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WINTER 2017

ISSUE 69

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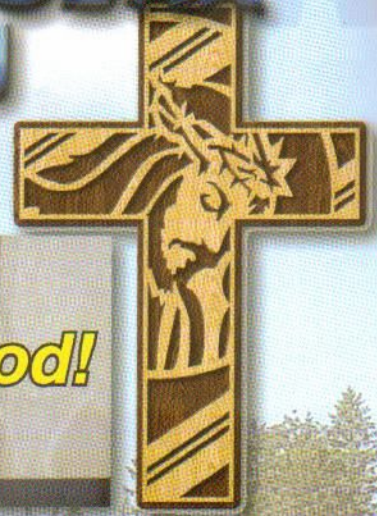


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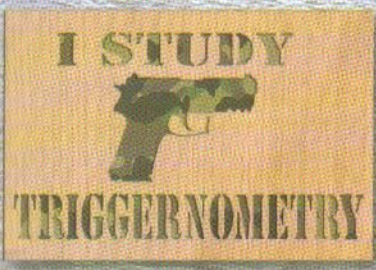


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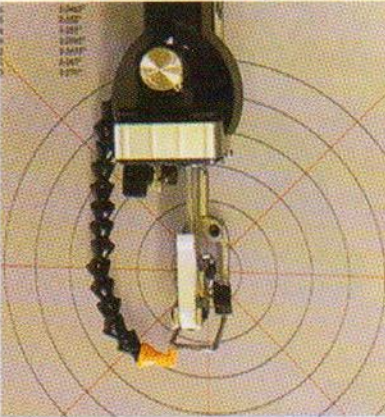
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SCROLLSAW Woodworking & CRAFTS

44



IN THIS ISSUE

PROJECTS

18 *Wooden Spinners*

By Rolf Beuttenmuller

Custom versions of these popular toys will win playground wars or make elegant gifts for restless adults

24 *Beasts of Burden*

By Kathy Wise

Add a majestic camel and whimsical donkey to your 3-D intarsia nativity

30 *Making a Gift Box with Wooden Hinges*

By Carole Rothman

This stylish box looks impressive, but is surprisingly easy to make

44 *Hamilton Log Set*

By Dave Van Ess

Larger logs make this building set appropriate for children of all ages

59 *Man Cave Lamp*

By John Hutchinson

Cheer for the home team with this customizable nightlight

FEATURES

50 *Holiday Roundup*

By Kathleen Ryan

68 *Toys by the Truckload*

By Kathleen Ryan

T.L.C. Toys has made and donated a quarter-million wooden toys ... and counting

52



18

PATTERNS

22 Christmas Word Art

By Bruce Shea

Celebrate the season with these elegant holiday messages

23 Gingerbread Men Ornaments

By Jacob and Wayne Fowler

Whimsical designs will delight fans of a popular holiday treat

28 Stained Glass-Style Ornaments

By Theresa Ekdorn

Fretwork ornaments inspired by Tiffany glass

36 Intarsia Angel Tree Topper

By Janette Square & Bruce Worthington

Use thinner wood to create a custom topper that won't topple your tree

39 Compound-Cut Ornaments

By Sue Mey

Combine fretwork snowflakes with wooden bulbs to make elegant ornaments

40 O Holy Night

By Sue Mey

Layer pieces and add color to create an intricate Nativity scene

42 Self-Framing Ornaments

By Sheila Landry

A simple angled cut is the secret to creating the 3-D effect

52 The Busy Carpenter

By Ruth Chopp

Pull the strings to animate this whimsical ornament

54 Making Earrings

By Richie and Larkin Newberry

Use hardwood scraps to make easy, inexpensive gifts

56 Freestanding Nativity Puzzles

By Paul Meisel

Simple designs teach the Christmas Story and double as holiday decorations

58 Geometric Compound-Cut Ornaments

By Sue Mey

These designs look impressive but are surprisingly easy to cut



COVER

Ornaments & Decorations ... 22, 23, 24, 28, 36, 39, 40, 42, 52, 56, 58

Heavenly Intarsia Tree Topper ... 36

Handmade Gift Box ... 30

Heirloom Wooden Toys ... 18, 44, 56

DEPTS.

4 Editor's Note

6 Letters

8 Reader Gallery

12 Tips & Techniques

12 Book Shelf

70 Scroll Saw Basics

71 Coming Features

71 Ad Directory

72 Sawdust

SCROLLSAWER.COM

• Video

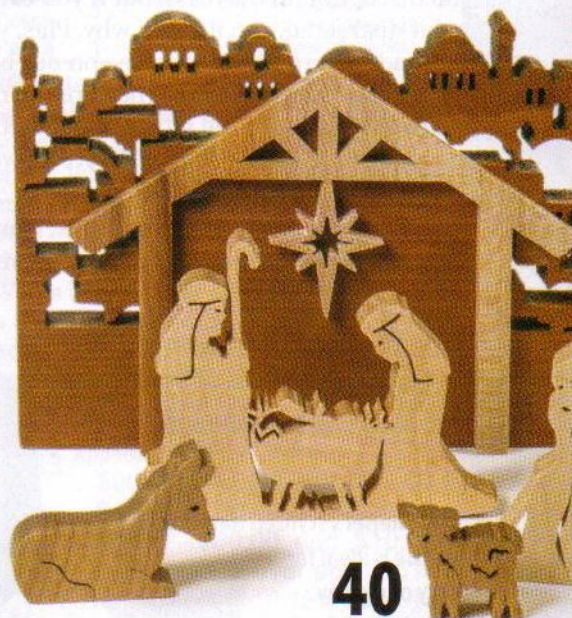
See the Man Cave Lamp (pg. 59) in action.

• Building Set Extras

Download plans for a fullsize playhouse, child safety testing guidelines, and a packing guide for mailing the logs to your favorite kid (pg. 44).

• Giving Back

Meet fellow scrollers who make and donate toys, and get ideas for your next charitable project (pgs. 68 and 72).



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A Toy Story

At this time of year, many scrollers' thoughts turn to toys. Even the most dedicated scroller of decorative fretwork tends to wander toward wooden toys at stores and craft shows and think, "I could make that..."

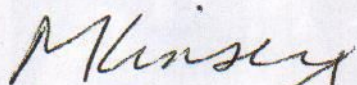
If you're looking for gift ideas, we have several: custom wooden fidget spinners, a sturdy Nativity perfect for play or display, and a set of child-safe building logs inspired by a classic design. Kids might also enjoy some of the Christmas ornaments, such as the jointed Busy Carpenter and a gingerbread man who's met with an unfortunate fate. Take a minute to woodburn the year and your name or initials on your gift so your handiwork can be appreciated year after year.

Donating toys is another pleasure of the season. In this issue you'll meet Mel Hartman, the founder of the nonprofit organization T.L.C. Toys. Mel and his fellow volunteers have made and given more than 380,000 toys over the past 25 years. We also profile two clubs who donate toys and ornaments in their communities. For more inspirational stories and some tips for starting a donation project, visit our website, www.scrollsawer.com.

Because we are talking about toys, the phrase "child-safe" came up several times as we prepared the issue. The actual consumer safety standard for toys is a 90-page document that explains manufacturing requirements in incredible detail. You're making wooden toys by hand, so you don't need to worry about batteries, magnets, metal edges, stuffing, etc. However, it's still important to choose your designs, materials, and finishes carefully. Visit our website to learn one toymaker's safety protocol, plus find a chart of toxic wood varieties you should avoid any time of year.

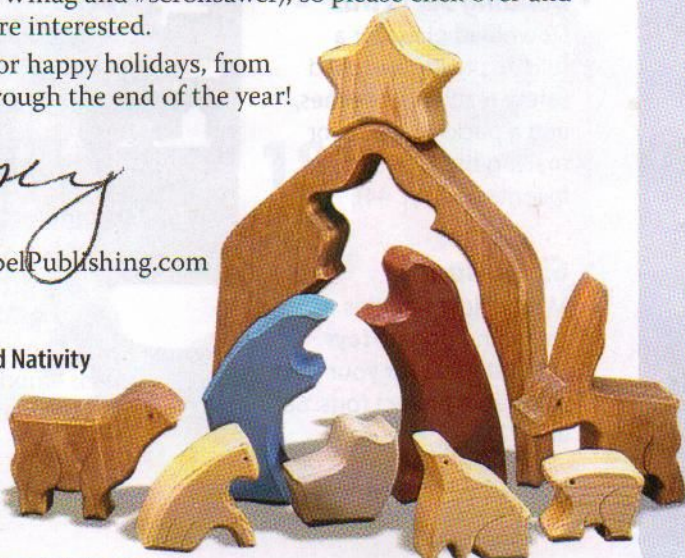
On a different note, I am excited to report that we are moving into a new building this fall. We hope to accomplish the move with no disruption to business, but if you call us in October and we seem a bit distracted, you'll know why. Plus, you will start seeing our new address in Mount Joy, Pa., on our bills and envelopes, and we want to be sure you know they are the real thing. We'll share more information about the move on our website (scrollsawer.com) and social media (#SSWmag and #scrollsawer), so please click over and take a look if you're interested.

Best wishes for happy holidays, from Thanksgiving through the end of the year!



Mindy Kinsey
Kinsey@FoxChapelPublishing.com

Paul Meisel's stylized Nativity puzzle is ideal for play or display. See the article on page 56.



Our Mission:

To promote scrolling as an artform and an enjoyable pastime—for all ages and all skill levels.

Publisher	Alan Giagnocavo
Vice President, Content	Christopher Reggio
CFO and General Manager	Dave Kefford
Editor	Mindy Kinsey
Technical Editor	Bob Duncan
Editorial Assistant	Kristen Scanlan
Art Director	Jon Deck
Contributing Photographer	Mike Mihalo
Technical Illustrators	Jon Deck
.....	Carolyn Mosher

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GEXpress Yourself

I thought "GEX" by Dave Van Ess in *Scroll Saw Woodworking & Crafts* Spring 2017 (Issue 66) looked like a great toy for my grandkids and a lot of fun for Granddad. Instead of painting or staining each lizard, I chose to attach different veneers from a variety pack. I shaped the head and spine of each lizard for a more realistic look. I glued the shaped portions onto $\frac{1}{8}$ " (3mm) walnut and did the same with just the head on a few of the bodies, adding spots punched from a contrasting veneer to add diversity. I used a stencil to paint the American flag on the underside of each animal with the idea that this puzzle represents our country's diverse population.



Ray Scheetz

Hattiesburg, Miss.



Scroll Saw Identification

I have a pedal-powered scroll saw that I need help identifying. It is a black scroll saw with a gold pinstripe. At one time somebody converted it to use an electric motor. Does anyone know of a scroll saw-restoring Facebook group? Any help is appreciated.

John Gray

Griffin, Ga.

If you have any information for John, contact him at johndeer1941b@gmail.com.



hardboard backing board

Fox Hunt

Jim Earley of Waynesboro, Va., and Mike Moppin of Grandview, Mo., were randomly drawn from the participants who located the fox in our last issue (Fall 2017, Issue 68). The fox was hiding on the base of the pheasant intarsia on page 37.

Find the fox in this issue, and tell us the page number and location. Two readers randomly selected from all correct replies will receive a \$25 Fox Chapel Publishing gift certificate. Entries must be received by December 1, 2017, to be eligible. *NOTE: The contest fox is an outline drawing that would face left if his feet were on the "ground" (other foxes appearing in SSW&C don't count).*

Send your entry to SSW&C, Attn: Find the Fox, 1970 Broad Street, East Petersburg, PA 17520, or enter online at www.ScrollSawer.com.

Clockopelli

I loved "Clockopelli" by Dave Van Ess in *Scroll Saw Woodworking & Crafts* Summer 2017 (Issue 67) so much that I made four! I scrolled the projects from reclaimed barn wood from my dad's farm, hard maple painted black, rosewood, and cedar.

Jeff Verble

Antioch, Tenn.

Wonder Bowl

Editor's Note: In the "Wonder Bowl" project by Dave Van Ess (Fall 2017, Issue 68), we did not make clear one point: the width of the bottom ring does not change if you use thicker wood. You can use the formula on page 57 to create an angle block and cut the bowl regardless of the thickness of the wood you choose. However, the width does change if you increase the size of the pattern. Dave has posted a PDF of a pattern for a 12" (30.5cm) bowl on the SSW forum (<https://tinyurl.com/y7wpokxj>). Use the same formula; just start with the new ring width.

Write To Us!

We'd love to hear your thoughts on our projects, ideas for new patterns, scrolling experiences, and woodworking show stories. Write to us at: Letters to the Editor, *Scroll Saw Woodworking & Crafts*, 1970 Broad Street, East Petersburg, Pa., 17520 or e-mail Editors@ScrollSawer.com.



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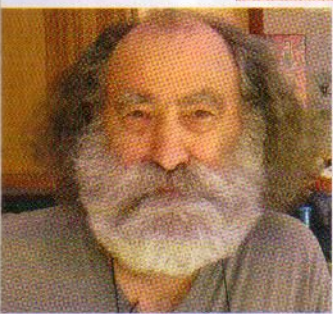
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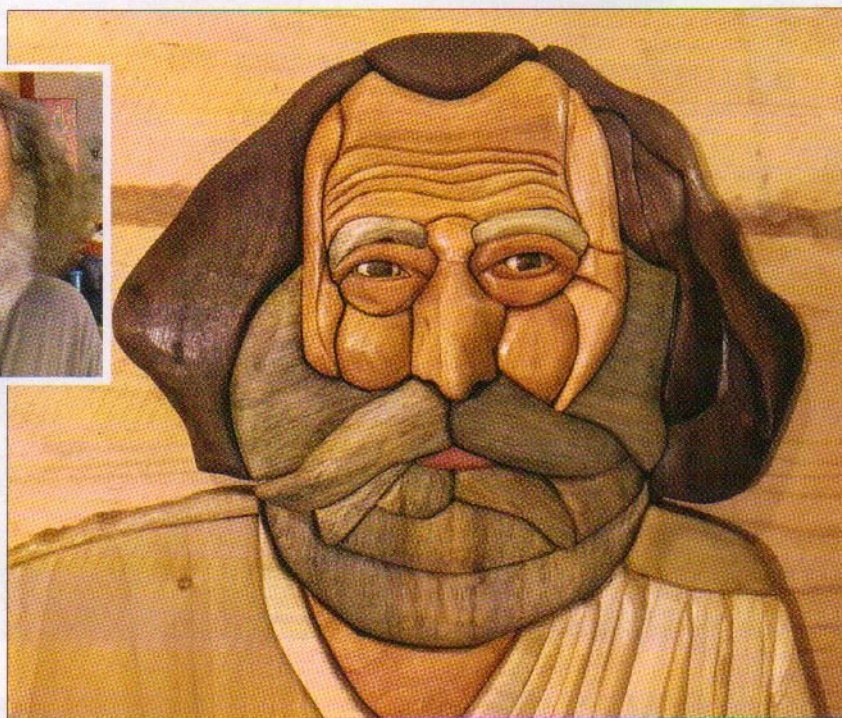
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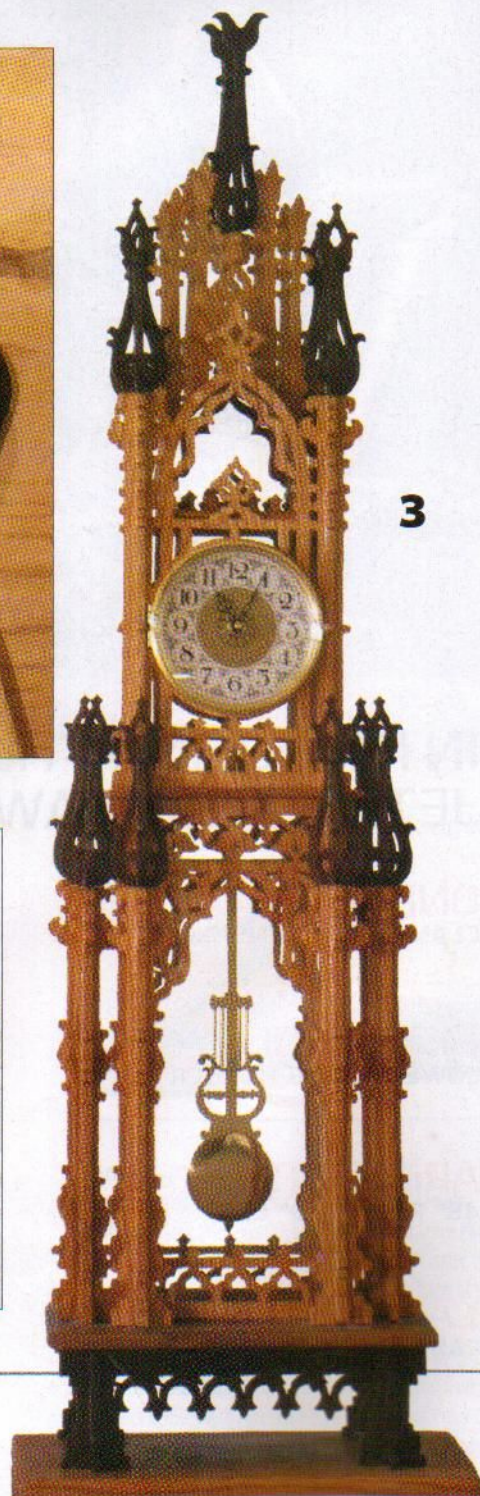
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1



2



3

1 Beatrix Brockman

Clarksville, Tenn.

Beatrix used a photograph of her husband as reference when she created this intarsia portrait.

2 Linda David

Phoenix, Ariz.

Camelback Mountain in Phoenix, Ariz., inspired this project. Linda used blue pine, Baltic birch, African padauk, satinwood, mahogany, and bloodwood to create the scene.

3 Laura Shannon

Sierra Vista, Ariz.

Laura enjoyed scrolling *Scheherazade* by Dirk Boelman because, "The pattern was easy to understand as a beginner, and the finished project stands at an impressive 45" (1.14m) tall." Laura added a base and inserted glass in the pendulum area to discourage her curious cat.

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4

5



6

4 Lori Butrick

River, Wis.

Lori calls her scroll saw her therapist because it helps her cope with chronic pain from a leg injury. She created *Sky Kings* after she saw a painting by Jody Bergsma of the same name. Contact Lori at www.facebook.com/Keoris-Custom-Woodworking-171349923026788/.

5 Jody Whittemore

LaFayette, Ga.

Jody made this Dala horse-inspired box, 6" (15.2cm) tall, from three layers of pine, sealed the box with teak oil, and finished it with acrylic paint. Visit Jody at www.etsy.com/shop/whittemorewoodcraft.

6 David Fall

Hanover, N.H.

David made his clever bookends, 7" by 12" (17.8cm by 30.5cm) from black walnut, maple, and cherry. They feature dovetail joints and are finished in polyurethane. Visit David at www.fallwoodcrafts.com.

Share Your Latest Work!

Send a slide, professional print, or digital image (300 dpi minimum) with 100 words about you and your piece. Include your hometown, the name of the pattern maker, and a list of wood and materials used. Send to Reader Gallery, Scroll Saw Woodworking & Crafts, 1970 Broad Street, East Petersburg, PA 17520, or e-mail editors@scrollsawer.com.

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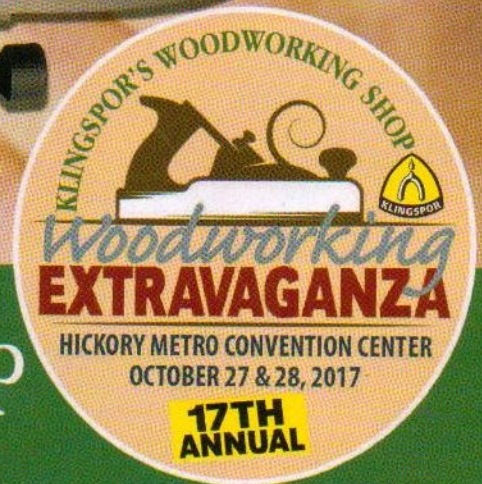


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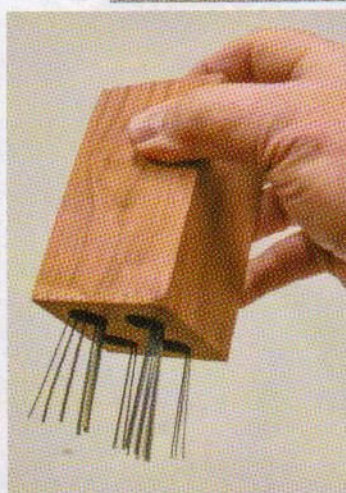
Stay-Put Blade Holder

TOP TIP

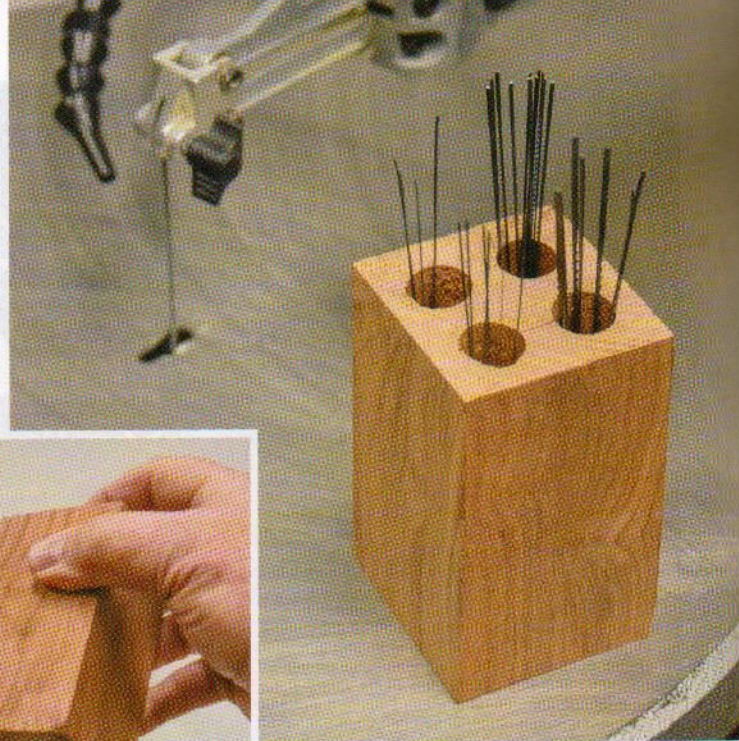
Transform a chunk of scrap wood into a custom blade holder. Measure in $\frac{1}{2}$ " (1.3cm) from the edge on all four sides. Buy inexpensive rare earth magnets around $\frac{1}{2}$ " (1.3cm) in diameter (the size doesn't really matter). Choose a Forstner bit slightly larger than the rare earth magnets. Center the bit where the lines intersect and drill down to within $\frac{1}{4}$ " (6mm) of the bottom. Apply a little glue to the bottom of each magnet and insert them into the holes.

The magnets hold scroll saw blades securely enough to keep them from flying everywhere if you knock the holder over. They are usually strong enough to secure the holder to a metal surface; I put my holder sideways on a metal filing cabinet near my saw.

Dave Van Ess
Chandler, Arizona



This simple blade holder is virtually spill-proof and lets you sort blades by size or type.



The magnetized base holds fast to any metal surface, even the saw itself.

Submit and win!

Send your favorite tip to *Scroll Saw Woodworking & Crafts* 1970 Broad St., East Petersburg, Pa., 17520, or e-mail editors@scrollsawer.com. The Top Tip in each issue wins a \$25 Fox Chapel gift card.



Scrolling Stencils

Over the years, I have cut just about anything with my scroll saw, including metal and plastic up to $\frac{3}{4}$ " (1.9cm) thick. So when a friend was looking for better stencils for her craftwork, I was ready for the challenge. I chose some of my son Jacob's snowflake designs. I alternated pieces of Duralar/Mylar frosted plastic with cardstock (to minimize melting), sandwiched the stack between two thin pieces of wood, and cut a number of our snowflake patterns. My neighbor loved her plastic stencils, I sold the wooden snowflakes as ornaments at a craft show, and my wife and daughter used the cardstock pieces to make garlands. It was a very successful test!

Heat is the enemy when you cut plastic. If you try making stencils from your patterns, be sure to separate the plastic with cardstock. I use my normal blades—for the snowflakes, it was a #3—but expect that they will wear out faster than usual because I'm cutting plywood.

Wayne Fowler
Markham, Ont.



Scroll saw patterns make surprisingly good stencils. Just layer the plastic with cardstock and wood for easy cutting.

PROXXON

TOOLS WITH CHARACTER

2-speed scroll saw DS 460

Approx. 460mm (18") throat! Extremely light magnesium saw arms for smooth operations and clean cuts.

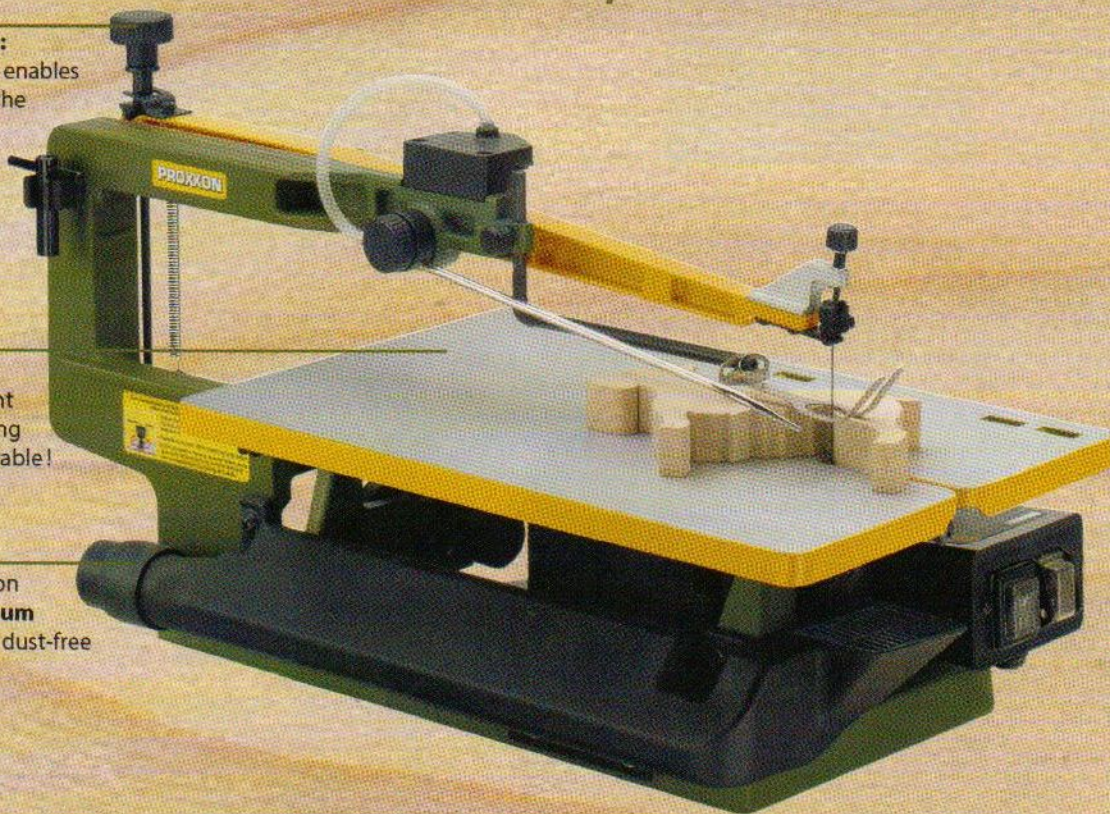
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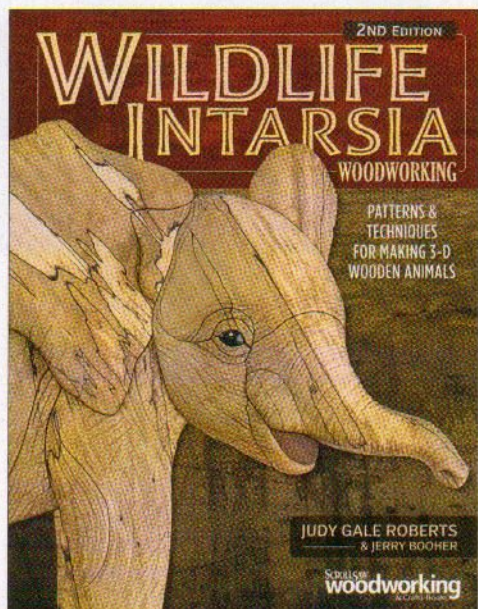


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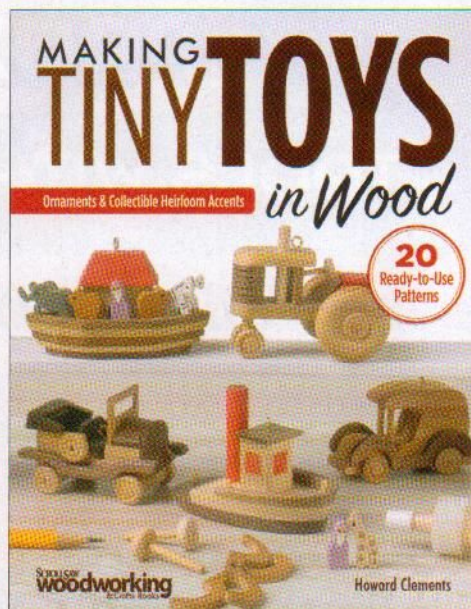
Wildlife Intarsia Woodworking, 2nd Edition

Patterns & Techniques for Making 3-D Wooden Animals

By Judy Gale Roberts & Jerry Booher

\$19.99

Judy Gale Roberts pioneered the modern art of intarsia during the 1970s and is still a leader in the field. Through her books, classes, kits, and website, she has personally taught many of today's intarsia artists and hobbyists. This second edition of one of her most popular books distills 40 years of experience into a detailed overview chapter and five step-by-step projects. The instructions have been updated with Judy's newest techniques, arranged in an easy-to-follow step style, and illustrated with clear, useful photos. The pattern section includes three new designs, and all of the patterns have tips to help you apply the earlier lessons. This book truly helps you learn the art of intarsia while creating beautiful wooden portraits of animals.



Making Tiny Toys in Wood

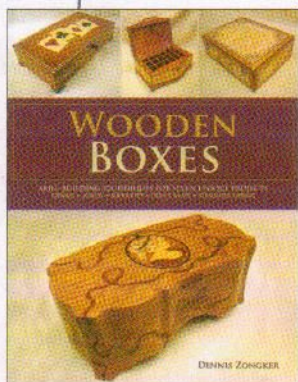
Ornaments & Collectible Heirloom Accents

By Howard Clements

\$12.99

Use up your scrap wood by making charming toy ornaments for your holiday tree or whimsical accents for your home. Most of Howard Clements' delightful designs incorporate motion, so the carousel turns, the Ferris wheel whirls, and the wheels spin on the cars, tractor, and wagon. The book includes an overview of woodworking materials and tools, and one step-by-step project. The 15 projects range in difficulty, but the clear instructions and assembly drawings should ensure that scrollers of any ability can make and enjoy these tiny toys.

From Other Publishers



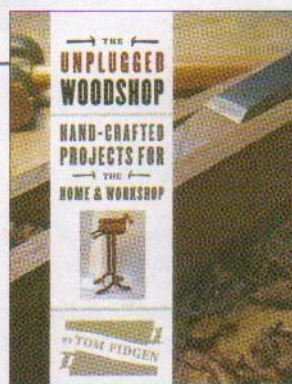
Wooden Boxes Skill-Building Techniques for Seven Unique Projects

By Dennis Zongker

\$24.95

Professional furniture maker Dennis Zongker shares detailed instructions for making beautiful and functional jewelry boxes, music boxes, and artist's cases. Along the way, he teaches marquetry, veneering, inlay, finishing, and other expert techniques you may enjoy incorporating into your

scrolling even if you don't plan to build the jointed boxes. The step format includes photos of the processes and plenty of helpful tips.



The Unplugged Woodshop

Hand-Crafted Projects for the
Home & Workshop

By Tom Fidgen

\$29.95

A maker of customer furniture, Tom Fidgen shares expert building and finishing techniques for making traditionally designed boxes, tables, and shop tools. The detailed instructions explain how to make the projects with hand tools, although

of course a scroll saw and other power tools would make short work of many of the processes. If you are interested in furniture making and have access to a shop in addition to your scroll saw, these projects might be a place to start.

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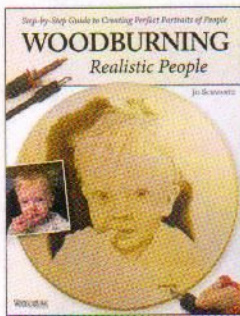
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Holiday Shopping Guide

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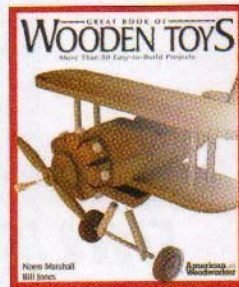


Woodburning Realistic People

Step-by-Step Guide to Creating Perfect Portraits of People

By Jo Schwartz
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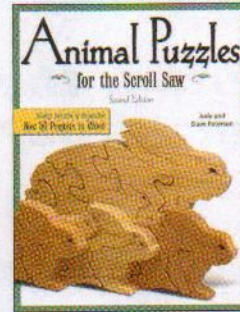


Great Book of Wooden Toys

More Than 50 Easy-to-Build Projects

By Norm Marshall and Bill Jones
Over 50 easy to follow projects for building classic wooden toys, including a Model T car, a bulldozer, steam engine, biplane, and many more.

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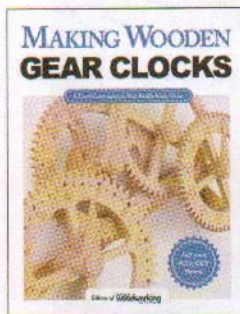


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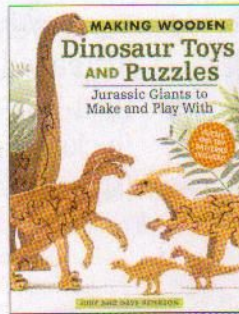


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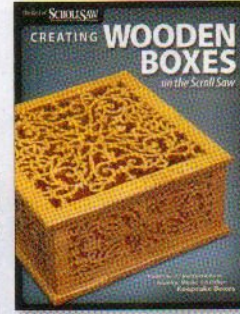


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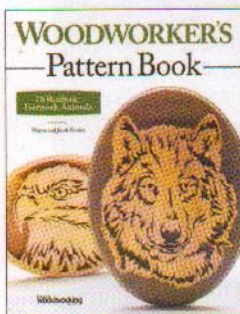
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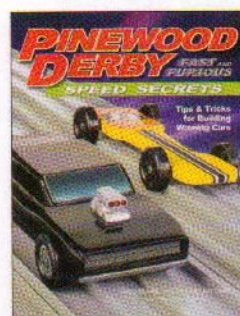
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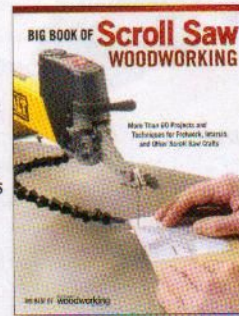


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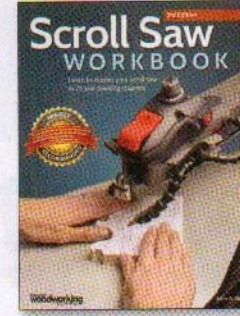


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By John Nelson
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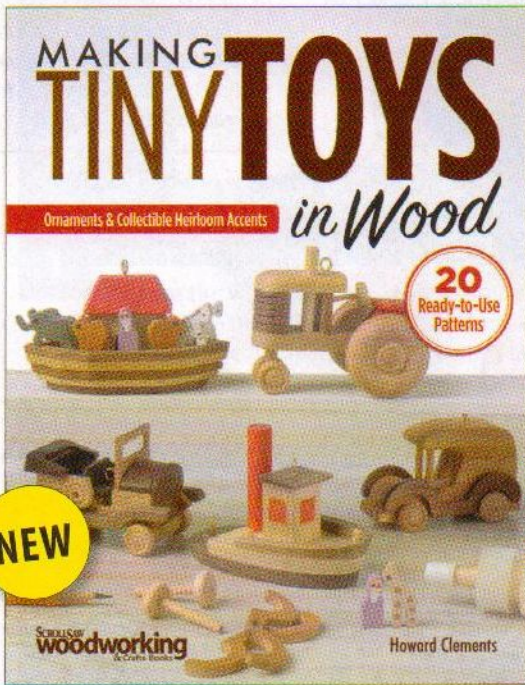
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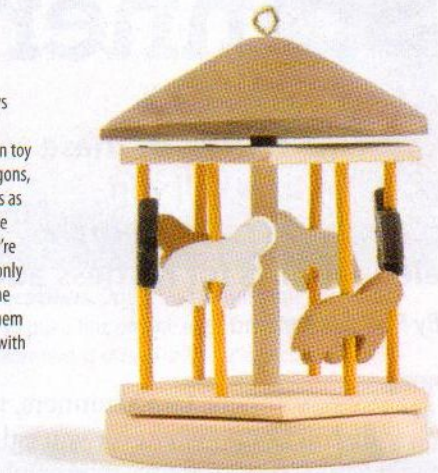
Ornaments & Collectible Heirloom Accents

By Howard Clements

Create charming holiday decorations that double as small toys with this easy-to-follow guidebook. Full-size patterns and step-by-step instructions are provided for 20 working wooden toy ornaments. From tugboats and tractors to windmills and wagons, these nostalgic moving toys make great Christmas ornaments as well as keepsake gifts for family and friends. And these simple projects don't take a lot of time, wood, or tools to make. They're a great way to reuse and repurpose scrap wood, and require only minimal painting. All you need is a scroll saw, a drill, and some glue to create memorable family heirlooms. You can create them assembly-line style and fill a tree—or make a lot of gifts—with just an afternoon's work. Better yet, get a youngster or two involved in the cutting, painting, and assembling.

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- 20 Full-size patterns and step-by-step instructions.
- Easy scroll saw projects that don't take a lot of wood or tools.
- Charming mini toys that move or "work" (wheels roll, carousel turns, windmill rotates).
- Great way to reuse and repurpose scrap wood.
- Make your own Christmas ornaments, toys for older children, or keepsake gifts for family and friends.



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- New from intarsia legend Judy Gale Roberts.
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- Shows how to cut, shape, and piece colorful hardwoods to make beautiful wood inlay animal portraits.
- Step-by-step projects plus detailed descriptions of techniques ensure success.
- Full-sized patterns can be used again and again.

