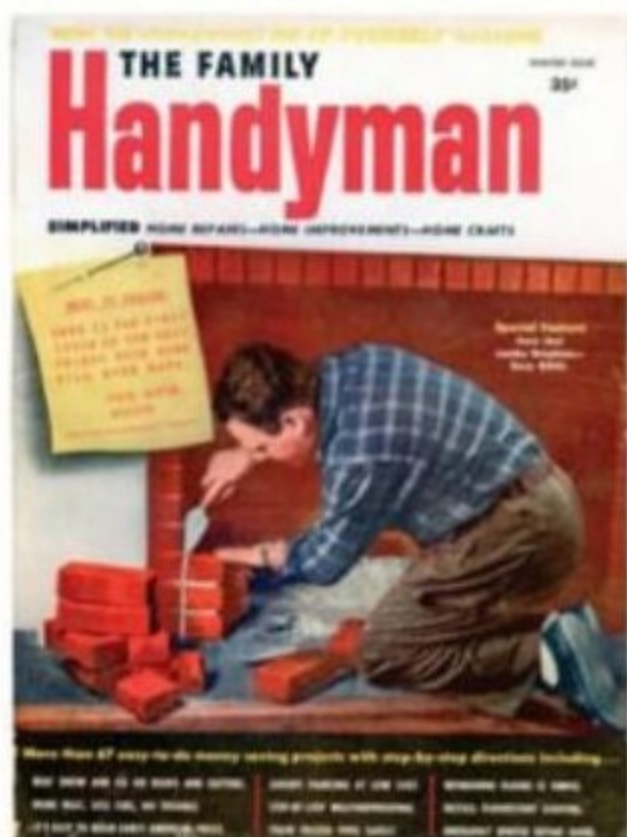
Inspired by our first issue, we challenged our editors and readers alike to make something amazing from this timeless staple

BY CHRISTINE CAMPBELL

When we published our first issue in 1951, a postwar suburban boom was reshaping American homeownership. Home centers as we know them didn't exist, online tutorials and home improvement networks were still decades away, and the very idea of a DIY magazine was new. As our first editor, Paul de Fur, wrote in his inaugural letter to readers, "Here, for the first time, is a magazine devoted exclusively to do-it-yourself home repair, maintenance and improvement."

Seventy-five years later, a lot has changed. Materials

cost more, tools are smarter, houses are larger and inspiration is constantly at our fingertips. But savvy homeowners still turn to DIY to save money, learn new skills, become more self-sufficient and enjoy the satisfaction of building or fixing something themselves. They still need the same advice that filled



TMIS STUDIO



One Sheet, Three Ways

As part of our One-Sheet Plywood Challenge, three editors each set out to turn a single sheet into a bold build, creating this coffee table, chair and floor lamp. Turn the page to see how they did it.

Figure A
Console Cutting Plan

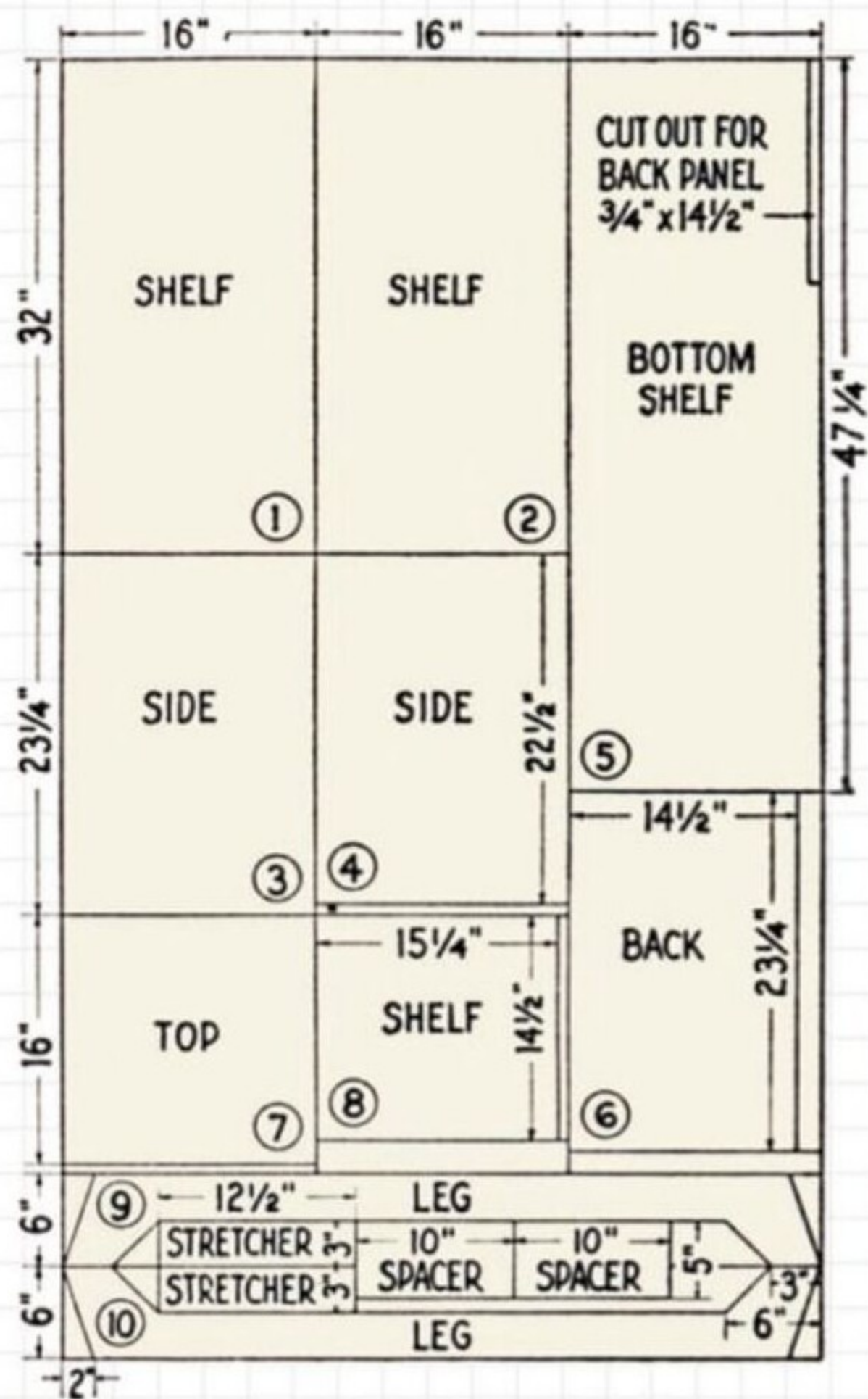
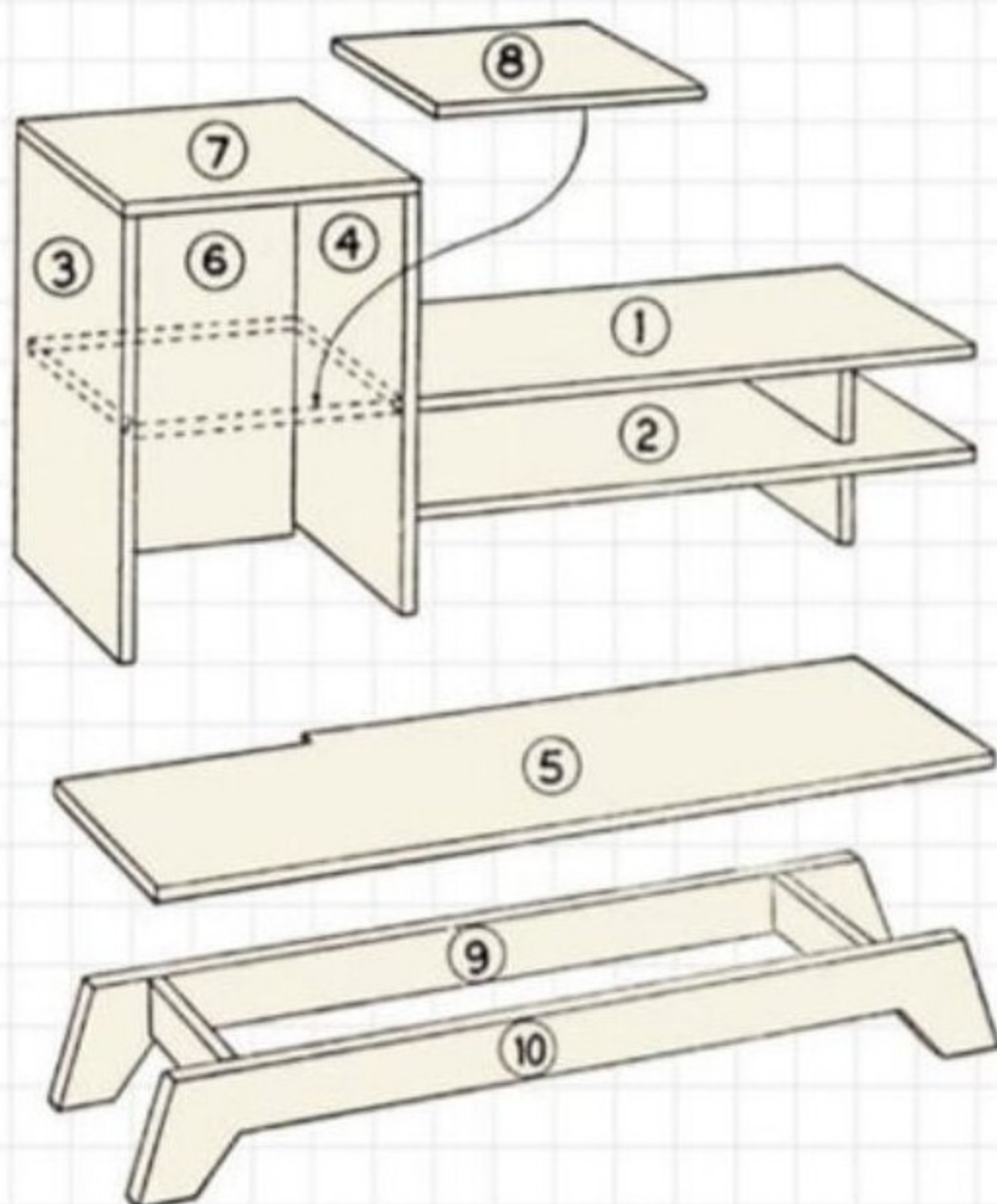


Figure B
Console Assembly



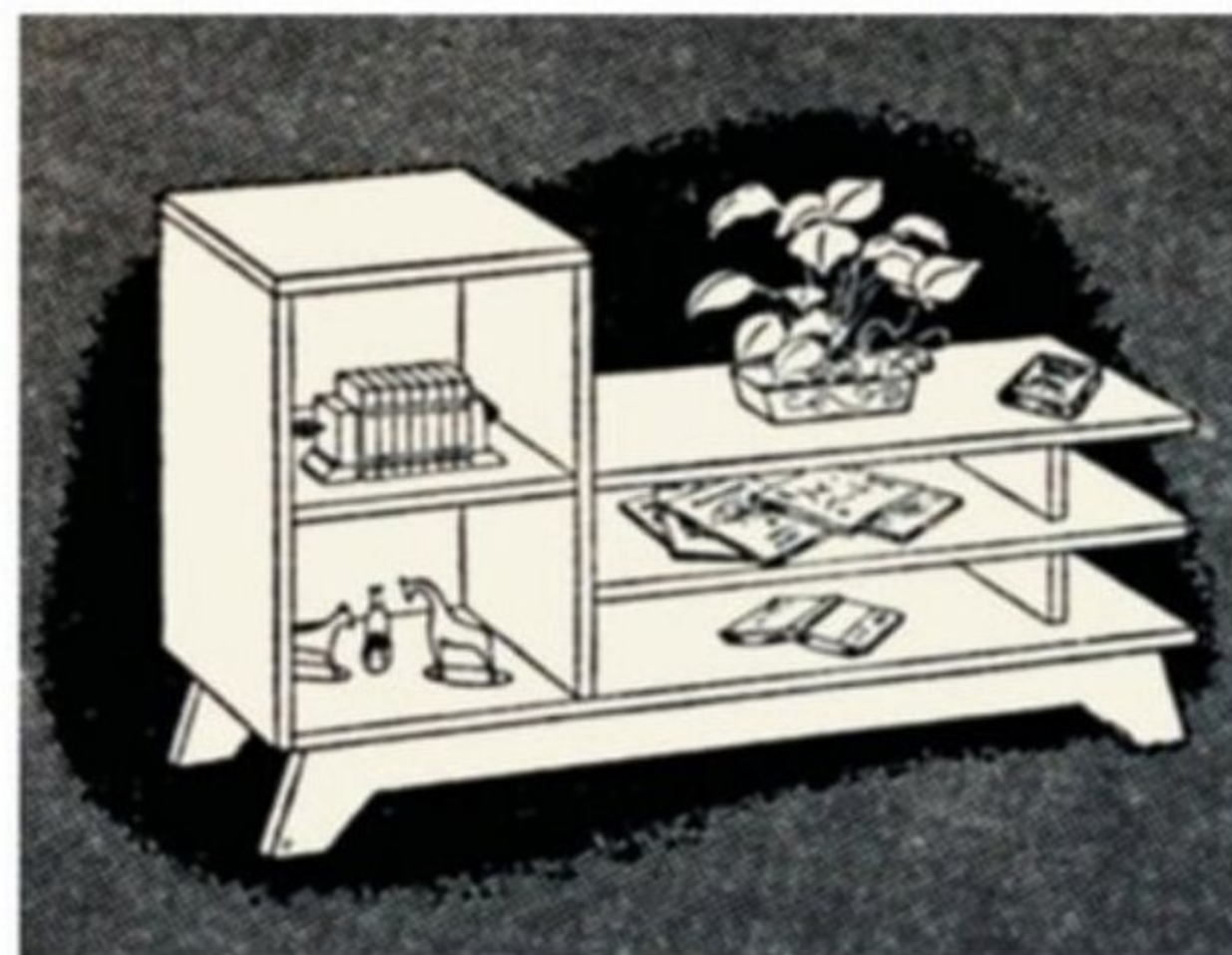
Family Handyman's early pages, from plumbing tips to tool recommendations and rewarding weekend builds.

One project from that first issue still feels surprisingly modern: a compact storage console built from a single sheet of plywood. It checked all the boxes of a great DIY shop project: affordable materials, manageable scope, practical function and a finished piece you could feel proud of. The single-sheet constraint also encouraged the kind of creative problem-solving that builds lifelong shop skills. That console got us thinking: What could today's builders create under the same conditions? So, in celebration of our 75th anniversary, we issued the One-Sheet Plywood Challenge to our editors and our audience.