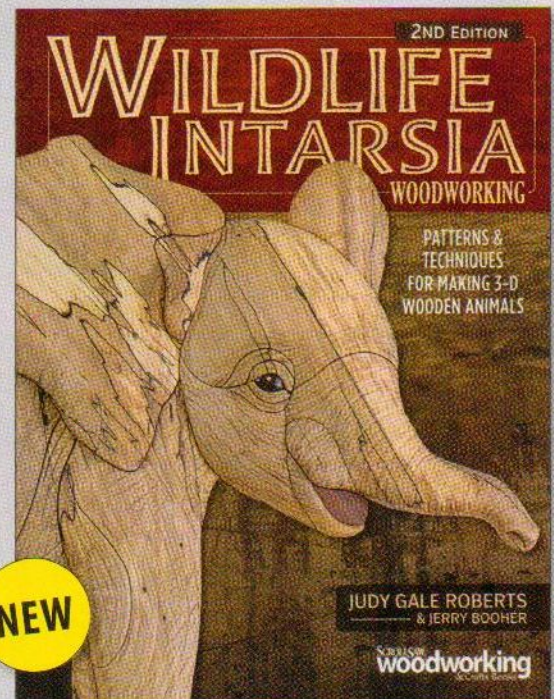
Wildlife Intarsia Woodworking, 2nd Edition

Patterns & Techniques for Making 3-D Wooden Animals

By Judy Gale Roberts and Jerry Booher

Discover the secrets of intarsia—the art of making beautiful three-dimensional picture mosaics that combine the natural colors and textures of wood. Intarsia legends Judy Gale Roberts and Jerry Booher provide all the inspiration and information readers need to cut, shape, and piece stunning wood inlay wildlife portraits. The authors explain how to choose wood—by judging its size, thickness, color, and grain—and provide expert instruction in shaping and sanding techniques. Three complete step-by-step projects are provided for creating dramatic raised images of a Bald Eagle, a Wild Mustang, and a Bull Moose. Eleven additional patterns feature a cross-section of North America's most popular wild animals. *Wildlife Intarsia, Second Edition* also features full-sized patterns and a colorful new photo gallery of inspiring projects.

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Wooden Spinners

Custom versions of these popular toys will win playground wars or make elegant gifts for restless adults

By Rolf Beuttenmuller

Fidget spinners, hand spinners, noisy distractions—whatever you call them, small spinning toys took America by storm this summer. The fan-shaped rotating devices were marketed to help kids focus by letting them release a bit of energy while they concentrate on other things. However, fidgeting took a back seat as kids figured out how to balance, stack, toss, turbo-boost, trade, and, of course, trick out their spinners. Using a scrap of wood and a couple of bearings, I'll help you make an ultimate custom spinner for the kid in your life or a great gift for a restless executive.

Design Notes

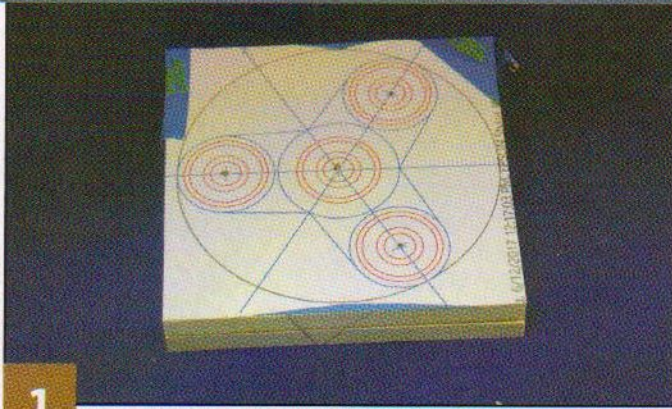
To twirl effectively, spinners need weights (the mass adds momentum). I added weights, in the form of marbles or additional bearings, to three of my five designs. I can really see a difference in the speed and duration of the spin on the weighted versus unweighted toys. If you make the double- or triple-heart designs, I definitely recommend adding weights.

Also, don't be tempted to skip the extra piece of wood. It's easy for the bearings to fall out of commercial spinners, presenting a choking hazard for small children. I encapsulated the bearings in the wood to avoid that problem.

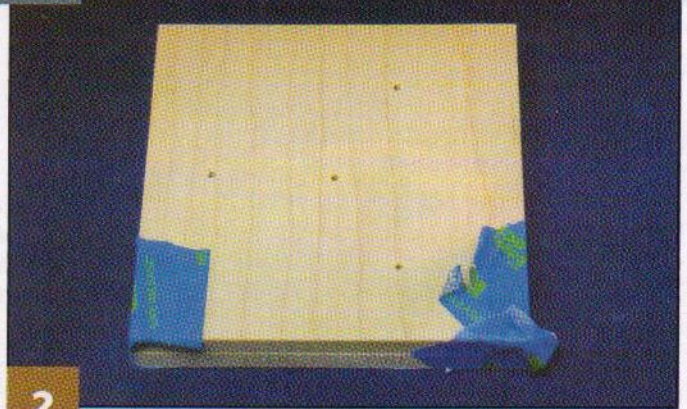
Even with careful woodworking, the bearings and small pieces in spinners could present a choking hazard. Fox Chapel Publishing and the author disclaim any liability for injuries, losses, or damages resulting from reader's use of this pattern.



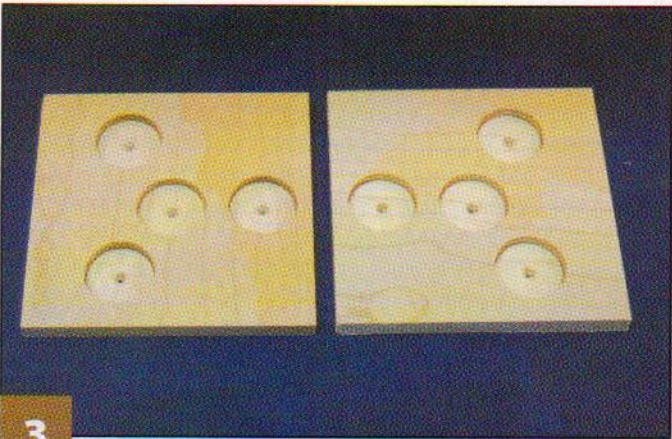
FIDGET: MAKING A SPINNER



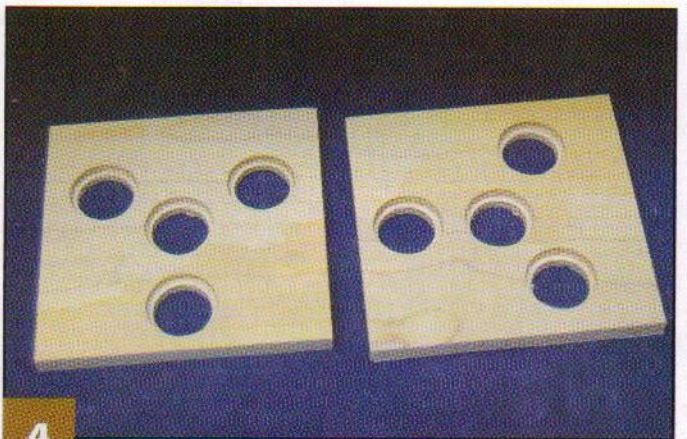
1 Prepare the wooden blank. Sand the blanks smooth. Align the blanks so the grain is perpendicular (crisscross). Stack the blanks (see page 70), apply a layer of painter's tape, and attach the pattern to the tape.



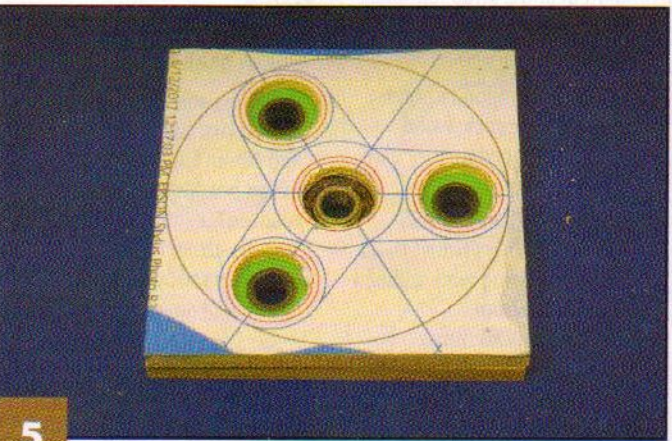
2 Mark the hole locations. Drill a $\frac{1}{16}$ " (2mm) hole through the center of each. I also put a line on one edge for additional reference. The hole placement is *critical* or the spinners will wobble.



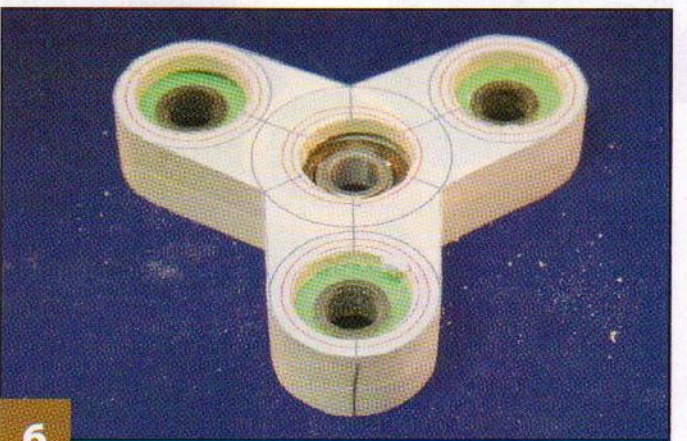
3 Drill preliminary holes. Separate the pieces. Then, on both pieces, drill 22mm-diameter holes partway through from the inside to a depth a bit more than half of the bearing thickness. Set a stop on the drill press once you have the correct depth and do all of the holes at the same time.



4 Complete the holes. Change bits and drill 18mm-diameter holes the rest of the way through. This creates a small shoulder in each hole to retain the bearing. Use a backing board to avoid tearout while you drill. *Note: You may need to change the sizes of the holes to suit your weights. For the marbles, I drilled through with a 14mm bit and then used a countersink on the inner surfaces until the marbles fit between the halves.*



5 Test-fit the bearings. Make sure the two pieces fit together with no gap.

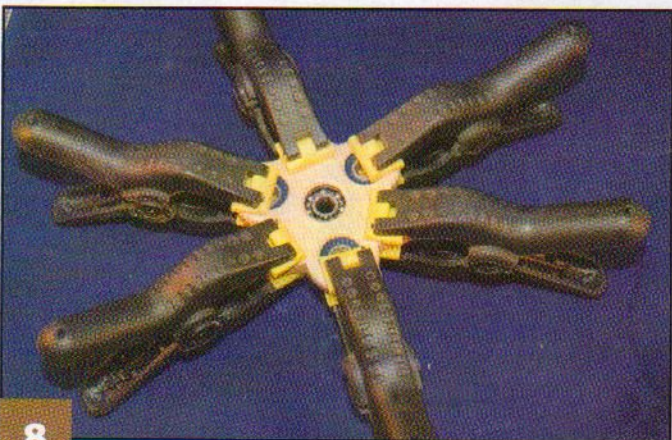


6 Cut the perimeter. Stack the two pieces together with the bearings installed; pin or tape (see page 70 for stacking instructions). Cut the perimeter. Put a new pencil mark on an edge for reference.



7

Finish the spinner. Separate the pieces. If desired, use a router with a $\frac{1}{8}$ " (3mm) roundover bit to shape the edges. I also carefully chamfered the holes on the top surfaces. Sand the outsides of the pieces. Finish the outsides of the two pieces; I used Minwax gloss spray lacquer.



8

Glue the pieces together. Spread a thin layer of wood glue on one half. Place the bearing and weights in the holes, add the top piece, clamp, and let dry.



9

Add a bearing cover (optional). For this variation, I press-fit a $\frac{5}{16}$ " (8mm) dowel into the center hole of the bearing. I used a size "O" letter drill bit to make a tube of wood from some scrap and then sliced off about $\frac{1}{8}$ " (3mm) of material to form a sort of wooden washer. I attached it with cyanoacrylate (CA) glue, being careful not to get any glue on the bearing.

About the Bearings

There are many sources for bearings. I purchased them online from VXB.com (608-2RS-SPINNER 608-2rs Fidget Hand Spinner Bearing with rubber seals 8x22x7mm); you can also check skate shops and even hardware stores. Honestly, the cheaper bearings in commercial toys seem to be much looser and to spin more freely than the higher quality bearings I bought. I made the red spinner using bearings from a cracked commercial toy that my wife found, and it spins like a champ.

By the way, when you buy them, the bearings come packed with grease. It seems counterintuitive, but you have to remove the grease or the bearings won't spin freely. I just blew the grease out with compressed air. Spinner guides also recommend soaking the bearing in alcohol and rubbing with a cotton swab until clean.

For ultimate speed, treat the cleaned bearing with synthetic lubricant designed for small, fast-turning bearings. Again, a skate shop or the interwebs can help you find the right product.



Materials & Tools

Materials:

- Hardwood, $\frac{1}{4}$ " (6mm) thick; 2 each $3\frac{1}{2}$ " (8.9cm) square or sized to fit pattern
- Hardwood scrap: contrasting color (optional; see Step 9)
- Dowel, $\frac{5}{16}$ " (8mm) dia. or sized to fit bearing; scrap (optional; see Step 9)
- Painter's tape
- Adhesive: temporary bond spray or glue stick; wood glue; cyanoacrylate (CA) glue (optional; see Step 9)
- Bearing, such as 608-2RS-SPINNER 608-2rs Fidget Hand Spinner Bearing with rubber seals 8x22x7mm from www.VXB.com
- Weights, such as marbles or extra bearings: enough to suit the pattern
- Compressed air and/or rubbing alcohol and cotton swabs

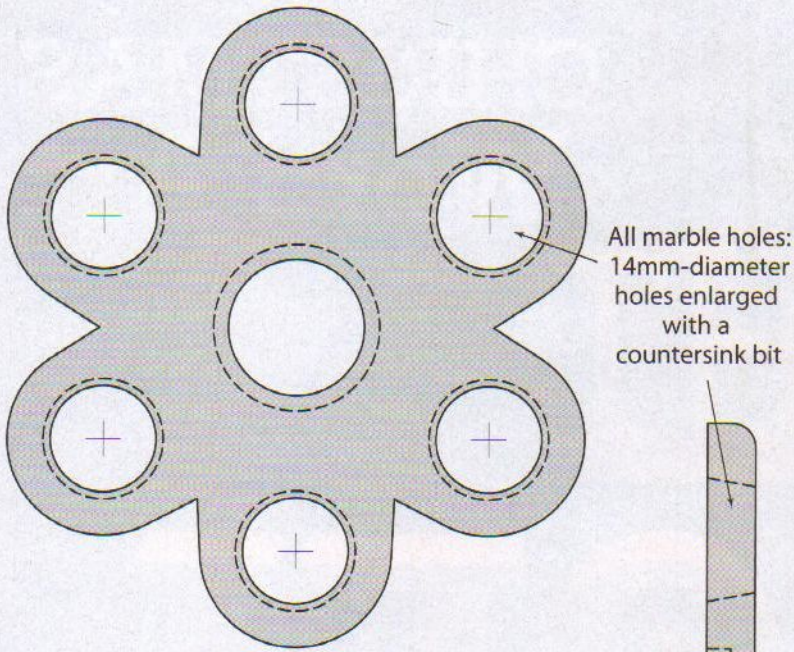
- Synthetic lubricant (optional)
- Pencil
- Sandpaper
- Spray lacquer, such as Minwax: gloss

Tools:

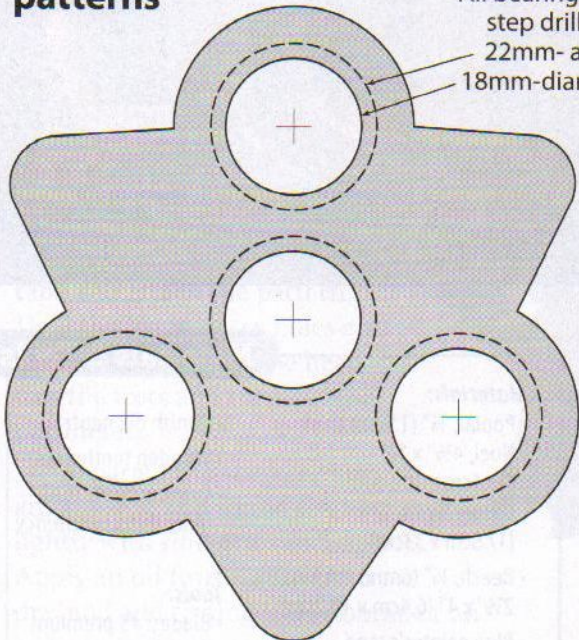
- Blades: #3 reverse tooth, such as Olson
- Drill press and bits: $\frac{1}{16}$ " (2mm)-dia. twist; 22mm and 18mm Forstner, or sizes to suit bearing and weights; countersink (optional; see Step 4); size "O" letter (optional; see Step 9)
- Router and bit: $\frac{1}{8}$ " (3mm) roundover (optional; see Step 7)
- Clamps

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.

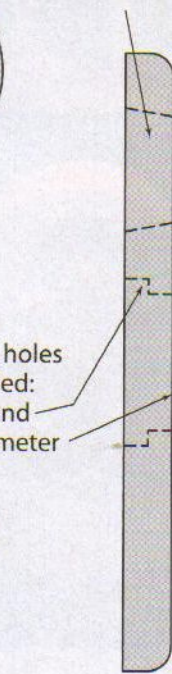
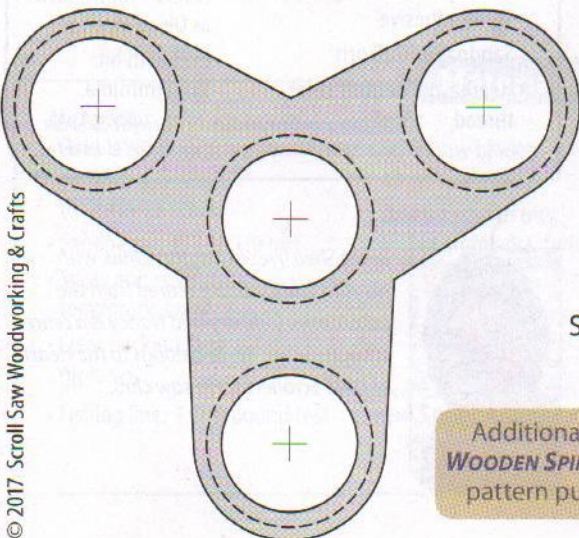
Spinner patterns



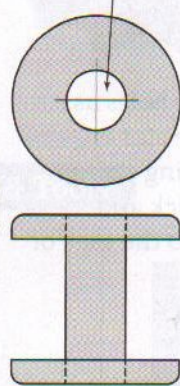
All marble holes: 14mm-diameter holes enlarged with a countersink bit



All bearing holes step drilled: 22mm- and 18mm-diameter



$\frac{5}{16}$ "-diameter hole



Spindle assembly

Additional patterns for **WOODEN SPINNERS** are in the pattern pullout section.

Is Fidgeting Effective?

Research has shown that students with ADHD are more focused if they are allowed to fidget at their desks than if they are expected to keep still. Hyperactivity is the natural state for these children, and preventing them from fidgeting actually distracts them more than their natural motion does.¹

In adults and students without ADHD, fidgeting is thought to occupy the part of your brain that would otherwise distract the rest of you with random thoughts, might allow your body to blow off steam while your mind is occupied, or could be a part of the thought process itself. And, like a basketball player who wipes his hands on his socks before taking a free throw, fidgeting may be a ritual that helps some people get in the right frame of mind for focusing.²

So a little fidgeting is probably okay, as long as your fidgeting doesn't ruin someone else's focus.

1. Hartanto, T. A., Krafft, C. E., Iosif, A. M., and Schweitzer, J. B. "A Trial-By-Trial Analysis Reveals More Intense Physical Activity Is Associated with Better Cognitive Control Performance in Attention-Deficit/Hyperactivity Disorder." *Child Neuropsychology*, June 10, 2015.

2. Lee, Bruce Y. "Here's the Science Behind the Fidget Spinner Craze." *Forbes*, May 19, 2017.

WANT MORE SPINNER FUN?

Fun with Fidget Spinners: 50 Super Cool Tricks & Activities

by David King with Colleen Dorsey & Katie Weeber

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Rolf Beuttenmuller started scrolling in 2004 after his wife, June, bought a scroll saw for his birthday. He joined a local club and enjoys new and challenging projects. His motto is, "I don't know that I can't, therefore I can."

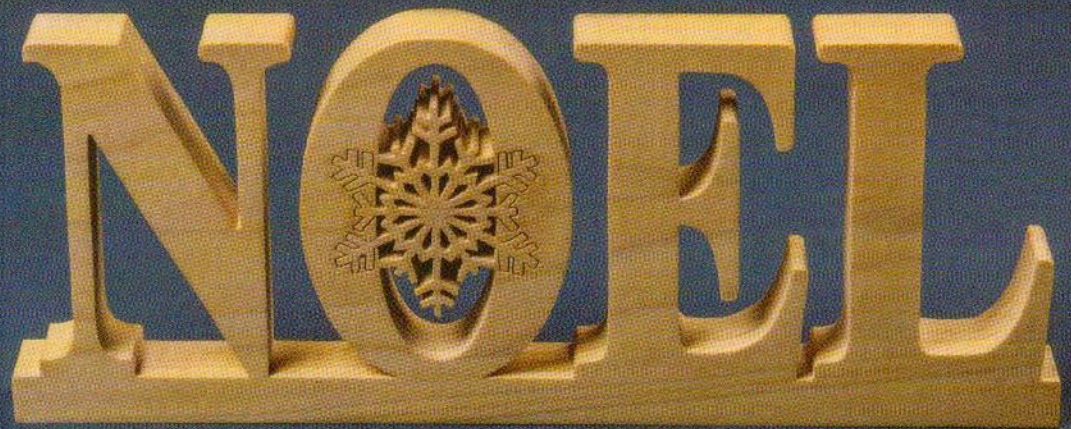
Rolf recently retired from Brookhaven National Lab after 34 years of designing and building special devices for high energy and photon science research. He lives in Bellport, N.Y.

CHRISTMAS Word Art



Celebrate the season
with these elegant
holiday messages

By Bruce Shea



I like to both transform and celebrate traditional Christmas carols and sayings by turning them into holiday word art. The star plays a big part in the Christmas story, so I incorporated it into my O Holy Night design. Snowflakes have long been associated with Christmas, especially here in the Northern Hemisphere, so I decorated my Noel with a snowflake.

O Holy Night

Transfer the patterns to the blanks. Drill blade-entry holes as needed and cut the word art. While the blank for the star is still square, drill a hole through the top for the hanging string. After cutting and finishing the project, use a toothpick and cyanoacrylate (CA) glue to secure a piece of thread to the tops of the star and the O.

Noel

Transfer the pattern to the blank, drill the blade-entry holes, and cut the frets. While the snowflake looks like it is cut totally free, it is actually attached to the sides of the O at four spots. Then, cut the perimeter of the piece, and sand everything smooth. Apply a neutral Danish oil finish.

Patterns for the **CHRISTMAS
WORD ART** are in the pattern
pullout section.

Materials & Tools

Materials:

• Poplar, $\frac{3}{4}$ " (1.9cm) thick:
Noel, $4\frac{1}{2}$ " x 12"
(11.4cm x 30.5cm);
O Holy Night, 7" x 13"
(17.8cm x 33cm)

• Beech, $\frac{1}{4}$ " (6mm) thick: star,
 $2\frac{1}{2}$ " x 4" (6.4cm x 10.2cm)

• Blue painter's tape

• Spray adhesive

• Sandpaper: 220 grit

• Needle and neutral-color
thread

• Danish oil: neutral
• Wooden toothpicks
• Cyanoacrylate (CA)
glue: thin consistency

Tools:

• Blades: #5 premium
reverse-tooth, such
as Olson Mach 5

• Drill with bit:
 $\frac{1}{32}$ " (1mm) dia.

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.



Bruce Shea lives in Dayton, Ohio, with his wife, Nancy. Bruce retired from the automotive industry and Nancy is a retired schoolteacher. Bruce belongs to the Heart of Ohio Scrollers scroll saw club.

Gingerbread Men Ornaments

Whimsical designs will delight fans of a popular holiday treat

By Jacob and Wayne Fowler

These gingerbread man designs always attract attention at craft shows. We like to think of them as the “before” and “after” versions of life as a gingerbread man!

Cutting and Finishing the Ornaments

Cut the wood to the rough dimensions in the Materials list and stack the pieces if desired (see page 70); I secure the stack with brads. Cover the top of the stack with clear packaging tape and attach the pattern. Drill the blade-entry holes and the hanging hole in the head. Cut the frets and then cut the perimeter.

Separate the stack, remove any fuzzies, and round the edges lightly with fine-grit sandpaper. Apply an oil finish, allow it to dry, and add fishing line, ribbon, or an ornament hanger to the top hole.



Patterns for **GINGERBREAD MEN ORNAMENTS** are in the pattern pullout section.

Materials & Tools

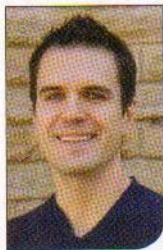
Materials:

- Oak, ¼" (6mm) thick: per ornament, 3¼" x 4½" (8.3cm x 11.4cm)
- Sandpaper: 220 or 320 grit
- Spray adhesive: temporary-bond
- Clear packing tape
- Oil finish
- Fishing line: 3 or 5-pound test

Tools:

- Scroll saw blades: #3 reverse-tooth
- Drill press with bits: ⅜" (1.5mm)-dia. twist

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.



Jacob Fowler designed his first scroll saw project when he was five years old. He now spends most of his time designing fantasy and animal patterns. Wayne Fowler has published nearly 150 articles



since 1998. His work has won awards at a local craft guild and several science fiction conventions.

Beasts of Burden

Add a majestic camel and whimsical donkey to your 3-D intarsia nativity

By Kathy Wise

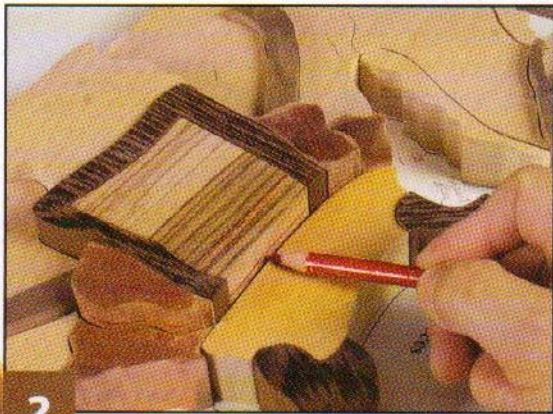


In 2013, I started a series of 3-D, two-sided, freestanding intarsia Nativity figures with Mary, Joseph, and Jesus. Since then, we've added an angel, a shepherd, sheep, and three Wise Men, learning new techniques with each addition. In this project, we will focus on creating a 3-D look for the camel.

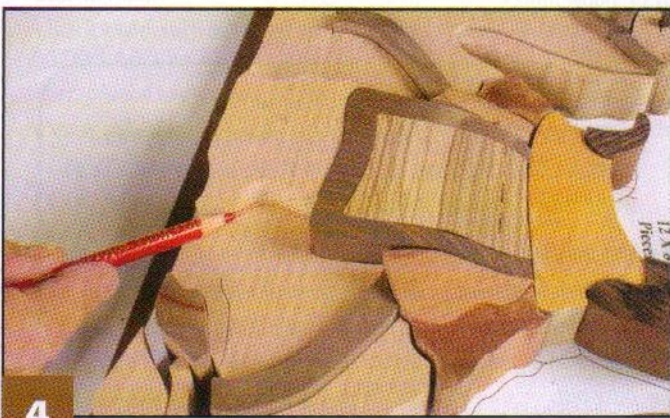
As with all of these pieces, we will glue the front and back together, so you don't need backing boards. For a simpler project, make the pieces one-sided and use a backing board, or leave out the risers. You can also reduce the size and simplify the designs to make them as ornaments.

Getting Started

The basic steps for intarsia are very similar. Make several copies of the pattern, keeping one as a master. Cut around each pattern piece and sort them into groups by wood color. Spray adhesive onto the backs of the pattern pieces; attach them to the shiny side of clear shelf paper, such as Con-Tact® brand; trim the patterns; and stick them onto the wood. Wood color suggestions are listed on the pattern, and wood selections are in the Materials list. Cut the wooden pieces, and mark the pattern number on the bottom of each with a pencil.

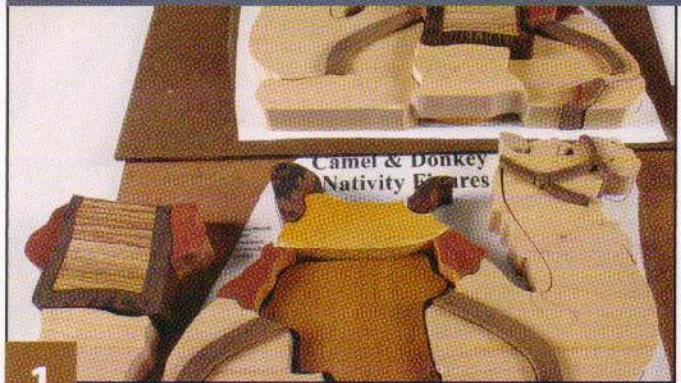


2 Dry-assemble the pieces on a photocopy of the pattern. Mark the edges of the pieces on risers into the level of the height of the next closest piece. I start with the blanket sections on the camel.



4 Mark the wood to be removed on the belly. Refer to the shaping guide. Sand the belly down below the legs. Mark the sides of the blank to create a curve on each side. Mark the legs where they touch the blanket and sand again. You are constantly marking, sanding, repositioning, and repeating the process. As you sand, you may need to adjust the surrounding pieces.

BEASTS: PREPARING TO SHAPE

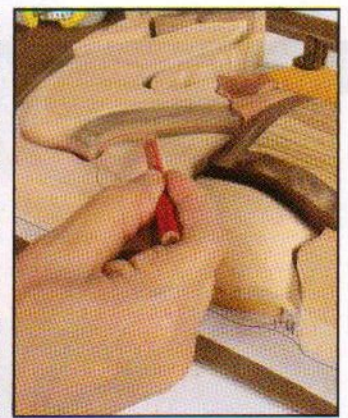


1 Cut the risers. Use 1/4" (6mm)-thick plywood or scrap wood. Attaching the risers to the back pieces makes the projects more stable when standing. For an easier project, leave out the risers. The donkey has a riser only in the tail. If you plan to glue more than one piece to a riser, sand and shape the pieces before gluing.

BEASTS: SHAPING THE PIECES



3 Taper the edges of the marked pieces. Use a 100-grit sanding drum. Use pliers to hold smaller pieces, and wear finger protection as you sand. In general, mark the level and sand down to the line, keeping the line side up and in sight whenever possible. Switch to a 220-grit drum to soften the edges and remove scratches from the coarser grit drum.



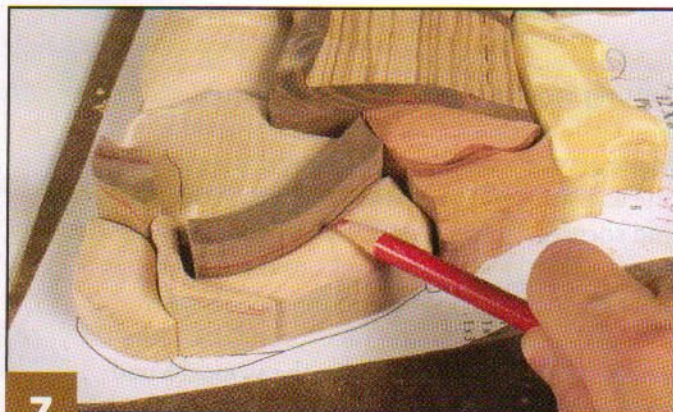
5 Work your way out from the sanded pieces. Set the strap aside and place the neck piece against the leg. Mark the thickness of the leg onto the neck and sand it down to that level. Reposition the strap, mark it about 1/8" (3mm) thicker than the legs, and shape it.



6

Mark the levels on the top and sides of the neck.

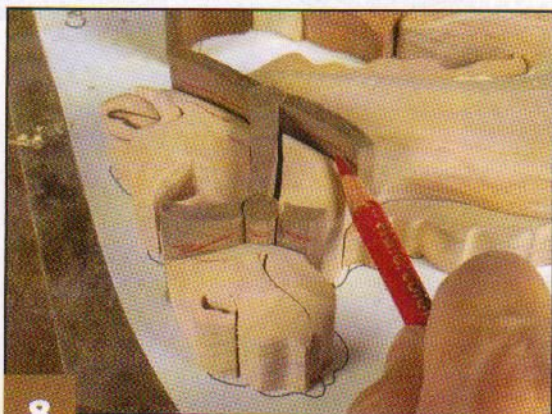
Refer to the shaping guide. Shape the inside of the neck with an oscillating spindle sander or a rotary tool with a sanding drum. Compare the neck to the surrounding pieces often and adjust the already-sanded pieces as necessary.



7

Mark the back legs. Sand and reposition them as needed.

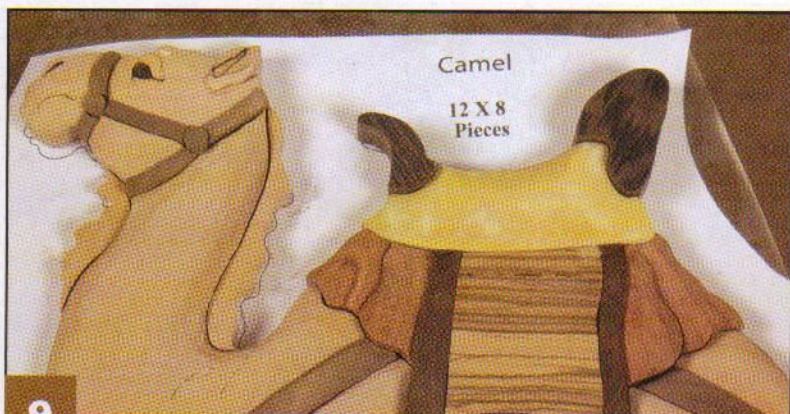
Set the strap aside and mark the thickness of the rearmost leg section using the main back leg section (like you did for the neck and strap). Shape the rearmost leg piece. Reposition the strap, mark it, and shape it. Adjust the adjoining pieces as needed.



8

Mark and shape the head. Then, move on to

the halter. Look over all of the roughly shaped pieces and make any small adjustments needed.

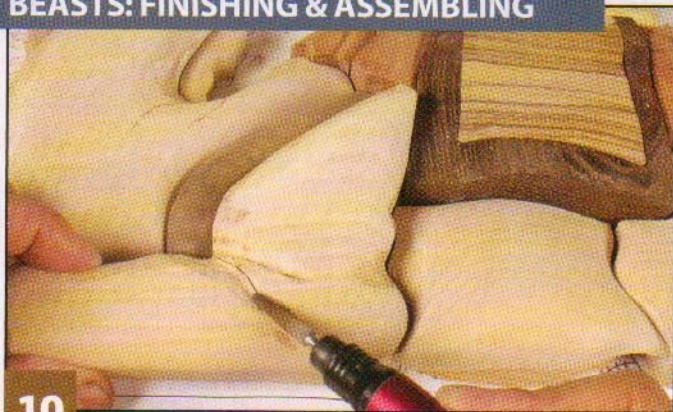


9

Place the dry-assembled project on a flat surface. Check the fit and

color of the pieces. For example, I decided that, instead of dark walnut, I wanted the tail to be just a shade darker than the body, so I cut a new piece for the tail. Don't be afraid to make changes to the pattern. Repeat these steps for the other side of the camel and the two sides of the donkey.

BEASTS: FINISHING & ASSEMBLING



10

Add the hair and blanket details to both sides. Use a

rotary tool, woodburner, or carving knife. Add stitching to the straps or add more carved details to the blanket. Then, buff all of the pieces with the sanding mop.

TIP

GLUING TIPS

If you use accelerator to speed up the gluing process, you must position the pieces quickly. Don't use accelerator if you want more time to fit the pieces together.

You may have to make some adjustments to join the larger sections to each other. Carefully recut the line between the two sections and reglue them to draw them closer together. Use small amounts of glue at the edges to be sure it doesn't ooze out.

Instead of gluing each half separately, you can also glue the front section together first, sand its back flat, and then lay the back pieces on top of it as if it were the backer board. This allows a bit more wiggle room to adjust pieces.



11

Place the pattern on a flat surface and cover it with waxed paper. Put dots of cyanoacrylate (CA) glue on the sides of the pieces, starting with the blanket, and assemble them on the pattern. Adjust the heights of the pieces as needed. Glue the pieces of the legs together, allowing the glue to set before adding the next adjoining pieces. Flat-sand the backs of the two sides with a portable drum sander, such as a Sand-Flee. The two surfaces must be flat for a good (and nearly invisible) glue joint.



12

Glue the front pieces to the back pieces. Use dots of CA and wood glues. If the pieces are uneven, align the top sections and sand the bottoms until they match. Clamp the edges together to get a nice tight fit and let dry. I used a die grinder to sand the edges so they taper into each other. Buff the edges with a sanding mop and hand-sand the tight areas. Mix CA glue with the matching sawdust to fill any gaps, and sand as needed. Sand the bottom of each figure so it will stand flat. Apply clear satin spray finish and let it dry overnight.

Patterns for the **BEASTS OF BURDEN** are in the pattern pullout section.

Materials & Tools

Materials:

Both animals:

- Black wood, such as ebony: eyes, 1" (2.5cm) cube
- Scrap wood or plywood, ¼" (6mm) thick: risers
- Spray adhesive
- Clear shelf paper: Con-Tact® brand
- Glue: cyanoacrylate (CA), wood

Camel:

- Medium-tone wood, such as zebrawood, 1" (2.5cm) thick: 4" x 6" (10.2cm x 15.2cm)
- Light wood, such as beech, 1" (2.5cm) thick: 10" x 26" (25.4cm x 66cm)
- Yellow wood, such as yellowheart, 1" (2.5cm) thick: 3" x 11" (7.6cm x 27.9cm)
- Red wood, such as tigerwood, 1" (2.5cm) thick: 4" x 9" (10.2cm x 22.9cm)
- Dark wood, such as black walnut, 1" (2.5cm) thick: 6" x 8" (15.2cm x 20.3cm)

Donkey:

- Light wood, such as maple, 1" (2.5cm) thick: 3" (7.6cm) square
- Dark wood, such as black walnut, 1" (2.5cm) thick: 7" x 19" (17.8cm x 48.3cm)
- Black wood, such as wenge, 1" (2.5cm) thick: 3" x 8" (7.6cm x 20.3cm)

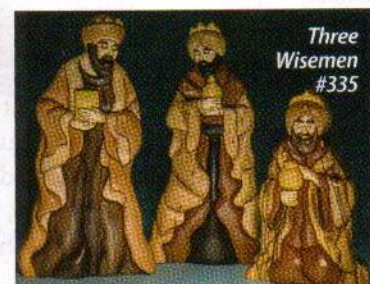
Tools:

- Scroll saw blades: #5
- Sanders: pneumatic drum with 100-, 220-grit drums; oscillating spindle or rotary tool with sanding drums; portable flat drum, such as Sand-Flee
- Clamps
- Woodburner or carving knife (optional)

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.



Kathy Wise is a nationally acclaimed intarsia artist. She has written consecutive articles for *Scroll Saw Woodworking & Crafts* for the past 13 years, including 52 articles for regular issues and additional patterns for a variety of special issues. Kathy has also written three books. For a free catalog of 560 patterns, contact Kathy Wise Designs Inc., P.O. Box 60, Yale, Mich. 48097, fax 810-387-9044, www.kathywise.com, kathywise@bignet.net.



Three Wisemen #335

Stained Glass-Style ORNAMENTS

Fretwork ornaments inspired by Tiffany glass

By Theresa Ekdorn

These ornaments were inspired by the architectural designs and the wonderful purpose of the Chicago Cultural Center. It is a plain block building on the outside, but when I visited, I discovered that opening the doors was like opening a gift—the interior was full of marble, mosaics, and stained glass! Originally Chicago's first central public library, the building was completed in 1897 and holds the world's largest stained glass Tiffany dome. In 1991 it became the Chicago Cultural Center, which hosts hundreds of free international, national, regional, and local artists, musicians, and performers each year.

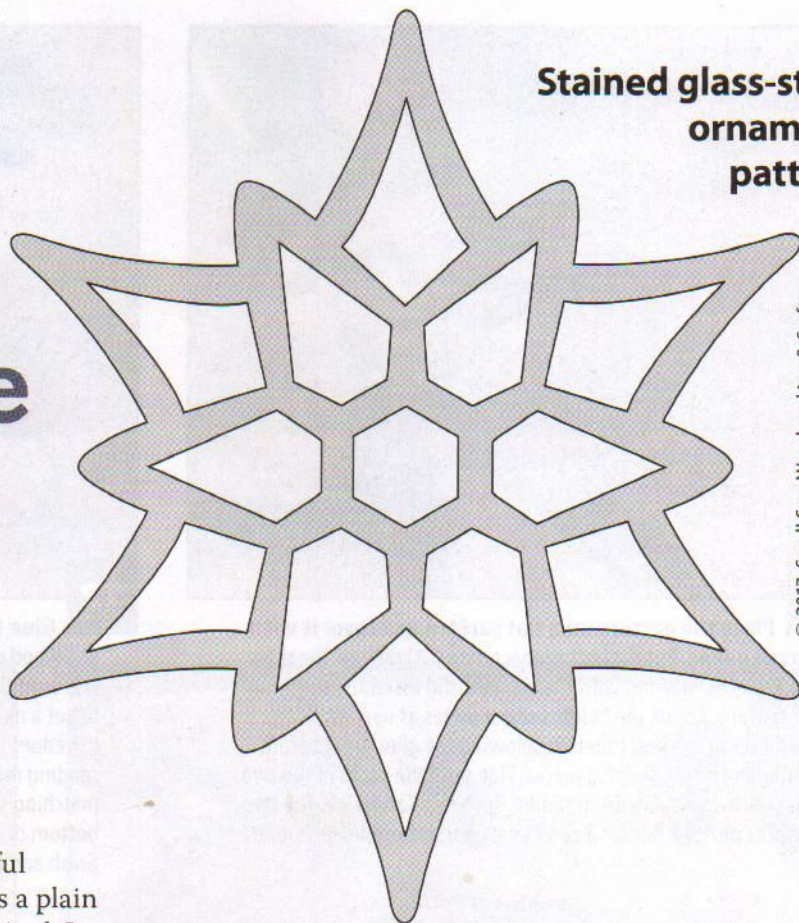
Making the Ornaments

Stack the wood blanks (see page 70) and attach a copy of the pattern. Drill the blade-entry holes and cut the frets. Attach pieces of watercolor paper and thin cardboard to the bottom of the stack. Then, cut the perimeter of the pattern, and unstack the wood and paper. Set aside the paper cutting and discard the cardboard. Carefully sand the ornaments to remove the fuzzies.

Adding Color

To color the watercolor paper cutout, wet it on both sides. Dilute the dye in water, and then use a paintbrush to drop dye onto both sides of the wet paper. Let the paper dry thoroughly, and then glue each piece between two 1/8" (3mm)-thick ornaments.

Stained glass-style ornament pattern



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Materials & Tools

Materials:

Stained glass ornaments

- Hardwood, 1/8" (3mm) thick: 2 pieces per ornament, sized to fit patterns
- Watercolor paper: 80 lb.
- Thin cardboard, such as a cereal box
- Dyes, such as Keda or Tandy Leather brands: assorted colors
- Wood glue

Standard ornaments

- Hardwood, 1/4" (6mm) thick: sized to fit patterns

- Finish, such as boiled linseed oil or acrylic spray

All ornaments

- Sandpaper
- Glue stick or temporary bond spray
- Materials for stacking blanks (see page 70)

Tools:

- Scroll saw blades: #5 premium, such as FD Polar
- Drill and assorted small bits
- Paintbrushes

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.

Additional patterns for **STAINED GLASS ORNAMENTS** are in the pullout section.

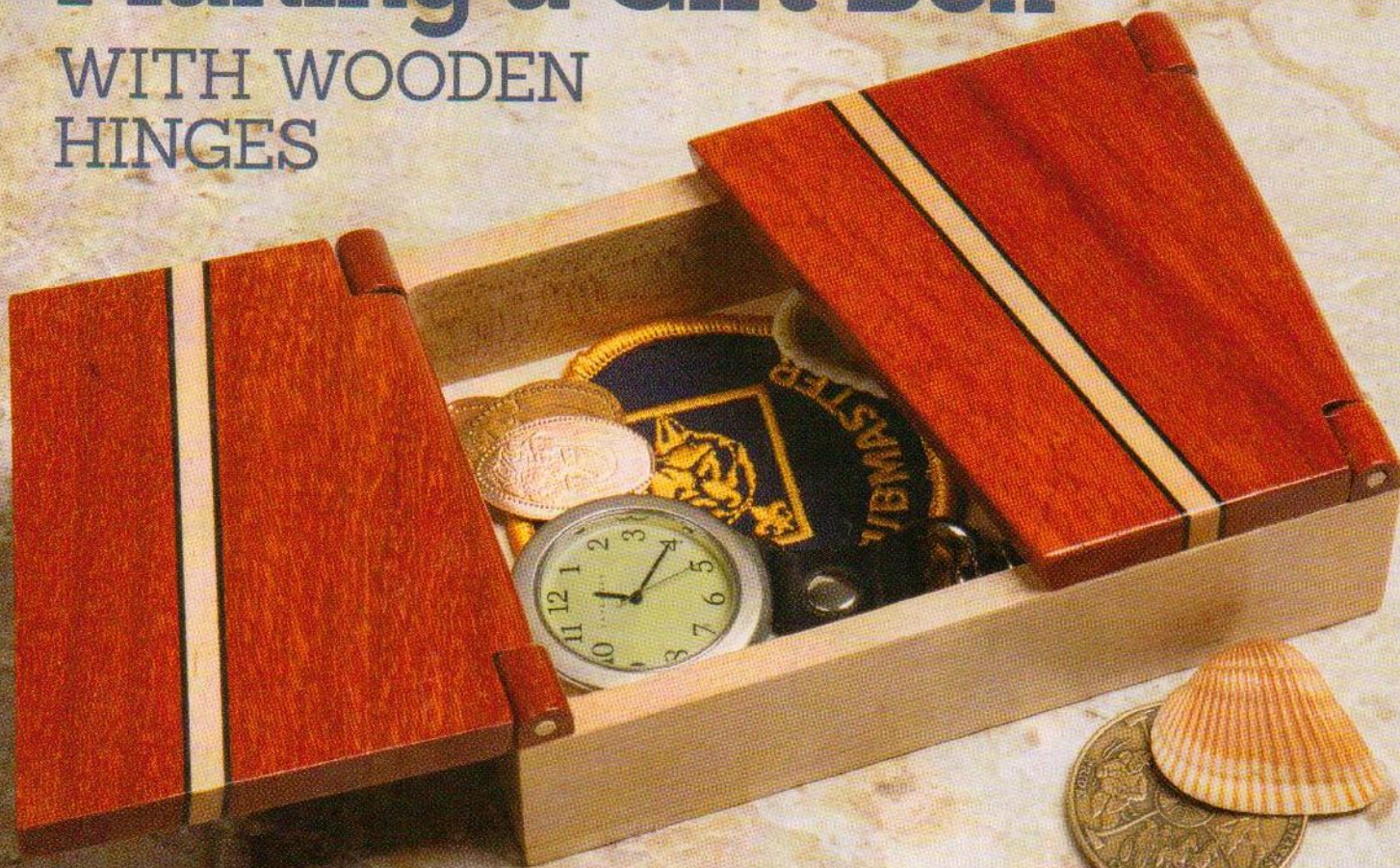


Theresa Ekdorn lives in Roscommon, Mich. Contact her at tekdom@hotmail.com or www.woodngoods.artfire.com.



Making a Gift Box

WITH WOODEN HINGES

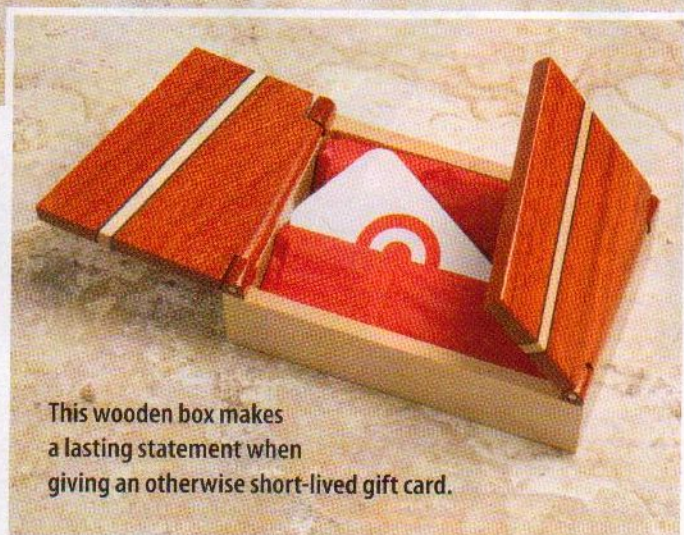


This stylish box looks impressive, but is surprisingly easy to make

By Carole Rothman

I've always liked wooden hinges and thought it might be fun to create a lid with hinges that appear to be cut from the lid itself. After exploring several options, I found that the simplest method was to cut the hinge areas from the corners of the lid, but to make the actual hinges from a separate, matching strip.

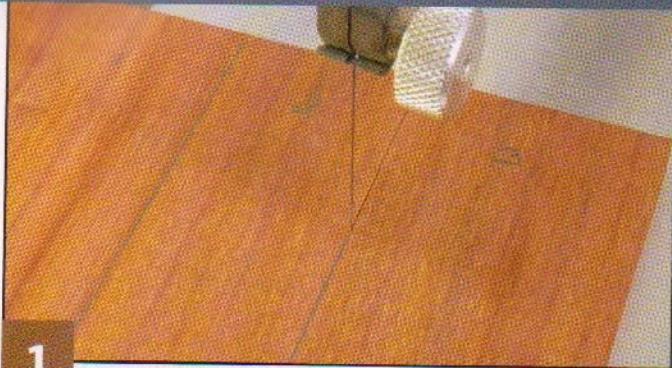
I used a geometric design, without a handle, for my lid, but you can easily adapt



This wooden box makes a lasting statement when giving an otherwise short-lived gift card.

the instructions to your own preferences and to the wood you have on hand. I've included some suggestions to help you get started customizing your box.

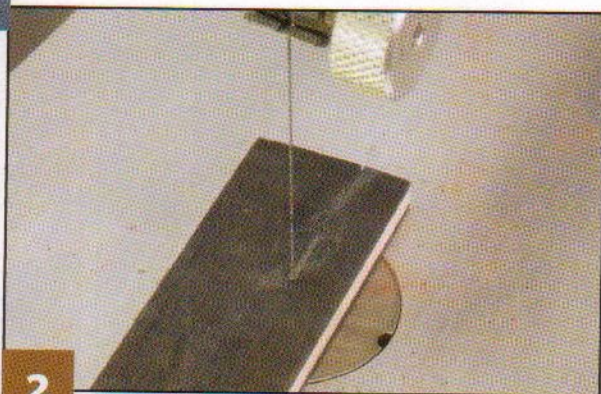
BOX: MAKING THE LID AND HINGES



1

Orient the lid blank with the grain running vertically.

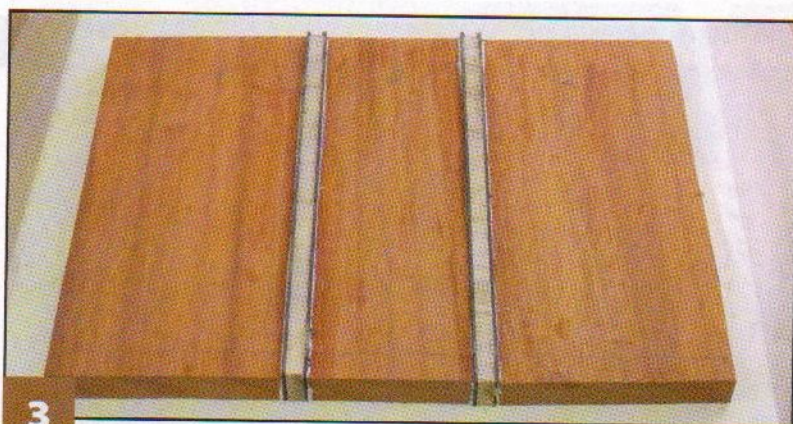
Measure 2 $\frac{3}{4}$ " (7cm) and 4 $\frac{3}{4}$ " (12.1cm) from the left edge. Draw lines parallel to the left edge at these marks. The space between the two should be 2" (5.1cm). Number the pieces and cut along the lines with a #3 blade. Sand or joint the cut edges smooth.



2

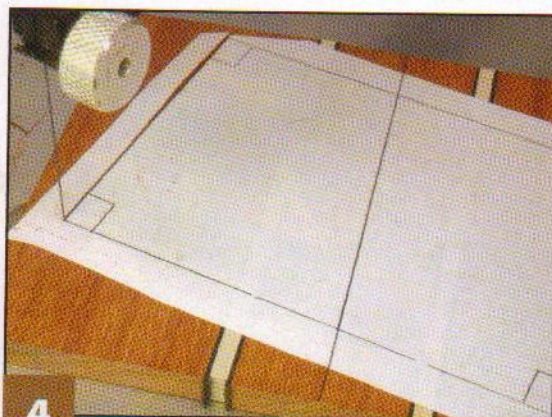
Glue and clamp black veneer to both faces of the maple inlay blank.

After the glue dries, cut two $\frac{1}{2}$ " (1.3cm)-wide strips from the blank. Sand one edge smooth and flat. This edge will be the bottom of the strip.



3

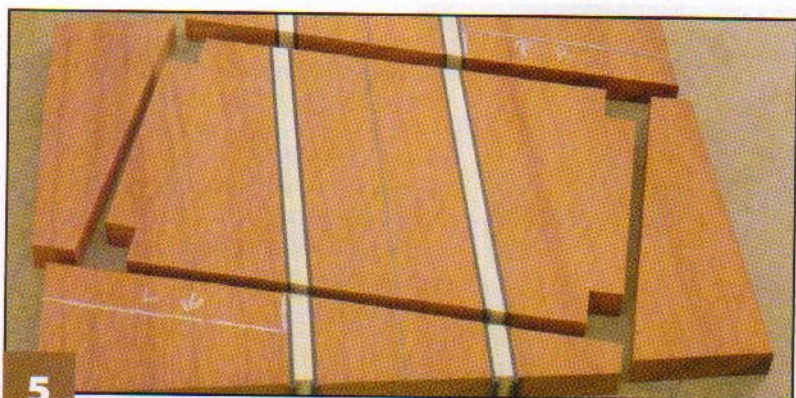
Apply a thin, even coat of glue to the cut edge of lid piece 1 and one face of a laminated strip. Rub them together until the glue drags, keeping the bottom edges aligned. The upper edge of the laminated strip should protrude slightly. Apply glue to the other face of the strip and to the left edge of lid piece 2. Glue them together the same way. Repeat the process for the other laminated strip and lid piece 3. Clamp briefly to draw the pieces together, and then remove the clamps and press the piece down firmly to flatten. When the lid is dry, sand it to $\frac{3}{8}$ " (1cm) thick.



4

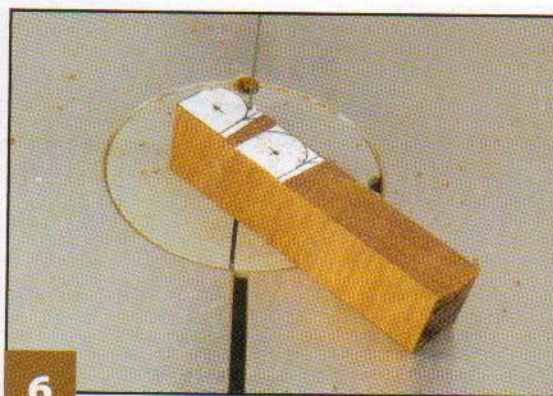
Draw a vertical line centered between the laminated strips.

Align the center cutline of the lid pattern with this line and attach the pattern with repositionable adhesive. Cut along the outer cutline for the lid, and then cut the corners. Do not cut the diagonal line. Save the cutoff pieces for Step 5.



5

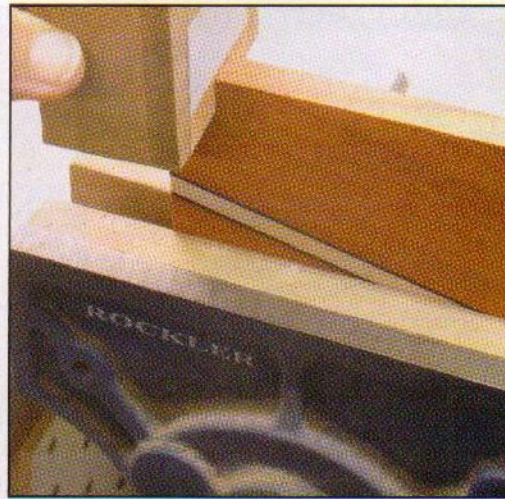
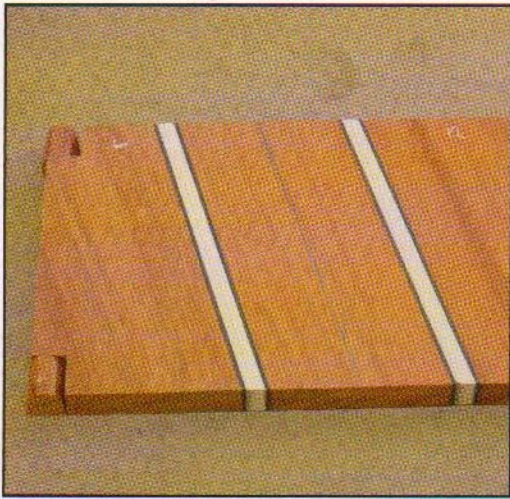
Reassemble the cutoffs around the lid. Mark and cut two $\frac{1}{2}$ " (1.3cm)-wide strips from the cutoffs next to the front and back edges of the lid. Mark each strip to identify its location and outer edge. This will help you choose the best placement for the hinge patterns and is especially important if the lid grain has distinct variations that extend to the hinge areas.



6

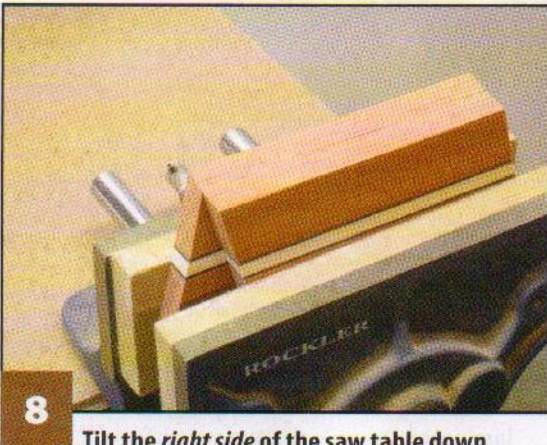
Use a glue stick to attach the hinge patterns to the cut side of the strips.

Attach several patterns so you can cut extra hinges in case something goes wrong. Mark the drilling points with an awl. Cut the hinges with a #3 blade.



7

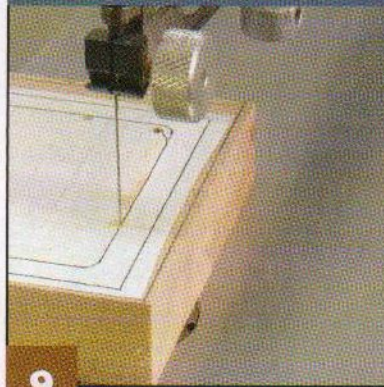
Mark the left and right sides of the lid. Select the best location for each hinge and mark it on the underside of the hinge. If you want to reverse a hinge for a better grain match, mark a drilling point at the other end. Smooth the rounded area of the hinge with sandpaper. Place each hinge into position on the lid to check its fit in the recess. Sand the recess or ends of the hinge until they fit. You will fine-tune the fit in Step 11.



8

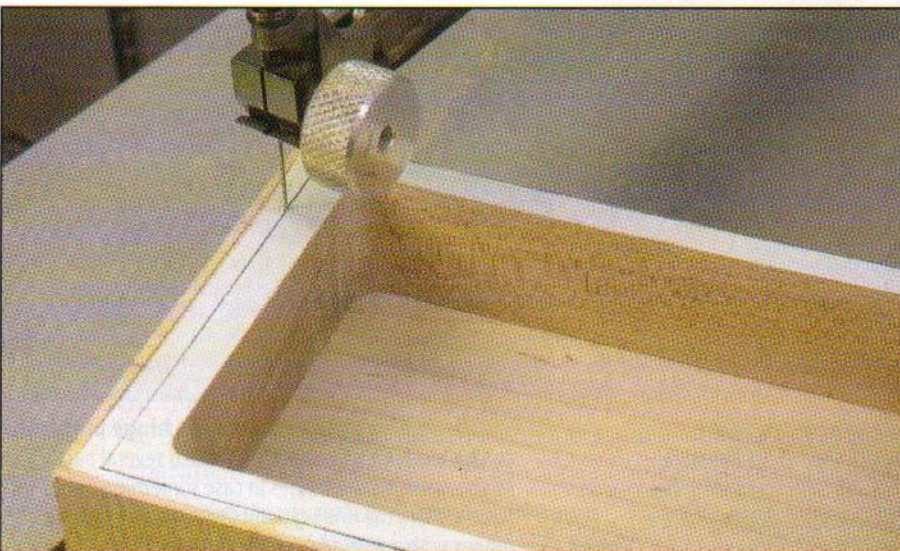
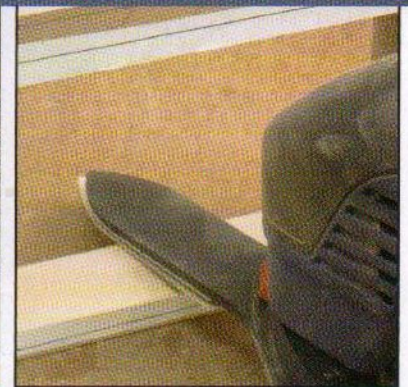
Tilt the right side of the saw table down to 10°. Place the lid on the table, oriented as it will appear on the box, and cut along the centerline with a #3 blade. If the cut edges are not smooth, clamp the two pieces in a vise, being careful to preserve the same angle on both, and sand lightly.

BOX: MAKING THE BOX BODY



9

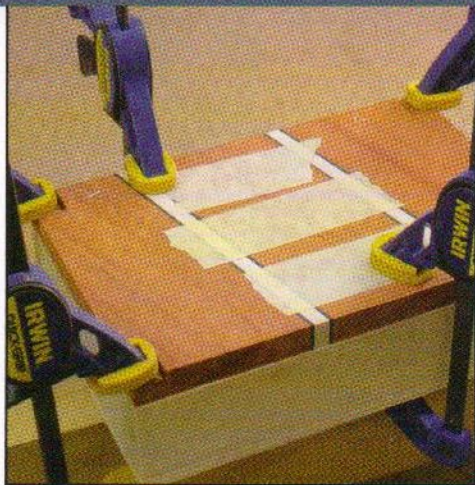
Attach the pattern to the box blank using repositionable adhesive. Drill a blade-entry hole and cut the interior of the box with a #7 blade. Sand the interior smooth, using a spindle sander for the corners and a detail sander for the sides.



10

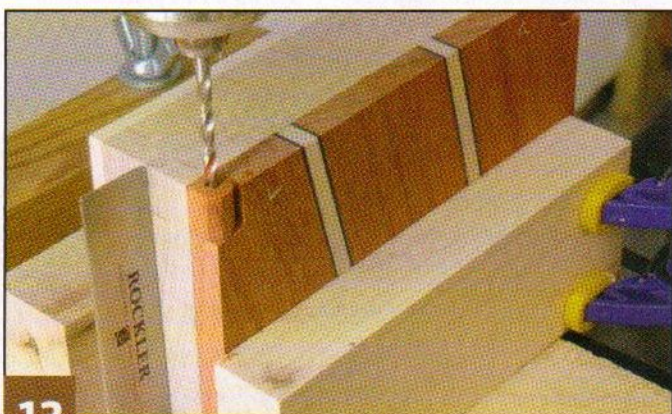
Glue and clamp the box body to the bottom. Let it dry for five minutes, remove the clamps, clean up squeeze-out, and re-clamp. When the glue is fully dry, cut the perimeter of the box with a #7 blade, cutting on the outer edge of the line. Sand with a belt sander, making sure the sides are vertical and the corners are square.

BOX: ASSEMBLING & FINISHING THE PROJECT



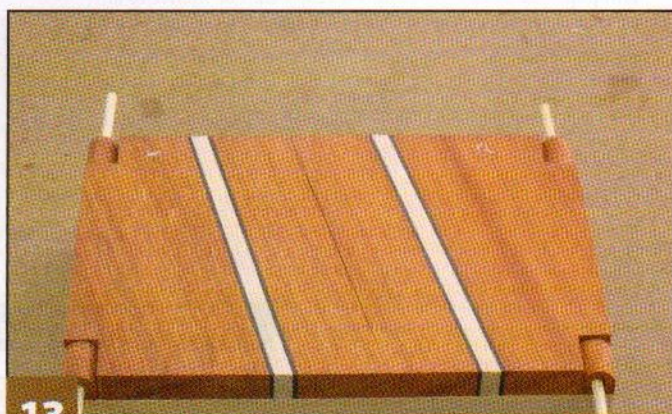
11

Place the lid and hinges on the box body to check the fit and alignment. Sand as needed. Tape the sides of the lid together and elevate the box to allow for clamping. Clamp the lid pieces and hinges into place. Working with one hinge at a time, remove the clamp and glue the hinge in place. Replace the clamp, but make sure the lid can be removed. When you have glued all of the hinges, remove the lid pieces, clean up squeeze-out, and center the clamps on the hinges.



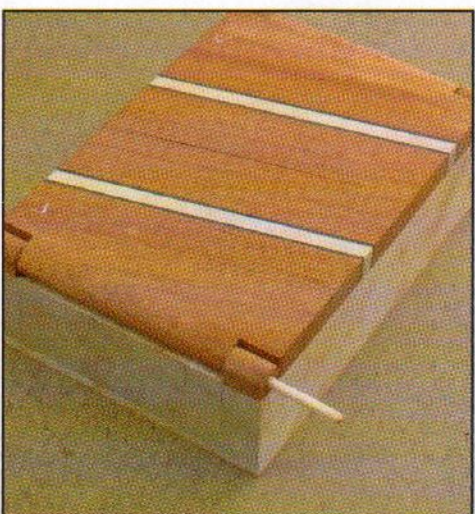
12

Clamp the lid in place. Place the box on its long side on the drill press table. Stabilize the box with scrap wood. Mark the side of the box at $\frac{1}{2}$ " (1.3cm) and 1" (2.5cm) so you can set the drilling depth. At each hinge drilling mark, drill a $\frac{1}{2}$ " (1.3cm)-deep hole with a $\frac{3}{16}$ " (3.6mm)-diameter bit, and then continue the hole an additional $\frac{1}{2}$ " (1.3cm) with a $\frac{1}{8}$ " (3mm)-diameter bit.



13

Keep the lid in position. Insert a $\frac{1}{8}$ " (3mm)-diameter by 2" (5.1cm)-long dowel into each hinge. The dowel pieces are extra long to allow for easy removal and replacement, and will be trimmed in Step 16. You may need to sand the lower $\frac{1}{2}$ " (1.3cm) of the dowel so it can slide fully into place. The lid should sit flat on the box. If the lid does not sit flat, adjust the problematic hole in the lid portion. If needed, fill the hole with a piece of dowel, glue it into place, and then re-drill the hole once the glue has dried.



14

Remove the dowel hinge pins to free the lid. Use a pneumatic drum to sand a curve into the upper and lower faces of each lid piece. Work slowly, removing only enough wood to relieve any binding. In addition to the upper and lower faces of the lid, you may need to sand the outer edge of the lid and the tops of the hinges. The lid should swing freely to the desired stopping point without excessive play.



15

Remove the dowels and lid. Soften the edges of the box and lid, and sand all of the pieces with progressively finer sandpaper up to 220 grit. Apply a sealer coat of shellac to all surfaces of the box and lid. Remove any glue spots, and then sand with 320-grit sandpaper until the surfaces are smooth. Reassemble the box and insert the dowels for a final check of lid swing and final corrections. Reseal as needed.



16

Use a toothpick to apply a drop of glue to the lid holes.

Place the lid on the box and insert the dowels firmly, using gentle pressure to seat them fully. About 1" (2.5cm) should protrude from each hinge. Remove any squeeze-out, and then trim the ends of the dowels flush. Repair any scuffed areas and apply several light coats of spray lacquer.

Materials & Tools

Materials:

- Maple, 1¼" (3.2cm) thick: box body, 4½" x 6½" (11.4cm x 16.5cm)
- Maple ¾" (5mm) thick: bottom, 4½" x 6½" (11.4cm x 16.5cm); inlay strips, 1¼" x 6" (3.2cm x 15.2cm)
- Padauk, 7/16" (1.1cm) thick: lid, 7½" (19.1cm) wide x 6" (15.2cm) long
- Veneer: inlay strips, 2 each black 1¼" x 6" (3.2cm x 15.2cm)
- Dowels, 1/8" (3mm) dia.: 4 each 2" (5.1cm) long
- Sandpaper: assorted up to 320 grit
- Wood glue
- Adhesives: repositionable, glue sticks
- Shellac
- Lacquer: spray

Tools:

- Blades: #3 reverse-tooth; #7 premium, such as FD Polar
- Drill press with brad point bits: 1/8" (3mm), 3/64" (3.6mm)-dia.
- Awl
- Sanders: pneumatic drum, spindle, detail
- Ruler
- Bowl press or boards and clamps
- Clamps: assorted

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.

Variations

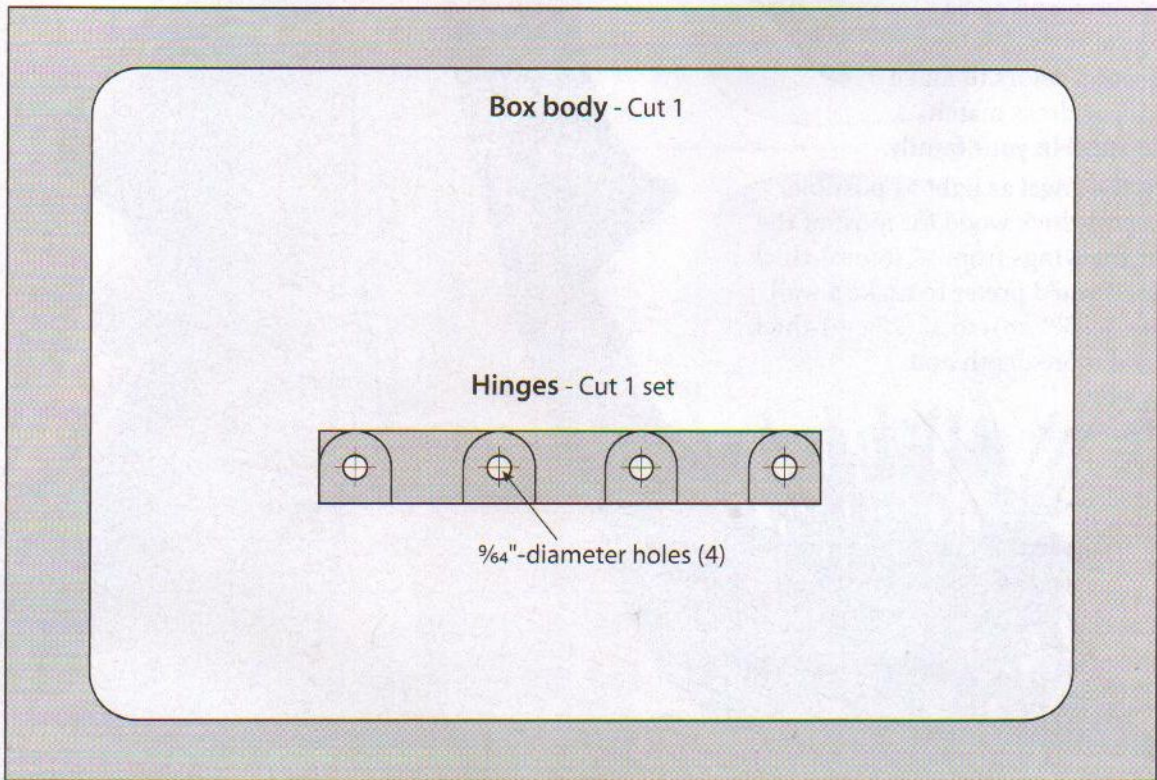
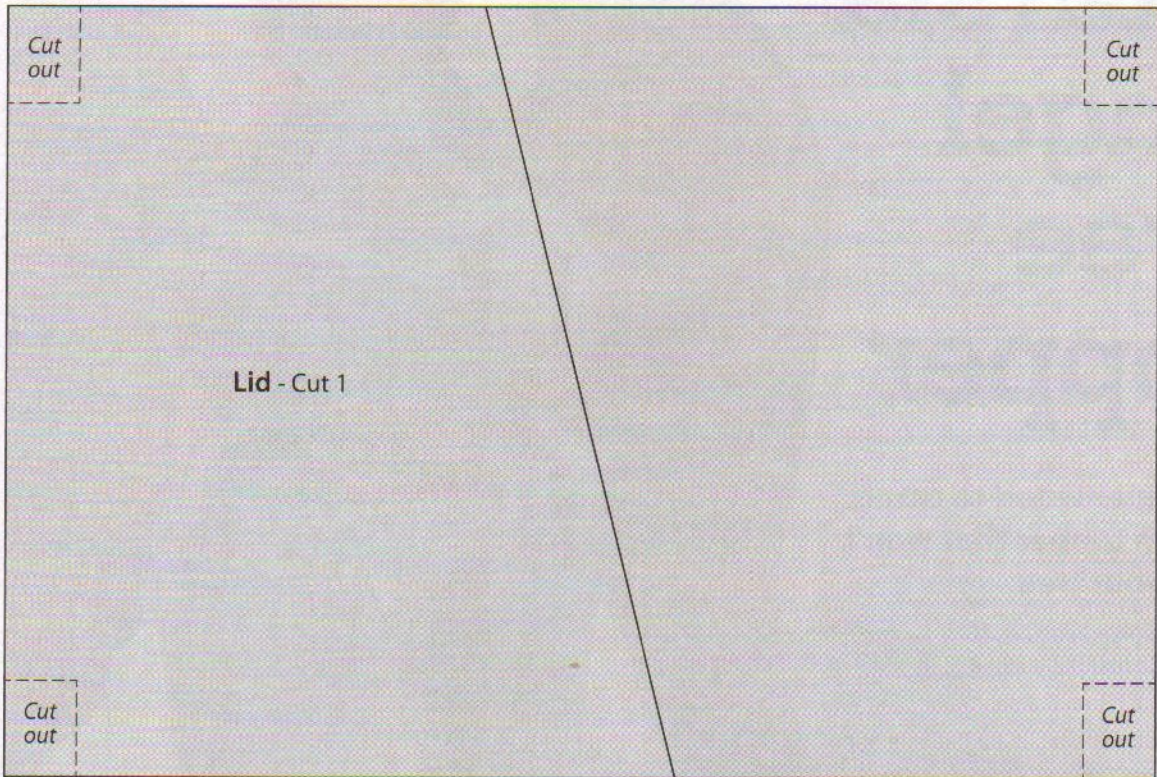
1. Square off the inner corners of the box body rather than rounding them.
2. Omit the decorative strips or change their widths.
3. Change the thickness of the box body and bottom, or cut them from the same or contrasting hardwoods.
4. Make the line from an odd number of strips running vertically. Make a vertical cut in the center strip at a 10° angle to separate the halves.
5. Add compartments to the inside of the box body while cutting it, or add eggcrate-style compartments after cutting.
6. Add flocking to the box interior, or cover the bottom with self-adhesive velvet.
7. Curve the front and back faces. Cut the hinges from a wider strip so they are long enough to accommodate the curve of the lid.



Carole Rothman of Pawling, N.Y., is a retired psychologist and college professor. She is also an award-winning cake decorator. Visit Carole online at www.scrollsawbowls.blogspot.com. You'll find her books *Creative Wooden Boxes* from the Scroll Saw and *Wooden Bowls* from the Scroll Saw at www.foxchapelublishing.com.



Hinged box patterns



Intarsia Angel Tree Topper

Use thinner wood to create a custom topper that won't topple your tree

*Design by Bruce Worthington
Article and project by Janette Square*

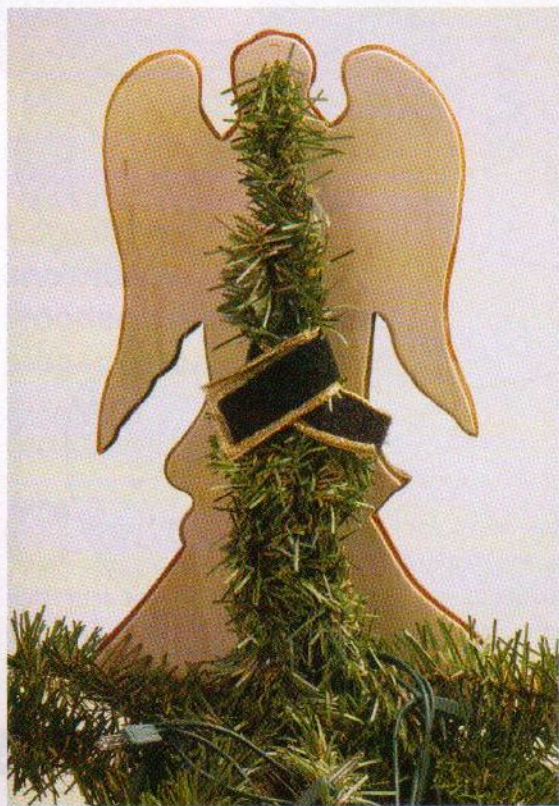
Create a customized intarsia angel for your holiday tree using scrap wood and a few crafting supplies. Simply change the wood colors to make the hair, skin, or dress match those of the angel in your family.