Plywood has stayed popular among DIYers for good reason. Made by layering thin sheets of wood veneer with alternating grain directions, it's strong, stable and resistant to warping, shrinking and splitting. It holds screws well, comes in a wide range of thicknesses and grades, and is available at virtually every home center. A standard 4 x 8-ft. sheet can become furniture, shelving, cabinetry, decor or countless other projects. That versatility made plywood a DIY staple in the '50s, and it's why we think it still deserves a place in the shop spotlight today.

Getting the most out of a single sheet starts with careful planning. Sketch your design on graph paper, or use a 3D modeling program such as SketchUp or a cut-optimizer app to nest pieces efficiently. When you lay out cuts, you have to account for the blade kerf—the roughly 1/8 in. of material the saw blade removes. Cut the largest pieces first, and properly support the sheet while you cut to prevent flexing, binding and splintering. If you need a thicker or stronger panel, layer and glue portions of the sheet together.

Don't toss offcuts, either. Even small scraps find new life as edge banding, cleats, shims, push sticks, garden-bed edging and drawer dividers. One sheet goes a lot further than you think—here's the proof!



From the archives: the original plywood console project that inspired our One-Sheet Plywood Challenge 75 years later.

OSB Coffee Table

A single sheet and a day in the shop are all it takes to create a functional design from humble materials

BY ETHAN O'DONNELL



A FEW YEARS BACK, I got really into chess—like, embarrassingly into it. One day I was in my shop, having just wrapped up a game on my phone, when I decided to build my own chessboard. I scanned the lumber rack, and all I had to work with was a chunk of MDF and a scrap of OSB from a packing crate. So I went for it. Once I had everything sanded and lacquered, I couldn't believe how beautiful the OSB looked.

That memory stuck with me. For *Family Handyman's* One-Sheet Plywood Challenge, I built a coffee table from a single \$22 sheet of $\frac{3}{4}$ -in. OSB, and I was even happier with the results. I chose OSB over plywood for two reasons: It's cheap, and I love how those chips look once the finish goes on. That said, plywood or MDF work just as well—half the fun is working with what you've got. Here's how to make it.

1 / TRIM THE TOP OF THE SHEET

Use a track saw to trim off the top $20\frac{3}{4}$ in. from a 4 x 8-ft. OSB sheet. Set it aside.

2 / RIP STRIPS

Rip sixteen $2\frac{1}{2}$ -in.-wide strips from the remaining large piece of OSB. To remove the painted factory edge or tongue-and-groove, cut the first strip slightly wider, then cut it down to $2\frac{1}{2}$ in.

3 / CUT THE STRIPS

On the miter saw, make one cut on each of 14 strips to separate the

legs (B) from the top pieces (C), following the dimensions specified in the cutting list (see page 32). To make the most efficient use of my sheet, I cut the strips so that the factory edge landed on the bottom of each leg (B).

From the two remaining strips, cut 48 spacers (D).

4 / MAKE THE CORBEL TEMPLATE

Cut a 10 x 19-in. rectangle

Figure A
Plywood Cut Diagram

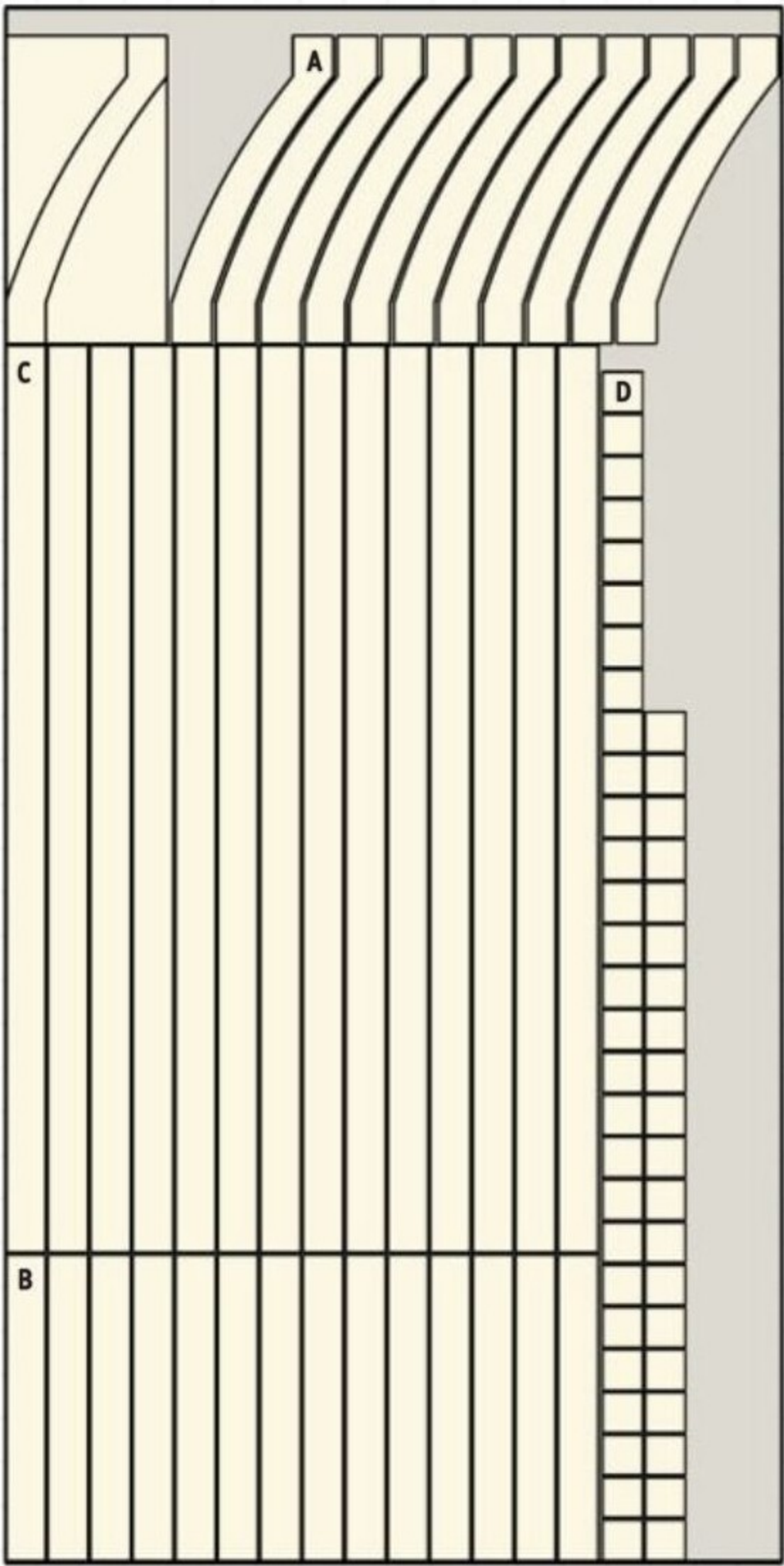
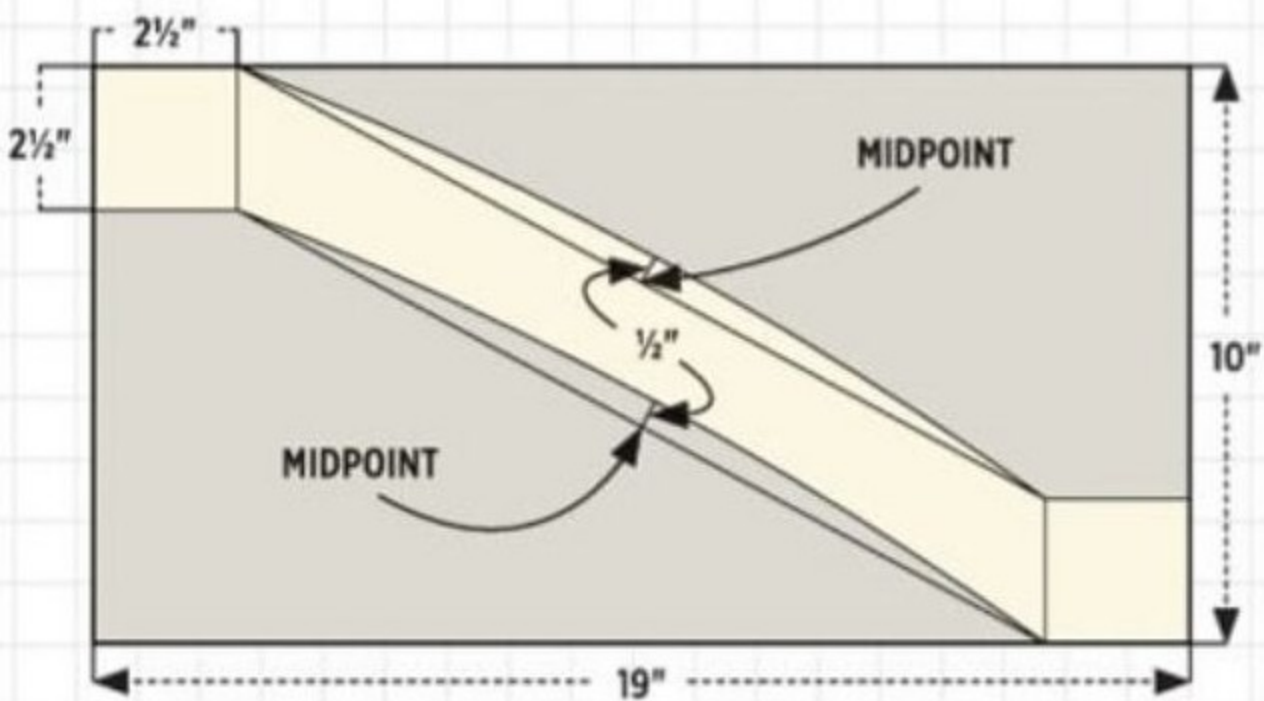


Figure B
Corbel Template



from the OSB piece set aside in Step 1. Using Figure B for reference, draw a corbel (A) template onto the rectangle.

Pro tip: Drawing smooth arches is the most difficult part of this process. To do so, hammer a few nails at the endpoints and peak of each arch, then bend a metal ruler along the nails and trace the curve.

Once you are satisfied with the template, cut the corbel (A) with a band saw or jigsaw. Give the edges a quick sand to ensure that they are smooth.

5 / MAKE
THE CORBELS

Trace and rough-cut 11 more corbels (A) from the remaining OSB sheet, leaving them slightly oversized.

Use strong two-sided carpet tape or a couple of screws to secure the corbel template on top of a rough-cut corbel (A). Then, using a router table fitted with a straight-cut router bit with a bottom bearing, rout the corbel (A) by running the bearing along the edge of the template. Repeat the routing process for the remaining 10 corbels. After routing, all 12 corbels should be nearly identical.

6 / DRILL HOLES FOR
THE THREADED ROD

Segments of 3/8-in. threaded rod are used to hold the coffee table together (in total, you will need six 3/8 x 36-in. lengths). The holes for the rod must be drilled straight, centered and aligned on all pieces.

Note: At the bottom of the four outside-facing legs (B) and at all four hole locations on the two outside-facing top pieces (C), drill 1/2-in.-deep holes with a 1 1/8-in. Forstner bit to countersink the nuts and washers on the ends of the threaded rod.

Construct a simple jig and clamp it to the drill press to center 7/16-in. holes on the spacers (D). Using the same jig and setup, drill holes at the ends of each leg (B) and corbel (A).

Make another jig to drill the two sets of holes on the top pieces (C): one pair centered 3 3/4 in. from each end, and another centered 11 1/4 in. from each end.

7 / SAND THE
COMPONENTS

Sand and break the edges of all sides of every piece with 150-grit sandpaper. If, like me, you're using OSB, take extra care to get the rough side as smooth as possible. I used a random orbital

CUTS

Key	Part	Qty.	Dimensions
A	Corbel	12	3/4" x 3 3/16" x 21 1/2"*
B	Leg	14	3/4" x 2 1/2" x 19"
C	Top	14	3/4" x 2 1/2" x 56"
D	Spacer	48	3/4" x 2 1/2" x 2 1/2"

*Organic shape; see Figure B



sander for most of the OSB and a belt sander followed by a random orbital sander for the rough sides.

8 / APPLY POLYURETHANE

To protect the OSB and bring out its colors, apply at least two coats of wipe-on poly to all sides of every piece. Allow ample drying time and sand with 220-grit sandpaper between coats.

9 / ASSEMBLE THE COFFEE TABLE

To help keep the pieces in order, use CA glue and 1¼-in. brad nails to attach the 48 spacers (D) to their adjacent top pieces (C), legs (B) and corbels (A). Make sure each spacer's edges and its 7/16-in. hole align with those of the adjoining piece.

Place the top pieces (C) top down on your bench, then arrange the rest of the pieces in order. The outer legs (B) and the top pieces (C) with countersunk 1⅝-in. holes should face outward.

When all the top pieces (C), legs (B) and corbels (A) are aligned at one end, insert the

threaded rod through the outermost holes in the top pieces (C) and the holes in the tops of the legs (B) with a nylon locknut and washer tightened on one end. Add a washer and loosely tighten down a nut on the other end so there is still play in the rod.

Repeat this process with a rod at the bottom of the legs (B) and another where the inner holes on the top pieces (C) align with the top holes on the corbels (A). Repeat on the other side of the table.

Tighten each rod little by little with a ratchet in one hand and an open-ended wrench in the other, pausing occasionally to ensure that the pieces are lined up. Use clamps and a mallet to move stubborn pieces into alignment.

Next, tighten the threaded rods enough to feel some resistance, but not so hard that the washer digs into the OSB. Then use a hacksaw to trim the rods flush with the ends of the nuts and file them smooth.



Plywood Chair

Play with curves to transform a flat sheet into a striking sculptural form

BY CARMEN DE LA PAZ



FACED WITH THIS DESIGN challenge, my first instinct was to cut my sheet of plywood into a bunch of square pieces. But I wanted to try something different, because how often do you get an opportunity like this? To add visual interest, I softened the design with arched panels, varied the orientation of repeated shapes and intentionally revealed the inner structure of the chair.

The hardest part was designing a layout that yielded everything I needed from a single sheet. To make it work, you must be intentional with every cut. The planning paid off—I used almost every square inch!

1 / LAY OUT THE COMPONENTS

Sketch all the chair components on a $\frac{3}{4}$ -in.-thick 4 x 8-ft. plywood sheet, making sure to account for a $\frac{1}{8}$ -in. kerf between the pieces. I used a T-square for the straight lines and trammel points for the curves.