To keep the angel as light as possible, I use $\frac{1}{2}$ " (1.3cm)-thick wood for most of the pieces. I cut the wings from $\frac{1}{4}$ " (6mm)-thick curly maple. If you'd prefer to make a wall hanging, use $\frac{3}{4}$ " (1.9cm)- to 1" (2.5cm)-thick wood and add more depth and contouring when you sand the pieces.



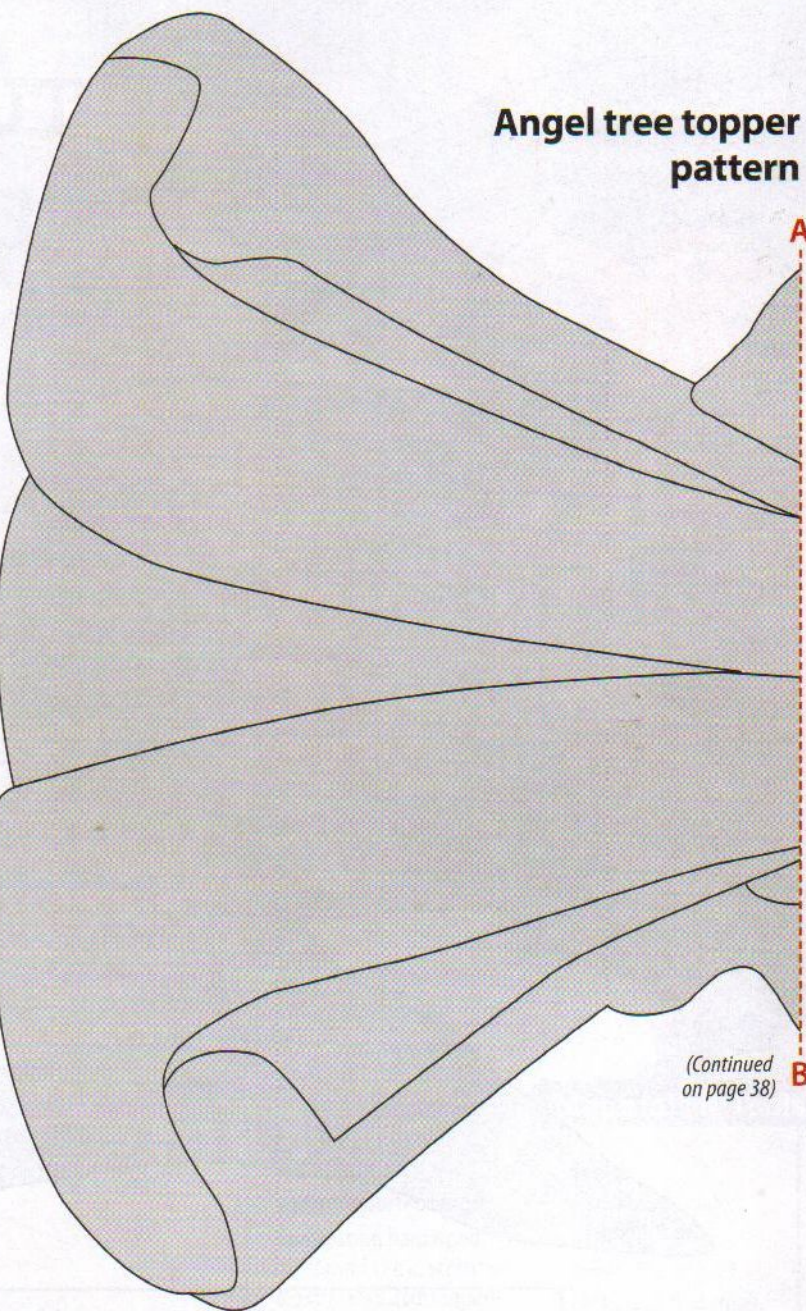
Making the Topper

Prepare, cut, and shape the individual pieces using standard intarsia-making techniques. Apply a coat of clear satin gel varnish. I added a coat of glitter paint (I use gold Craft Twinkles by DecoArt) to the heart with a small paintbrush. A little glitter paint goes a long way, so practice on scrap wood before you paint the project. After the paint dries, apply a second coat of gel varnish. Then, glue the completed pieces to a 1/8" (3mm)-thick Baltic birch plywood backing board.



Attaching the Topper to the Tree

The simplest way to attach the topper to the tree is using adhesive-backed hook and loop strips. Cut a length of cloth ribbon to cover the adhesive on the back of a 10" (25.4cm)-long piece of the loop portion. Cut a 1" (2.5cm)-long piece of the hook portion and attach it to the other side of the ribbon near one end. Wrap the ribbon around the top of the tree and secure the loop with the short hook section. Then, attach a 2" (5.1cm)-long piece of the hook portion to the center of the back of the angel. Use this hook section to attach to the ribbon wrapped around the top of the tree.



(Continued on page 38)

If the top of your tree is flimsy, attach a 1/2" by 12" (1.3cm by 30.5cm) stick to the back of the angel and secure the stick to the tree farther down on the trunk.

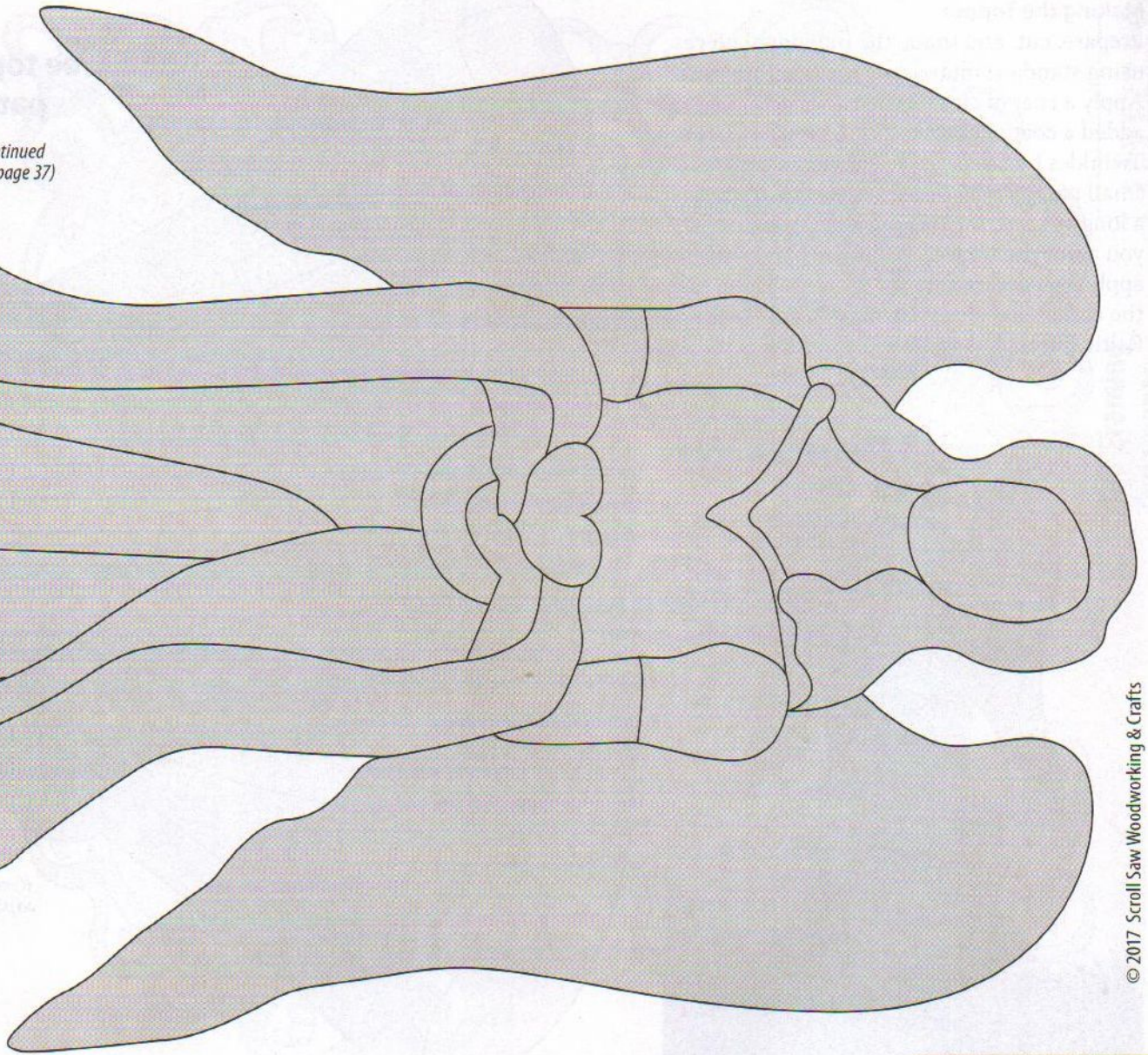
Another option is to attach the center of a piece of picture-hanging wire or a ribbon to the back of the angel, wrap the two free ends around the tree, and twist or tie them together to secure the angel.



Janette Square lives in Yachats, on the Oregon coast. For more of her work, visit her website at www.square-designs.com.

A (Continued
from page 37)

B



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Materials & Tools

Materials:

(Sizes are approximate; larger pieces give you better grain options.)

- Reddish-brown wood, such as figured redwood, $\frac{5}{8}$ " (1.6cm) thick: hair, 2 $\frac{1}{2}$ " x 3" (6.4cm x 7.6cm)
- Red wood, such as aromatic red cedar, $\frac{1}{2}$ " (1.3cm) thick: outer robe, 3" x 10" (7.6cm x 25.4cm)
- White wood, such as aspen, $\frac{1}{2}$ " (1.3cm) thick: inner gown, 5" x 8" (12.7cm x 20.3cm)
- Green wood, such as poplar, $\frac{5}{8}$ " (1.6cm) thick: sash, 3" x 6" (7.6cm x 15.2cm)
- Medium-brown wood, such as alder, $\frac{1}{2}$ " (1.3cm) thick: skin, 2" x 3" (5.1cm x 7.6cm)
- Yellow wood, such as yellowheart, $\frac{1}{2}$ " (1.3cm) thick: heart, 1" (2.5cm) square
- Lightly figured wood, such as curly maple, $\frac{1}{4}$ " (6mm) thick: wings, 6" x 7" (15.2cm x 17.8cm)
- Baltic birch plywood, $\frac{1}{8}$ " (3mm) thick: backing board, 7" x 12" (17.8cm x 30.5cm)
- Hook and loop strip, adhesive backed, such as Velcro: 10" (25.4cm) long
- Packaging tape
- Spray adhesive
- Wood glue
- Sandpaper
- Gel varnish: satin
- Glitter paint, such as DecoArt Craft Twinkles: gold
- Cloth ribbon

Tools:

- Blades: #3 reverse-tooth
- Sanders: flex drum or pneumatic air, mop
- Rotary tool with bit of choice (adding optional hair texture)
- Paintbrush: small

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.

COMPOUND-CUT Ornaments



Combine fretwork snowflakes with wooden bulbs to make elegant ornaments

By Sue Mey
Cut by Leldon Maxcy

Compound-cut ornaments look great but are quick and easy to make. In fact, you can complete each one with just a few cuts. The snowflake accents are equally easy to cut. You could also fill the recessed space with a photo or initial to personalize the ornament.

Making the Ornaments

Cut the wood to size. Fold a pattern along the dotted line, apply adhesive to the back, align the fold with the corner of a blank, and press the pattern into place. Drill the hanging hole (if marked). Drill the blade entry holes for the inside cuts, and cut the inside frets on both sides. Cut the perimeter on one side, making a single continuous cut around the ornament. Secure the cutoff pieces with clear tape and cut the other profile. Remove the waste, and sand away any rough spots.

Adding the Inlay

Stack together several pieces of $\frac{1}{4}$ " (6mm)-thick wood. I suggest using a color that contrasts with the ornaments. Drill blade-entry holes and cut the snowflake inlays. Separate the stacks and sand the snowflakes smooth. Use a $1\frac{1}{4}$ " (32mm)-diameter Forstner bit to drill a $\frac{3}{8}$ " (1cm)-deep hole in each bulb ornament for the inlay. Smooth the edge of the drilled hole and glue the inlay in place using cyanoacrylate (CA) glue. Apply a clear spray finish.

Materials & Tools

Materials:

- Hardwood, 2" (5.1cm) square: assorted lengths
- Contrasting hardwood, $\frac{1}{4}$ " (6mm) thick: scraps at least $1\frac{1}{4}$ " (3.2cm) square
- Adhesive: spray or glue stick
- Tape: clear
- Sandpaper
- Glue: cyanoacrylate (CA)
- Finish: clear spray

Tools:

- Scroll saw blades: #9 skip-tooth
- Drill
- Bits: assorted small, Forstner $1\frac{1}{4}$ " (32mm)

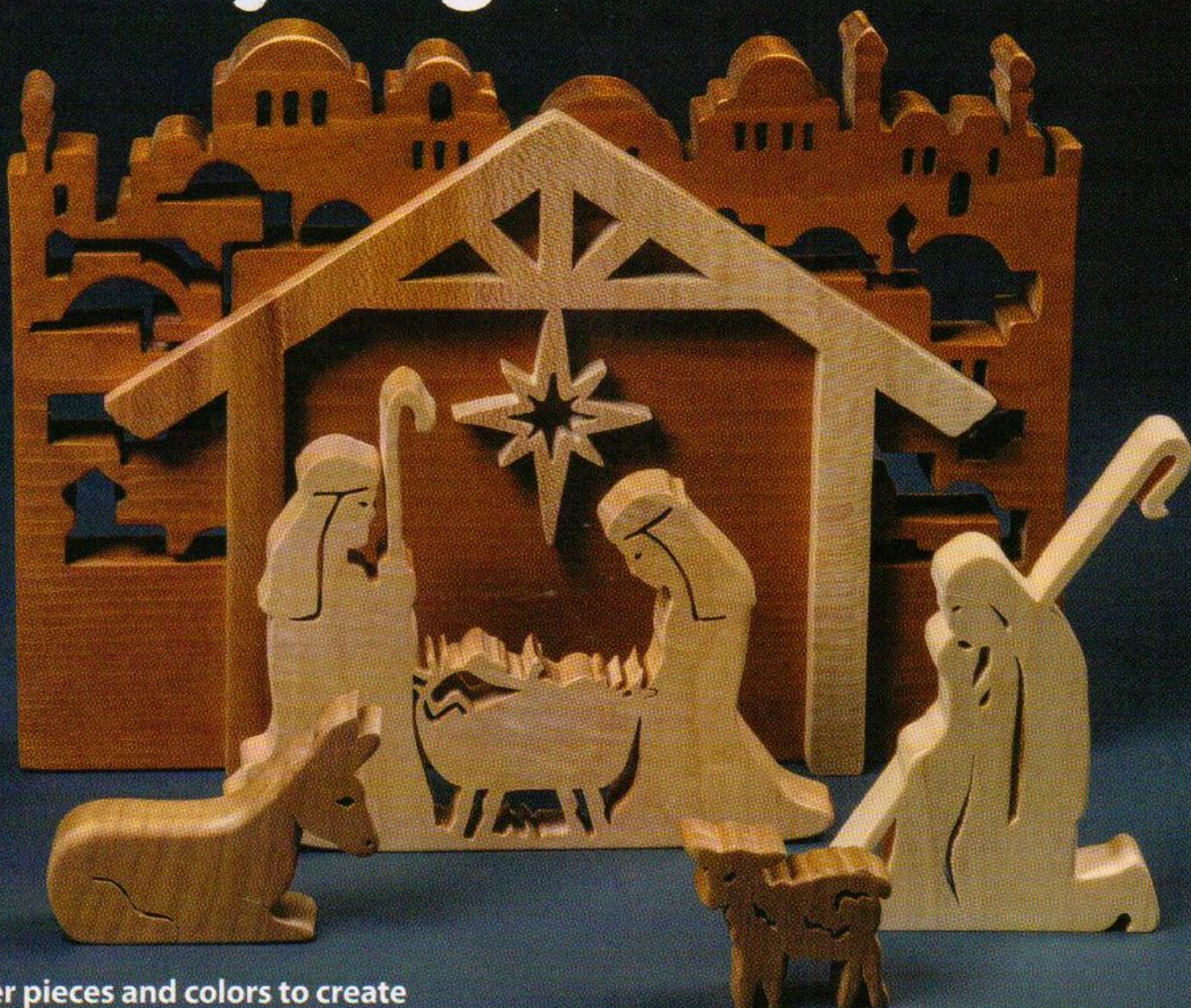
The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.

Patterns for the **COMPOUND-CUT ORNAMENTS** are in the pattern pullout section.



Sue Mey lives in Pretoria, South Africa. To see more of her work, including a wide variety of patterns and pattern-making tutorials available for purchase, visit www.scrollsawartist.com. She can be contacted at suem@storage.co.za. Her pattern book, *Lighted Scroll Saw Projects*, is available from www.schifferbooks.com and other outlets.

O Holy Night



Layer pieces and colors to create an intricate Nativity scene

By Sue Mey
Cut by Rolf Beuttenmuller

With its layers of wood and cityscape background, this Nativity is a dramatic addition to your holiday decorations. Choose contrasting varieties of wood to emphasize the different pieces, adding color with stain if desired. Cut additional shepherds and animals to make a larger scene. While it's possible to cut this scene from thin wood and attach it to a base, I prefer to cut

it from thicker wood (up to 1", or 2.5cm) so it is self standing.

Making the Scene

Transfer the patterns to the blanks, drill any required blade-entry holes, and cut the pieces. Sand the pieces smooth. Glue and clamp the stable to the back. Attach the back assembly to an oval base, if desired. After the glue dries, apply a clear spray finish.



Sue Mey lives in Pretoria, South Africa. To see more of her work, including a wide variety of patterns and pattern-making tutorials available for purchase, visit www.scrollsawartist.com.

She can be contacted at suem@storage.co.za. Her pattern book, *Lighted Scroll Saw Projects*, is available from www.schifferbooks.com and other outlets.

Materials & Tools

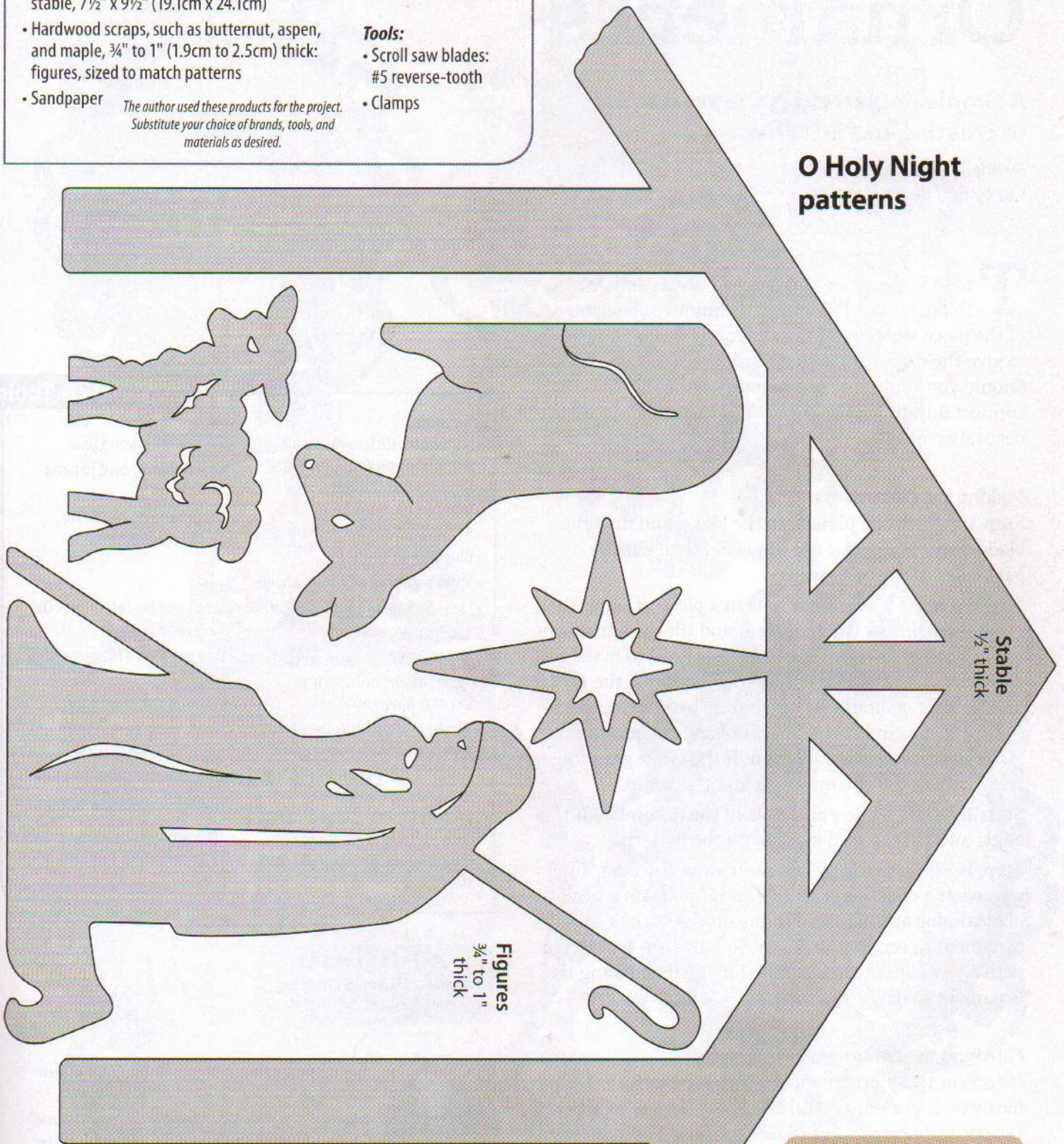
Materials:

- Pine: 1" (2.5cm) thick: back, 8" x 11" (20.3cm x 27.9cm) (I colored the pine with cherry stain.)
- Sycamore, ½" to 1" (1.3cm to 2.5cm) thick: stable, 7½" x 9½" (19.1cm x 24.1cm)
- Hardwood scraps, such as butternut, aspen, and maple, ¾" to 1" (1.9cm to 2.5cm) thick: figures, sized to match patterns
- Sandpaper

*The author used these products for the project.
Substitute your choice of brands, tools, and
materials as desired.*

- Spray adhesive
 - Wood glue
 - Finish: clear spray
- ### Tools:
- Scroll saw blades:
#5 reverse-tooth
 - Clamps

O Holy Night patterns



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Additional pattern for
O HOLY NIGHT is in the
pattern pullout section.

Self-Framing Ornaments

A simple angled cut is the secret to creating the 3-D effect

By Sheila Landry

Cut by Rolf Beuttenmuller

These fretwork ornaments add visual delight thanks to a self-framing technique. The center of the piece slides back and the frame locks into place to give the ornament added interest and dimension. Should you find these ornaments too small to cut comfortably, increase the size and turn them into decorative plaques.

Making the Ornaments

Step 1: Attach the pattern to the blank and drill the blade-entry holes. Cut the frets, and then cut the perimeter of the ornament.

Step 2: Drill a blade-entry hole in a piece of scrap the same thickness as the ornament and tilt the left side of the saw table down 7° (or tilt the saw head to make the same cut). Cut a circle in the scrap and press the center in. The center should recess slightly before catching tightly. If the circle wants to protrude, cut another circle in the opposite direction. If the circle goes too far in, adjust the cutting angle and test again.

Step 3: Drill a blade-entry hole in the ornament at this angle and cut the oval marked on the pattern.

Step 4: Separate the pieces, sand away any fuzz, and remove the dust. Reinsert the center and run a bead of clear glue around the cut line on the back of the ornament to secure the pieces. Remove any excess glue with a wet paper towel. Apply the finish and hang the ornament to dry.

Finishing the Ornaments

If you cut these ornaments from an attractive hardwood, use mineral oil and spray shellac to allow the natural beauty of the wood to show. For a different look, cut the ornaments from light wood. Before you glue the pieces together, sponge-paint jewel-toned acrylic paint on the frame, accenting it with silver or gold if desired.

Materials & Tools

Materials:

- Hardwood, such as maple, or Baltic birch plywood, 1/8" to 3/16" (3mm to 5mm) thick: set of 6 ornaments, 4 1/2" x 18" (11.4cm x 45.7cm)
- Blue painter's tape
- Spray adhesive: temporary bond
- Clear packaging tape (optional)
- Sandpaper
- Spray shellac or matte acrylic spray sealer/finish, such as DecoArt Americana
- Acrylic paint, such as DecoArt Americana: Black Forest green (DA83), deep burgundy (DA128), dioxazine purple (DA101), primary (phthalo) blue (DA200); such as DecoArt Americana dazzling metallic: splendid gold (DA263)

- Clear-drying wood glue
- Thin ribbon or cord to hang ornaments
- Small hanging hardware for the plaques

Tools:

- Scroll saw blades, such as Olson: #2/0 reverse-tooth
- Drill press with bits: assorted small
- Handheld orbital sander
- Small, sharp paring knife
- Sea sponge (available at most craft stores) or nicely textured sponge

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.

Patterns for the **SELF-FRAMING ORNAMENTS** are in the pattern pullout section.



Sheila Bergner-Landry grew up in the Chicago area and began her woodworking and painting career when her daughter Danielle was born, more than 20 years ago. A friend, Cari Denison, introduced her to scroll sawing. Sheila relocated to Nova Scotia, Canada, where she has found new inspiration for designs. For more of her patterns, call 902-482-7174 or visit www.sheilalandrydesigns.com.



Hamilton Log Set

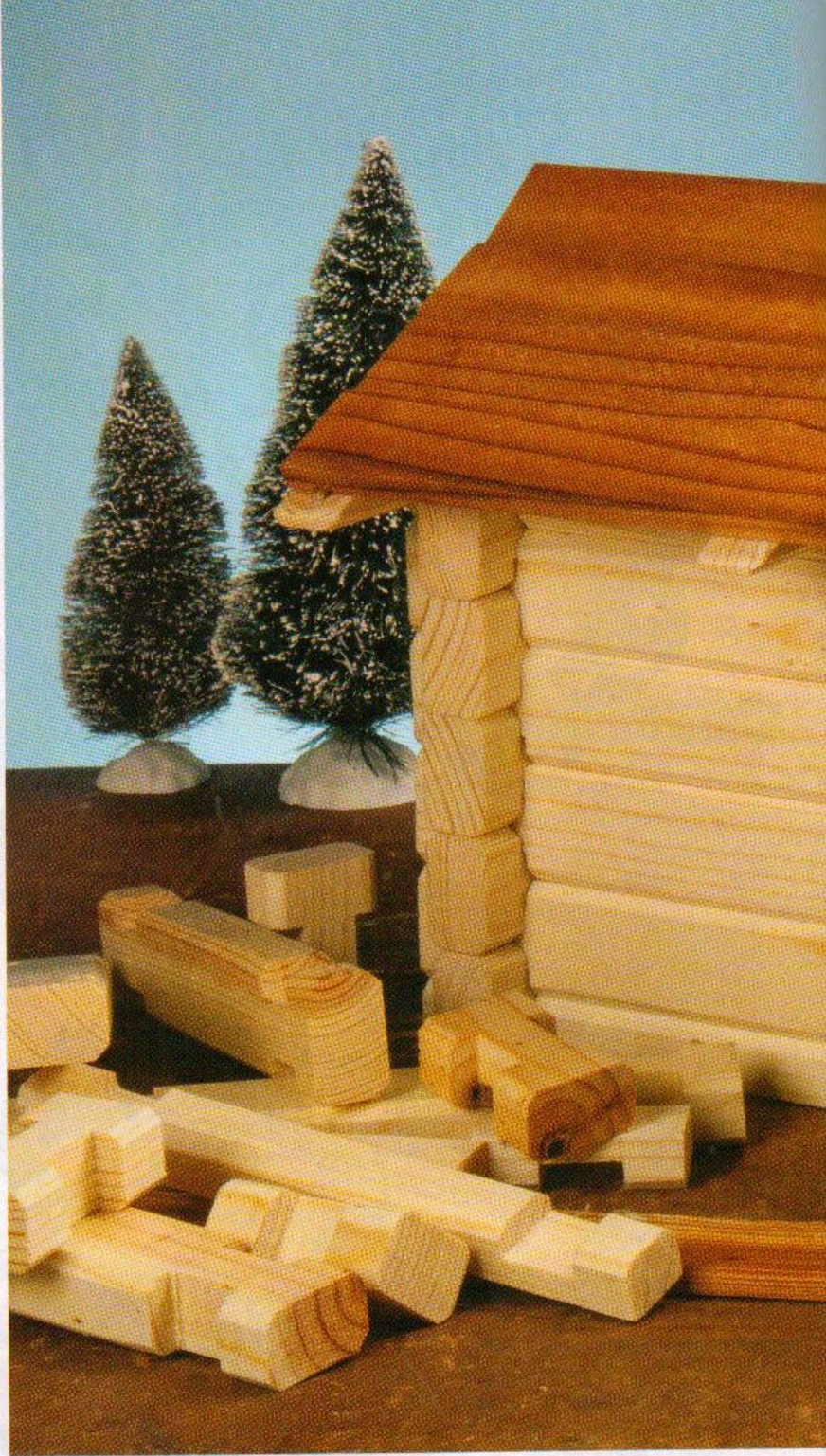
Larger logs make this building set appropriate for children of all ages

By Dave Van Ess

Children's construction toys have been around since the 1850s. That they are still popular shows just how much children and parents love them. But these toys were designed in earlier times with different safety rules and concerns. All of the presently sold construction toys are safe for children 3 years and older, but what about younger kids or the younger siblings of older children? Even the smallest pieces in my set are safe for toddlers. I cut all of the pieces on a scroll saw and used dimensioned lumber from a home center.

Lean-To Pieces

I have included additional "Lean-To" pieces, which children can use to make awnings, porches, and flat-roof buildings. I did not include them in the basic set because my goal was to make a set that fit in a large USPS flat-rate shipping box. If this is not a limitation or you are willing to sacrifice some of the other pieces to get these into the box, cut them using the techniques for the other beams.



Making a Play House

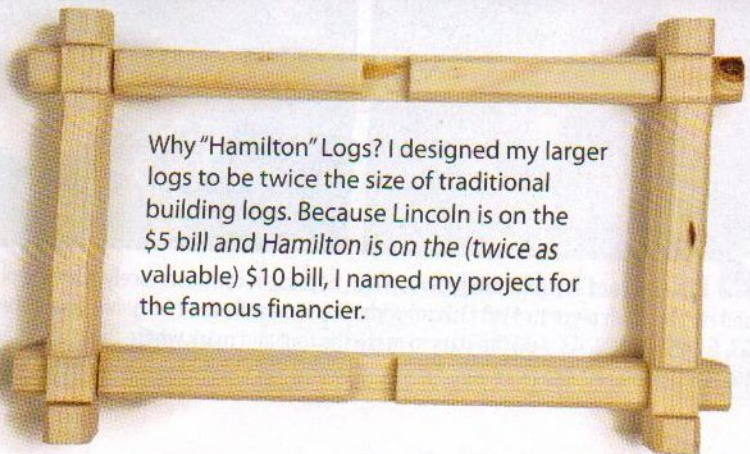
After I designed the bigger logs, it wasn't much of a leap to enlarge them enough to make a child-sized house. To make your own, enlarge the patterns and cut the beams from 5½" (14cm)-wide strips of ¾" (1.9cm)-thick plywood. Match the notches to the thickness of the plywood. For full patterns and a cutting diagram, visit www.scrollsawer.com.





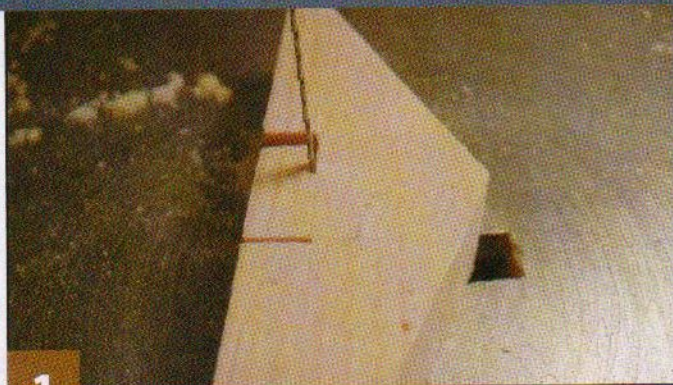
Getting Started

Cut the long blanks to the sizes in the Materials list. Then, rip each 1x4 into two 1 $\frac{1}{2}$ " (3cm)-wide pieces. You can use a table saw, but I cut them with my scroll saw because I lose less wood that way—the kerf of a scroll saw blade is much smaller than that of a table saw (see Ripping with a Scroll Saw on page 48).

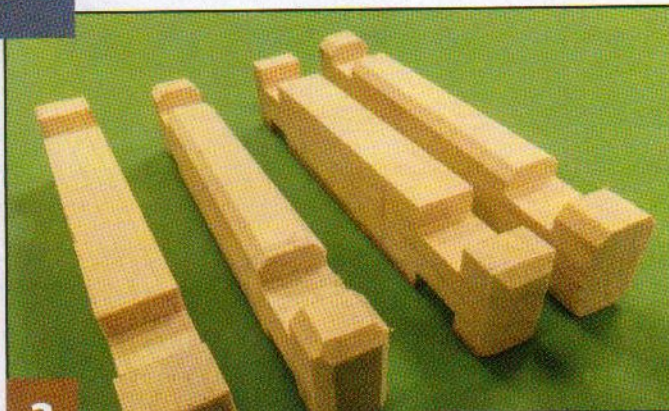


Why "Hamilton" Logs? I designed my larger logs to be twice the size of traditional building logs. Because Lincoln is on the \$5 bill and Hamilton is on the (twice as valuable) \$10 bill, I named my project for the famous financier.

CONSTRUCTION SET: CUTTING THE PIECES



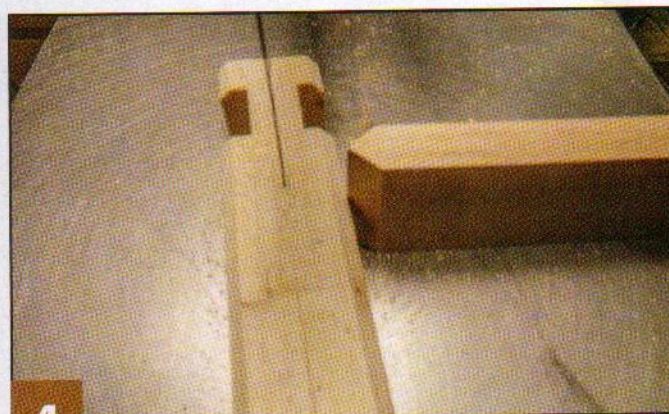
1 **Transfer the gable patterns to 1x4 stock.** Refer to the drawings for the angles, notch dimensions, and quantity of each gable piece. Cut outside the notch lines to make the notches slightly oversized. Repeat the process to cut the beams.



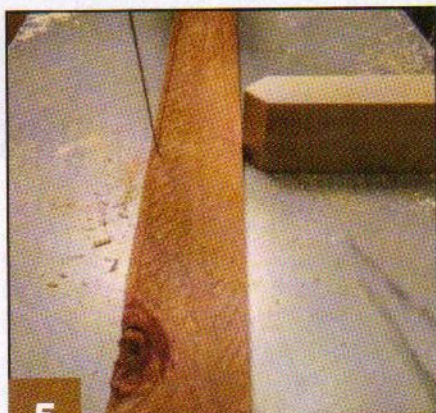
2 **Decide if you want to bevel the edges of the pieces.** You can choose not to bevel them at all, bevel the ends, bevel along the length, or both. I bevel along the length to make the beams look round to resemble the original Lincoln Logs.



3 **Draw a line $\frac{1}{8}$ " (3mm) in from the long edge of a piece of scrap plywood or MFD.** This will be the bevel-cutting fence. Set the scroll saw to cut at a 45° angle and cut along the line about halfway with a #5 skip-tooth blade. Clamp the fence in place. Cut a test piece. If the bevel is too small, rebuild the fence with the line closer to the edge. Clamp the fence in place and bevel all the pieces.



4 **Rip the beams to create half beams.** These half beams go at the bottom of the cabin walls. Rip one N4, two each N2 and N3, and six N1. Mark the center of each beam and use the single-point fence as you rip them in half (see Ripping with a Scroll Saw on page 48).



5 **Rip the roof strips.** I use redwood lath because it contrasts nicely with the pine. Mark and rip each lath piece to $\frac{1}{4}$ " (3.2cm) wide. Dry-assemble the two gable assemblies: G1, G2, G2, G3, G3 and G2, G2, G3. Add the slats to make the roof and mark where the last slat ends. Screw a $\frac{1}{4}$ " (6mm)-long #2 flat-head wood screw in so only $\frac{1}{8}$ " (3mm) protrudes to catch the slat.

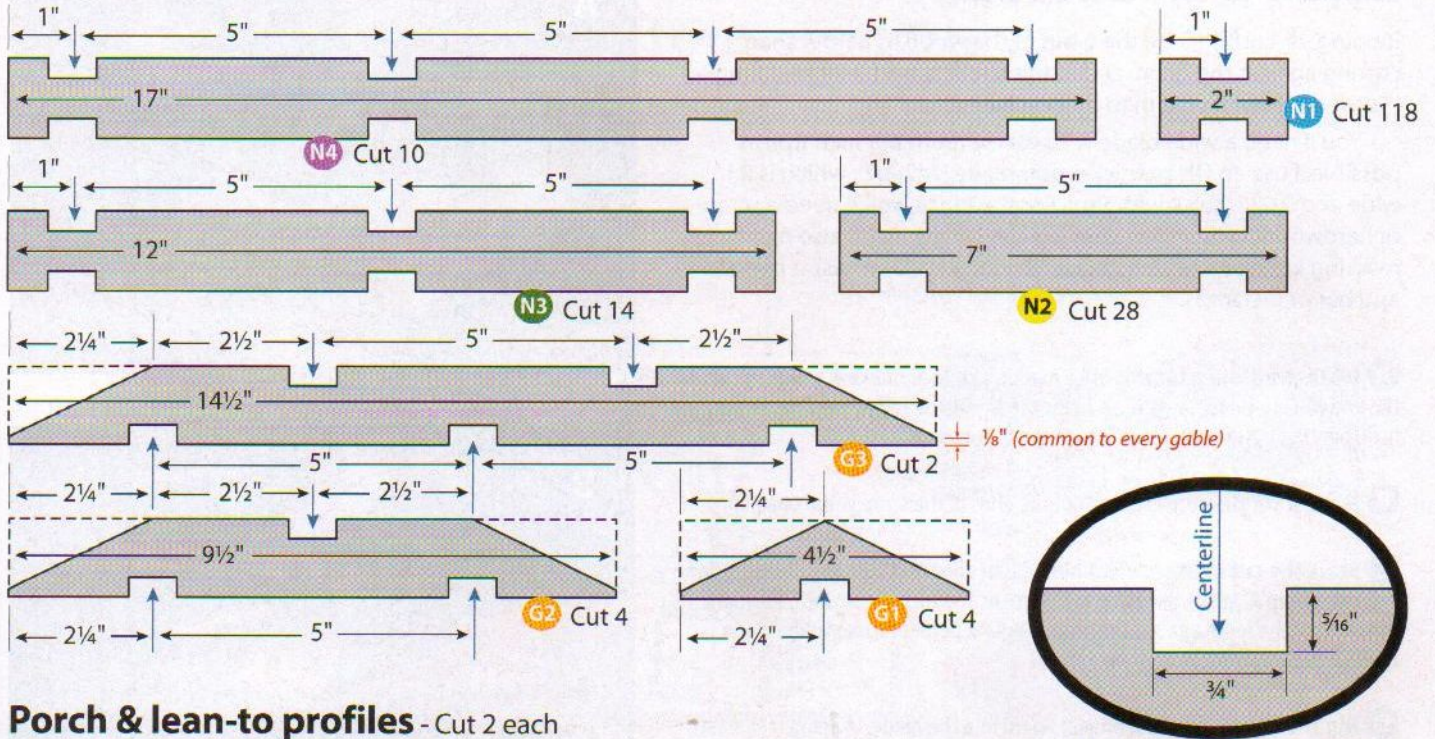


Finishing and Packing

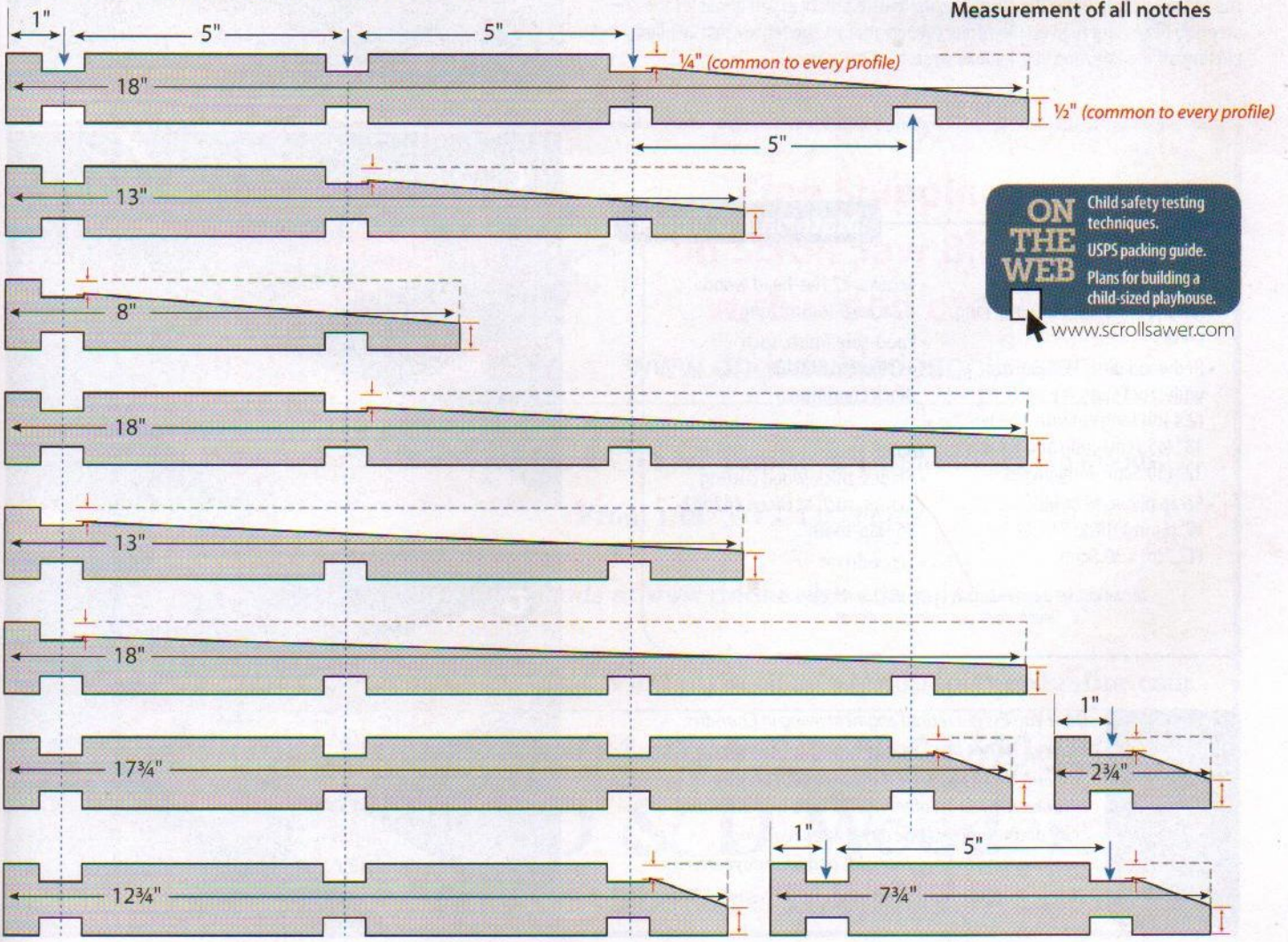
Because the pine will easily pick up grime from a child's hands, I apply Howard Butcher Block Conditioner. It's inexpensive, nontoxic, and widely available. Coat each piece and wipe off the excess.

It's possible to pack the entire set in a large USPS flat-rate box for shipping to grandkids. I've included the packing guide at www.scrollsawer.com. For general use, store them in a five-gallon bucket.

Hamilton logs measured drawings



Porch & lean-to profiles - Cut 2 each



ON THE WEB Child safety testing techniques. USPS packing guide. Plans for building a child-sized playhouse. www.scrollsawer.com

Ripping with a Scroll Saw

Ripping, or cutting with the grain of the wood, is harder than cutting against the grain, and many scrollers find it intimidating. I've worked out a system to make it easy.

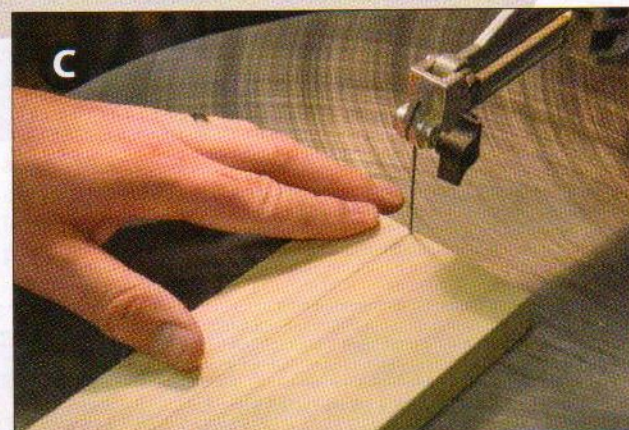
You'll need a wide blade with as few teeth per inch (tpi) as possible. I use an Olson thick-wood blade (#42002), which is 0.1" wide and 0.022" thick with 9tpi. For the fence, you'll need a scrap of hardwood thicker than your project board. You'll also need a marking knife or marking gauge (a hobby knife works), a pencil, and bar or C-clamps.

A Mark the project board. Use a marking knife or marking gauge to cut the line you intend to rip. This cut helps the saw blade follow the line. Rub a little pencil graphite into the line to make it more visible.

B Make a single-point fence. Cut the ends of the scrap wood to a point.

C Start the cut in the project board. Cut about 1/16" (2mm) along the line you cut in Step A. Leave the blade in the board and turn the saw off. Position the point of the fence against the project board, perpendicular to the blade's teeth, and clamp the fence to the table.

D Rip the board. Feed the project board into the blade, keeping it against the fence and following the cutline. With a little practice, you'll master the steering necessary to keep the project wood against the fence and the blade cutting on the line, and you'll make straight cuts.



Materials & Tools

Materials:

- Pine 1x4s: 7 each 6' (1.83m) long cut into 18" (45.7cm)-long pieces
- Redwood lath, 1 1/2" (3.8cm) wide: roof slats, 4 each 8' (2.44m) long cut into 12 each 18" (45.7cm)-long and 8 each 12" (30.5cm)-long pieces
- Scrap plywood or MDF, 1/4" (6mm) thick: 5" x 12" (12.7cm x 30.5cm)
- Screws, #2 flat-head wood: 8 each 1/4" (6mm) long
- Food-safe finish, such as Howard Butcher Block Conditioner

Tools:

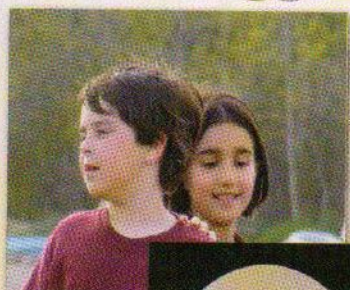
- Blades: thick-wood cutting blades, such as Olsen #42002; #5 skip-tooth
- Screwdriver

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.



Dave Van Ess is a retired engineer living in Chandler, Arizona. He has been woodworking for 40 years and scrolling for 30 years. He is the president of Arizona Woodworkers (a greater Phoenix area woodworking club) and volunteers one day a week teaching woodworking to four-year-olds at a local daycare.

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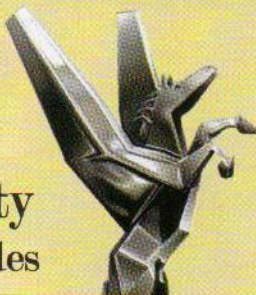
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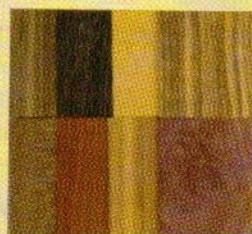


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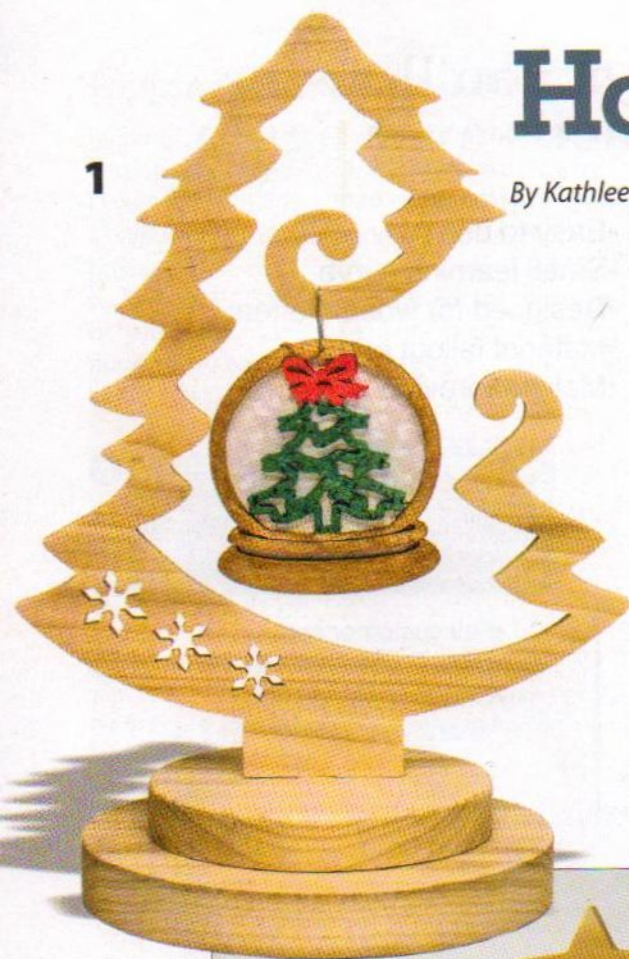
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Holiday Roundup

1

By Kathleen Ryan



2



3



4

1 Ornament Tree

Sue Mey of Scrollsawartist.com in Pretoria, South Africa, designed this tree to display a special ornament. It is 7¾" wide by 10" tall (19.7cm by 25.4cm) and made from hardwood. *The pattern is available at www.scrollsawartist.com.*

2 Hanukkah Dreidel

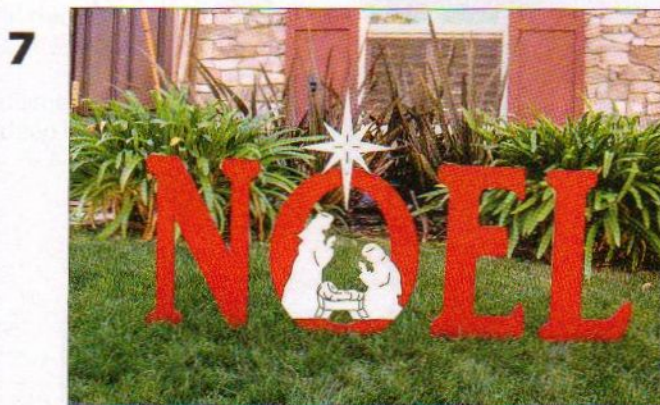
Juli Eliastam of House of Tiny Treasures in Haifa, Israel, laser-cuts festive layered dreidels, 2½" by 4" (6.4cm by 10.2cm), from reclaimed wood. She handpaints them, glues the layers together, and adds clear finish. *See more of Juli's work at www.etsy.com/shop/HouseOfTinyTreasures.*

3 A Star is Born Playset

John and Cynthia Lewman of ToymakingPlans.com in Parkville, Mo., made this stylized nativity scene, which is about 8" by 15" (20.3cm by 38.1cm). Its simplicity is beautiful in hardwood, but it can also be painted for a more kid-friendly appearance. *The pattern is available at www.toymakingplans.com.*

4 Puffin Ornament

Brad and Hazel Eklund of Entwood Crafts in North Carolina used padauk, maple, black walnut, and chakte viga to make their intarsia Puffin ornament, 4" (10.2cm) tall. *See more of their ornaments at www.EntwoodCrafts.*



5 Snowflake Doorhanger

Amy Baesler of HerToolBelt.com used inexpensive cedar pickets to make her winter door decoration, 18" (45.7cm). To fit the pieces into her saw, she cut the design before screwing the planks together. She painted the wood with washes of color, adding glitter spray for sparkle. A tutorial is available at www.hertoolbelt.com.

6 Photo Album

Mar Aguilera of La Chispa Mágica in Asturias, Spain, cut this photo album cover from poplar using a manual marquetry saw. She finished the cover, 9¾" by 12⅝" (24.8cm by 32.1cm), with stain and an oil rub, and then bound the book with waxed thread and decorative charms. Visit Mar Aguilera at www.etsy.com/es/shop/LaChispaMagica.

7 Noel Yard Sign

Ivy Faelz of Ivy's Wood Creations in Rocklin, Calif., used her CNC router to cut this holiday yard sign, 33" by 5½" (83.8cm by 1.7m). Ivy painted the sign and finished it with a weather resistant sealer. See more designs at www.etsy.com/shop/IvysWoodCreations.

8 Layered Dove Ornament

Sue Mey of Scrollsawartist.com in Pretoria, South Africa, layered fretwork and assorted hardwoods to create this Dove Ornament, 8" (20.3cm) wide. The pattern is available at www.scrollsawartist.com.

Note: These projects are intended as inspiration only. The patterns are not in this issue, nor are they necessarily available from the designers.

The Busy Carpenter

Pull the strings to animate this whimsical ornament

By Ruth Chopp

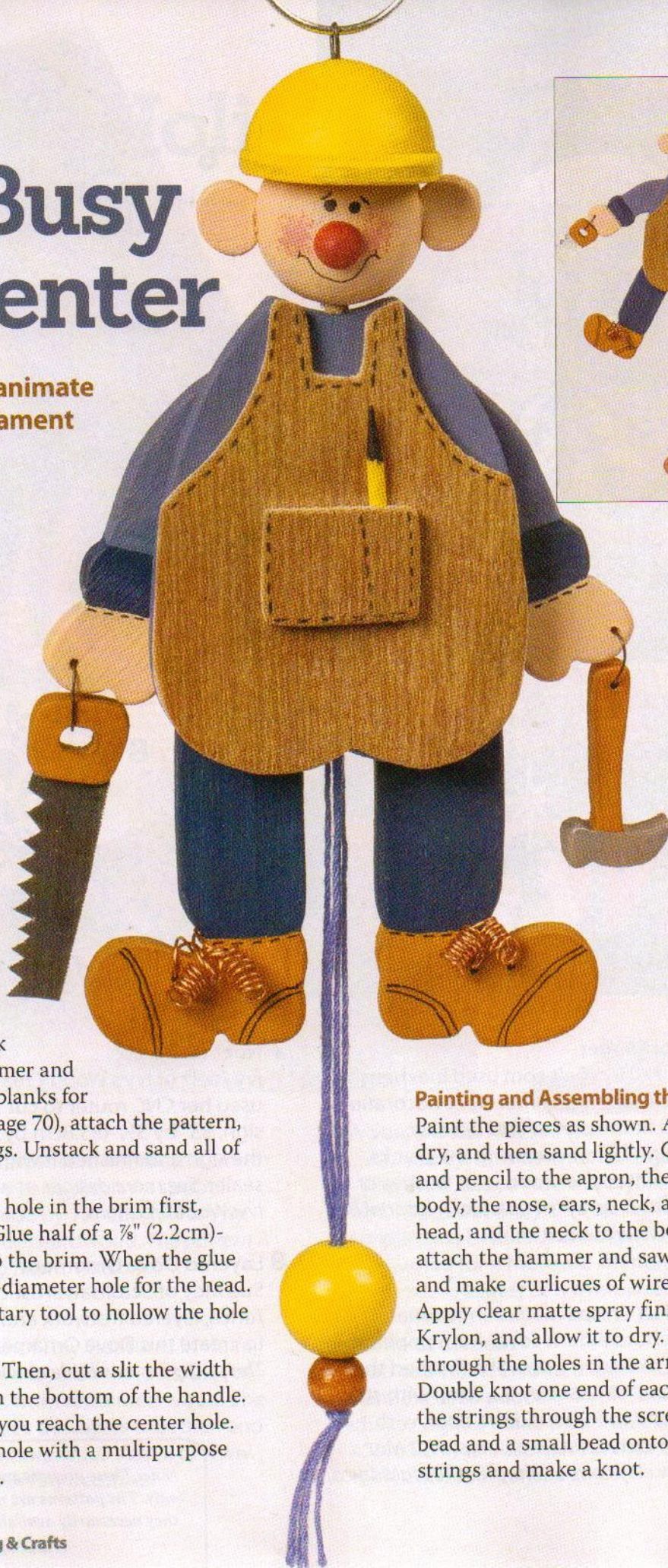
This fun ornament is perfect for the woodworker in your life. Feel free to add yarn hair to turn “him” into a “her”!

Making the Carpenter

Transfer the patterns to the blanks. Cut the body, drill a hole for the neck, and flip the piece over. Drill shallow holes in the back as marked. Cut the hammer and drill the hole. Stack the blanks for the arms and legs (see page 70), attach the pattern, and cut the arms and legs. Unstack and sand all of the pieces.

For the hat, drill the hole in the brim first, and then cut the brim. Glue half of a $\frac{7}{8}$ " (2.2cm)-diameter wooden ball to the brim. When the glue is dry, drill a $\frac{3}{4}$ " (1.9cm)-diameter hole for the head. Use a carving bit in a rotary tool to hollow the hole to fit the head.

Cut the saw handle. Then, cut a slit the width of the scroll saw blade in the bottom of the handle. Stop the cut just before you reach the center hole. Glue the blade into the hole with a multipurpose adhesive, such as E6000.



Painting and Assembling the Pieces

Paint the pieces as shown. Allow the paint to dry, and then sand lightly. Glue the pocket and pencil to the apron, the apron to the body, the nose, ears, neck, and hat to the head, and the neck to the body. Use wire to attach the hammer and saw to the hands, and make curlicues of wire for the shoelaces. Apply clear matte spray finish, such as Krylon, and allow it to dry. Feed string through the holes in the arms and legs. Double knot one end of each string. Thread the strings through the screw eye, slip a large bead and a small bead onto the ends of the strings and make a knot.

Materials:

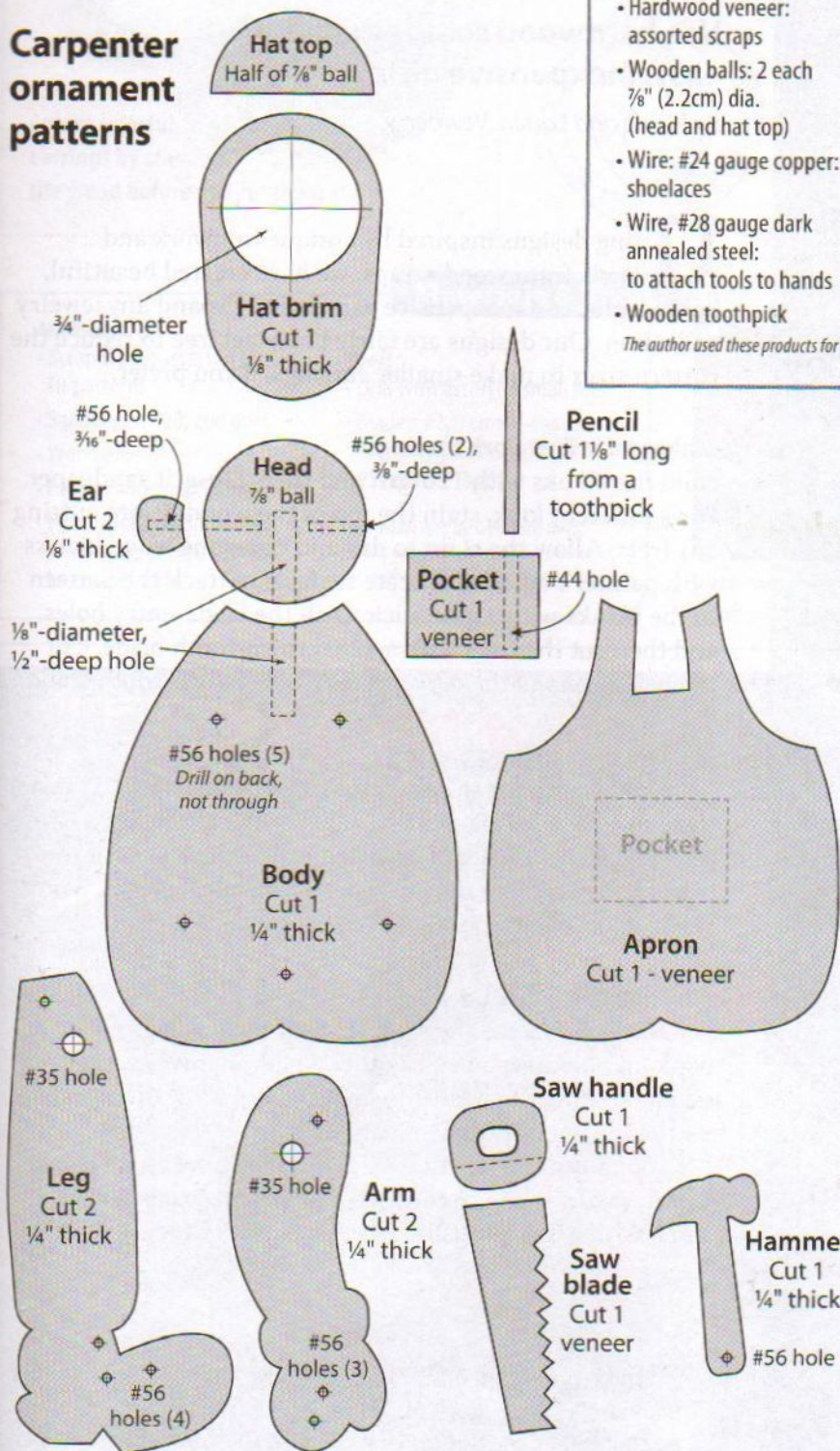
- Baltic birch plywood, 1/4" (6mm) thick: assorted scraps
- Baltic birch plywood, 1/8" (3mm) thick: assorted scraps
- Hardwood veneer: assorted scraps
- Wooden balls: 2 each 7/8" (2.2cm) dia. (head and hat top)
- Wire: #24 gauge copper: shoelaces
- Wire, #28 gauge dark annealed steel: to attach tools to hands
- Wooden toothpick
- Screw eye: 1 each 5/8" (1.6cm) long
- Acrylic paint, such as Delta Ceramcoat: bright yellow, fleshtone, black, tomato spice, golden brown, liberty blue; such as DecoArt Americana: French mauve; such as Plaid FolkArt: thunder blue, metallic silver
- Micron pen: 005 black
- Spray finish, such as Krylon matte
- Multipurpose adhesive, such as clear E6000
- Glue: wood
- Wooden beads: 3/4" (1.9cm) dia., 1/4" (6mm) dia.
- String, #5 cotton: 24" (61cm) long
- Screws, #2 brass slotted round head: 4 each 1/2" (1.3cm) long

Tools:

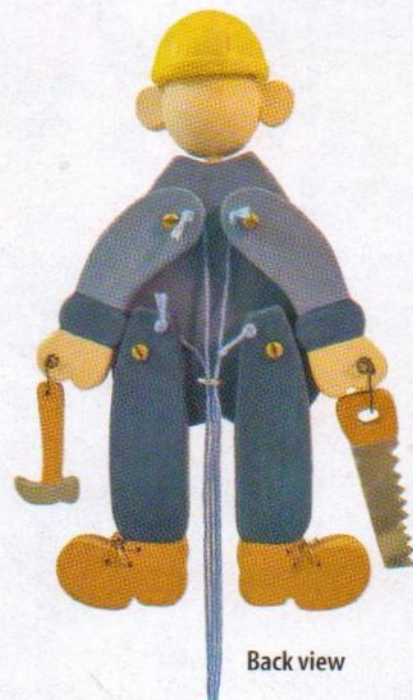
- Scroll saw blades, #3 reverse-tooth
- Screwdriver
- Clamps
- Wire cutters

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.

Carpenter ornament patterns



© 2017 Scroll Saw Woodworking & Crafts



Ruth Chopp began her career as a home economics teacher. When her children left home, she decided to try woodworking, noting that using a scroll saw and a sewing machine are really quite similar. Ruth loves wooden Christmas tree ornaments, so she designed her own; she now has about 300 patterns. Contact Ruth via e-mail at melchopp@comcast.net.

ON THE WEB Two more of Ruth's jointed ornaments available online.
www.scrollsawer.com

Making Earrings

Use hardwood scraps to make easy, inexpensive gifts

By Richie and Larkin Newberry

Using designs inspired by antique ironwork and made from wood scraps, we have created beautiful, lightweight, and inexpensive earrings to expand any jewelry collection. Our designs are fairly bold; feel free to reduce the pattern sizes to make smaller earrings, if you prefer.

Making the Fretwork Earrings

Sand the blanks with 120-grit and then 220-grit sandpaper. For a different look, stain the top of the wood before cutting any frets. Allow the stain to dry and cover the wood blanks with painter's tape for delicate surfaces. Attach the pattern to the blanks with a glue stick. Drill the blade-entry holes, and then cut the frets with a #2/0 crown-tooth blade. Cut the perimeters of the earrings with a #5 crown-tooth blade.

Making the Layered Earrings

Glue and clamp a stack of scraps in assorted colors. Transfer the pattern to the blank and cut along the lines with a #5 reverse-tooth blade. Then, determine the center of the blank and cut it in half to create two identical pieces. Sand them smooth and round the edges.

Finishing the Earrings

For softer woods, such as poplar, seal the earrings with wipe-on polyurethane. For other wood, we mix coconut oil and beeswax to accent the natural colors of the wood without using heavy chemicals. To refresh this finish, occasionally apply a little more oil. Finally, we apply Black Bison wax to some earrings and buff them to a beautiful shine with a white buffing wheel in a rotary tool.

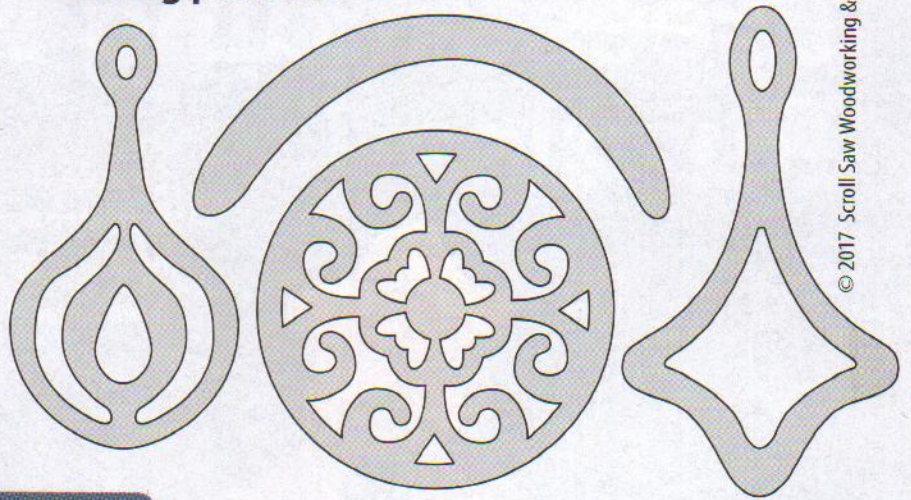
Findings for Wooden Earrings

Standard jump rings are not wide or strong enough to accommodate the thickness of even the thinnest wooden earrings. A jewelry-making friend, Pamela Rembold, created a video on making one-piece earring hooks designed for wooden jewelry. You can find the video at <https://youtu.be/SqxXUZ0viyo>.



Create colorful earrings by staining the wood before you cut the frets.

Earring patterns



Materials & Tools

Materials:

- Scrap wood: assorted to fit patterns
- Sandpaper: 120, 200 grits
- Wood glue
- Earring wire and findings
- Finish: polyurethane, Black Bison wax, or coconut oil/beeswax finish

Tools:

- Drill with assorted small bits
- Blades: #2/0 crown-tooth, #5 crown-tooth, #5 reverse-tooth

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.



Richie and Larkin Newberry share in the design work of all of their pieces, which are split between scroll saw work and custom signs on their CNC router. Richie does the scroll saw work and Larkin handles online sales, social media, and day-to-day operations of their home-based business, Wood & Thyme, which they started as a way to care for their daughter at home and begin their

dream of a woodworking shop. For more of their work, visit <http://www.woodandthyme.com/>.

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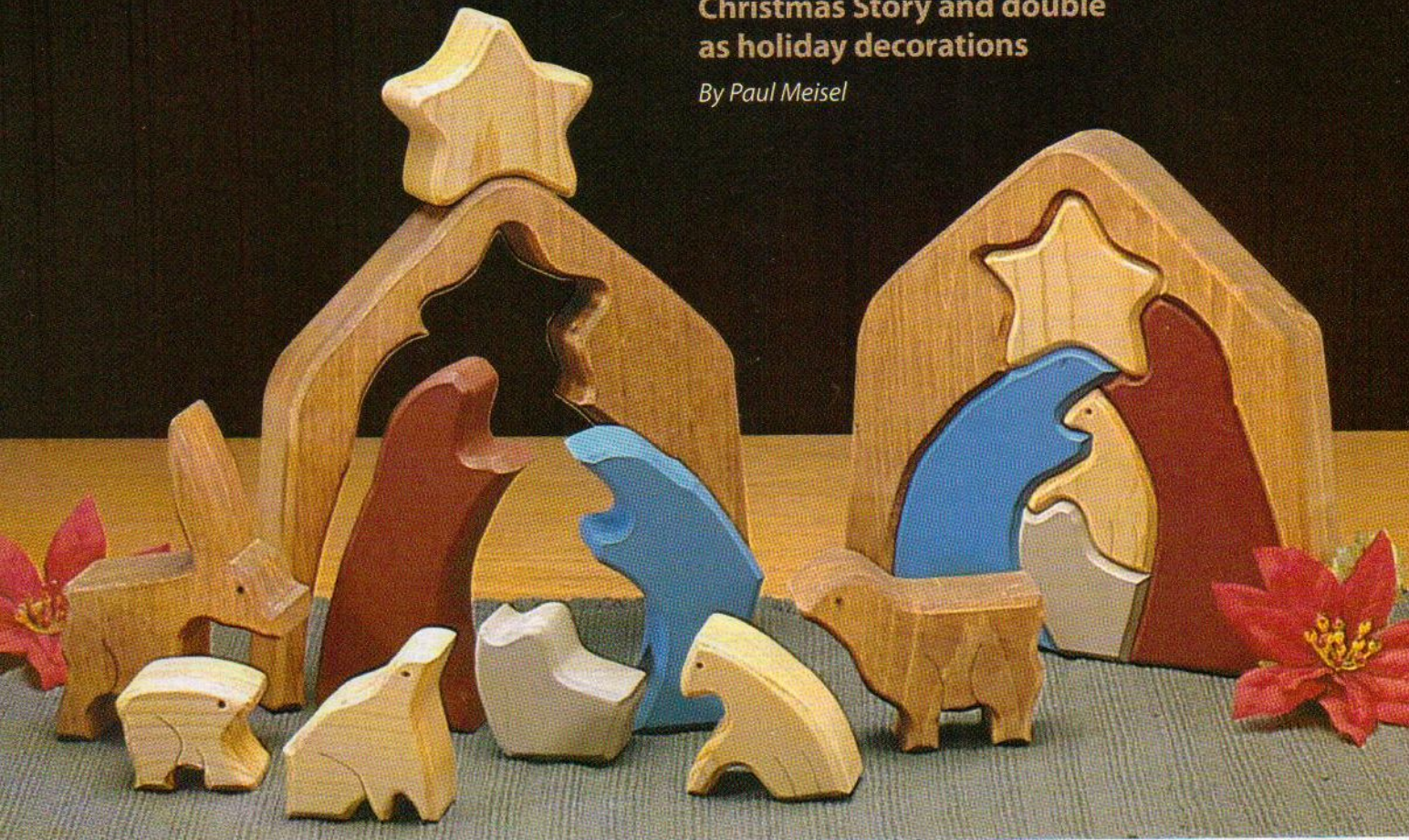
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Freestanding Nativity Puzzles

Simple designs teach the Christmas Story and double as holiday decorations

By Paul Meisel



These puzzles follow a long history of artistic depictions of the Nativity, which have played an important part in the Christian church. Ranging from magnificent gilded sculptures in European churches to simple plywood cutouts, clergy and religious educators use these figures to teach the story of the birth of Jesus.

I gave these puzzles a stylized look to make them simple to cut, but still include the most important teaching components. Both projects include a large star, which represents the bright star that drew the shepherds to where Jesus was born, as well as Mary, Joseph, baby Jesus, and a sheep. In the large puzzle, I added a donkey, a cow, and two more sheep.

By cutting the projects from 1½" (3.8cm)-thick lumber, I made sure they are stable enough to stand on their own. I cut both puzzles from a short piece of 1x12 construction lumber.

Cutting the Puzzles

Attach a copy of the pattern to the blank with temporary-bond spray adhesive. Cut the pieces with a coarse-tooth blade, such as a #9 skip-tooth blade. The coarse blade helps to clear the sawdust while you cut. Drill ⅛" (3mm)-diameter through holes for the eyes. After cutting, use a ⅛" (3mm)-radius roundover bit in a router table to soften the edges of all of the pieces. Sand everything smooth.

Finishing the Puzzles

I painted Jesus, Mary, and Joseph basic colors: white, blue, and maroon. Apply a light-colored stain to give the barn, the cow, and the donkey nice coloring. I applied a coat of clear varnish to the star and sheep, but the star could be painted bright yellow.

Materials & Tools

Materials:

- Construction pine, 1x12: 24" (61cm) long
- Sandpaper: 80, 220 grits
- Stain: light brown, such as fruitwood
- Acrylic paints, such as Delta Ceramcoat: blue (#02478)*, maroon (#02490)*, tan (#02435)*, white (#02505)*, yellow (#02504)*
- Varnish, such as Delta Ceramcoat: clear satin (#07003)*

Tools:

- Blades: #9 skip-tooth, such as Olson #450-F*
- Drill press with bit: 1/8" (3mm)-dia. twist
- Router table with bit: 1/8" (3mm)-radius roundover
- Paintbrushes

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.

SPECIAL SOURCES:

The items above marked with an asterisk (*) are available from Meisel Hardware Specialties. Call 1-800-441-9870 or visit their website, www.meiselwoodhobby.com.

Patterns for **FREESTANDING NATIVITY PUZZLES** are in the pattern pullout section.

TIPS

SQUARE CUTTING

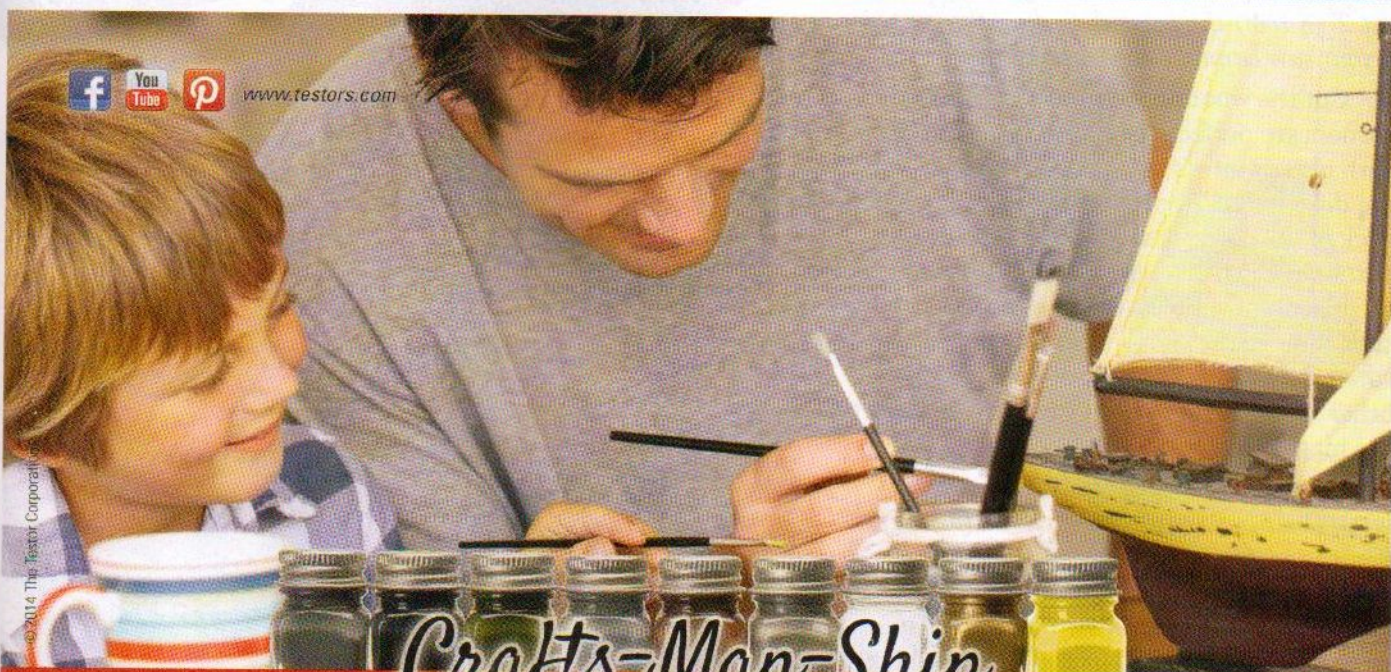
When cutting thick lumber, make sure your saw table is exactly perpendicular to the blade. If you are off even 0.5°, the resulting taper will prevent the pieces from easily sliding together.