2 / MAKE THE STRAIGHT CUTS

Use a table saw or a track saw to cut the seat/backrest panels (A), side panels (B) and footrest panels (C) to the dimensions specified in the cutting list. You can also use a circular saw for this task; to ensure a straight cut, clamp a straight piece of wood to run the saw against.

Cut the spacers (D and E) on a miter saw.

3 / MAKE THE CURVED CUTS

To cut the arches for the seat/backrest panels (A) and side panels (B), use a trim router with a straight-cut bit attached to a router circle jig. Find the center of each square and set the jig to cut a circle with the same diameter as the square's width.

Start with shallow cuts, exposing the tip of the router bit gradually with every pass until you cut through. Clamp the plywood as you rout, and check the pivot point of the circle jig and the cutting edge of the router bit to ensure you are cutting along the drawn lines.

The process for the narrow footrest panels (C) is similar, but the pivot point must be

7¹/₁₆ in. off the board. To prevent movement as you rout, firmly secure both the footrest panel (C) and the substrate with the pivot-point nail to the bench.

4 / PAIR UP THE PANELS

Clamp together two pairs of seat/backrest panels (A) and two pairs of side panels (B). Run a straight bit with a top bearing along the curved edge of each pair to minimize inconsistencies. From here on out, be sure to keep track of each pair.

Pro tip: A sheet of plywood isn't the same on both sides—one face tends to be smoother, lighter or cleaner. Select the side you want to face out, and lightly pencil the other to keep track.

5 / ROUND OVER THE OUTER EDGES

Run a trim router with

a 1/4-in. round-over bit along the outer top edge of each panel (A-C). Leave the inside edges square so the spacers will sit flush for assembly.

6 / FINISH THE INSIDE FACES

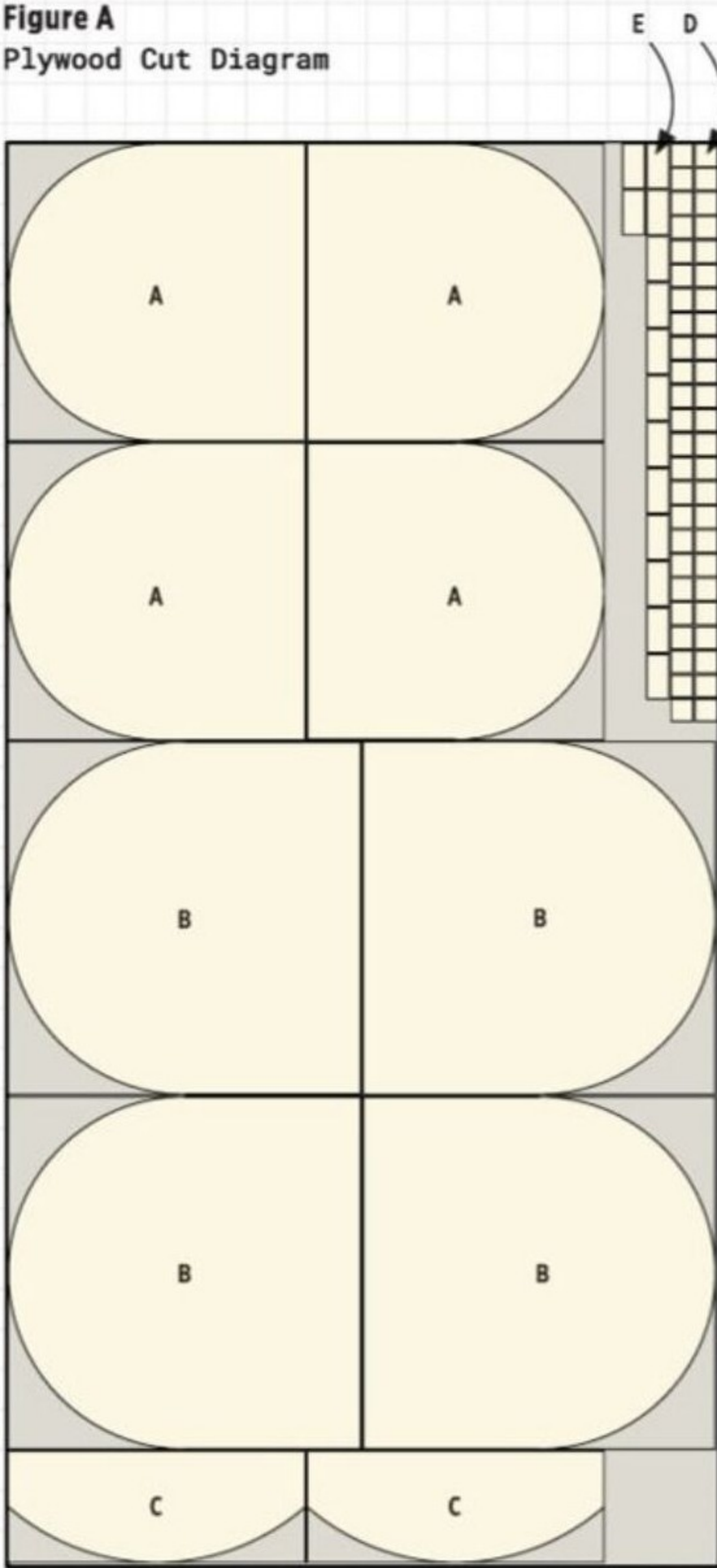
Apply a coat of tung oil to the inside face of each panel (A-C) and all six sides of each spacer (D and E). Once the chair is assembled, you won't be able to reach these surfaces.

You'll finish the exterior faces and edges of the panels (A-C) after the chair is assembled. Oiled plywood looks noticeably different from raw plywood, providing a good visual reminder of what you've finished.

7 / BUILD THE SEAT AND BACKREST

Lay a seat/backrest panel (A) flat on the bench. Starting at the peak of the arch, use

Figure A
Plywood Cut Diagram

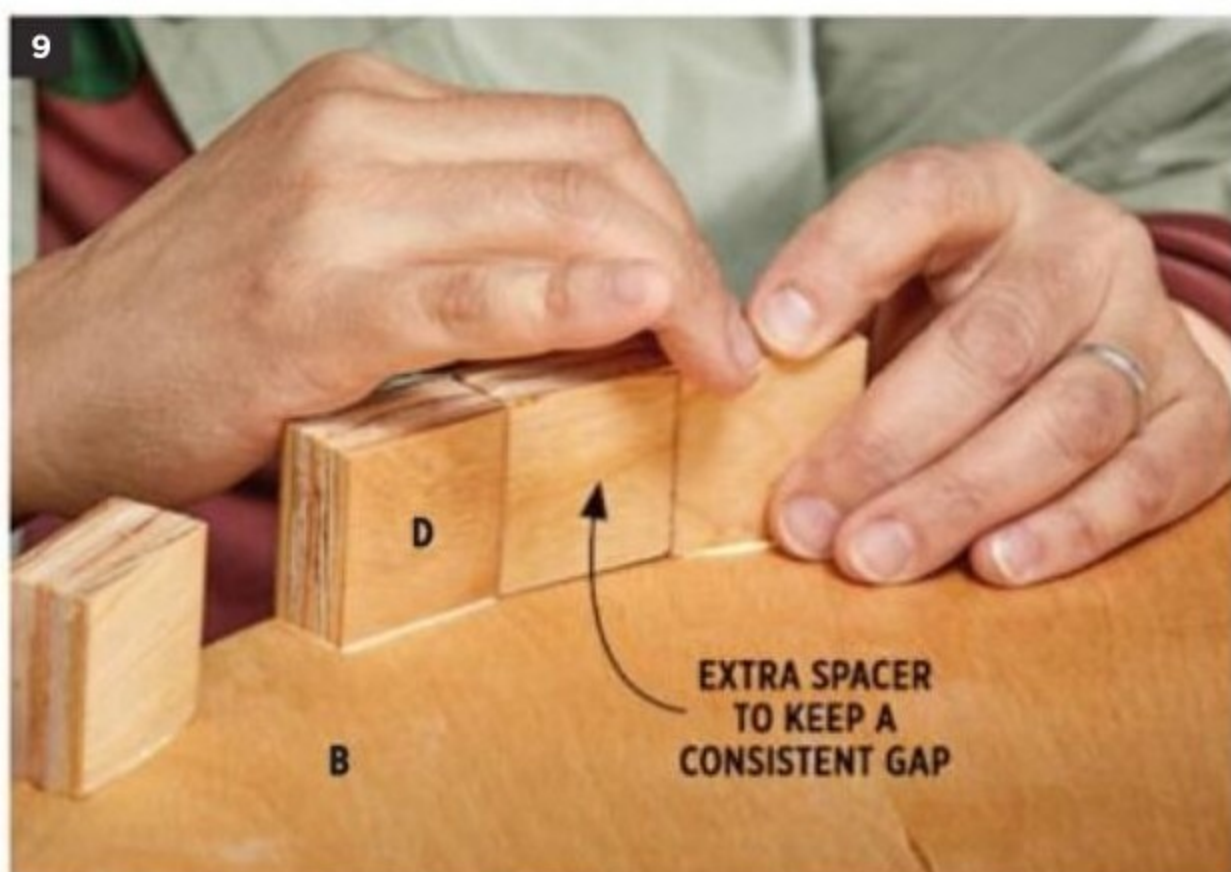


CUTS

Key	Part	Qty.	Dimensions
A	Seat/backrest panel	4	3/4" x 20" x 20"*
B	Side panel	4	3/4" x 23 3/4" x 23 3/4"*
C	Footrest panel	2	3/4" x 7 1/2" x 20"*
D	Small spacer	46	3/4" x 1 1/2" x 1 1/2"
E	Large spacer	14	3/4" x 1 1/2" x 3"

*Before arch is cut





wood glue and 1¼-in. pin nails to attach small spacers (D) along the curved edge. Use another spacer (D) to keep a consistent 1½-in. gap between the blocks.

Shoot the pin nails from underneath the panel (A), keeping the nail gun perpendicular to the piece and your fingers out of the way—the tiny pins can shoot out in any direction.

Next, secure large spacers (E) along the flat bottom of the panel (A), also evenly spaced with 1½-in. gaps.

Once the spacers are attached, apply glue to the exposed top of each spacer, then lay the second seat/backrest panel (A) of the pair on top and secure it with pin nails.

Repeat with the other pair of seat/backrest panels (A). You should end up with two identical sandwiched slabs.

8 / JOIN THE SEAT AND BACKREST SLABS

Set the backrest slab on top of the seat slab, making sure the back edges are flush. Glue the joint, clamp it, and check for square with a Speed square. To join the slabs, drive a couple of hidden 1½-in. screws between the large spacers (E) from inside the seat slab. Use a countersink bit so the screw heads sit below the surface of the plywood.

9 / ATTACH SPACERS TO THE SIDE PANELS

Take one piece from each pair of side panels (B). As with

the seat/backrest panels, glue and pin-nail small spacers (D) along the curved edge of each panel, starting at the peak of the arch and using an extra spacer (D) to maintain consistent 1½-in. gaps. Attach large spacers (E) along the flat bottom edges the same way.

Unlike the seat and backrest slabs, these slabs won't be closed with a second panel yet. Set both half-assembled slabs aside.

10 / MARK THE SEAT POSITION ON THE SIDE PANELS

On each of the side panels (B) that don't have spacers attached to them, draw a pencil line connecting two points: one 13 in. up from the bottom corner on the back edge, and one 15 in. up from the bottom corner on the front edge. The lines don't need to run the full width—10 to 15 in. is enough to see them during assembly.

On each panel, draw a parallel line 3 in. above the first. These two lines mark where the top and bottom of the seat slab will land on the side panel (B).

Flip the panel and transfer both lines to the other face. This helps keep your nails and screws aligned when you're fastening from either side.

11 / ATTACH THE SIDE PANELS TO THE SEAT/BACKREST ASSEMBLY

Set the seat/backrest assembly on its side. Take one of the side panels (B) that doesn't



have attached spacers and position it on top of the assembly. Align the seat to the lines you drew in Step 10. The heel of the seat should sit right where the bottom line begins (13 in. up the back edge).

Glue the joint, tack it with brad nails, then drive 1½-in. screws into the connection—aim them at the spacers (D) inside the seat slab so they have something solid to bite into. These fasteners will all be hidden once the other side panel (B) is closed over them.

Flip the chair and repeat on the other side with the other side panel (B), making sure the bottom edge of the panel (B) is at the same height as the first side. If

they are even slightly off, the chair will rock.

12 / CLOSE THE SIDE SLABS

With both loose side panels (B) now fastened to the seat/backrest assembly, close both sides. Take the two side panels (B) with spacers (D and E) attached and glue and pin-nail them over the open side of their corresponding side panel (B). Clamp across the full width of each side (B) to pull the edges together flush, then let the glue set.

13 / BUILD THE FOOTREST

Cut ¾ in. off each end of one footrest panel (C) so it's 18½ in. long. Use wood glue and pin nails

to assemble the footrest slab. You'll sandwich six small spacers (D) along the front edges of the two footrest panels (C) and three large spacers (E) along the back. Start in the center with both spacers (D and E) and work your way out, keeping them evenly spaced as with previous slabs.

14 / ATTACH THE FOOTREST

Glue and brad-nail one large spacer (E) to the inside face of each side panel (B). The tops of the spacers should be level, 5¼ in. from the bottom of the panel and flush with the front edge. Install the footrest slab so that the top 20-in.-long panel (C) rests on top of the large

spacers (E) and has a finished height of 6 in. Recess the footrest into the side slabs 3¾ in. from the front of the chair. Glue and tack with brad nails, then drive 1½-in. screws through the side slabs into the footrest, placing them between the small spacers (D) so they are hidden.

15 / FINISHING TOUCHES

Fill all nail holes with wood filler. Let it dry completely, then sand it smooth. Apply a coat of tung oil to all exterior faces, let it dry, then lightly sand the raised grain and apply a second coat. Two coats is the minimum—three provides a better finish.



Plywood Floor Lamp

Keeping materials simple doesn't have to mean sacrificing style

BY PATRICK VANG

ONE SHEET OF PLYWOOD is more than enough to build this seriously cool lamp. Along the way, you'll tackle a few skill-building challenges: cutting irregular shapes, dialing in the angles for the slatted lampshade, and ensuring that the legs sit perfectly level. If you get those right, the rest will be smooth sailing.

I wanted a statement piece that would inject some personality into a plain living space, but if you prefer something more traditional, the design allows you to substitute a store-bought shade for the custom option.

1 / MAKE A LEG TEMPLATE

On a piece of cardboard or other scrap material that's at least 10 x 56½ in., draw a leg template (see Figure B on page 40). Cut out the template.