UPCYCLING CONSTRUCTION LUMBER

You can often find cut off ends of 1x12 lumber discarded at construction sites. Make sure the wood is flat; avoid lumber that has cupped or warped.



Paul Meisel and his team at Meisel Hardware Specialties have designed over 3,500 projects and plans for the home hobbyist woodworker. We have brought you over 30 projects from Paul's collection in past issues of *Scroll Saw Woodworking & Crafts*.



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Geometric COMPOUND-CUT Ornaments

These designs look impressive but are surprisingly easy to cut

By Sue Mey

Cut by Leldon Maxcy

These simple compound ornaments fit in on every tree. And since they require only a few cuts, you can cut, sand, and finish several in just an afternoon. For a different look, stain or paint the completed ornaments and woodburn the year onto each one.

Making the Ornaments

Note: These patterns are sized for saws that can cut 2" (5.1cm)-thick wood. Reduce the patterns if your saw cannot cut wood this thick.

Cut the wood to size and make sure the corners are perfectly square. Cover the blank with blue painter's tape. Fold the pattern on the dotted line. Apply spray adhesive to the back of the pattern, align the fold with the corner of the blank, and press it down. Drill the blade-entry holes. Cut the frets on one side, remove the waste (keep the bigger pieces), rotate the blank 90°, and cut the frets on the other side. Again, remove the waste and keep the bigger pieces.

Replace the bigger waste pieces and wrap clear packaging tape around the blank. Cut the entire perimeter on one side. Hold the ornament and waste in place while you vacuum away the sawdust. Then, wrap more clear tape around the blank, rotate the blank, and cut the perimeter of the ornament on the other side.

Remove the waste wood and sand the ornament with 320-grit sandpaper. Remove the sanding dust with a stiff-bristled paintbrush and apply several thin coats of clear spray finish. Attach a hanging string to the top.



Materials & Tools

Materials:

- Light wood, 2" (5.1cm) square: sized to fit ornament
- Tape: blue painter's, clear packaging
- Spray adhesive
- Sandpaper: 320 grit
- Finish: clear spray

Tools:

- Scroll saw blades: #9 skip tooth
- Vacuum
- Paintbrush: stiff bristled

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.

Patterns for **GEOMETRIC COMPOUND-CUT ORNAMENTS** are in the pullout section.



Sue Mey lives in Pretoria, South Africa. To see more of her work, including a wide variety of patterns and pattern-making tutorials available for purchase, visit www.scrollsawartist.com. She can be contacted at

suem@storage.co.za. Her pattern book, *Lighted Scroll Saw Projects*, is available from www.schifferbooks.com and other outlets.

Man Cave Lamp

Cheer for the home team with this customizable night-light

By John Hutchinson

Brighten your man cave on game days with this cheering fan lamp. As a football tumbling down the gridiron, an arm sporting an iconic #1 hand waves. Customize the lamp by choosing a lampshade and logo sticker for your favorite team. More of a baseball, basketball, or hockey fan? Use free clip art to turn the gridiron and football into the field and ball of your choice!



Customize your lamp to celebrate your favorite team.

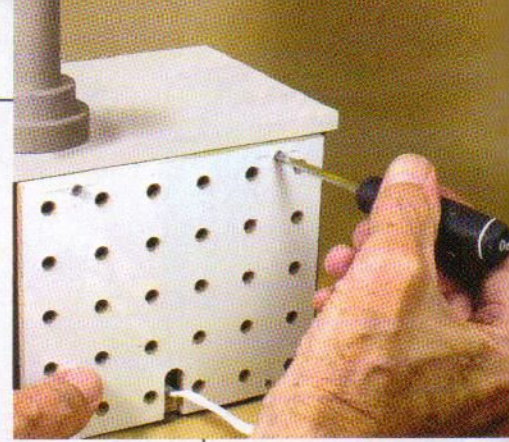
Getting Started

Use the patterns and dimensions to cut the pieces from wood, referring to the Parts List as necessary. Drill the holes as marked. Do not cut pieces A1 or A2 yet. Glue the football artwork (M1B) to the football rotor (M1A).

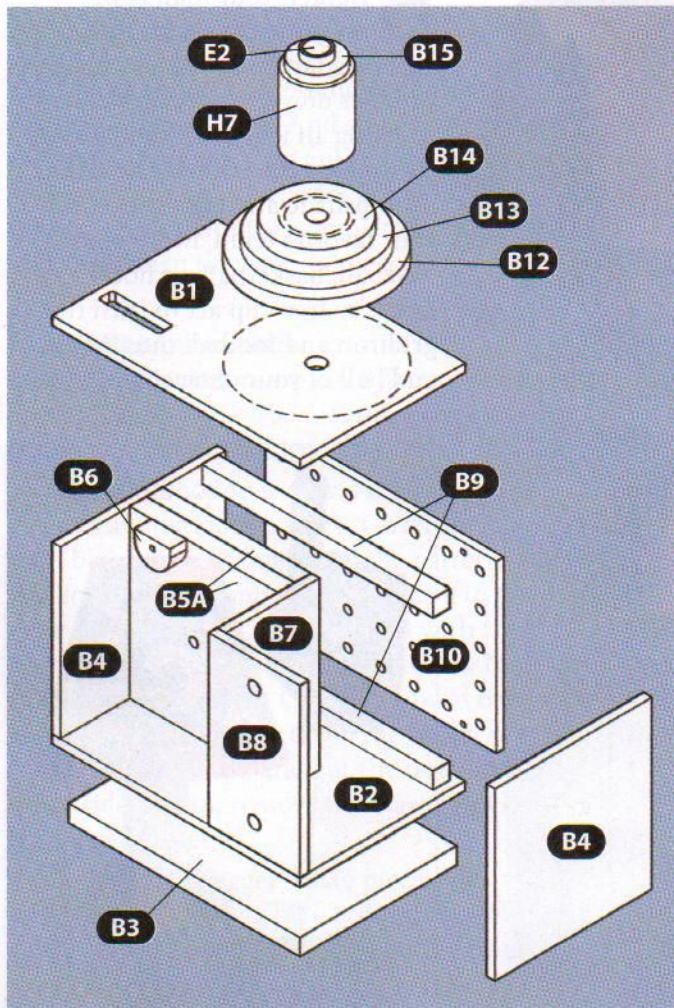
TIP

SAFETY NOTES

- If you feel uncomfortable with electrical circuitry, enlist the assistance of a licensed electrician.
- When choosing an animation motor, make sure that it's rated continuous duty.
- Limit the wattage (heat output) of the light bulb per the recommendations of the shade manufacturer.
- Provide ventilation for the motor in the box. I used pegboard; you can also use plywood drilled with several holes.



MAKING THE BOX



▲ Step 1: Refer to the diagram to assemble the box; glue and clamp the pieces. Use a scrap of dowel to align pieces B12, B13, and B14 with the hole in piece B1. Glue the field artwork (B5B) to one piece B5A before you add pivot block B6. Adjust the pilot hole markings on the back (B10) as needed but do not install the piece. Referring to the photo, paint the pieces, if desired, and let dry.



◀ Step 2: Adjust piece B15 as needed so it fits inside the PVC (H7) while supporting the bulb socket (E2). *Note: If you prefer, purchase a premade socket reducer from your electrical supplier.*

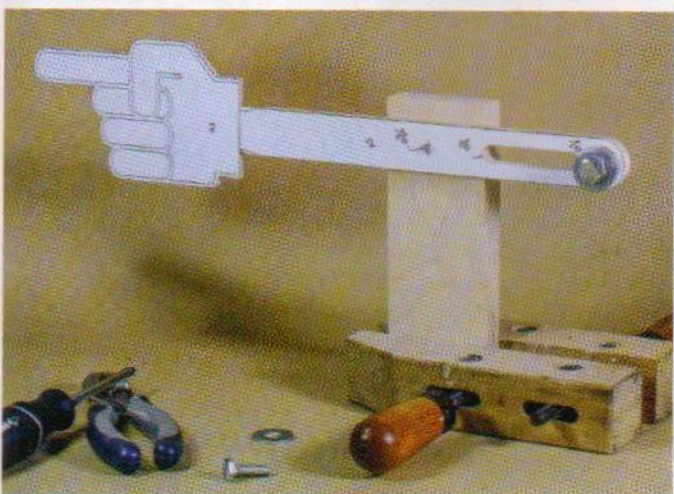
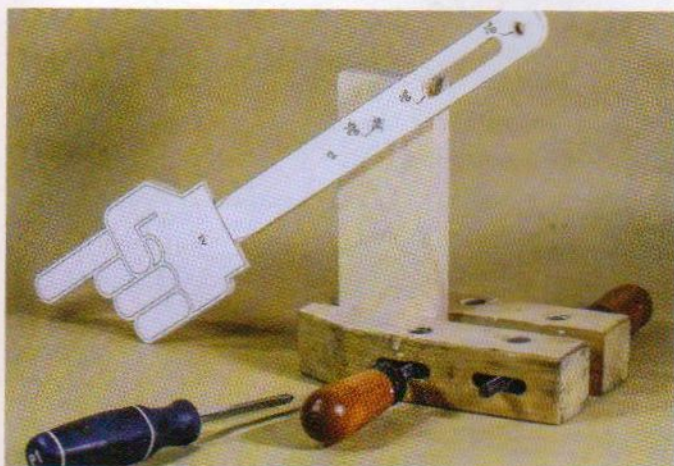
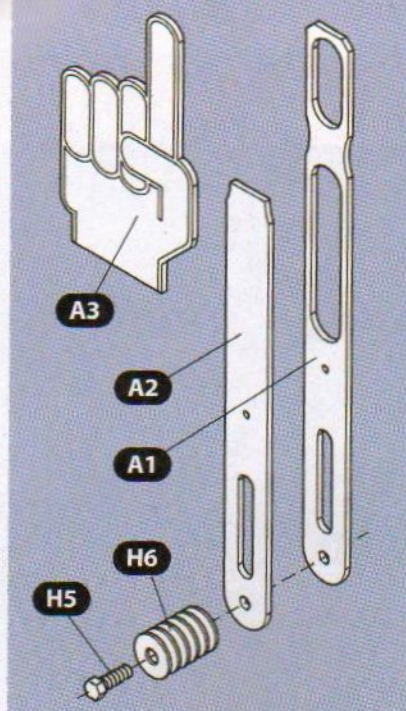
MAKING THE ARM

► Step 3: Glue patterns A1 and A2 to gallon-size paint-stirring sticks. I use white school glue, which holds tenaciously during drilling and cutting but releases easily when I apply a damp paper towel. Stay away from "improved" school glues, which bond too well.



◀ Step 4: Cut the large ovals in piece A1 and cut the length off piece A2 as marked. Remove pattern A1 only, align the pieces, and use wood glue to assemble them. The stirring sticks are made from soft wood, so use scraps of wood to pad the clamps to prevent damage. When the glue is dry, round the end of the assembled piece, drill the holes, and cut the slot. Remove pattern A2.

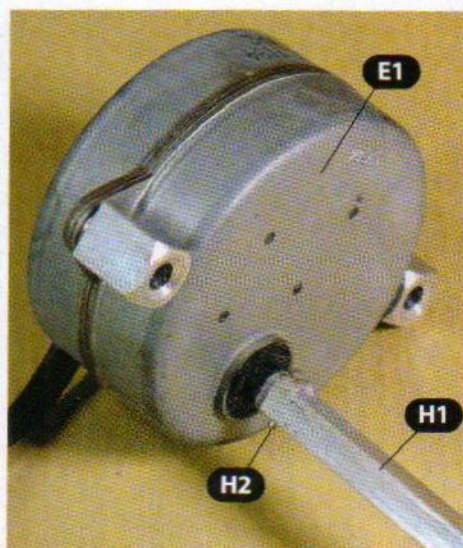
► **Step 5:** Center piece A3 on the arm assembly and glue it in place, clamping with pads as before. Let the glue dry.



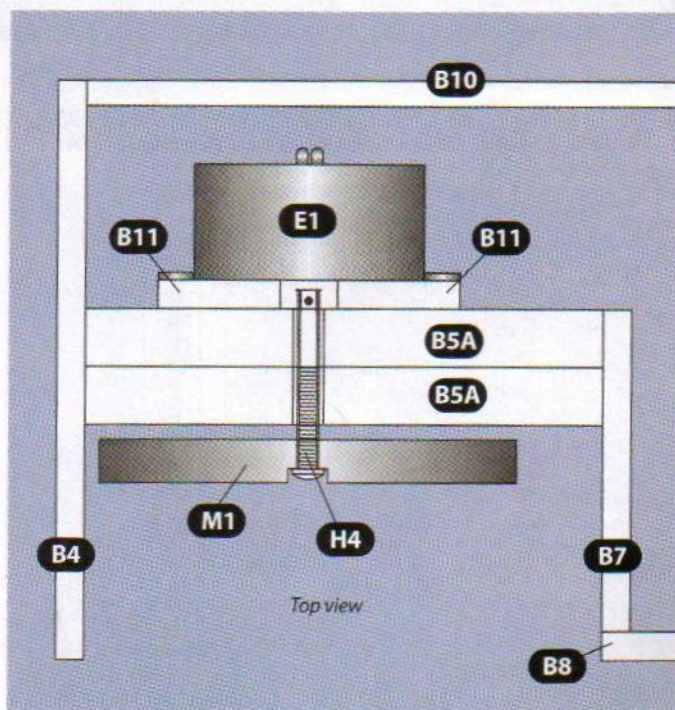
▲ **Step 6:** Drill a hole in a piece of scrap wood and clamp it vertically as shown. Use a #6 machine screw to mount the arm assembly to the wood. To balance the arm, thread five or six washers (H6) onto a short bolt (H5). The balance doesn't have to be perfect.

CONNECTING THE DRIVESHAFT TO THE MOTOR

► **Step 7:** Drill a $\frac{1}{16}$ " (2mm)-diameter hole through the driveshaft (H1) about $\frac{1}{4}$ " (6mm) from the end. Use a disc sander to reduce the distance from the hole to the end of the tube to $\frac{1}{8}$ " (3mm). Use gel cyanoacrylate (CA) glue to attach the driveshaft tube to the motor's square driveshaft. Using the hole in the tube as a guide, drill a $\frac{1}{16}$ " (2mm)-diameter hole through the motor's driveshaft. Slide a $\frac{3}{64}$ " (1.2mm)-diameter escutcheon pin through the hole and secure the ends with CA glue. Trim the pointed end of the pin just beyond the mound of glue.

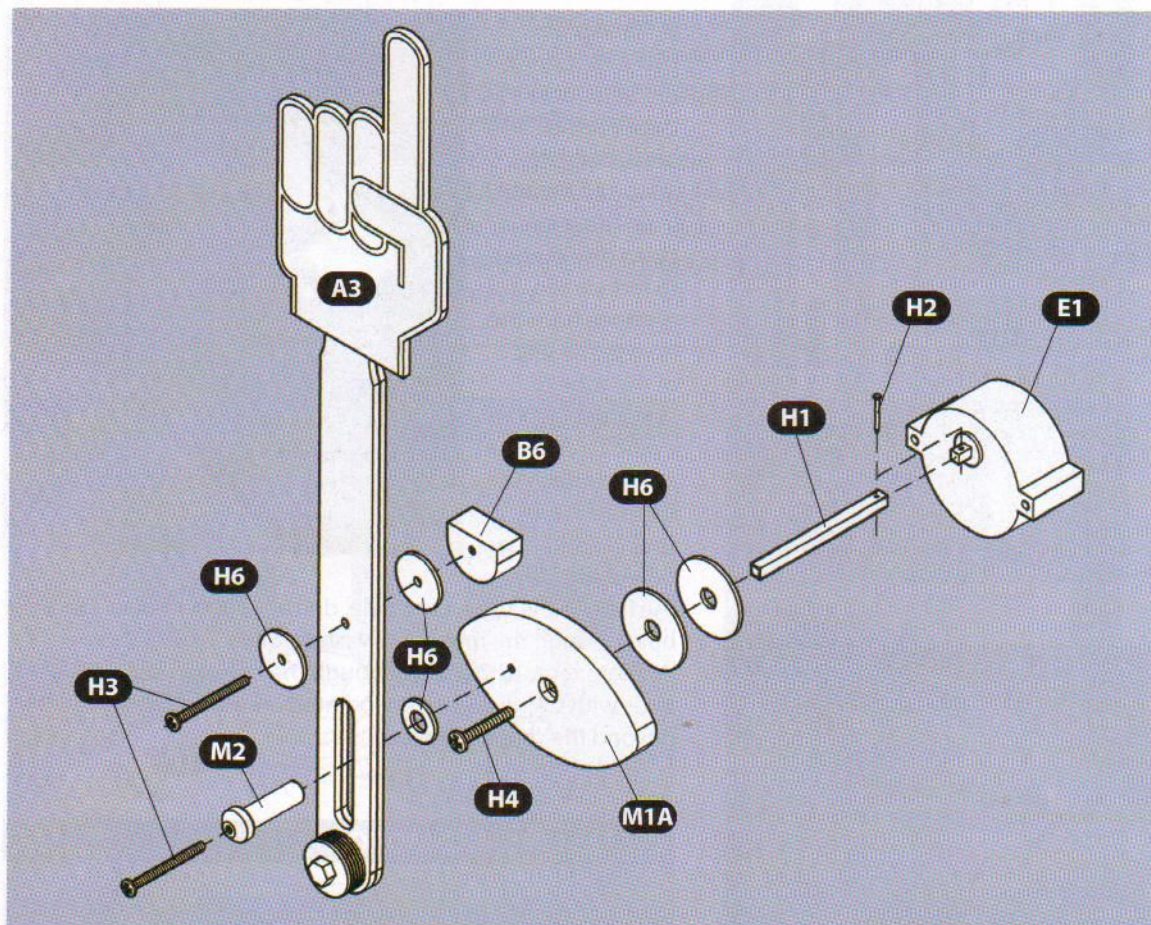


INSTALLING THE MOTOR



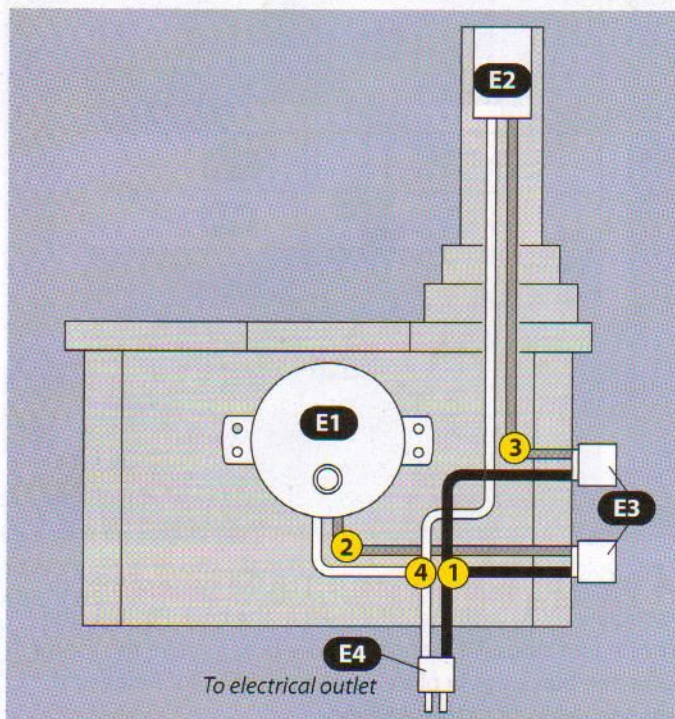
▲ **Step 8:** Align the motor (E1) on the inside of the box faceplate (B5A) with the driveshaft in the hole. Position the motor blockings (B11) and mark the box; remove the motor. Glue the blockings in place, mark and drill pilot holes, and screw the motor to the blockings.

CONNECTING THE ROTOR TO THE MOTOR



◀ **Step 9:** Insert the arm through the slot in the top of the box. Referring to the diagram, assemble and install the arm mechanism.

INSTALLING THE LAMP AND SWITCHES



◀ **Step 10:** Install the lamp fixture and switches. Fit the fixture into the top of the PVC pipe and feed the wires down into the body of the box. Feed the switch wires through the holes and then epoxy the switches in place, using washers as necessary.

Step 11: Wire the lamp. Separate the power cord and strip the ends of each wire about 1/2" (1.3cm). Using wire nut 1, connect one cord wire, a bottom switch wire, and a top switch wire. Use wire nut 2 to attach the other bottom switch wire to one motor wire. Use wire nut 3 to attach the other top switch wire to a lamp wire. Use wire nut 4 to attach the remaining power cord wire, motor wire, and lamp wire.

Step 12: Hold the back in place, mark and drill pilot holes, and screw the back to the project. Add the lightbulb and shade, and then switch on your lamp and cheer for your team!

(Continued on page 64)

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Parts List

	Description	Quantity	Materials	Dimensions	Presentation
A1	Arm back	1	Paint stir stick, 1/8" (3mm) thick	Premade	Pattern
A2	Arm front	1	Paint stir stick, 1/8" (3mm) thick	Premade	Pattern
A3	Hand	1	Plywood, 1/8" (3mm) thick	3 1/4" x 6 1/4" (8.3cm x 15.9cm)	Pattern
B1	Box top	1	Plywood, 1/4" (6mm) thick	5" x 7 1/2" (12.7cm x 19.1cm)	Pattern
B2	Box bottom	1	Plywood, 1/4" (6mm) thick	5" x 7 1/2" (12.7cm x 19.1cm)	Dimensions
B3	Box base	1	Plywood, 1/2" (1.3cm) thick	4 1/4" x 6 3/4" (10.8cm x 17.1cm)	Dimensions
B4	Box side	2	Plywood, 1/4" (6mm) thick	4 3/4" x 5" (12.1cm x 12.7cm)	Dimensions
B5A	Box face plate	2	Plywood, 1/2" (1.3cm) thick	4 1/2" x 5" (11.4cm x 12.7cm)	Pattern
B5B	Field artwork	1	Color copy artwork		
B6	Box pivot block	1	Plywood, 1/2" (1.3cm) thick	3/4" x 1 1/16" (1.9cm x 2.7cm)	Pattern
B7	Box center support	1	Plywood, 1/4" (6mm) thick	2 25/32" x 5" (7.09cm x 12.7cm)	Dimensions
B8	Box switch plate	1	Plywood, 1/4" (6mm) thick	2 3/4" x 5" (7cm x 12.7cm)	Pattern
B9	Box back supports	2	Hardwood, 1/2" (1.3cm) square	7" (17.8cm) long	Dimensions
B10	Box back	1	Pegboard, 7/32" (5.6mm) thick	5" x 7" (12.7cm x 17.8cm)	Dimensions
B11	Box motor blocking	4	Paint stir sticks, 1/8" (3mm) thick	1" x 1 1/16" (2.5cm x 2.7cm)	Dimensions
B12	Box large lamp base	1	Plywood, 3/8" (1cm) thick	4 1/2" (11.4cm) square	Pattern
B13	Box medium lamp base	1	Plywood, 3/8" (1cm) thick	3 3/4" (9.5cm) square	Pattern
B14	Box small lamp base	1	Plywood, 3/8" (1cm) thick	3" (7.6cm) square	Pattern
B15	Socket reducer	1	Plywood, 1/2" (1.3cm) thick	1 3/8" (3.5cm) square	Pattern**
E1	Motor	1	30-rpm continuous duty		
E2	Bulb socket	1	3/4" (1.9cm) OD for candelabra base bulb		
E3	Switch	2	Rotary style		
E4	Power cord		2-conductor lamp cord		
E5	Bulb	1	Candelabra base		
H1	Drive shaft	1	Aluminum tube, 3/16" (5mm) square	1 1/2" (3.8cm) long	Dimensions
H2	Escutcheon pin	1	Brass, 3/64" (1.5mm) diameter	3/8" (1cm) long	Dimensions
H3	Hand screws	2	Steel machine screw, #6-32	1" (2.5cm) long	Dimensions
H4	Football screw	1	Steel machine screw, #8-32	1" (2.5cm) long	Dimensions
H5	Counterweight bolt	1	Hex-head bolt, 1/4" (6mm) dia.	3/4" (1.9cm) long	Dimensions
H6	Washers	10	1/4" (6mm) dia.		Dimensions
H7	Lamp neck	1	PVC pipe coupling, 1" (2.5cm) I.D., 1 1/8" (4.1cm) O.D.	2" (5.1cm) long	Dimensions
M1A	Football rotor	1	Plywood, 3/8" (1cm) thick	2 3/4" x 4" (7cm x 10.2cm)	Pattern
M1B	Football artwork	1	Color copy artwork		
M2	Tracker	1	Toy axle, 5/16" (8mm) O.D.	1/4" (6mm) long	Dimensions

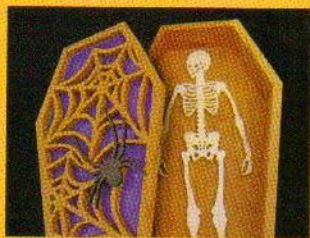
**Use purchased reducer instead if desired.

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(Continued on page 66)

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Materials:

- Plywood, 1/8" (3mm) thick: 3 3/4" x 6 1/4" (8.3cm x 15.9cm)
- Plywood, 1/4" (6mm) thick: 10" x 18" (25.4cm x 45.7cm)
- Plywood, 3/8" (1cm) thick: 8" x 9" (20.3cm x 22.9cm)
- Plywood, 1/2" (1.3cm) thick: 10" (25.4cm) square
- Hardwood, 1/2" (1.3cm) square: 14" (35.6cm) long
- Pegboard, 3/32" (5.6mm) thick: 5" x 7" (12.7cm x 17.8cm)
- Paint-stirring sticks: 4 each gallon size
- Glue: white school type; wood; gel cyanoacrylate (CA)
- Acrylic paint: to match team colors
- Lamphshade
- Team sticker/decal (optional)
- Paper towels
- Motor: 30-rpm continuous duty
- Switches: 2 each rotary style
- Power cord: 2-conductor lamp cord
- Bulb socket: 3/4" (1.9cm) OD for candelabra base bulb
- Socket reducer (optional; see Parts list B15)
- Wire nuts: 4 each
- PVC pipe coupling: 1" (2.5cm) I.D. x 1 5/8" (4.1cm) O.D. x 2" (5.1cm) long
- Light bulb: 1 each candelabra
- Aluminum tube, 3/16" (5mm) square: 1 1/2" (3.8cm) long
- Escutcheon pin: 1 each 3/64" (1.2mm) dia. x 3.8" (1cm) long
- Steel machine screw: 2 each #6-32 x 1" (2.5cm) long

- Steel machine screw: 1 each #8-32 x 1" (2.5cm) long
- Bolt, hex-head: 1 each 1/4" (6mm) dia. x 3/4" (1.9cm) long
- Washers, 1/4" (6mm)-dia. hole: 10 each
- Toy axle: 1 each 5/16" (8mm) O.D. x 1/4" (6mm) long
- Color copies of field and football artwork

Tools:

- Scroll saw and blades: #1 or #3
- Table saw (optional)
- Drill and bits: 1/16" (2mm), 1/8" (3mm), 9/64" (3.5mm), 1/4" (6mm), 17/64" (6.75mm), 3/8" (10mm), 1/2" (13mm) Forstner, 3/4" (19mm) Forstner
- Disc sander
- Paintbrush
- Clamps
- Screwdriver

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.

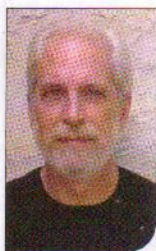
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Order a wide variety of college logo lamp shades at www.littlebobbycreations.com. The company also makes shades in themes such as the military, Boy and Girl Scouts, animals, television shows, motorcycles, and much more. The motor is available from various online sources, including eBay.

B5B

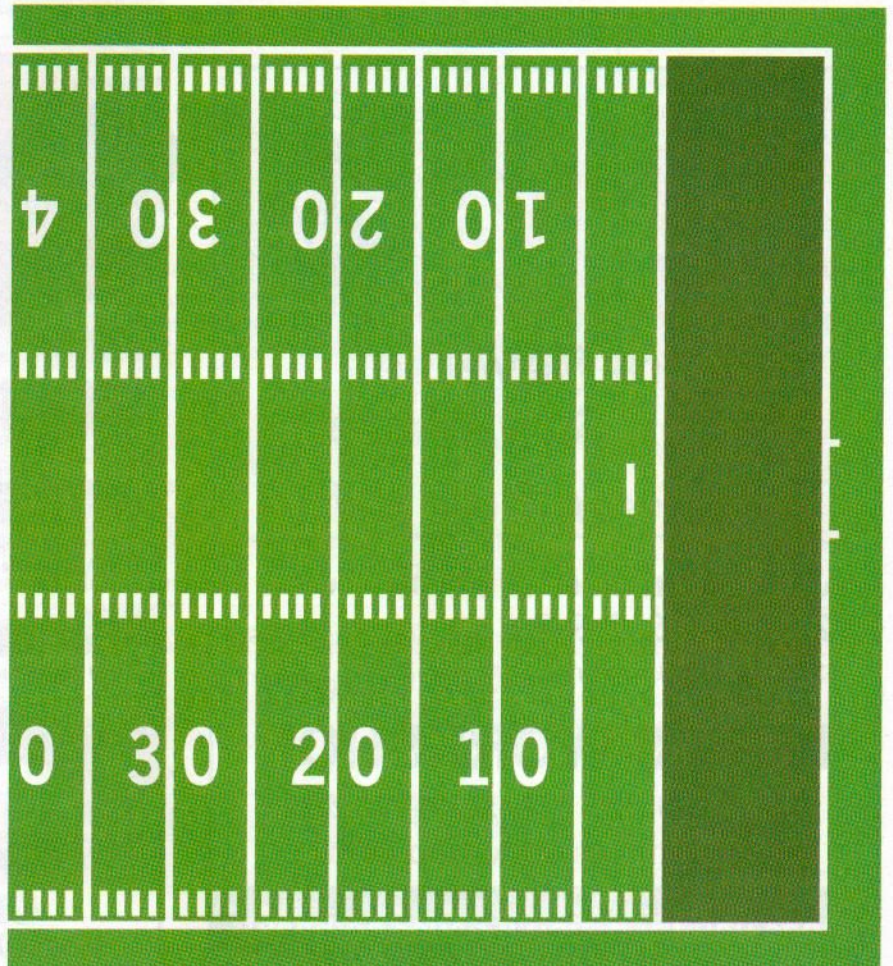


M1B



On a childhood family vacation that included a swing through Las Vegas, John Hutchinson was first introduced to the marvel of animated signs. A "few" years later, he's reliving that wonderment through his animated lamps. You can find

a gallery of his small-scale kinetic woodworking at www.johnwhutchinson.com. Questions or comments? Contact him via e-mail: john@johnwhutchinson.com.



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"The first time I installed a good blade in my scroll saw, it was like I upgraded my machine. I was hooked."



—Steve Good, Scrollsaw Workshop



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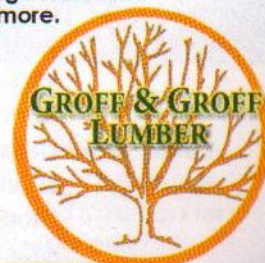
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Toys by the Truckload

T.L.C. Toys has made and donated more than a quarter-million wooden toys ... and counting

By Kathleen Ryan

Our primary goal is to bring some happiness to less fortunate children during the holidays by letting them know that we care. Each toy we make means one more child gets a priceless gift of love," said Mel Hartman, the founder of the nonprofit organization T.L.C. (Tender Loving Care) Toys. Over the past 26 years, Mel and the volunteers at T.L.C. have produced more than 380,000 handmade wooden toys for needy children, valued in excess of \$7.1 million.

Mel's toy story started in 1989, when he presented his grandsons with homemade trucks for Christmas. Around the same time, he caught a television news story about a man who filled a pickup truck full of wooden toys and donated them to Toys for Tots. This impressed Mel so much that he decided to do the same—only he planned to fill two pickup trucks. "I didn't want to make just any toys, though," he said. "These had to be well made, safe, heirloom-quality toys—the kind that kids would actually play with."

With that in mind, Mel let the sawdust fly, working in his shop eight to 10 hours each day. He enjoyed the woodworking, but not the painting, which left a growing stack of unfinished toys. Then, the idea struck to recruit volunteers from senior centers and churches to do the painting and lacquer work. By the following Christmas, Mel had produced enough toys to fill six pickup trucks. He donated them to six different agencies.

Two days after Christmas, Mel and his helpers were back at work creating toys for the following year. This time, they worked as a newly formed nonprofit organization. As word spread, volunteers and donations flooded in. Today, the toy program has grown beyond Mel's wildest expectations, with no signs of slowing down. Mel and the volunteers at T.L.C. create 80 different types of wooden toys and distribute them to more than 200 charities each Christmas. "Our goal is to keep working to fulfill as many toy requests as possible," he said.

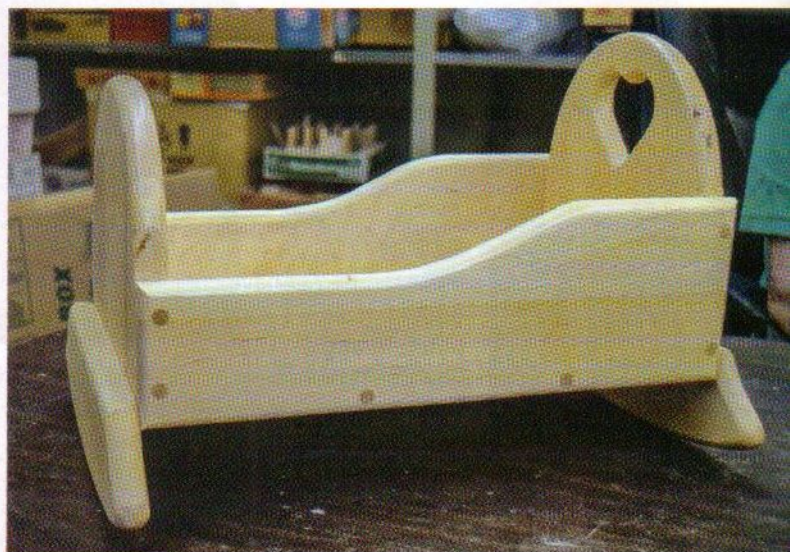
“The volunteers at T.L.C. create 80 different types of wooden toys and distribute them to more than 200 charities each Christmas.”

Mel and 14 other woodworkers work in shifts at Mel's small but well-equipped woodshop, making hundreds of each design at a time. Additional woodworkers take wood home to cut blanks for various parts. T.L.C. also works with three technical schools, which send students to help as part of their training. All finished toys get a final quality check with one criterion in mind: "The toys must be good enough to give to my great-grandchildren—and I have five of them!" said Mel.

The organization stores the toys in a large warehouse to await distribution, which occurs throughout the year. "These toys are given free of charge to less fortunate children, but we also sell toys on our website to help raise money for the supplies we need to make more toys," Mel explained. "Last year we spent \$6,400 just for the basics."

T.L.C. is supported by many businesses and organizations, who donate money and materials to help meet the group's growing needs. They currently have about 20 volunteers, including Mel's daughter, Pam, who handles the bookkeeping, and Ann, his wife of 60 years. ("Ann's job is to keep me well enough to continue making toys!" Mel said.) "Our helpers come from all walks of life and are not required to have any special skills. All they need is a desire to make a difference in child's life." A local scroller, Gary Geist, is one of the dedicated T.L.C. woodworking volunteers. "We do whatever Mel has scheduled to get done, which could be sanding, routing, sawing, gluing, etc.," he said. "But I think we all get back much more than we give. This is definitely a labor of love."

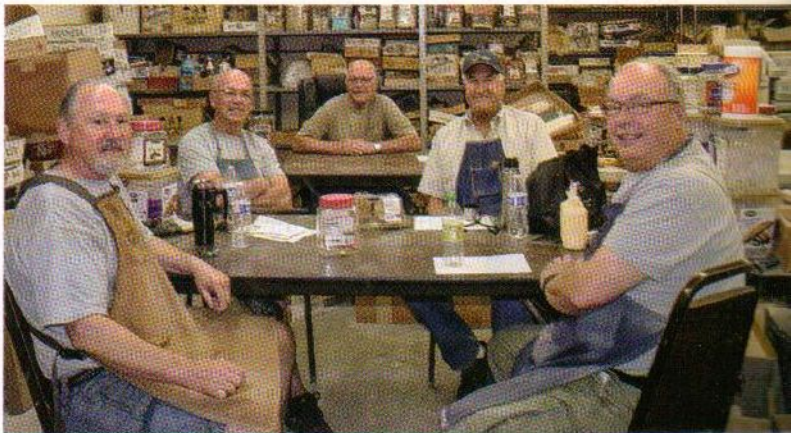
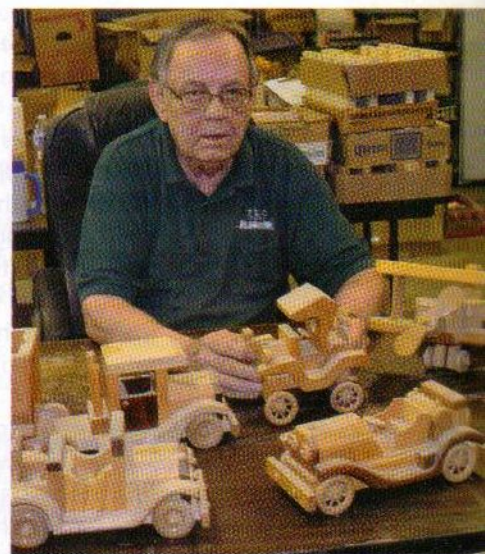
To learn how you can help visit the website at www.T.L.C.toys.org



The T.L.C. woodworkers make 80 different designs from assorted hardwoods.

Mel Hartman may run T.L.C., but he is also in the shop making toys almost every day.

About 20 volunteers make toys at T.L.C. including Gary Geist, Brad Chabot, Ray Guimont, Gordon Barringer, and Bill Guthrie.



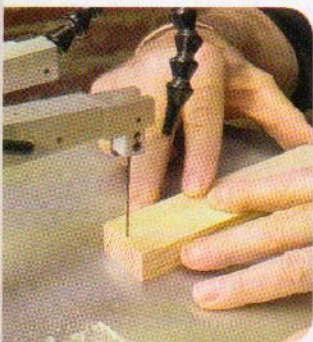
To meet more folks using their scroll saws to make a difference, check out Sawdust on page 72. Plus! Visit our website for links to local clubs who make toys for kids: scrollsawer.com/2015/12/22/gift-of-time/.

To avoid repetitive instructions, this page is included in each issue to assist novice scrollers with basic scrolling techniques.



Squaring Your Table

Most scroll saws have an adjustable table that allows you to make cuts at different angles. There are times when you want the saw set at an angle, but most cutting is done with the blade perpendicular to the table. If the table is even slightly off-square, the cuts will be angled. This interferes with puzzle pieces, intarsia, segmentation, and many other types of scrolling projects.