2 / DIVIDE THE PLYWOOD SHEET

Using a table saw, crosscut a ½-in.-thick 4 x 8-ft. plywood sheet at 56½ in. Set aside the drop piece, then rip the 56½-in. piece down the center.

3 / GLUE UP THE LEG PANEL

Evenly spread a generous amount of

wood glue onto one of the pieces you ripped in Step 2. Place the second piece on top, with the edges flush, to create a 1-in.-thick panel.

Clamp the pieces and secure them together with ¾-in. pin nails along all four sides and throughout the center, using the leg template to ensure the pins are clear of any approximate cut lines. Wipe away any glue squeeze-out.

4 / CUT THE LEGS

After the glue sets, use the leg template to trace three legs (A) onto the panel. Pin-nail inside the outlines and

around the notches. Use a track saw to cut the straight sides of each leg and a jigsaw for the smaller detail cuts. Round over the edges with a router and 1/4-in. round-over bit, ensuring all edges are smooth.

5 / BUILD THE CONNECTOR DISCS

Retrieve the drop piece set aside in Step 2. Use a 6-in. hole saw to cut a 5 3/4-in. bottom connector disc (B) and a 4 1/4-in. hole saw to cut a 4-in. top connector disc (C). Sand the edges with 220-grit sandpaper.

On the bottom of each disc, mark three lines at 120-degree intervals from the center. Then mark parallel 1/2-in. offsets on both sides of these lines, creating outlines for the small (D) and large (E) triangular leg guides. Use a miter saw to cut

the guides from 1-in.-thick scrap plywood left over from the leg panel (see Figure C on page 41).

Align the triangular guides with your pencil marks, then glue and pin-nail them to the connector discs.

Once they're attached, drill a 3/8-in. hole through the center of the top and bottom connector discs (enlarging the pilot holes made by the hole saw) for the electrical cable to slide through.

6 / ASSEMBLE THE LEGS

Seat the notch in each leg snug to the bottom connector disc (C), sliding each leg into the spaces between the large triangular guides (E). Repeat for the top connector disc (B), ensuring the outside face at the top of each leg (A) is flush with the outside

CUTS

Key	Part	Qty.	Dimensions
A	Leg	3	See Figure B
B	Top connector disc	1	See Figure C
C	Bottom connector disc	1	See Figure C
D	Small triangular guide	3	See Figure C
E	Large triangular guide	3	See Figure C
F	Lampshade bottom	1	See Figure D
G	Lampshade top	1	See Figure D
H	Lampshade slat	10	See Figure D

Figure A
Plywood Cut Diagram

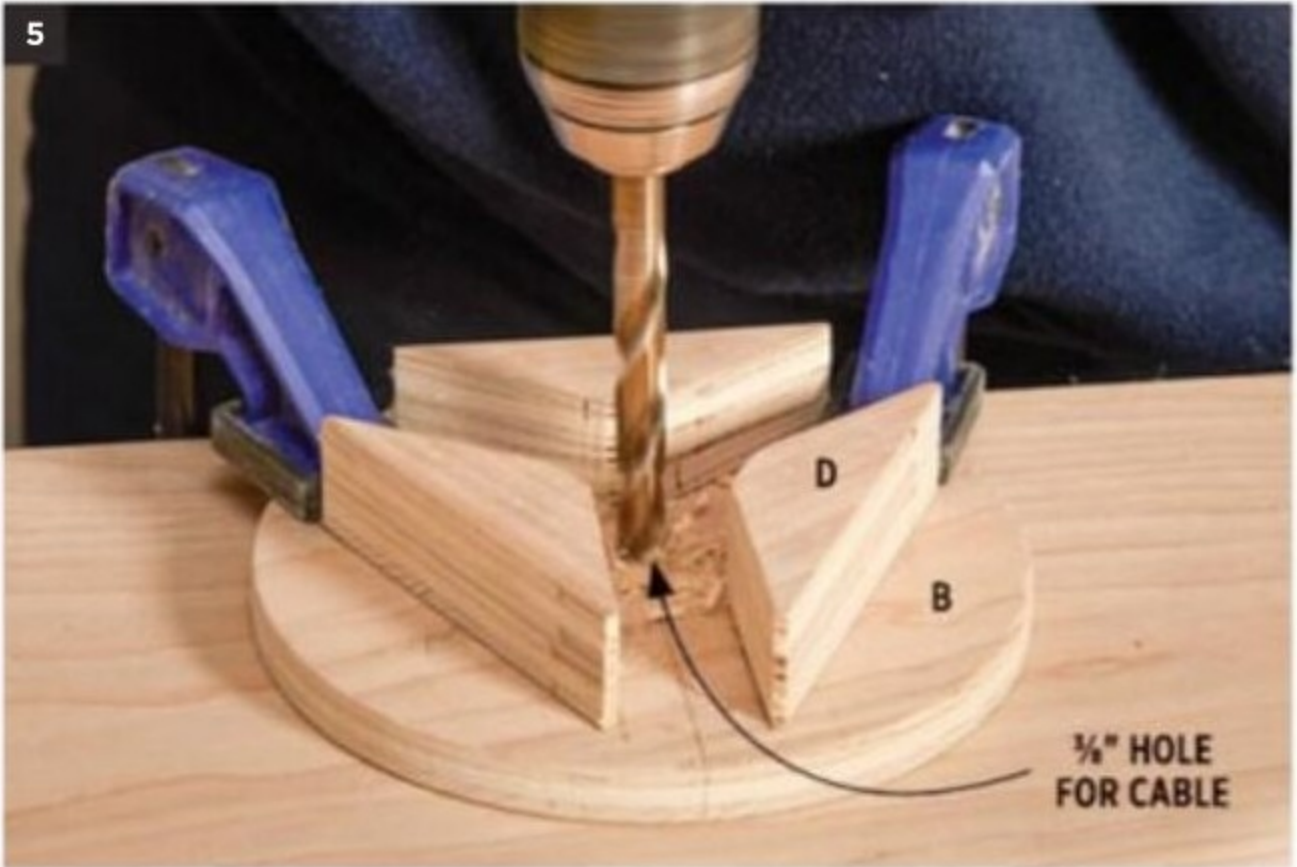
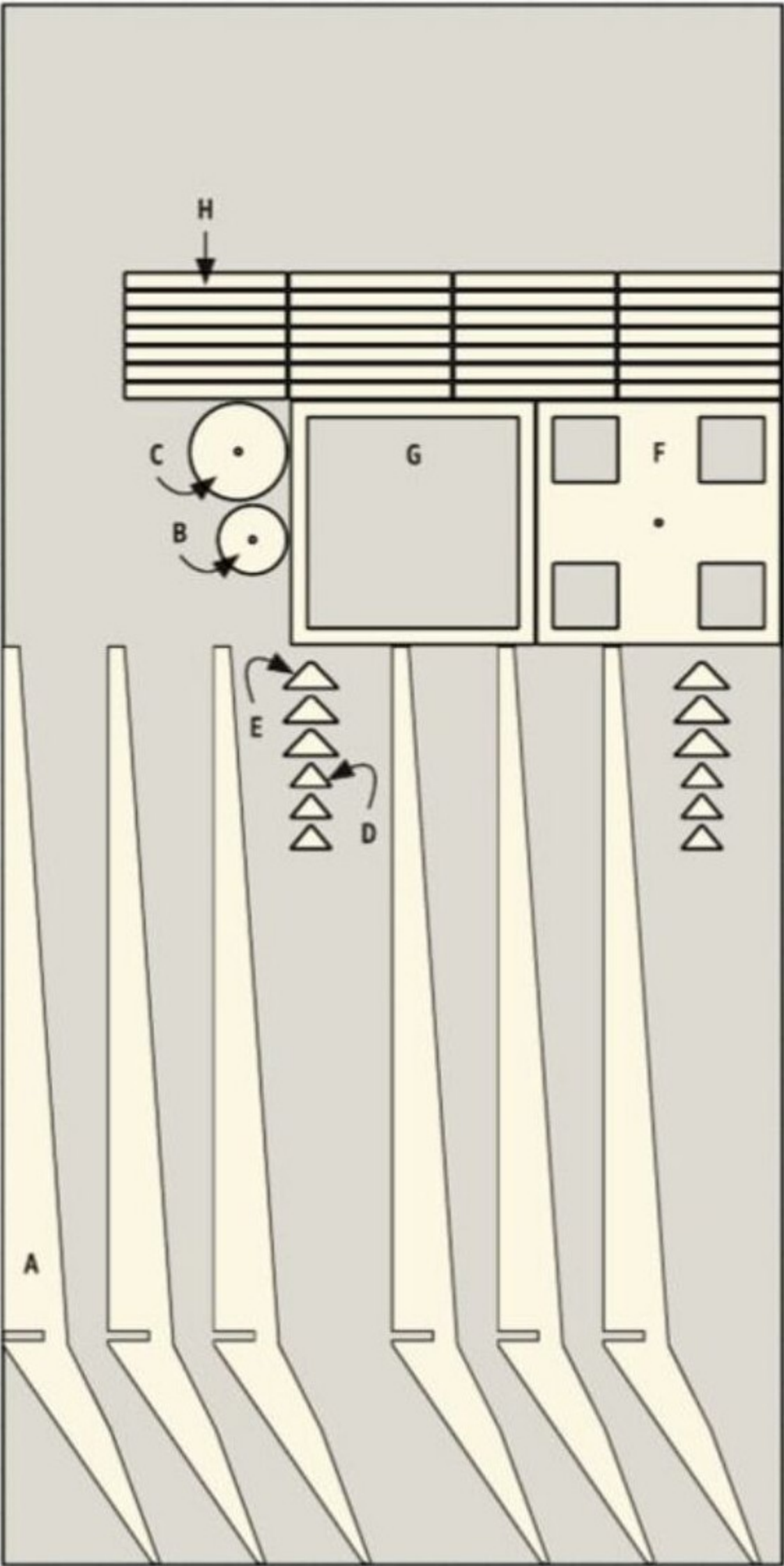
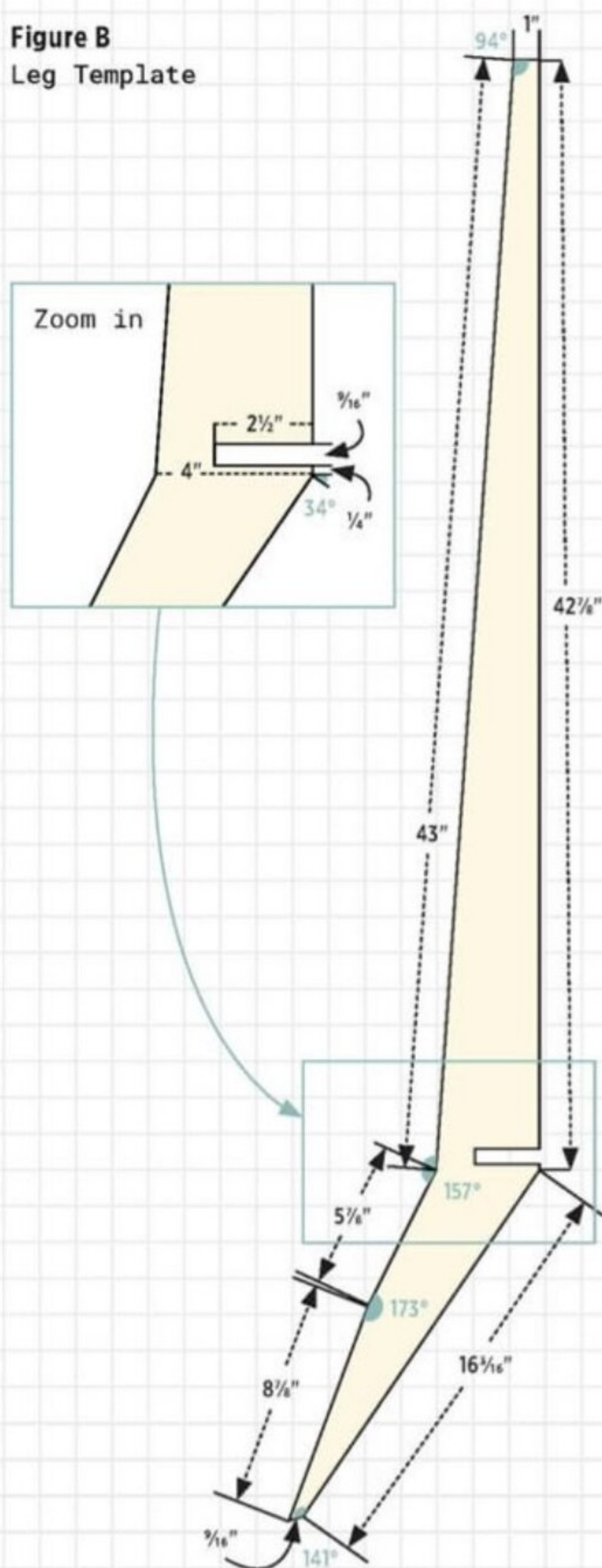




Figure B
Leg Template



edge of the disc. Glue and pin-nail the guides (D and E) to the legs (A) from the sides, then drive nails through the top/bottom of the connector discs (B and C) into the leg ends for stability.

7 / CUT THE LAMPSHADE COMPONENTS

Use a table saw to cut two 15-in. squares and twenty-eight 1 x 10-in. slats (H) from the remaining plywood.

To make the lampshade bottom (F), first mark four 4-in. squares inset 1 in. from each corner of one 15-in. square (see Figure D). Cut them out with a jigsaw, then drill a centered $\frac{3}{8}$ -in. hole to accept a threaded pipe.

To make the lampshade top (G), mark a 13-in. square inset 1 in. from all edges on the second 15-in. square (see Figure D). Cut it out with a miter saw, stopping short of the corners, then finish the cuts with a jigsaw.

Sand the lampshade bottom (F), lampshade top (G) and lampshade slats (H) to 220-grit. Use a router and a $\frac{1}{4}$ -in. round-over bit to round over the edges on all the pieces.

8 / ASSEMBLE THE LAMPSHADE

Draw a line from corner to corner on the lampshade bottom (F). Center the first two slats (H) on the line in opposite corners, gluing and pin-nailing them in place.

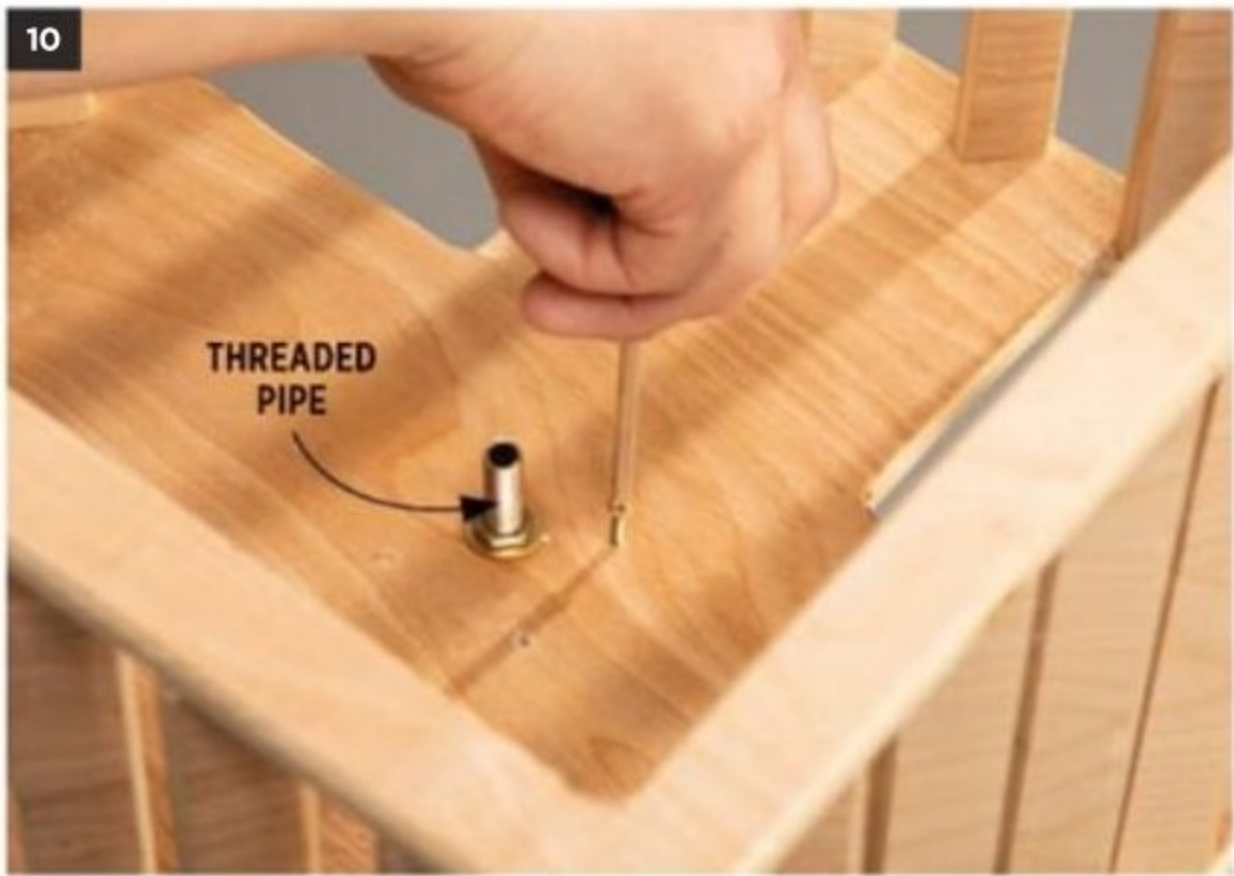
Continue installing slats around the perimeter of the lampshade bottom (F), spacing them 2 in. apart center to center and keeping them parallel with the first two slats. Once you have a handful of slats attached in opposite corners, attach the lampshade top (G) to the top of the slats.

Work around the shade, maintaining uniform spacing and angle until all slats are secured to the lampshade top and bottom.

Fill any deep pin-nail holes with wood filler, wiping away excess with a damp shop rag.

9 / APPLY POLYURETHANE

On any project that includes electrical components, I like to add a fire-retardant additive to the finish for peace of mind. Mix the manufacturer's



recommended ratio into a water-based polyurethane and apply two coats to all plywood components, lightly sanding with 220-grit sandpaper between coats.

Note: I used RDR Flame Stop III for this project because it is approved for use with latex-based paints and can be added to clear water-based polyurethane coatings.

10 / FINAL ASSEMBLY

Insert the coupler from a floor lamp wiring kit in the center hole on top of the top connector disc (C).

Thread the threaded pipe from the wiring kit through the center hole in the lampshade bottom (F) and top connector disc (B). Use the included nuts and washers on each end to secure it.

To finish installing the lampshade and keep it from spinning, drive four 1-in. screws through the inside of the lampshade bottom (F) into the top connector disc (B). Use a countersink drill bit to ensure the screws are flush with the plywood surface.

11 / ELECTRICAL INSTALLATION

Lamp wiring kits vary, so follow the manufacturer's instructions for best results. In general, you will secure an electrical neck to the top of the threaded pipe, feed an electrical cord up through the connectors and into the neck, then connect the wires to a socket/switch assembly following the kit's schematic. To seat the socket/switch firmly into the neck, gently pull the slack out of the cord. Then attach the insulation sleeve and socket shell.

To test, install a bulb and plug in the lamp. If it illuminates, you're done! If it doesn't, double-check your wire connections. ●

Figure C
Connector Components

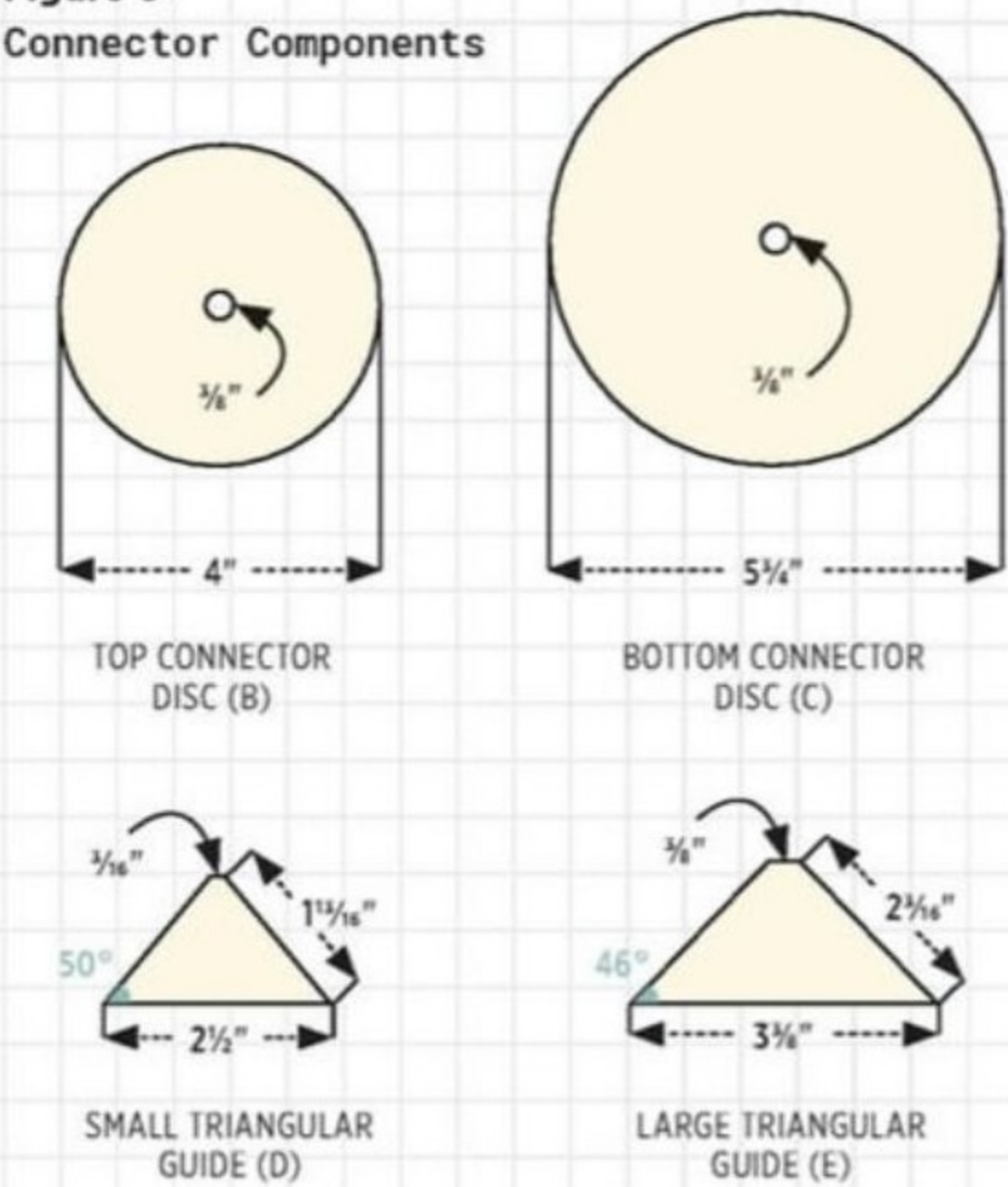
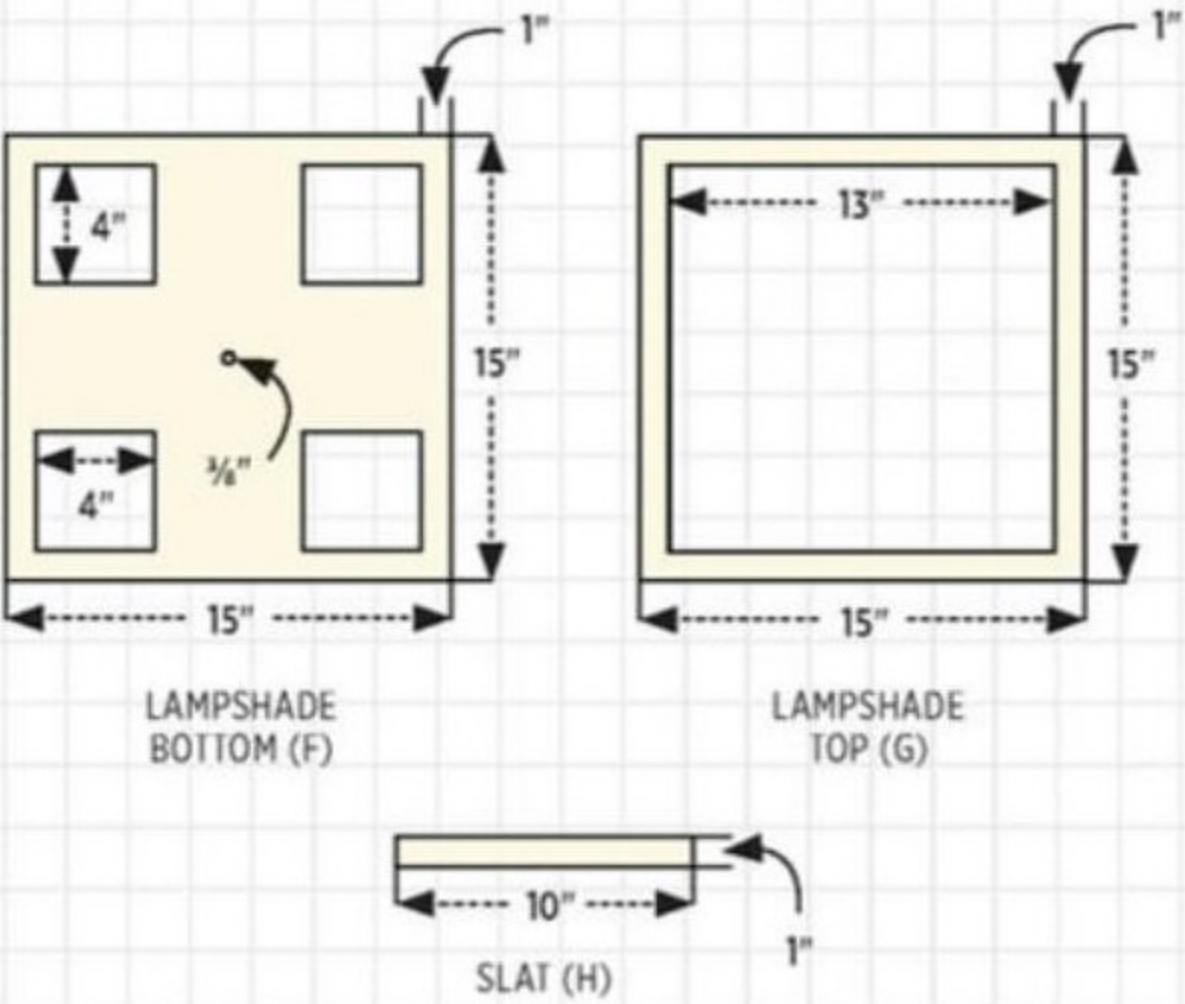


Figure D
Lampshade Components



Challenge Accepted!

Guest editors Nick Offerman and Lee Buchanan are joining a panel of Family Handyman judges to select the top reader builds from our One-Sheet



Plywood Challenge, evaluating each entry for craftsmanship, creativity and efficient use of materials. Scan the QR code to learn more about the contest and get inspired for your next build.

PAINTED STRIPES

Give your walls a bold new look
in a single day

BY CARMEN DE LA PAZ



Getting Started

TIME A full day • **COST** \$100-\$200

SKILL Beginner

MATERIALS

- Drop cloths
- Paint (base color and stripe color)
- Paint rags
- Painter's tape
- Primer (optional)
- Roller cover

TOOLS

- 1½" angled paintbrush
- 6' level
- Baby powder
- Chalk line
- Credit card/spoon/putty knife
- Measuring tape
- Paint tray
- Powdered chalk
- Roller cage
- Roller extension pole
- Small angled artist's paintbrush

WHEN IT COMES TO CREATING, paint is my first love. It's the medium that gave me confidence and proved to me that I have a visual chip running through my blood. Over the years, I've painted stripes on just about everything, including walls, floors and even furniture.

TMB STUDIO



Along the way, I've picked up a few secrets to mastering the technique.

While striping a wall is well within reach as a DIY project, it requires a fair bit of prep work and planning. Getting stripes that are crisp, clean and even—without spending

more time than you'd like—is no small feat. After unrolling what feels like miles of painter's tape, I am more than happy to share what I've learned to make the process a whole lot easier, from making a plan to final touch-ups.

1/PREPARE THE WALLS

Contrasting stripes will be painted over a solid base color. If you're adding stripes to a previously painted wall, wipe down the surface with a microfiber cloth to remove any dust so the tape and paint can adhere properly. You'll also need paint in the base color on hand to complete this project.

If you're applying a new base color to the wall, be sure to let the

base coat dry and cure for 24 to 48 hours before painting stripes. If you're transitioning from a light color to a dark one (like I did), apply a gray-tinted primer before the base coat.

Note: Work in a well-ventilated space. Open windows or run a fan to keep air moving.