The most common method for squaring a table uses a small metal square, or right angle tool. Set the square flat on the saw table against a blade that has been inserted and tensioned. Adjust the table to form a 90° angle to the blade.

The cutting-through method is also popular. Saw through a piece of scrap wood at least 3/4" (19mm) thick and check the angle of the cut using a square. Adjust the table until you get a perfectly square cut.

You can also use the kerf-test method. Take a 1 3/4" (44mm)-thick piece of scrap wood and cut about 1/16" (2mm) into it. Stop the saw, back the blade out, and spin the wood around to the back of the blade. If the blade slips easily into the kerf, the table is square. If it doesn't slide into the kerf, adjust the table and perform the test again until the blade slips in easily.



Attaching Patterns

Temporary-bond spray adhesive is the most common method used to attach patterns to stock. Photocopy the pattern. Spray the adhesive on the back of the copy of the pattern, wait a few seconds, and then press the pattern down onto the blank. Rubber cement or glue sticks work similarly.

You can also use graphite or carbon transfer paper. Place the pattern on the blank and slip a sheet of transfer paper in between the pattern and the blank. Use a few pieces of painter's tape to hold the pattern and transfer paper in place. Trace around the pattern with a red pen (so you know where you have traced). Choose a light-colored transfer paper for darker woods. Carbon paper costs less than graphite paper, but must be sanded off before finishing.

Stack Cutting

Stack cutting lets you cut several pieces of a project—or even several projects—at one time. Essentially, you attach several blanks together and cut them as one unit.

One way to attach blanks is with tape. Line all the layers up and wrap a layer of tape around the outside edge. You can also wrap the whole stack in tape for extra stability. Use masking tape, painter's tape, or clear packaging tape.

Hot-melt glue is another option. Glue the blanks together with a dot of hot-melt glue on each side.

You can also join pieces by driving brads or small nails into as many waste areas as you can. Cut off any overhanging nails as close to the surface as you can, and then sand them flush to avoid scratching or catching on the table.



Blade Tension

Before inserting a blade, completely remove the tension. Clamp both ends of the blade into the blade holders and adjust the tension. Push on the blade with your finger. It should flex no more than 1/8" (3mm) forward, backward, or side to side.

A blade that does not have enough tension will wander. It will also flex from side to side, making for irregular or angled cuts. If you press too hard on a loose blade, it will usually snap. A blade that has too much tension is more susceptible to breaking and tends to pull out of the blade holders. In general, it is better to make the blade too tight rather than too loose.

Blade-Entry Holes

Some patterns have blade-entry holes marked. If the pattern doesn't, place the holes near a line to be cut to prolong the blade life, but don't place the hole on a curving line or inside corner (if possible). Drill the hole perpendicular to the blank. Use a drill press if you have one; otherwise, use a hand drill and make the holes as vertical as possible. Drill through the blank into scrap wood to prevent tear-out on the back side of the blank.

If you have the space, use a larger bit—it will make it easier to thread the blades through. For thin veining cuts, use the smallest bit the blade will fit through.



Removing Patterns

Dampen a glued paper pattern with mineral spirits to aid in removal. Commercial adhesive removers work as well. A quick wipe of mineral spirits will remove most adhesives left behind on the wood.

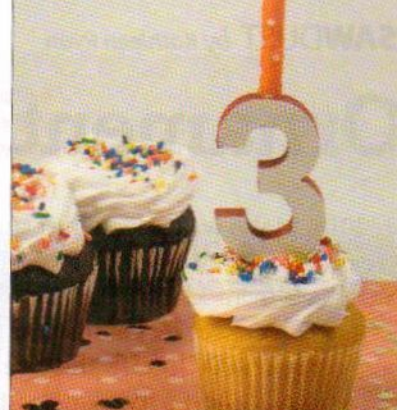
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Ornament Outreach

In 2016, Idaho was selected to supply the National Christmas Tree to Washington, D.C. The 84-year-old Engelmann spruce was felled from Idaho's Payette National Forest and stood 80' tall. Woodworkers across the state handcrafted their very best ornaments to adorn the tree.

Members of the Treasure Valley Scrollers in Boise, Idaho, were so inspired by the project that they decided to start a new tradition. "We had been looking for a community project that we could get involved in," said the club's president, Larry Fisher. "A member suggested that we keep making these Christmas ornaments and donate them to the Women and Children's Alliance in Boise, an organization that provides temporary housing for women and children who have left abusive situations." Because the identities of the recipients are kept secret to avoid further abuse, the scrollers will not see the faces of the recipients light up when presented with their beautiful ornaments this Christmas. But, they will have the joy of knowing that the families will take these small acts of love with them wherever they go.

Learn more about the Treasure Valley Scrollers at www.treasurevalleyscrollers.org.



(Left to right) Val Isle, Craig Plummer, Larry Case, Al Shaw, and Larry Fisher began a new tradition of scrolling ornaments for families in need.



Presenting handmade toys to local kindergarten students has become a holiday highlight for the members of the Sun City West Wood Club.

Holiday Inspiration

Each year, members of the Sun City West Wood Club in Arizona spend countless hours crafting more than 100 toys for kindergarten students as part of the club's Christmas toy program. "The schools bus the kids to us. They sing holiday songs to our members, which is fun for us because most of our grandchildren are older and far away," said Max Thompson, last year's project leader. In return, club members serve the youngsters refreshments and present them each with a bag of small handmade wooden toys.

"It's a fun project and very rewarding for the woodworkers because the immediate response is smiles and shy words of thanks," said Max. "Our members are men and women with widely varying skills—from no woodworking experience to lifelong woodworkers. The toy project helps create team building and learning opportunities between new and experienced woodworkers."

Max hopes the program will have lasting benefits for the students, as well. "Teachers and parents tell us that these kids really take care of the toys. Many have them on shelves as keepsakes from the 'old people' in Sun City West. It is our hope that some of these kids will be inspired enough by the toys to someday want to make their own wood crafts."



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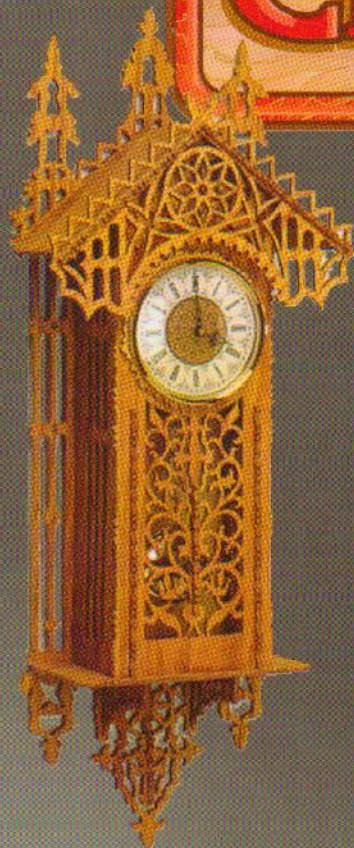
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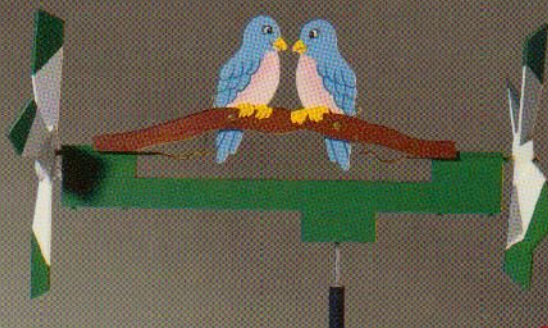
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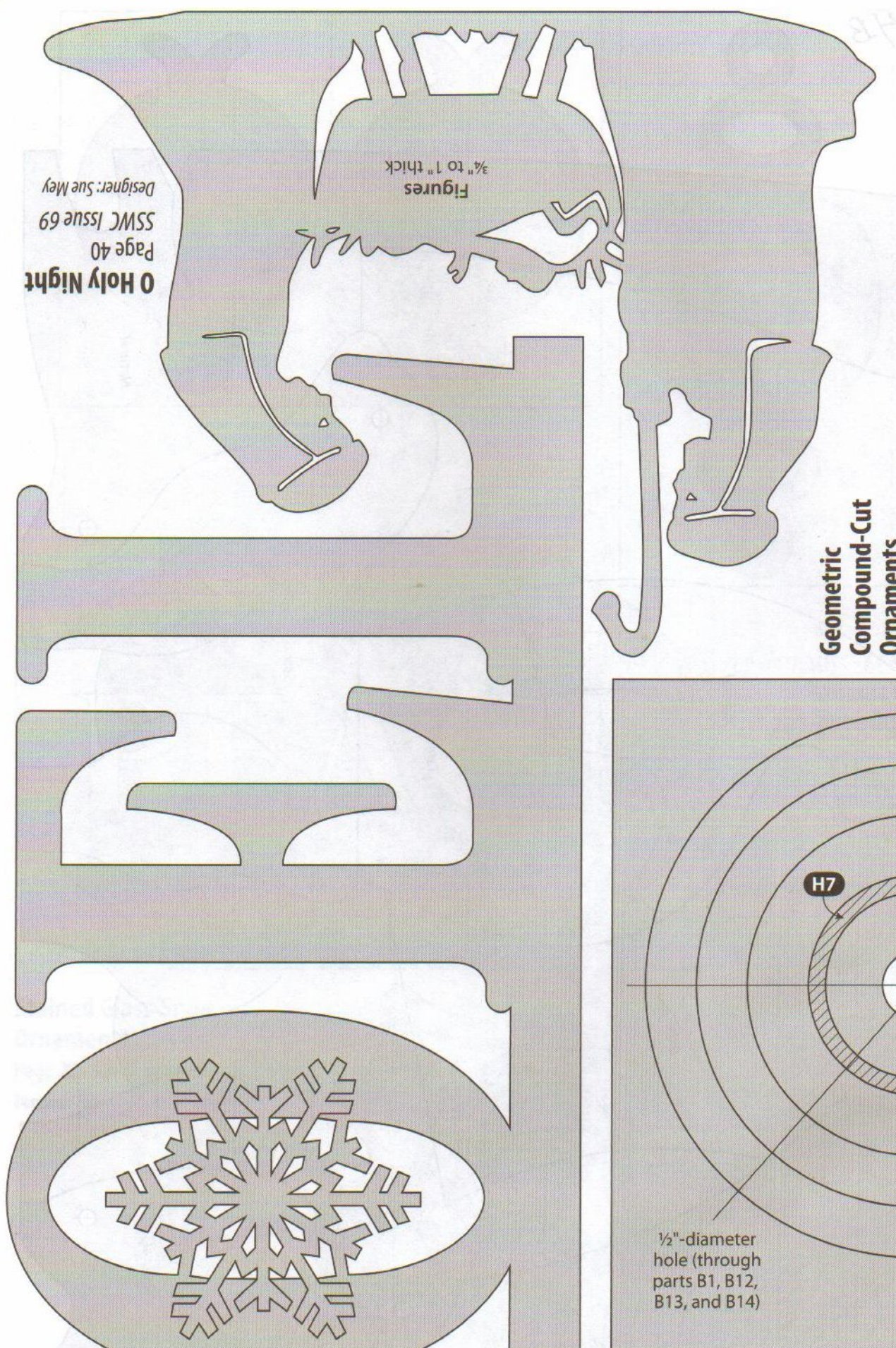
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SSWC Issue 69
Designer: Sue Mey

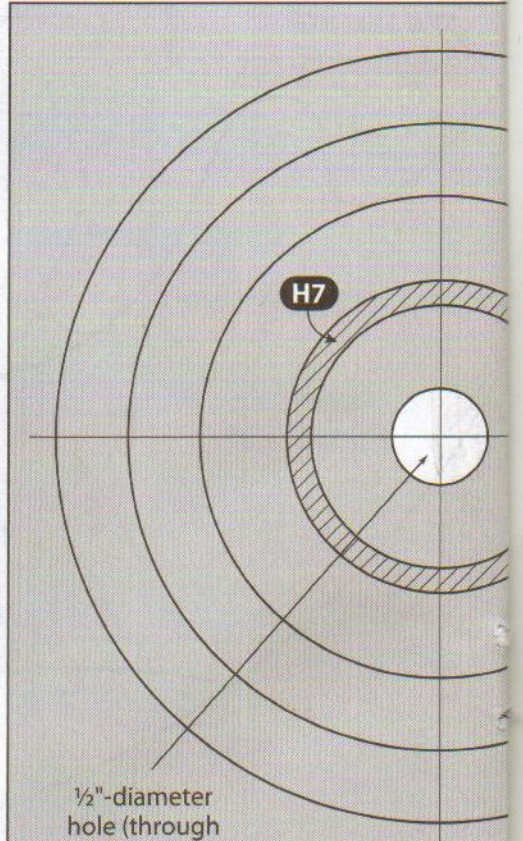
Figures
3/4" to 1" thick



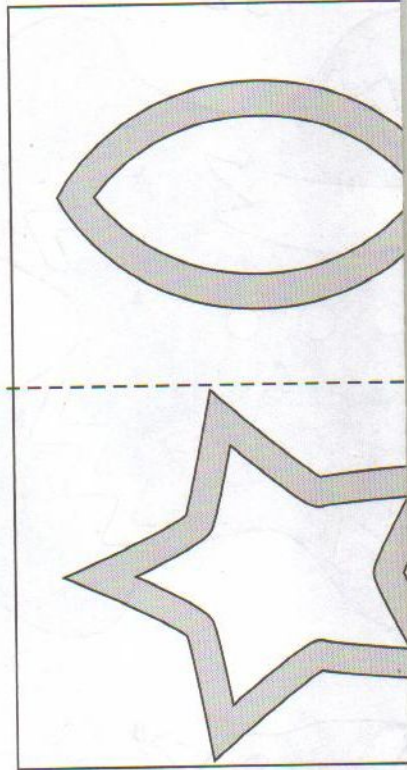
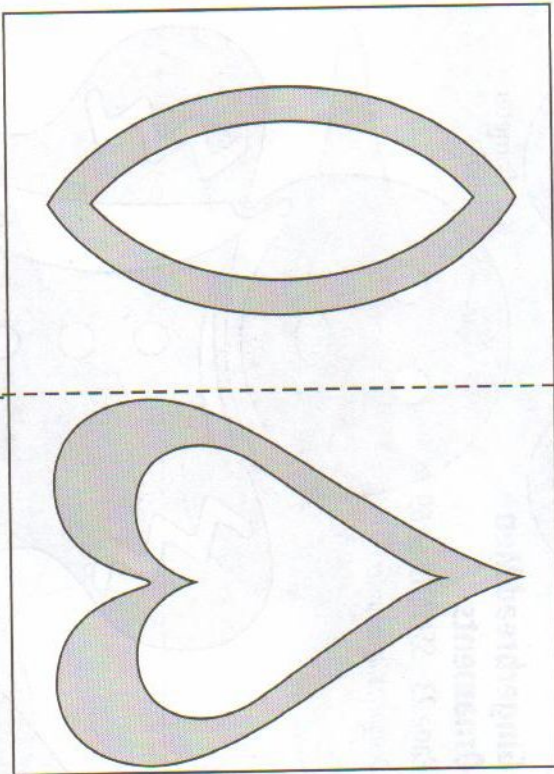
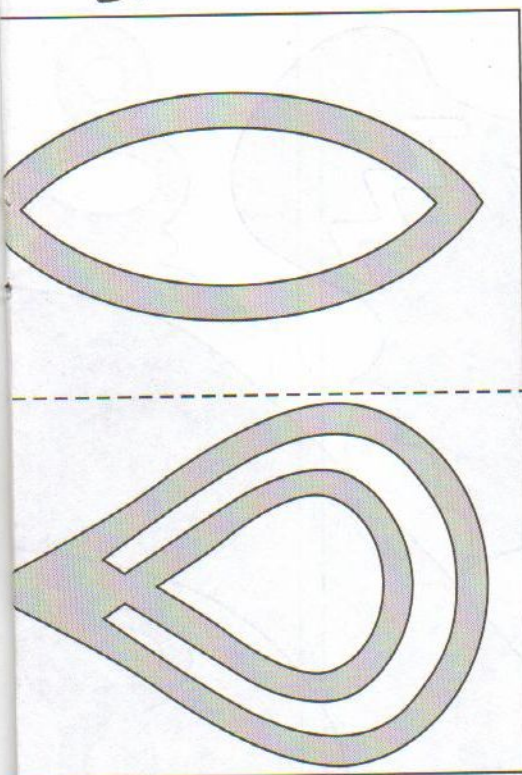
Geometric
Compound-Cut
Ornaments

Page 58

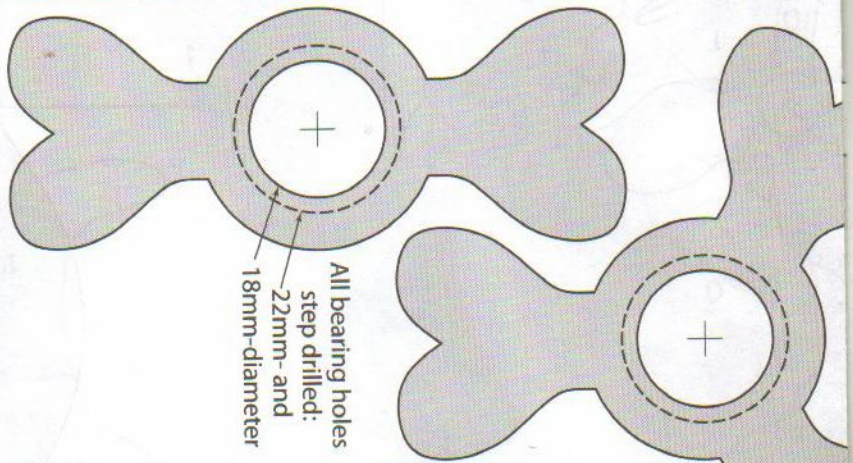
SSWC



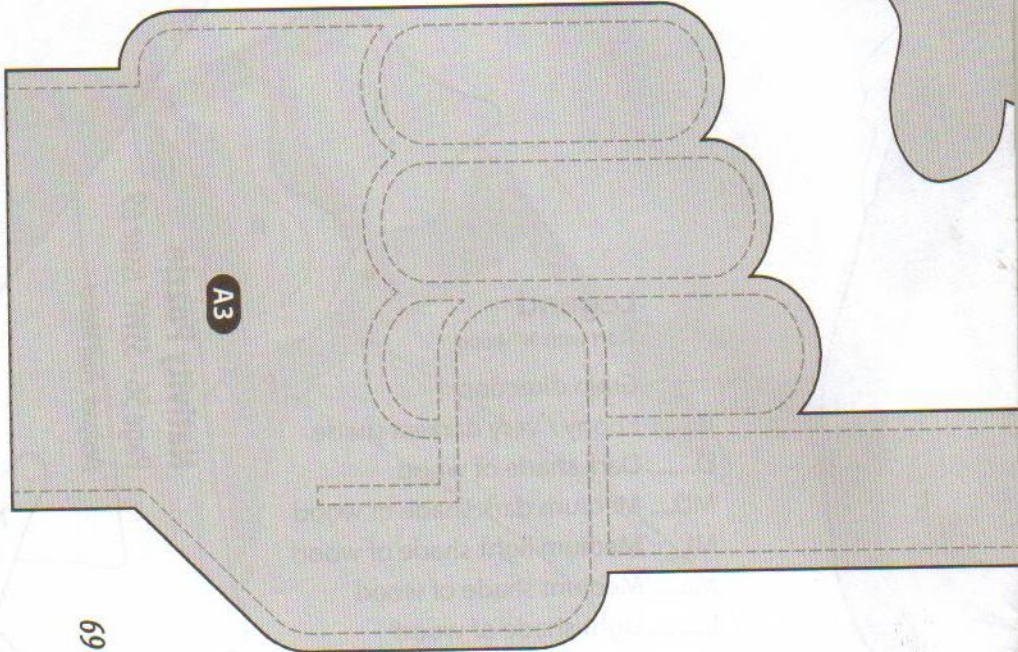
1/2"-diameter
hole (through
parts B1, B12,
B13, and B14)



Wooden Spinners
 Page 18 - SSWC Issue 69
 Designer: Rolf Beuttenmüller



All bearing holes
 step drilled:
 22mm- and
 18mm-diameter

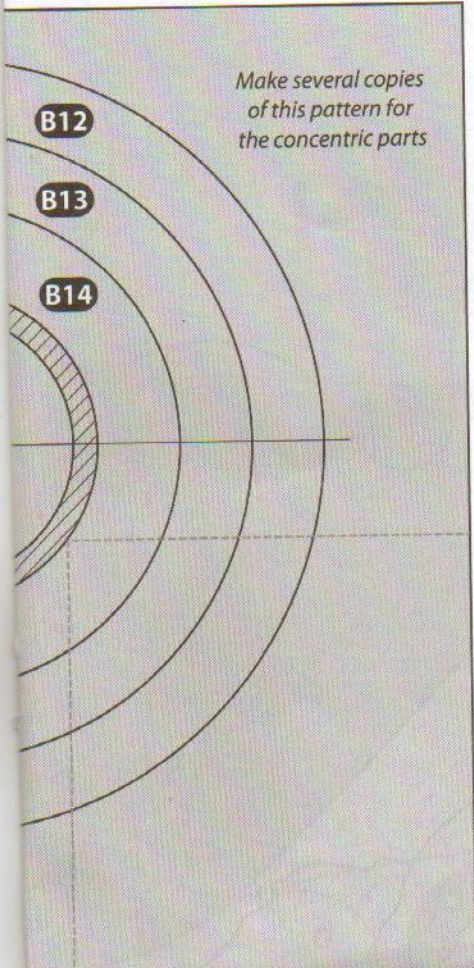


Make several copies
 of this pattern for
 the concentric parts

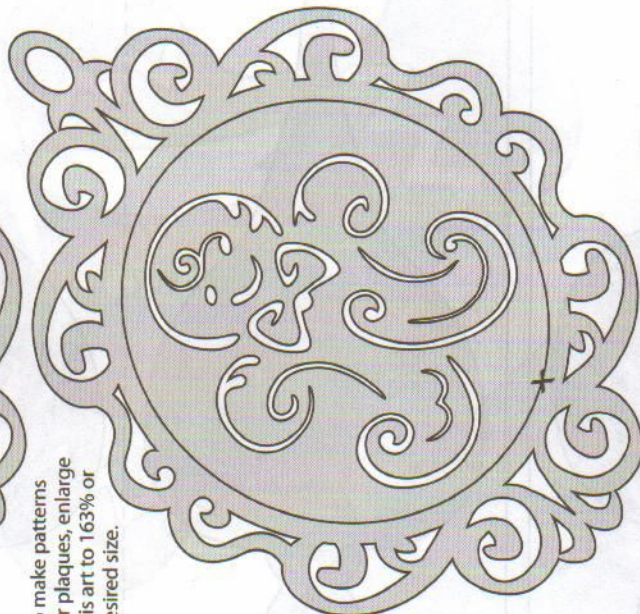
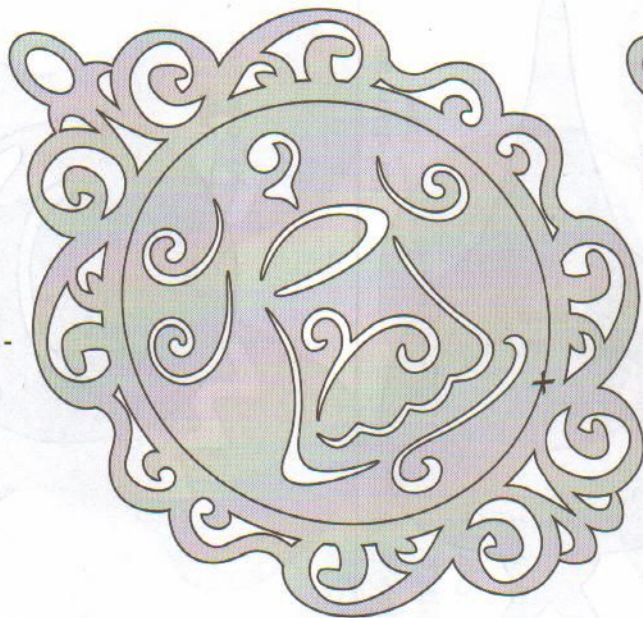
B12

B13

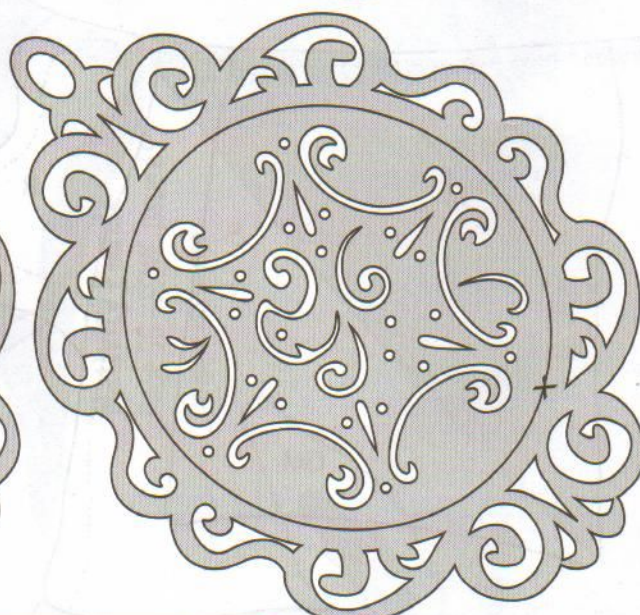
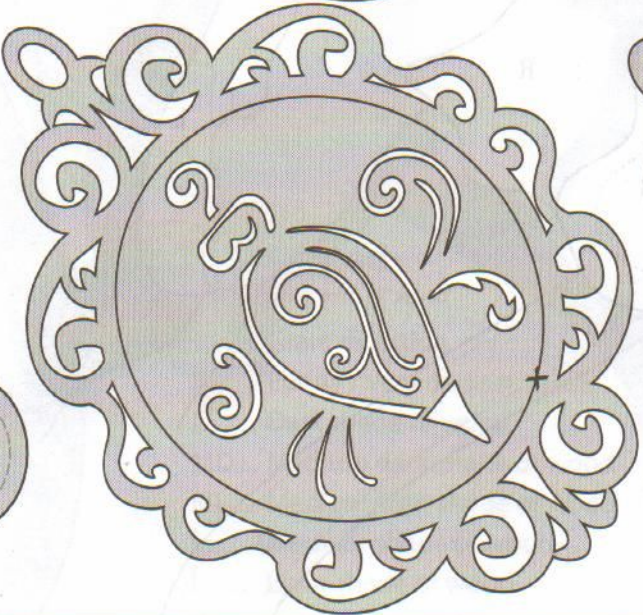
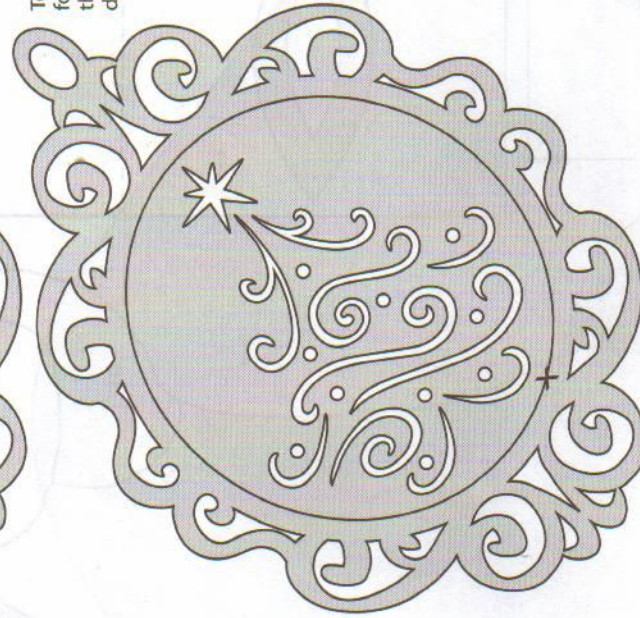
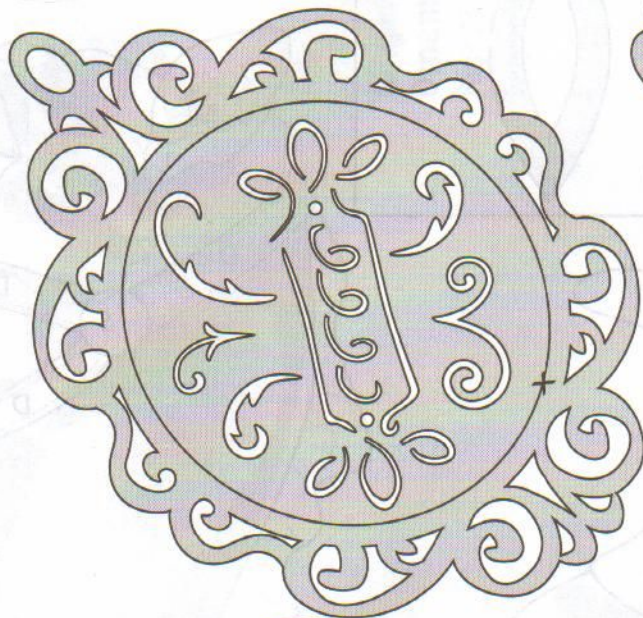
B14



3A



To make patterns for plaques, enlarge this art to 163% or desired size.



Notice about

Some photocopies distort patterns slightly. Use the 1" bar when copying photocopies to check for any distortion.

**Self-Framing
Ornaments**

Page 42

SSWC Issue 60



photocopying patterns

copiers and home printers can distort when you print them, making them off-size or stretching the image. Printed below as a guide are the patterns and hold the original pattern up to the original



One inch

Designer: Shiela Landry

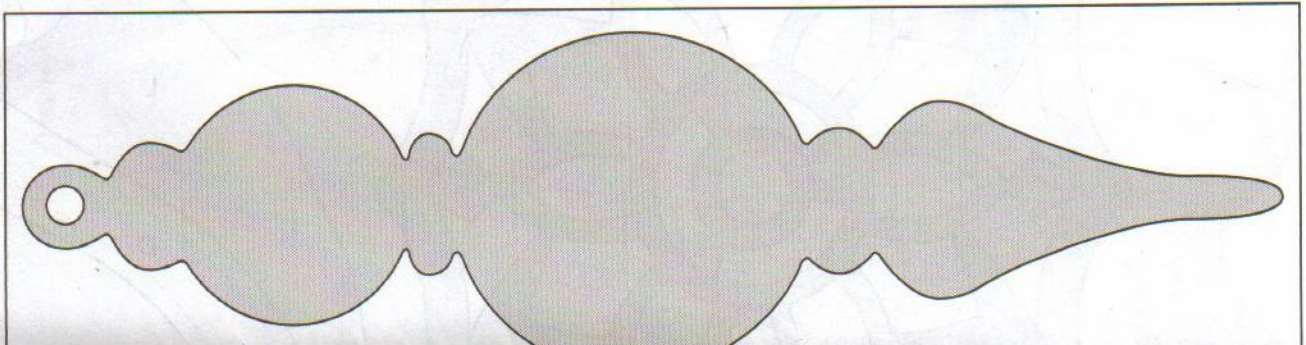
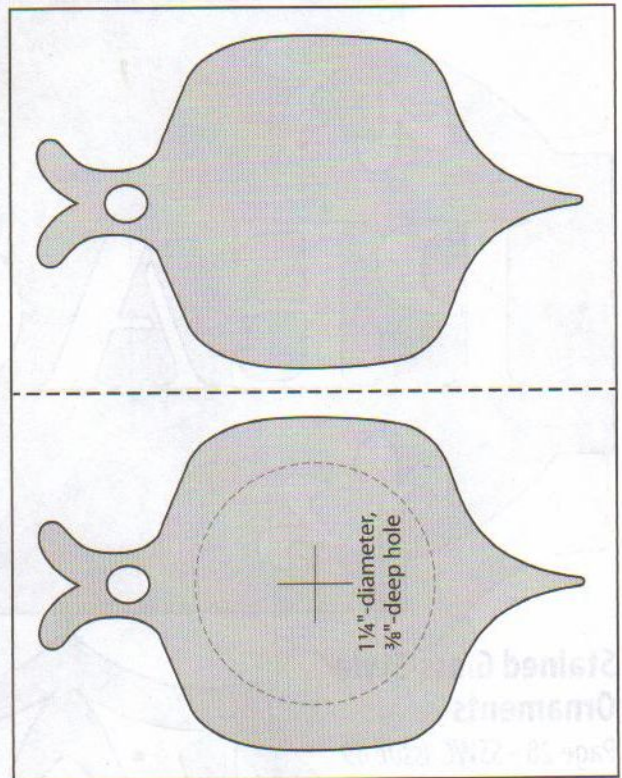
1970 Broad Street
East Petersburg, PA 17520

All patterns to be copied at 100% unless otherwise indicated.

All patterns on this pullout section: © 2017 Scroll Saw Woodworking & Crafts

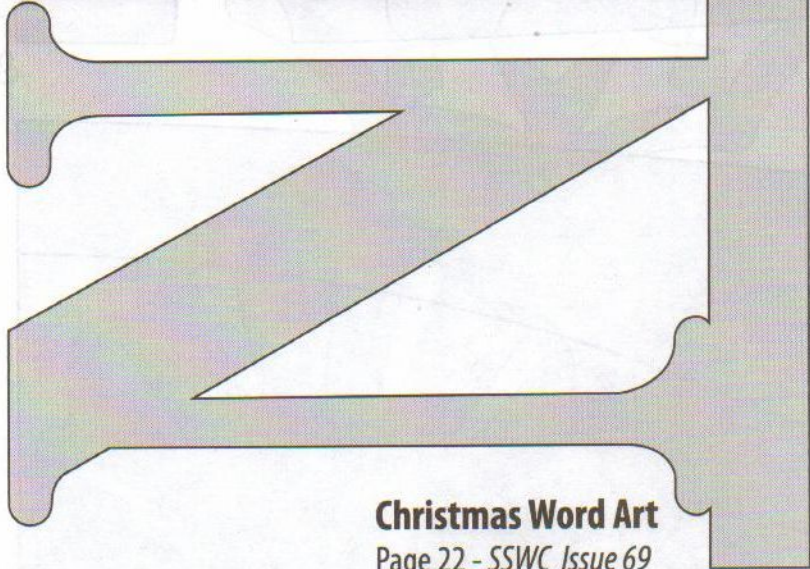
Wooden Spinners	18	O Holy Night.....	40
Christmas Word Art.....	22	Self-Framing Ornaments	42
Gingerbread Men Ornaments.....	23	Nativity Puzzle	56
Beasts of Burden	24	Geometric Compound-Cut Ornaments	58
Stained Glass-Style Ornaments	28	Man Cave Lamp	59
Compound-Cut Ornaments.....	39		

Note to professional copying services. You may make up to ten copies of these patterns for the personal use of the buyer of this magazine.