2/DETERMINE STRIPE WIDTH AND LAYOUT

Decide on the width and number of stripes

you want to include in your design.

Start by measuring each adjacent wall you plan to stripe and adding the lengths. Choose a target stripe width (8 to 12 in. is a good starting range), then divide the total wall length by that number, adjusting the width slightly until you land on a whole number of stripes (e.g., a 120-in. wall ÷ 8 in. = 15 stripes). Some walls won't divide perfectly; in those cases, get as close as you can and plan to absorb any differences at the corner stripes, where variations will be least noticeable.

For a single wall, aim for an odd number of stripes: This centers a stripe on the wall for a strong visual anchor and ensures the pattern starts and ends with the same color. For stripes that wrap around corners, use an even number of stripes per wall so that a stripe centers on each corner (half a stripe on each side of the corner).

Again, if any minor adjustments are needed, make them in the corner stripes.

3/MEASURE AND MARK

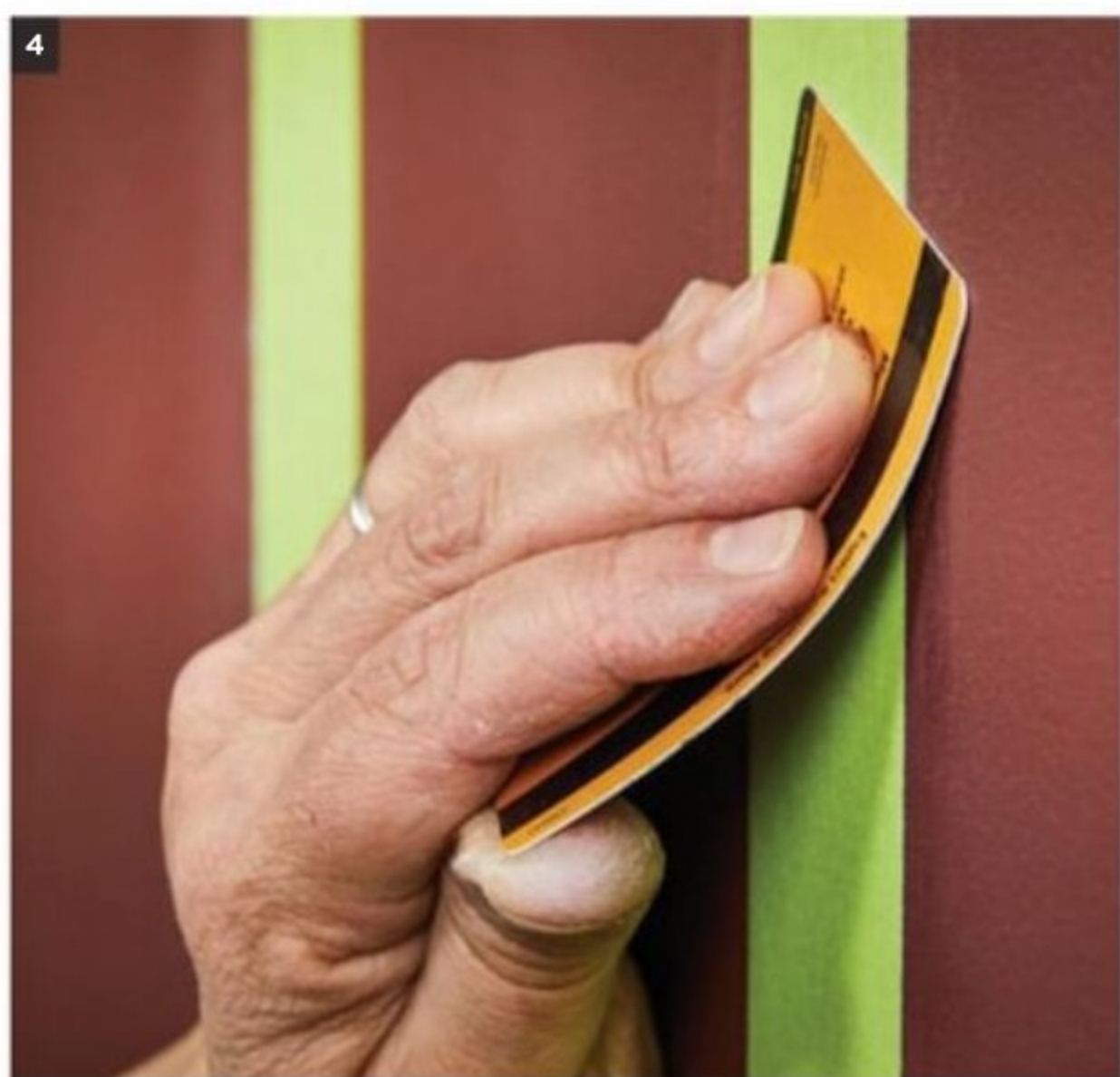
Once you've decided on a stripe width, you're ready to mark the wall. I went with 10-in. stripes, so I made light pencil marks 5 in. out from the center line in both directions, then marked every 10 in. across the wall.

Using these marks as a guide, use a 6-ft. level to mark plumb lines from the top to the bottom of the wall. To further define the lines, use a chalk line.

Pro tip: Add baby powder to your chalk line to reduce the chalk's color intensity. This makes it easier to wipe away and prevents a pronounced colored chalk line from bleeding into the paint.

4/TAPE AND BURNISH

Follow the chalk lines and apply painter's tape to the wall. It is important to be consistent in how you





place the tape—apply it to the outside edge of the chalk line for the stripe being painted. This allows you to paint over the pencil marks and chalk. If you place the tape on the inside of the marked line, you will have to retouch to remove pencil marks and wipe down the wall to remove chalk lines when you are done.

Once you are satisfied with the placement, burnish the tape edge against the wall with a credit card, spoon or a plastic putty knife. This creates a good seal, prevents paint bleed and reduces the need for touch-ups.

Pro tip: As a visual reminder of which stripes to paint and which to leave alone, place small pieces of tape on the stripes you won't be painting.

5 / SEAL THE EDGES WITH THE BASE COLOR

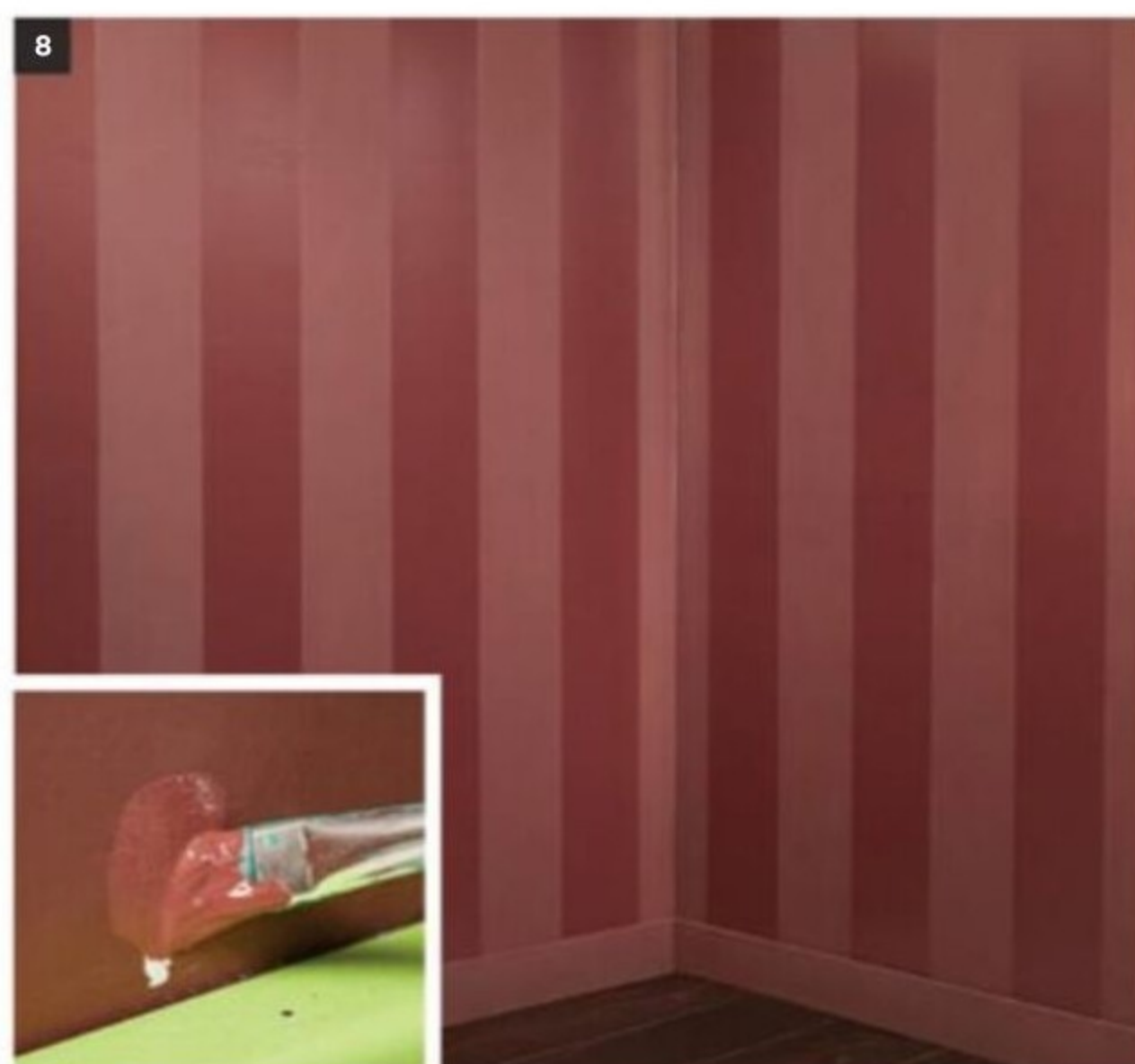
Using a 1½-in. angled paintbrush, paint along the inside edge of your

taped-out stripe with the base coat color (the color already on the wall). This seals the edge of your paint line. If any paint bleeds through, it will match the base color and be nearly impossible to notice. This step helps to achieve crisp lines and further reduces the need for touch-ups.

6 / PAINT THE STRIPES

After the base-color paint along the tape lines has dried, use a roller to paint two coats of your stripe color between the sealed tape lines. Allow ample drying time between each coat.

Note: I used the same paint color (Sherwin-Williams Sommelier) for my stripes, in a semigloss finish. Semigloss paint reflects the direction of the applied paint. To avoid texture or marks that will be visible when the paint dries, pull the roller off the wall while it is still in motion. Keep a wet edge as you apply each new load of paint, and lightly even out the



paint to avoid heavy lap marks.

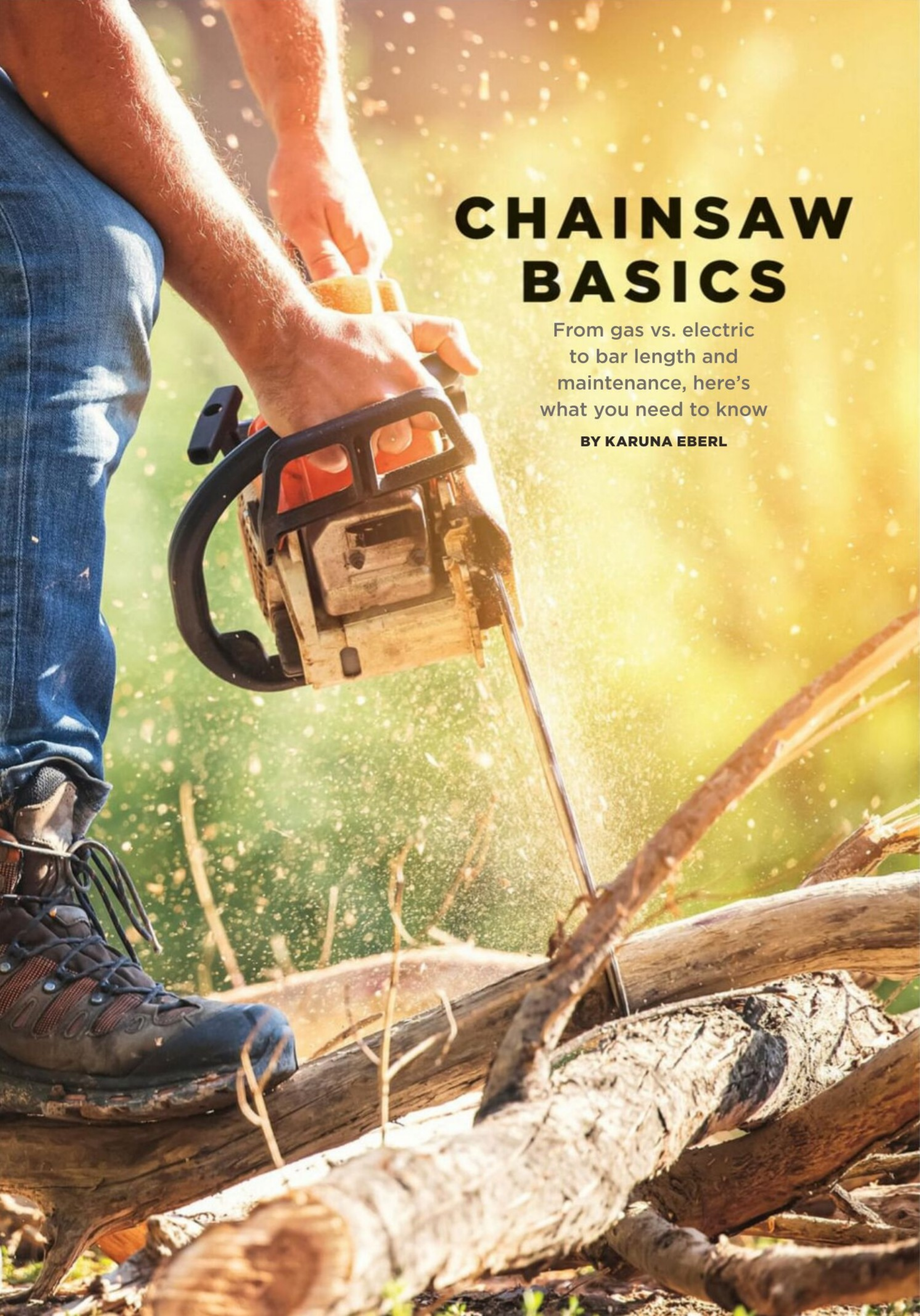
7 / PULL THE TAPE

You have two windows to successfully remove the tape—when the paint is freshly applied and still tacky, or when it has fully cured and is dry (12 to 24 hours). Both will snap the paint edge cleanly. For best results, pull the tape back at a 45-degree angle. Avoid removing the tape when the paint is in between—partially

dry but not cured—as this can cause pulls and tears in the finish.

8 / TOUCH UP

Every striped wall will require some touch-up. The goal is to keep it to a minimum. Use a small angled artist's paintbrush to clean up any bleed lines or imperfections along the edges of the stripes. Work with a steady hand and keep a damp rag on hand to fix mistakes while the paint is still wet. ●

A close-up, low-angle shot of a person's hands and arms using a chainsaw to cut through a large log. The person is wearing blue jeans and brown work boots. The chainsaw is orange and black, and the blade is visible cutting into the wood. A large cloud of wood chips is being ejected from the cut, filling the upper right portion of the frame. The background is a bright, hazy green, suggesting a forest or wooded area. The overall lighting is warm and golden, creating a sense of action and power.

CHAINSAW BASICS

From gas vs. electric
to bar length and
maintenance, here's
what you need to know

BY KARUNA EBERL

Portable and powerful, chainsaws are built to handle a wide range of landscaping and maintenance tasks. Their fast-spinning chains make quick work of tough jobs such as trimming branches, felling small trees, cutting firewood and clearing storm debris.

“For most homeowners, a chainsaw is all about efficiency and convenience,” says Ryan Kropfelder of Stihl Inc. “Even if you use it only a few times a year, having one on hand means you can take care of jobs on your own, instead of waiting on a service or struggling with hand tools.”

Today’s models are safer and more user-friendly than ever. And thanks to advances in lithium-ion batteries, electric chainsaws are replacing gas-powered versions in more and more households.

If you’re considering adding a chainsaw to your toolkit, here’s how to choose the right model, use it safely and keep it running smoothly for years to come.

Gas-Powered Chainsaws

For heavy-duty tasks such as cutting larger-diameter trees,

gas-powered chainsaws are often the best choice. They deliver the most power and longest runtime. However, they’re louder, heavier and require more maintenance. Their emissions are also regulated in some states.

For the majority of homeowners, Kropfelder suggests an engine size of 30 cc to 50 cc, which offers “a strong balance of power and manageability.”

Electric Chainsaws

Battery-powered chainsaws are quieter, lighter and easier to maintain—plus they start up with the push of a button. That makes them an approachable option for general homeowner use, says Kropfelder.

“The main consideration is runtime, although an extra battery can easily extend your work time,” he says. For convenience and to save some money, consider brands with batteries that are interchangeable with your other electric tools.

Corded models are even lighter but require an outlet, limiting use to areas near the house unless paired with a portable power

station. If you plan to use an extension cord, note the amps that your chainsaw draws and choose an appropriate cord.

Bar Length

The length of a chainsaw’s cutting bar dictates the size of wood you can cut through in a single pass. But bigger isn’t necessarily better, as it makes the saw heavier. “That can lead to fatigue,” says Katie Grendell of Husqvarna. “Ultimately, bar length dictates what level of safety and control you have over your chainsaw, especially for inexperienced users.” Shorter bars also reduce the likelihood of hitting the ground and damaging the chain.

For most homeowners, Grendell and Kropfelder both recommend a bar length between 12 in. and 18 in. If you want to cut firewood, clear storm damage or fell small trees, go with at least 14 in. In general, the bar should be at least 2 in. longer than the diameter of the wood you’re cutting through.

Extra Features

Key features to look for center around safety and ergonomics,



Choose a bar length based on your typical cutting tasks.

ROMAN CHEKHOVSKOY/GETTY IMAGES (OPPOSITE), TMB STUDIO

says Grendell. Look for models with low-kickback chains, bar trigger lockouts, chain catchers, automatic oilers, tool-free chain tensioning and anti-vibration systems. On gas models, starting assistance can also make life easier.

Refueling

Gas chainsaws typically have two-stroke engines, which use a 50:1 ratio of gas to oil (check the manual for precise specs). Use fresh, high-quality unleaded gasoline with a minimum octane rating of 89, and avoid gas with more than 10% ethanol to prevent engine damage.

Many manufacturers offer premixed fuel options, which are also designed to prevent issues caused by aging fuel. These can be especially helpful if you use your saw infrequently.

You'll also need to keep your chainsaw supplied with bar and chain oil to keep the chain lubricated, make cutting easier and reduce unnecessary wear.

Maintenance

Chainsaws require maintenance to keep them running safely and smoothly. Routine tasks include sharpening the chain, adjusting the chain tension, ensuring proper bar and chain lubrication, and cleaning the air filter.

"Most of these tasks are very manageable for homeowners with a little guidance and the right tools," says Kropfelder. Authorized dealers will also assist with maintenance and servicing.

Storage

Before winter, chainsaws should be thoroughly cleaned, then stored in a dry place with the bar cover on and the chain slightly loosened. To preserve battery health in electric chainsaws, check manufacturer instructions for what percentage of charge to leave in the battery, then remove it and store it at a moderate temperature (don't let it freeze). For gas models, you'll also need to drain the fuel system or add a fuel stabilizer.

Rent, Buy or Call a Pro?

If you only need a chainsaw once in a while, renting may make the most financial sense. It's also a smart way to try out a specific model before buying, says Kropfelder. But if you regularly prune trees or cut firewood, or you want a chainsaw on hand for storm preparedness, buying is probably the better long-term investment.

If you're not confident you have the strength to use a chainsaw safely, or simply feel uneasy about operating one, call a pro. Leave high-risk jobs to professionals too, including felling large trees or cutting near power lines, homes or vehicles. "It's always better to err on the side of caution," says Grendell.

Kropfelder adds that caution is especially important after storms: "Downed trees and branches may be under tension and can react unpredictably when cut. If there's any doubt about how the material will move, it's always best to call a professional."





How to Use a Chainsaw Safely

These hardworking tools can save you time and effort in the yard, but they must be handled with care

BY SAMUEL ROSENMYER

Five Things You Should Never Do with a Chainsaw

Cut into Dirt

Cutting too close to the ground makes it easy to hit soil, rocks and debris, which can dull the cutters and wear the chain links and the sprocket at the bar tip.

Fill the Chain Lube Reservoir with Used Motor Oil

Used motor oil may be “free,” but it contains fuel, acid, water and soot that can damage moving parts and lead to costly repairs.

Run the Chainsaw with a Dirty Air Filter

Chainsaws kick up a lot of dust, and the air filter keeps it from entering the combustion chamber. Clogged filters limit airflow, reducing engine performance and increasing wear over time.

Cut with a Dull Chain

A dull chain requires extra downward pressure to cut, raising your risk of injury and wearing out the bar, drive links and clutch components.

Refuel the Chainsaw When It's Still Hot

A hot engine can vaporize fuel and create a fire risk. Shut off the saw and let it cool for at least 10 minutes before refueling.



In the U.S., chainsaw injuries land more than 36,000 people in emergency rooms every year, so be vigilant about safety. Before you begin a job, consult the owner's manual for your model and make sure you have all the proper protective gear on hand, including hearing protection, gloves, a full face shield, steel-toed boots, a helmet and chaps.

1 / START WITH A SHARP CHAIN

Inspect the chain before every job and watch for signs such as the saw pulling to one side, smoking as it cuts or producing sawdust instead of curl-like chips. If you don't want to sharpen the chain yourself, replace it or have it sharpened by a pro (typically for about a third to half the cost of a new chain).

2 / CHECK THE CHAIN TENSION

When pulled, a correctly adjusted chain should offer some give but not disengage from the guide. To make adjustments, use an adjustable wrench to loosen the bar nut that holds the bar. Then lift the bar while tightening the adjusting screw until the chain is snug against the bar. The tension is correct when you can't lift the chain drivers free of the bar groove, but you can still drag the chain easily around the bar with a gloved hand. Retighten the bar nut.

3 / TOP OFF THE OIL AND GAS

Fill the saw with gas. For chainsaws with two-stroke engines, premix

gasoline with the proper ratio of two-stroke chainsaw oil (check the owner's manual). Then fill the oil reservoir with bar and chain oil.

4 / SET UP THE WORK AREA

Plan to work at least 10 ft. from the fueling area, in a spot cleared of ignitable debris.

You can position the trunk or branch to be cut in one of two ways: with both ends of the log supported and stable, or with one end supported and one end free. For the former, you'll cut in the middle of the log; for the latter, you'll cut at the unsupported end.

If possible, cut at waist level. Do not operate a chainsaw on a ladder to prune branches above shoulder height. And if you are cutting on a hill, stand on the uphill side of the log in case it begins to roll during or after the cutting process.

5 / ACTIVATE THE CHAIN BRAKE

Wearing safety gear, place the chainsaw on the ground. Gently push the chain brake forward until it securely engages. Typically a distinct lever positioned between the top handle and the bar, the chain brake halts the chain's rotation until it is disengaged and the throttle is activated.

6 / START THE CHAINSAW

When using a gas-powered saw equipped with a choke, activate the choke. If the saw has a primer button, press it four to six times

to allow fuel into the carburetor.

With the saw still on the ground, put your right foot into the back handle loop and grasp the front handle with a stiff left arm. Wrap the thumb of your left hand around the front handle and pull the starter cord to fire up the engine. Once the engine has warmed up, release the choke lever.

For an electric chainsaw, press the power button to start.

7 / ENGAGE THE THROTTLE

After starting the engine, the chain will stay still. To set the chain in motion, you need to engage the throttle. Safely position yourself before engaging the throttle by firmly planting your feet and holding the saw securely. Experiment and become familiar with how your saw responds to the throttle. Only start cutting when you're comfortable and well balanced, with your feet shoulder-width apart. Always stand to one side of the saw and never directly behind it. Before touching the wood, the chainsaw should be at full throttle.

8 / BEGIN CUTTING

The actual cutting process will look a bit different depending on how your log is set up (see Figure A). Either way, trim any small branches before moving on to cutting.

If both ends are supported and you're cutting in the middle of the log, cut down from the top about one-third of the way, then finish the cut from the bottom up through the remaining two-thirds.

If one end is supported and the other is free, cut up from the bottom about one-third of the way, then finish the cut from the top down through the remaining two-thirds.

Cutting the log in this way creates as little binding as possible as the trunk's weight pinches the saw's bar.

Note: Cutting the underside of a trunk requires you to cut with the top of the bar, which can be a little unnerving initially because the saw pushes toward you. But it's safe if you're well braced and follow all other precautions.

When you're ready to start cutting, release the chain brake and fully engage the throttle. Place the saw in

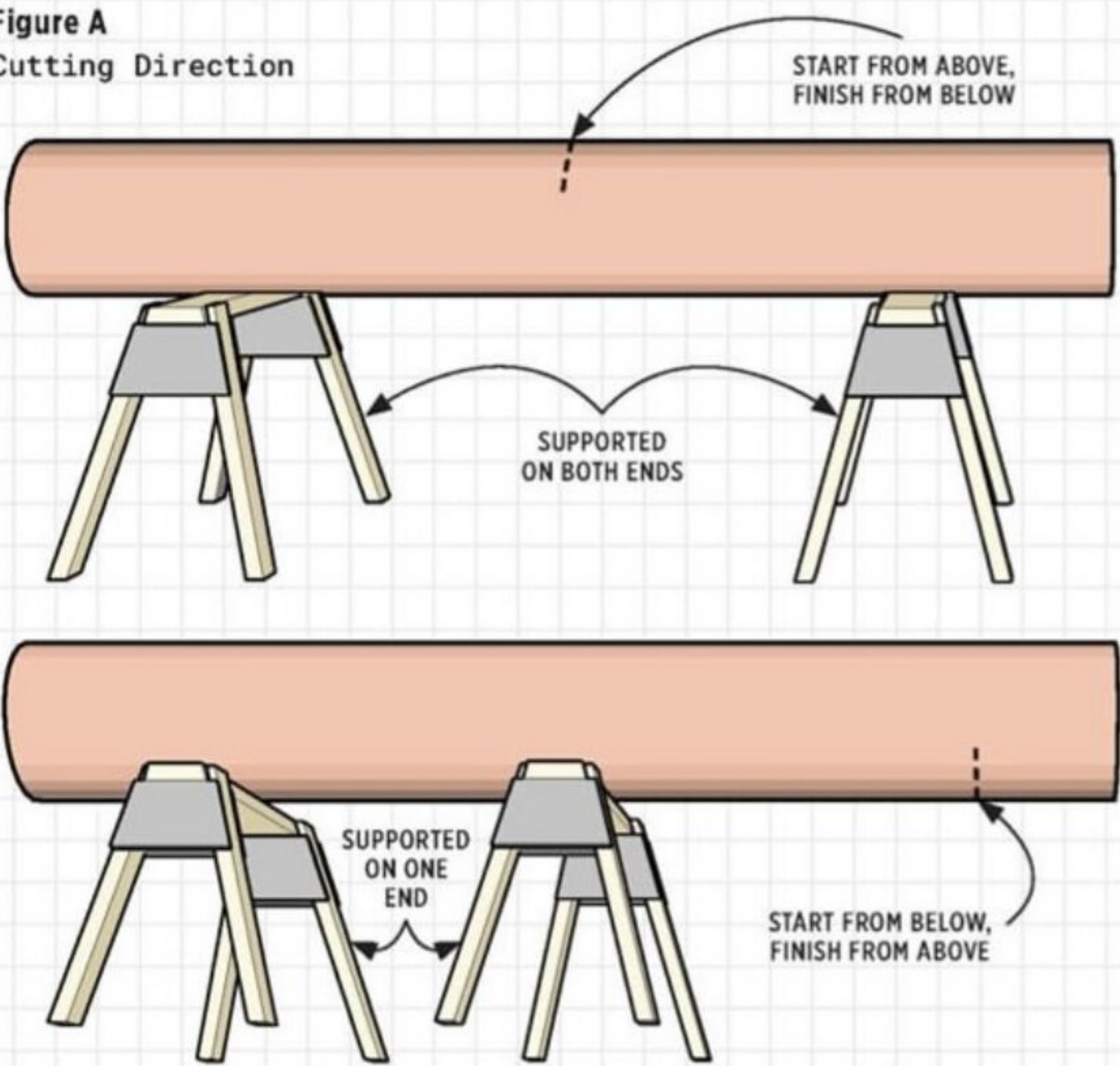
the intended cutting position. Don't try to force the saw through the wood—it's designed to do the work for you. Only release the throttle after you have finished each cut.

When you move from place to place with the saw running, even if it's only to the next branch, remove your right hand from the back handle and carry the saw at your side with your left hand holding the front handle. This way, if you trip or stumble, the saw's engine cannot accelerate and start the chain spinning.

9 / TURN OFF THE CHAINSAW

Before replacing the bar cover or returning the chainsaw to its case, switch off the chainsaw and let it cool. Store it in a dry location away from the elements. If you have a gas model, empty the fuel tank or use a fuel stabilizer to winterize the chainsaw or for long-term storage. ●

Figure A
Cutting Direction



SAFETY TIP

The Kickback Zone

Never cut with the top half of the bar's tip, known as the kickback zone. If this area comes in contact with something while the chain is moving, the saw can kick up and back toward you.

Modern chainsaws have a chain brake to help stop the chain, but proper technique is still essential. Always wrap your left thumb around the front handle while cutting—this encircling grip helps keep the saw under control during kickback.

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Toolkit



BEST PRO TIPS

OLD FORMS, NEW THINKING

From spoon carving to chair making, Aspen Golann's work is rooted in tradition—and knowing when to break from it

BY KELLY AIGLON

KATE BENSON



At the bench, Golann tackles a work in progress alongside a finished walnut-and-rosewood clock.

For Aspen Golann, woodworking didn't start with a project—it started with a feeling she couldn't shake. "I was full of things I wanted to make, with no real way to make them," she says.

Golann was teaching high school art at the time, but she stepped away to pursue formal training, enrolling at North Bennet Street School in Boston. The two-year cabinetry and fine furniture program centers on traditional American techniques, with a focus on hand tools, repetition and structure. It's the kind of training that goes beyond the mechanics of cutting a joint or shaping a leg and teaches students how to really think through the material. "I wanted to feel fluent," Golann says.

Today, that fluency is reflected in the pieces Golann creates in her New Hampshire studio. Her furniture often starts with traditional designs from the 17th to 19th centuries—chairs, stools

and other objects built the same way for generations—then intentionally departs from the template. A curve might extend farther than expected, or a familiar silhouette might shift just enough to feel novel. It's a

"If you're making something small, you can wander through the woods and find the material you need."

conversation between old and new that runs through just about everything Golann makes.

Tools of the Trade

True to preindustrial tradition, Golann works primarily with hand tools. "They're quiet. It's just free. It's mobile," she says.

Mobility matters, especially if

you're just getting started. You don't need a dedicated shop or thousands of dollars in equipment; a small set of tools is enough to build something real.

That idea led Golann to found The Chairmaker's Toolbox, a nonprofit dedicated to expanding access to woodworking. The organization provides free tools, education and mentorship to makers who have historically been excluded from the craft, helping them build both skills and a career without all the usual barriers.

An emphasis on accessibility also extends to Golann's choice of materials. She often works with green wood, or freshly cut wood that hasn't been kiln-dried. The centuries-old method is gaining renewed attention for how straightforward and direct it is. The higher moisture content makes the wood softer and easier to shape with hand tools, though it requires close



Carving a spoon is a beginner-friendly way to build fundamental woodworking skills.

attention as it dries and moves.

Working with green wood also broadens where your materials can come from. “If you’re making something small, you can wander through the woods and find the material you need,” Golann says.

Getting into the Groove

For beginners, Golann keeps the advice practical: Don’t start with a chair. Start with something smaller—and something you’ll actually use.

“Carve a spoon, because that’s what sucks everybody in,” she says, adding that spoon carving teaches the fundamentals quickly. You learn to read grain direction, control your cuts and understand how sharp a tool needs to be to work well. It’s also low-risk in both material and time, making it easier to practice and stick with.

One challenge you may not have considered? “Learning to sharpen,” Golann says. It’s one of the biggest hurdles for beginners working with hand tools, but with practice, it becomes second nature.

Once you’ve got sharpening down, a surprisingly short list of tools will carry you far: a chisel, a small handsaw, a hand plane and shaping tools such as a rasp or a spokeshave. It may seem sparse, but it’s enough to build furniture that lasts.

The Bigger Picture

As your skills improve, so does

your sense of what the craft is really about. For Golann, learning traditional methods opened up bigger questions about the meaning behind everyday objects.

Her work now sits somewhere between furniture and art and she says, “I don’t think there’s a hard line between them.” Instead, she works within the structure of functional objects and adjusts them just enough to change how they’re seen, using historical techniques to explore ideas about identity, labor and power that still feel timely.

In one series, Golann applies the same level of craftsmanship used in fine furniture to brooms—objects long tied to domestic work. By elevating them through unexpected forms and finishes, she invites viewers to ask why certain kinds of labor, and the tools associated with them, have historically been undervalued.

That’s the power of woodworking: Even when you’re just starting out, it changes how you see the things around you, how they’re made and why they matter. And after all that carving, just try looking at a spoon the same way again. ●

Aspen Golann’s Ground Rules for New Woodworkers

Start Cheap

Don’t begin with the tools you saved up for. Grab something from a flea market or thrift store and practice grinding and sharpening. Feeling comfortable messing up is key.

Use What You Have

A lean toolkit can do a lot. Spend time getting to know what’s already in your hands before adding anything new.

Try Before You Buy

The “best” tool is the one that works for your body, stance and way of working. Take a class or use tools in someone else’s shop before committing. Hands-on experience tells you more than specs ever will.

Look for Community Early

Having people to ask questions, share space with or just work alongside makes a huge difference. Check local guilds, carving groups or even online meetups.

Make Things You Care About

There’s value in starting with something that excites you, even if it feels like a stretch. Just be ready to stumble.

Embrace Vintage Tools

Some of the best hand tools were designed in the 1800s. Once you learn to tune them, what looks like rusty junk can serve you well.



MEET THE PRO

Aspen Golann is an artist and furniture maker who explores gender, power and history through American craft traditions. Her work has been exhibited at institutions including the Metropolitan Museum of Art and is held in major collections.



HANDY HINTS

ALL-STAR SHOP TIPS

For decades, *Family Handyman* readers have shared clever solutions for measuring, cutting, sanding and more. These are a few of our tried-and-true favorites.

Rust Prevention Pouch

Keeping your tools free of rust is difficult if you store your toolbox in an unconditioned garage or the bed of a truck. Moisture in the air can invade those spaces in a hurry. To absorb the moisture and prevent rust, I put a scoop of silica crystal cat litter in a rag and then tie it shut. I drop a pouch in every toolbox and replace them once a year.

—RICK AMBRASAS



Pallet Dolly

I had a truckload of lumber to transport down a long hallway to my shop, and I wasn't looking forward to carrying it an armload at a time. Then I noticed the pallet it was on. I didn't have a pallet jack, but I did have a set of casters. After I installed some reinforcement blocking, it took just a few minutes to attach a 4-in. caster to each corner of the pallet. Now it's my all-around heavy-stuff mover. —**KEITH JONES**



Solo Planing Made Easy

It's tricky to plane long boards without an assistant, so I mounted my planer to a piece of plywood and bolted the plywood to a miter saw stand. The stand is equipped with adjustable supports that help me infeed and outfeed long boards when I'm working alone. —**TERRY BLANCHARD**



Magnet in a Bag

Cleaning up metal shavings around my drill press almost always left me with a metal sliver or two. Using a magnet works, but getting the shavings off is a hassle. So I put the magnet in an inside-out plastic bag. Now I can attract the shavings, seal the bag, pull it free and toss it—no more slivers! —**ROBERT BLACK SR.**



Six-Pack Shop Organizers

Six-pack cartons are useful for storing and transporting shop items such as spray paint, lubricants and caulk. —**GERALD FITZGIBBON**

"Always measure ALL the openings your piece has to get through. My first canoe had to go out a warehouse window with a block and fall." —**NICK OFFERMAN**



Paper Towel Clamp

I like to keep a roll of shop towels handy when I'm at the workbench. To prevent the towels from rolling off the bench, I simply clamp a quick-grip-style clamp to the edge of the bench and slip the paper towel roll over the rod.

—BRAD JOHNSON



Divide Odd Widths

Say you have a board that's 11 $\frac{3}{8}$ in. wide and you need to divide it into four equal parts. No problem. Angle your tape across the board until it reads a number easily divisible by four, such as 16. Then, with the tape angled, make marks at 4, 8 and 12 in.

—BRYAN MALM



Carry Plywood with a Rope

Toting a sheet of plywood by yourself is awkward and hard on your back. The best method I've found involves making a loop from an 18-ft. rope. Wrap it around the bottom two corners of the plywood sheet. The rope makes a perfect handle.

—KEN PORTER



Simple Gutter Shelving

Vinyl rain gutters make great workshop storage shelves for long, thin items such as molding, light lumber, pipe and certain tools. Simply screw wraparound support brackets to each wall stud and snap the gutters into place.

—J.R. NUSSMEIER



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Blade Storage Tubes

My reciprocating saw gets used a lot, and the tool case becomes a mess. To keep my blades in order, I use storage tubes made from 1¼-in. PVC waste pipe and end caps. I just cut the pipe to length, glue one end and then label and store my blades. The open end gets friction-fitted with the cap. Now I can find the right blade at a glance. —**PHIL STREIT**



Convenient Bench Clamps

Trigger-style bar clamps make perfect workbench hold-down clamps. First, punch out the split-tube stop at the end of the clamp's bar and then slide off the trigger head. Slip the bar through a bench dog hole and reinstall the trigger head. If your bench doesn't have dog holes, just drill a hole wherever you need it. —**WILL LEIGHTON**

“Don’t forget your card scraper! I’m always pulling one out of the drawer to feather out glue-up lines, gouges and unevenness without tearing out the wood surface.”
—**LEE BUCHANAN**



Tape Trick for Drill Bits

If you need to drill a hole to a specific depth, make this quick visual guide. On your drill bit, mark the desired depth with masking tape. When you’re drilling, stop when the tape reaches the surface of the wood. —**BRITT REESOR**



Sandpaper Tearing Blade

Cutting sandpaper dulls scissors and utility knife blades over time. Here’s a better technique: Fasten a hacksaw blade to the edge of your workbench. Slip a washer behind the blade at each of the mounting holes so a sheet of sandpaper can easily slide in behind the blade. I fold the paper to the finished size I want, then tear along the fold. —**DARRELL NOVACEK** ●



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UP TO THE CHALLENGE

Woodworker and custom furniture maker
Lee Buchanan tackled a unique Murphy bed makeover



A few years ago, I got a call from clients who had bought an original Sea Ranch condominium designed by renowned architect Charles Moore. They asked me to rebuild a twin Murphy bed closet to fit a full-size bed—without changing the footprint or straying from Moore's original design.

I demoed the closet's original 2x4 framing and replaced the sides with $\frac{3}{4}$ -in. plywood, but I was worried about structural integrity, so I came up with a few methods of reinforcement. I installed a $\frac{3}{4}$ -in. plywood floor, toe-kick, 2x4 bracing and a small header box to conceal lighting.

Black powder-coated aluminum L-brackets along the bottom of the cabinet strengthened the sides. Adding felt feet on the doors allowed the floor to support their weight, alleviating stress on the left wall. I also glued solid wood edging on the doors and closet sides to provide a strong connection for the brass screws that hold the piano hinges.

Given the room's high sun exposure, I rubbed Osmo UV-Protection Oil on all the panels before installation. The warm, natural finish matched the rest of the Douglas fir millwork in the house.

—LEE BUCHANAN,
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- Footprint: 19 1/2" x 20 1/2"
- Shipping weight: ≈ 450 lbs.



MADE IN AN ISO 9001 FACTORY

G0899 // ONLY \$2195

\$259⁹⁵
FREIGHT

10" 2 HP Benchtop Table Saw

Exceptional mobility and performance

- 31 1/2" Rip capacity
- 35 1/4" x 23" Aluminum table
- Extension table expands up to 42 1/2" wide
- Aluminum fence with micro-adjustment
- Built-in folding stand
- Footprint: 35 1/2" x 26 1/2"
- Shipping weight: ≈ 72 lbs.



SHOP FOX

W1875 // ONLY \$380

\$199⁹⁵
FREIGHT

13" 2 HP Benchtop Planer

Transform rough lumber for projects

- 3-Knife cutterhead
- Stainless steel table with steel wings
- Single-speed automatic board feed
- Convenient grab handles
- Top-mounted return rollers
- Footprint: 22 1/2" x 13"
- Shipping weight: ≈ 73 lbs.



MADE IN AN ISO 9001 FACTORY

G0939 // ONLY \$495

\$59⁹⁵
SHIPPING

8" 1 1/2 HP Benchtop Jointer

Portable for jobsite or shop

- Spiral-type cutterhead with 16 indexable HSS inserts
- 8" Infeed/outfeed table extensions
- Cast aluminum infeed and outfeed tables
- Infeed table height adjustment lock
- 2 1/2" Dust port
- Footprint: 19" x 13 1/2"
- Shipping weight: ≈ 59 lbs.



MADE IN AN ISO 9001 FACTORY

G0947 // ONLY \$535

\$59⁹⁵
SHIPPING

17" Floor Drill Press

Engineered for accuracy and efficiency

- 210-3630 RPM 16-speed spindle
- Adjustable Class II laser guide
- Built-in LED work light
- Precision-ground cast-iron table
- Chuck key holder
- Footprint: 20" x 13 1/2"
- Shipping weight: ≈ 174 lbs.



MADE IN AN ISO 9001 FACTORY

T34610 // ONLY \$750

\$199⁹⁵
FREIGHT

1 HP Wall-Mount Dust Collector

Dust solution for tight work areas

- 1-Micron canister filtration
- 537 CFM air suction capacity
- 10" Cast aluminum impeller
- Steel base plate mounts easily to most walls
- Ideal point-of-use dust collector
- 11-Gallon capacity
- Shipping weight: ≈ 64 lbs.



MADE IN AN ISO 9001 FACTORY

G0785 // ONLY \$398

\$49⁹⁵
SHIPPING

6" Belt / 10" Disc Combo Sander

Efficient project sanding

- Cast-iron table, disc, and base
- Quick-change belt release
- Cabinet stand with storage locker
- Graphite-coated platen
- Heavy-duty miter gauge
- Footprint: 15" x 16 1/2"
- Shipping weight: ≈ 168 lbs.



MADE IN AN ISO 9001 FACTORY

SHOP FOX

W1676 // ONLY \$835

\$99⁹⁵
SHIPPING

12" 1 1/2 HP Drum Sander

Professional finishes without the big machine

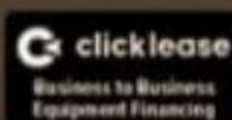
- 2.5-17.3 FPM variable-speed conveyor
- User-friendly hook and loop sanding
- Industrial-duty conveyor belt
- Grab-and-go portability
- Thickness scale
- Footprint: 22 1/4" x 12"
- Shipping weight: ≈ 166 lbs.



MADE IN AN ISO 9001 FACTORY

G0459 // ONLY \$1295

\$199⁹⁵
FREIGHT



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ARCH FIT®

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4

COZY FIT®

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