5A

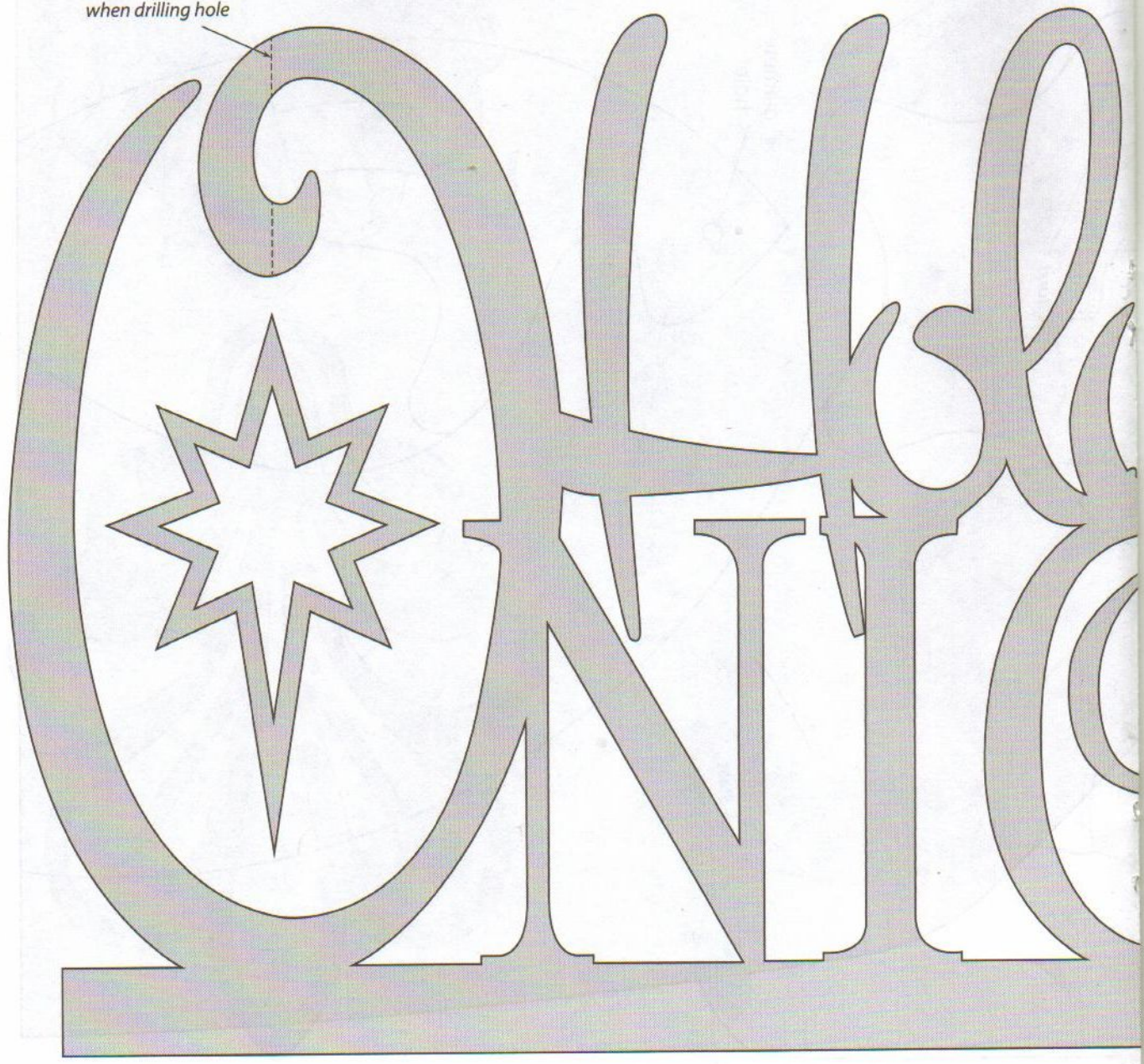
B1



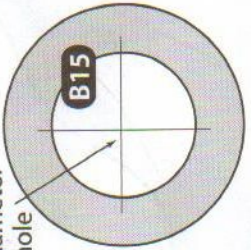
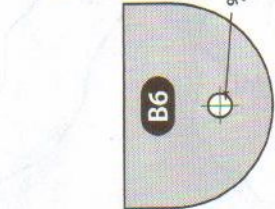
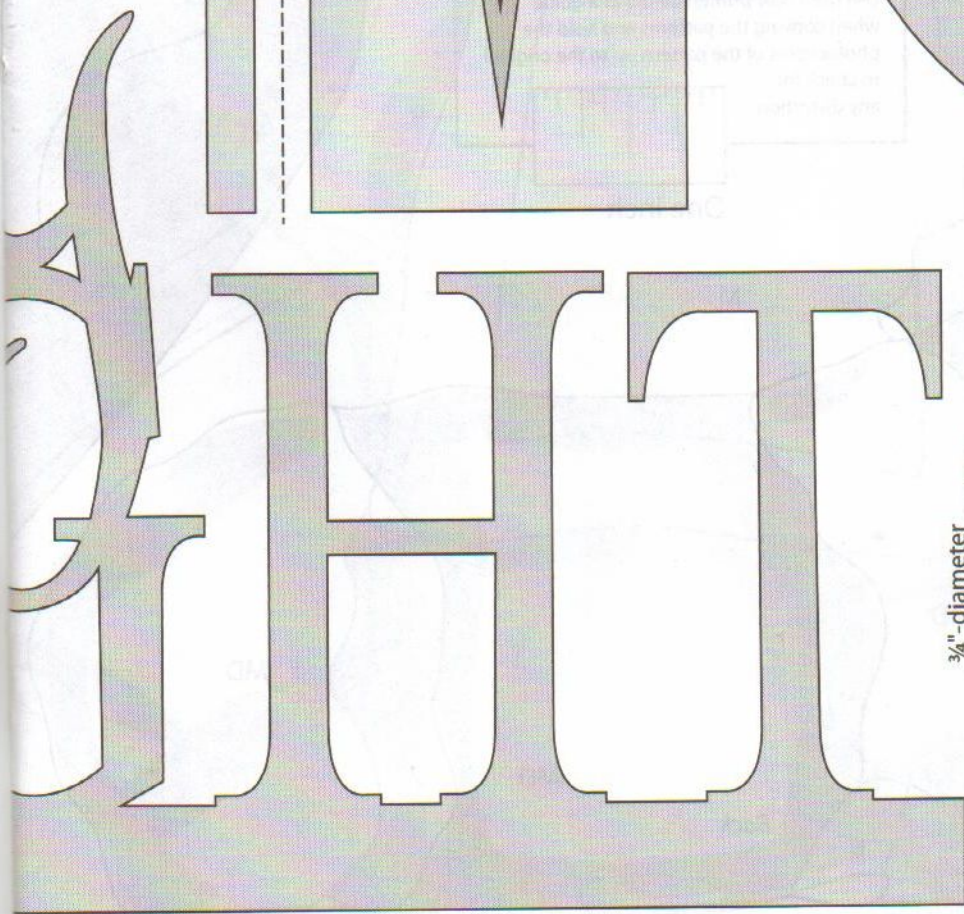
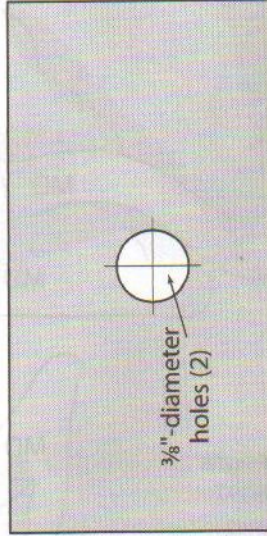
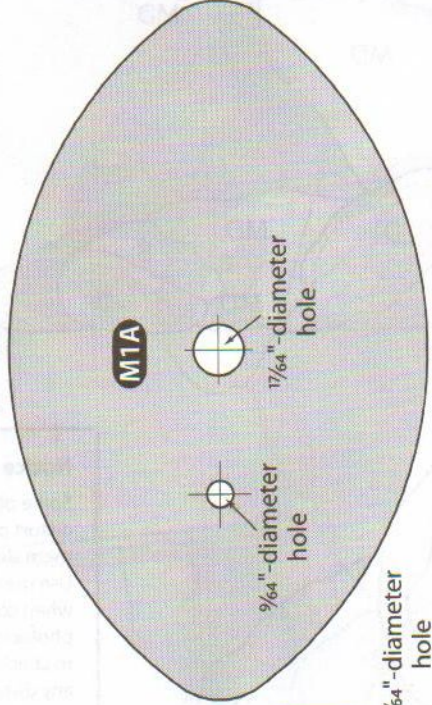
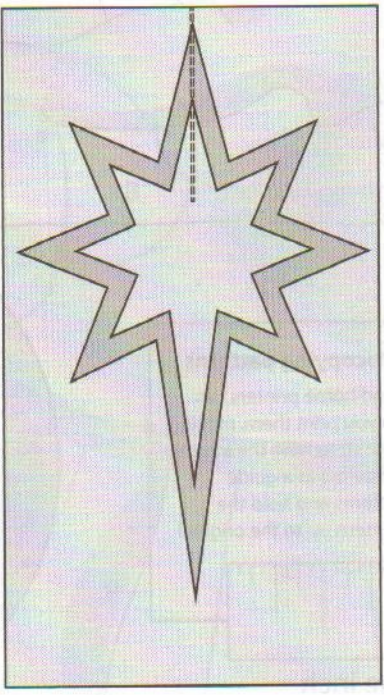
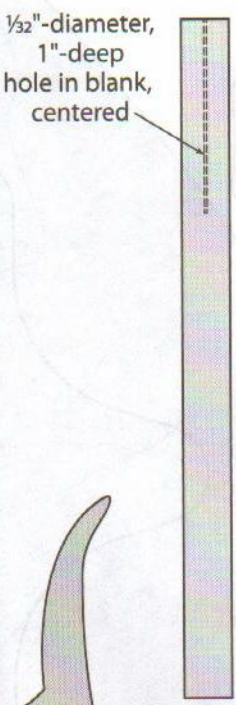
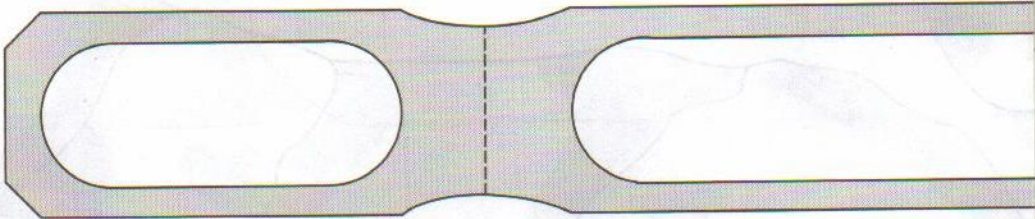
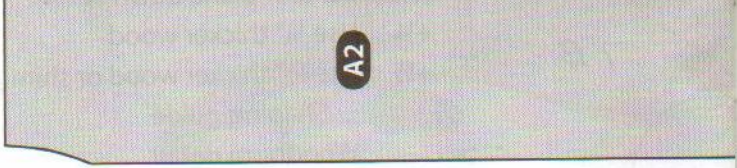
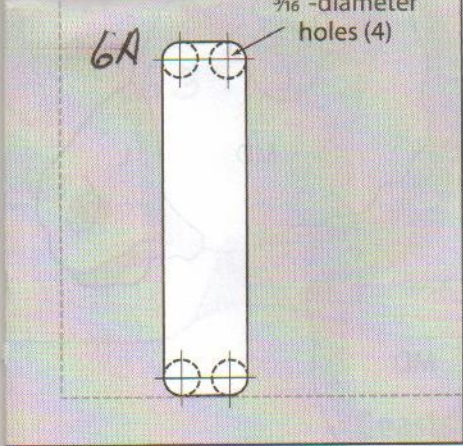
Christmas Word Art
Page 22 - SSWC Issue 69

Designer: Bruce Shea

1/32"-diameter hole,
centered
Use these lines as reference
when drilling hole



Man Cave Lamp
Page 59 - SSWC
Designer: John Hutter



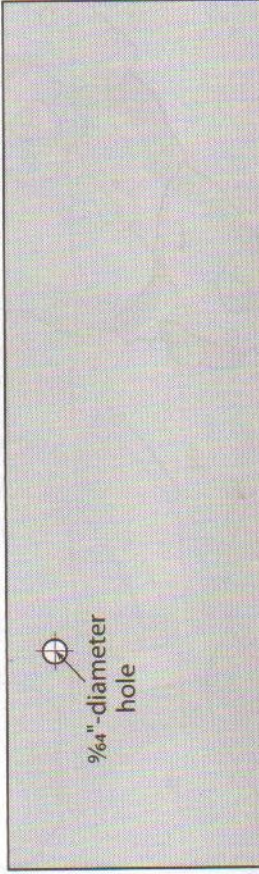
3/4" diameter hole

9/64" diameter hole

Man Cave Lamp

Page 59 - SSWC Issue 69

Designer: John Hutchinson



7A



$\frac{1}{64}$ "-diameter hole



$\frac{1}{4}$ "-diameter hole

A1



B8

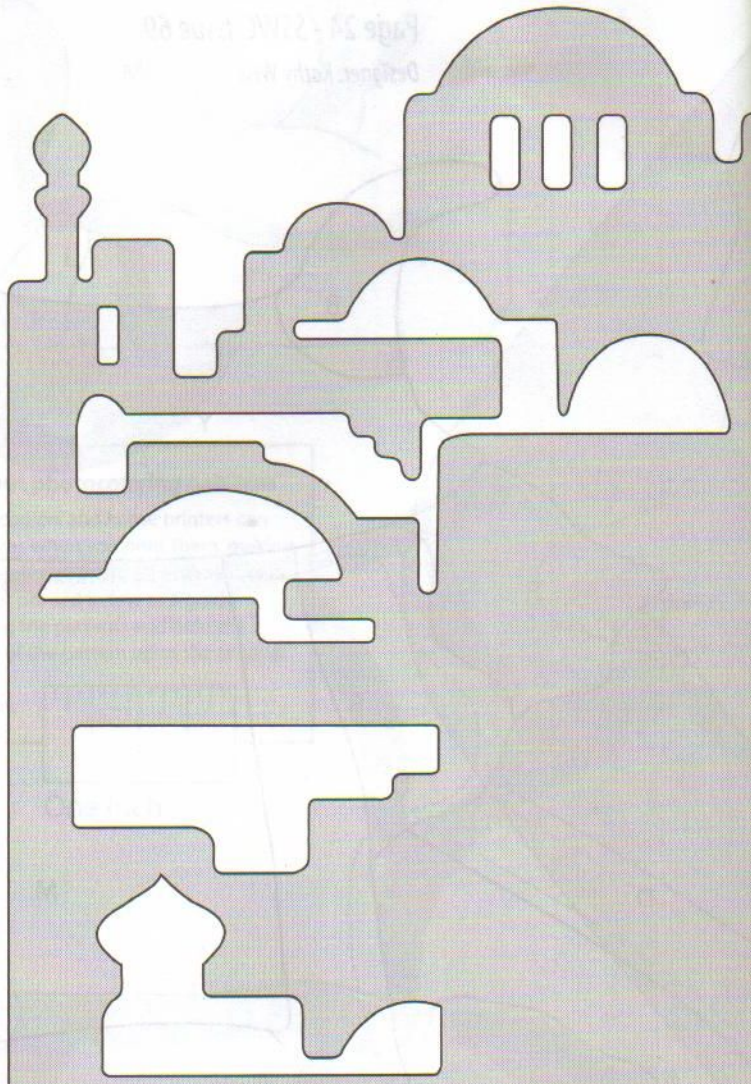


B5A

Cut 2



$\frac{1}{64}$ "-diameter rotation hole for aluminum driveshaft

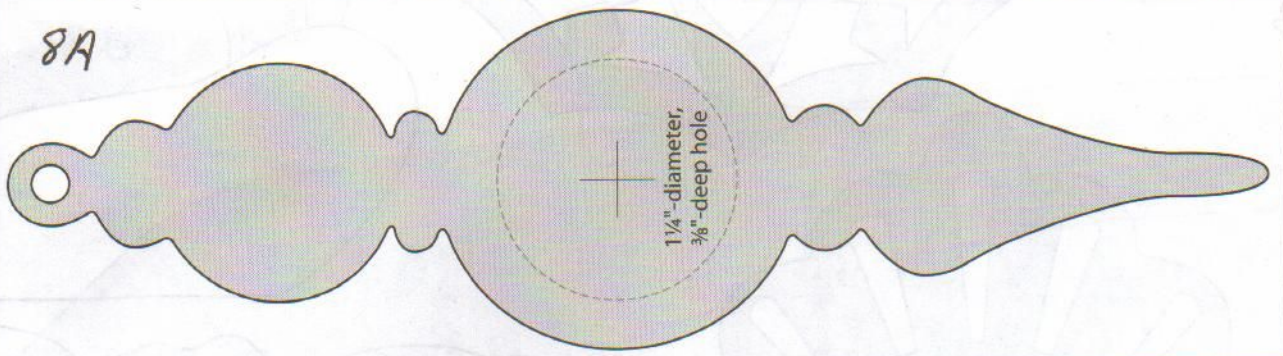


O Holy Night

Page 40 - SSWC Issue 69

Designer: Sue Mey

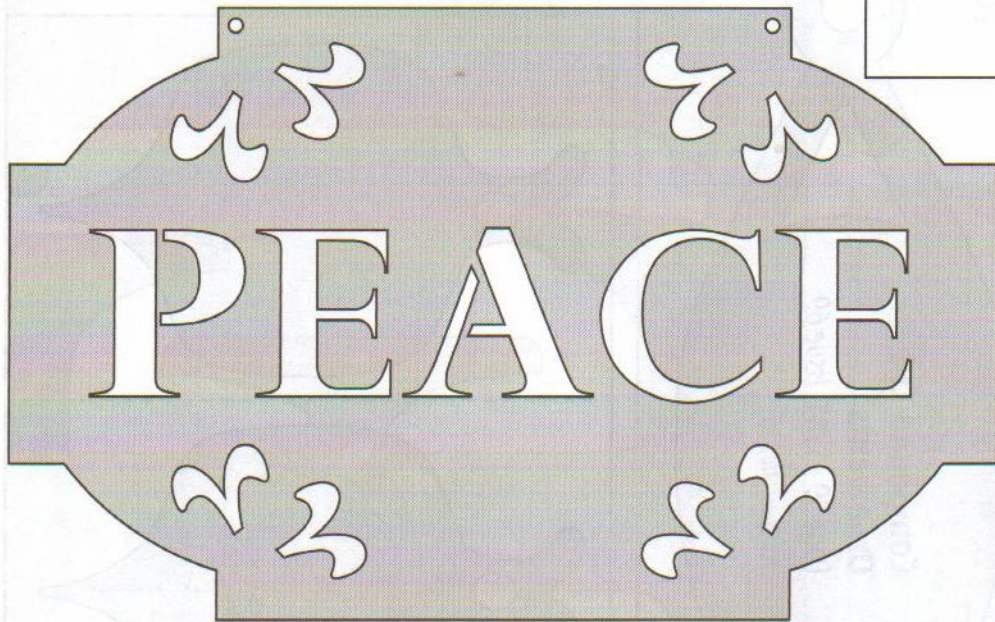
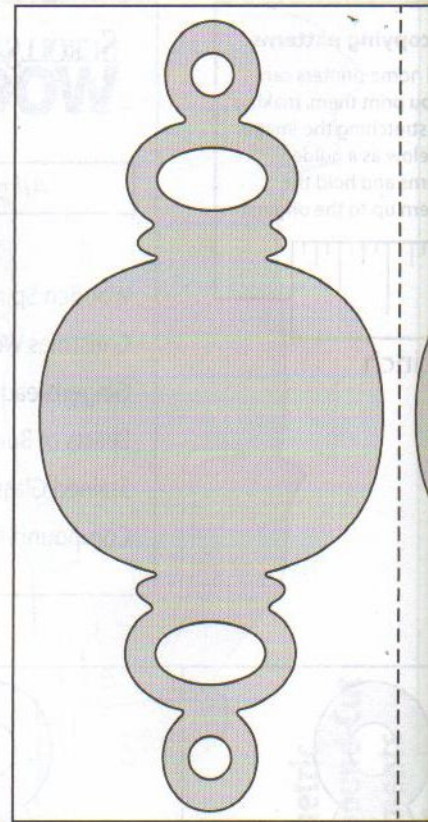
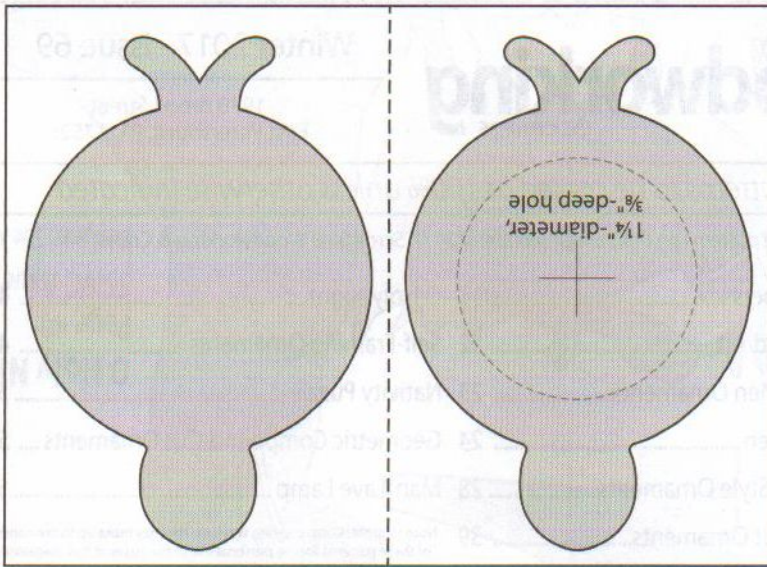
8A



Back layer
1 1/2" thick



13

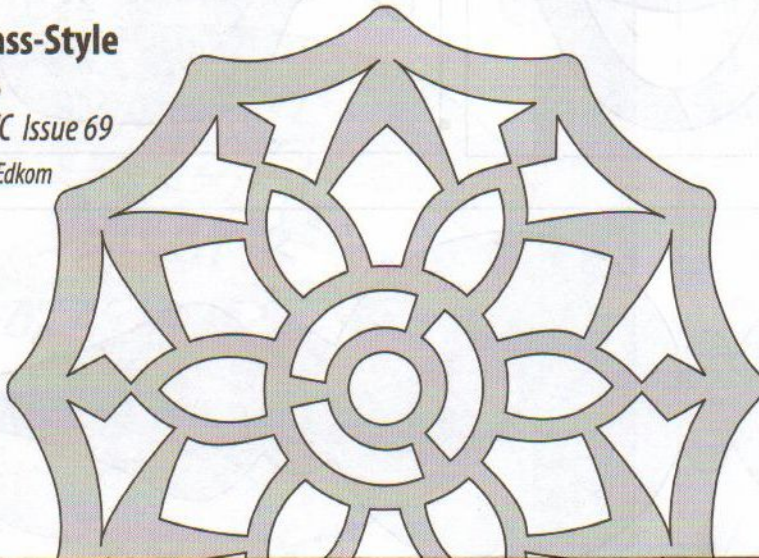


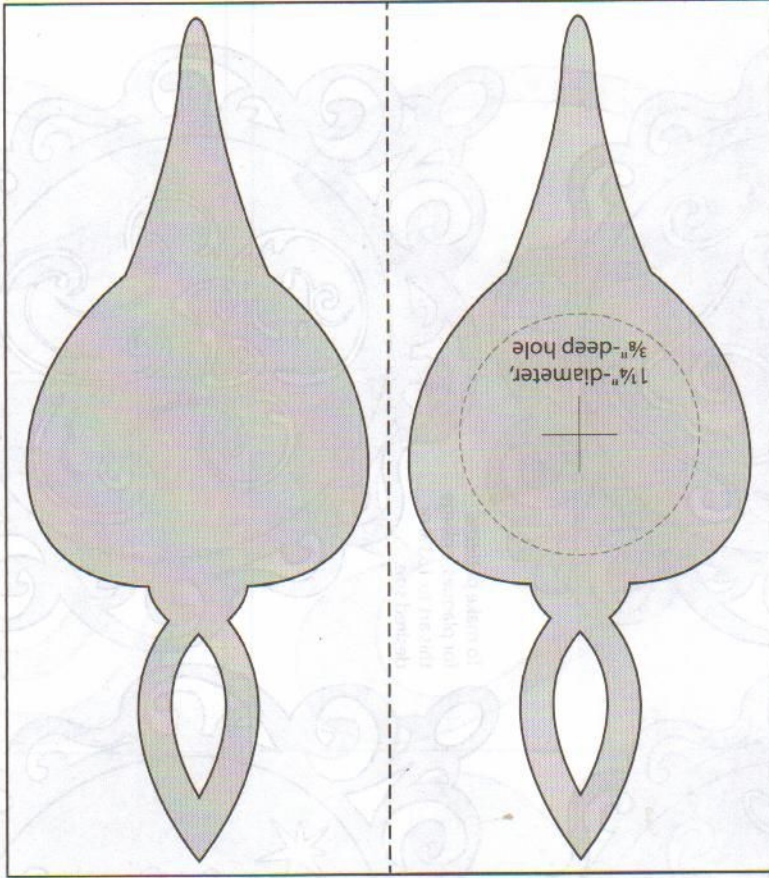
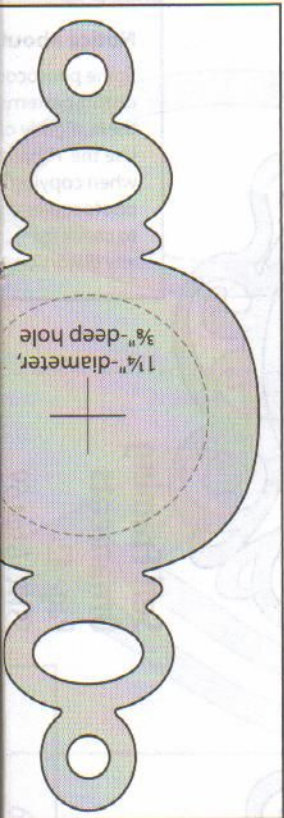
Compound-Cut
Ornaments
Page 39 - SSWC Issue 69
Designer: Sue Mey

**Stained Glass-Style
Ornaments**

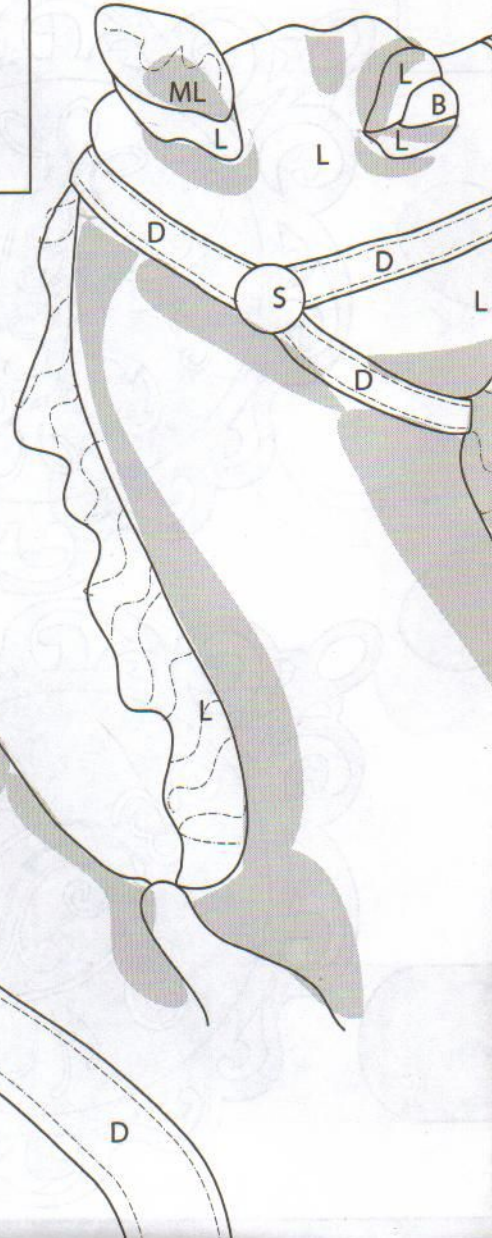
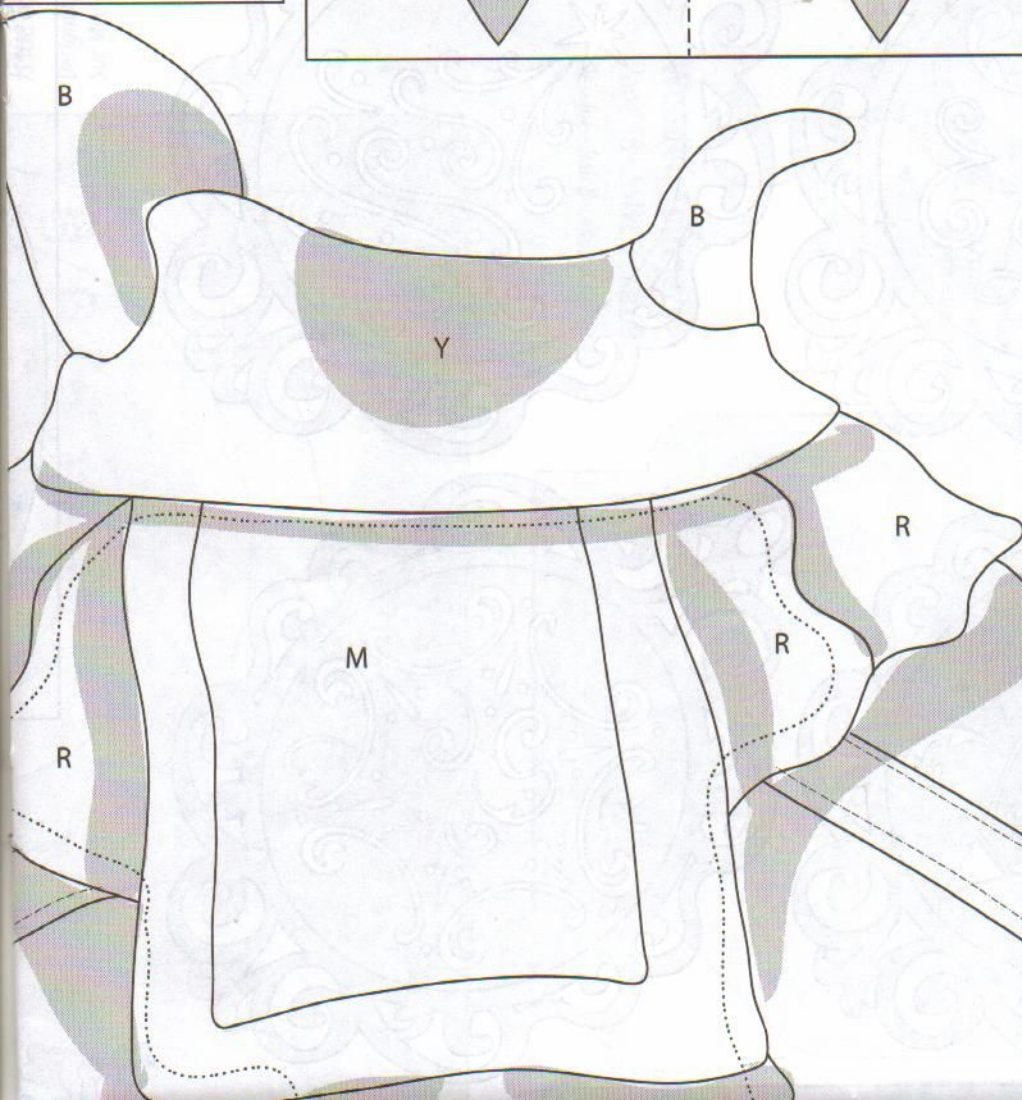
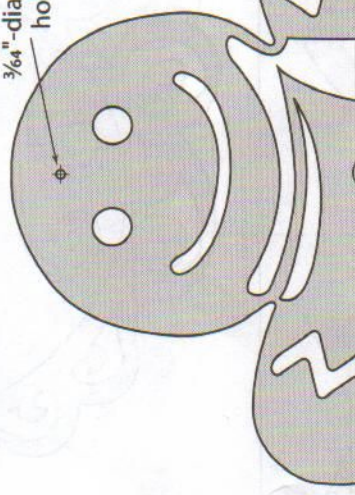
Page 28 - SSWC Issue 69

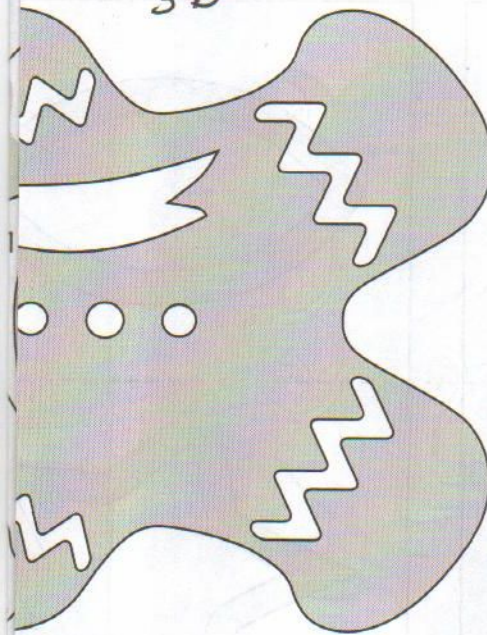
Designer: Theresa Edkom





3/64"-diameter hole



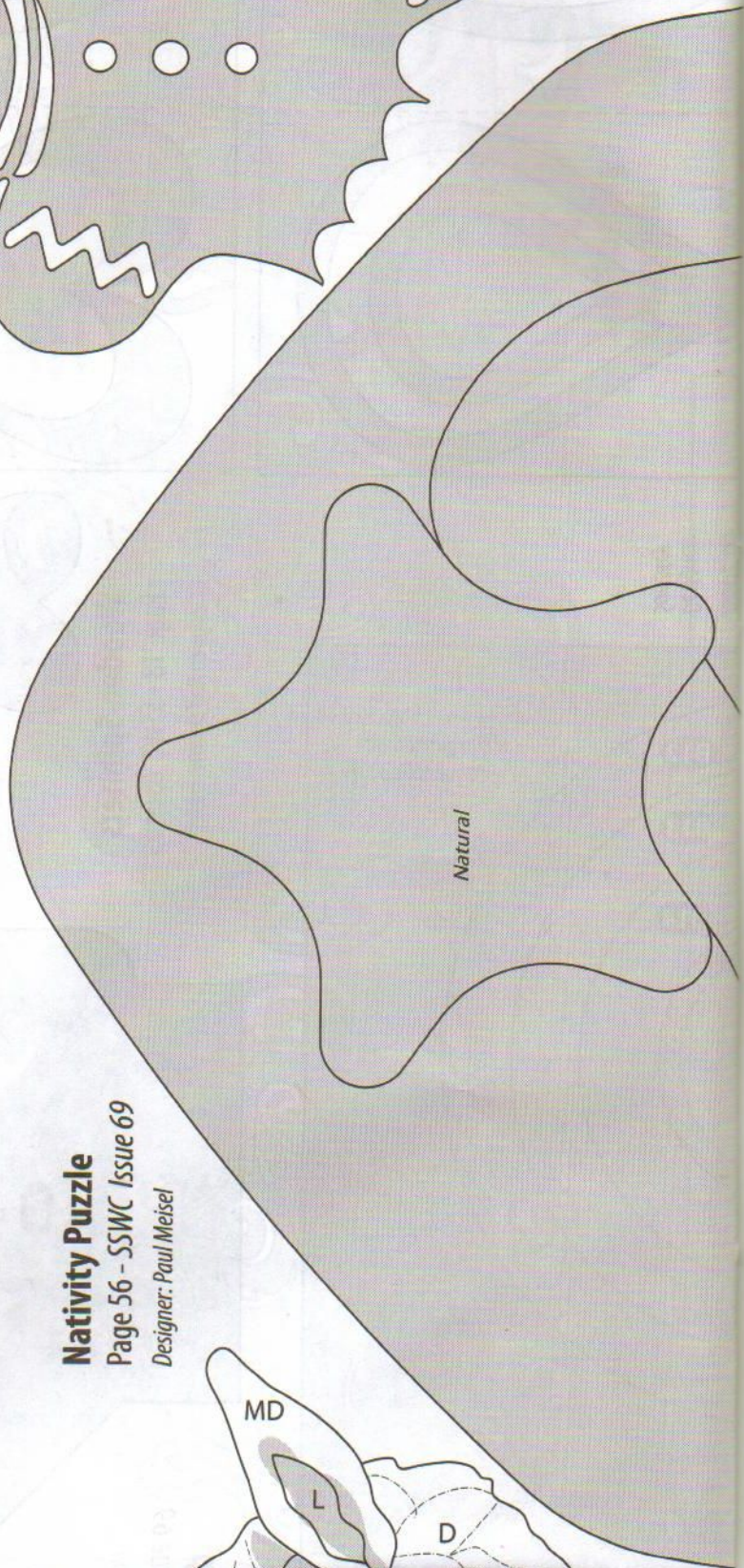


3/64" diameter hole

**Gingerbread Men
Ornaments**

Page 23 - SSWC Issue 69

Designer: Wayne Fowler



Legend

Start with 3/4" wood

- ↔ Grain direction
- B..... Ebony / very darkest shade
- D..... Dark shade of wood
- MD.... Medium dark shade of wood
- ML.... Medium light shade of wood
- M..... Medium shade of wood
- L..... Light shade of wood
- W..... Any white wood

Nativity Puzzle

Page 56 - SSWC Issue 69

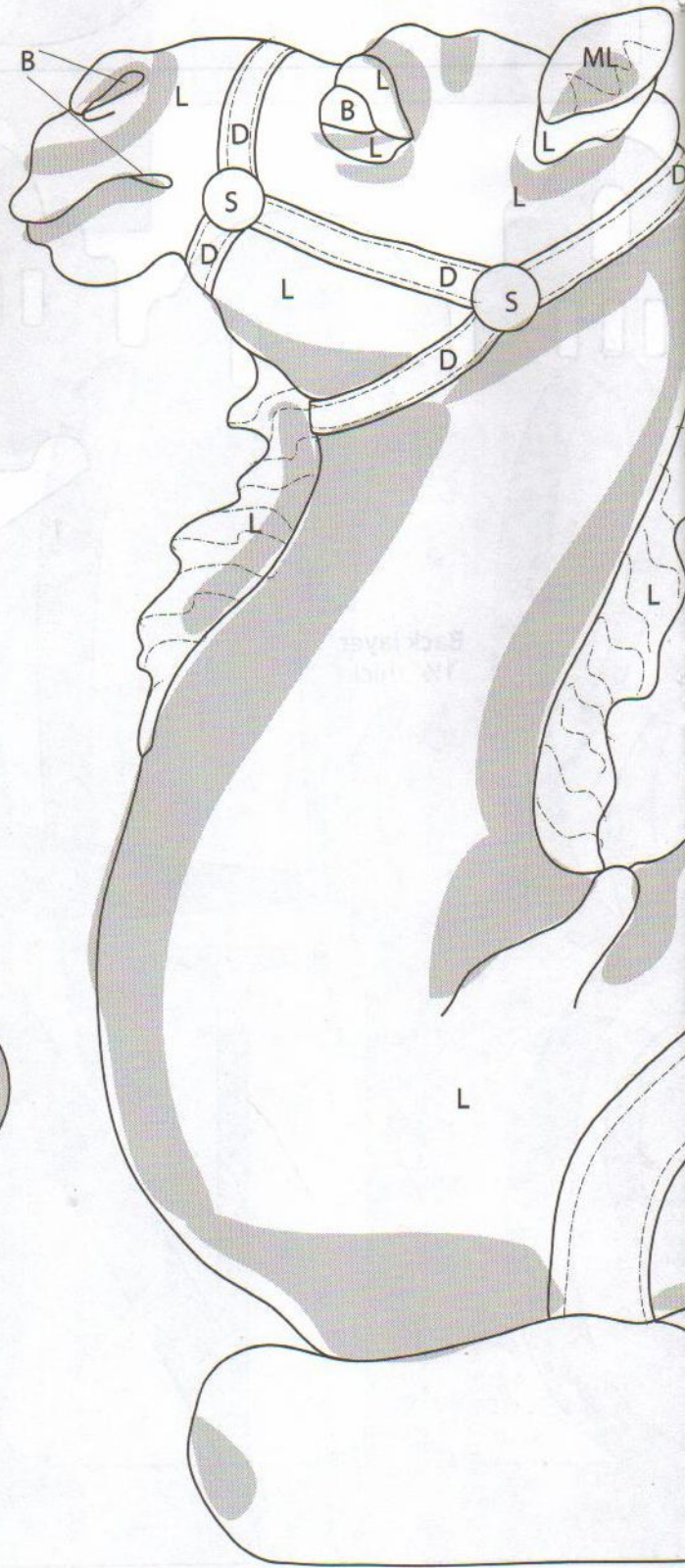
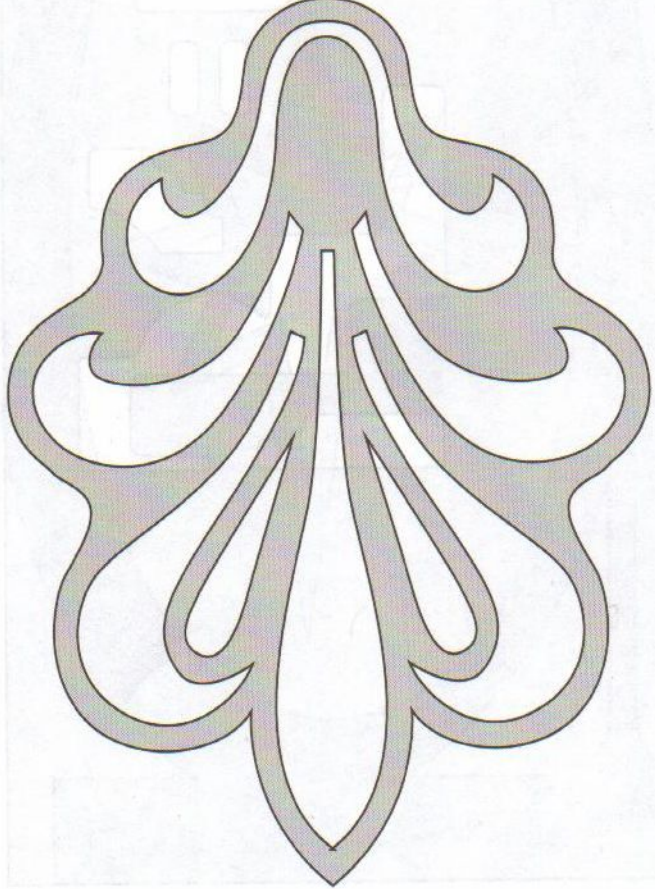
Designer: Paul Meisel

4B

Woodworking

WILSON JONES





6B

L

Back

L

Beasts of Burden

Page 24 - SSWC Issue 69

Designer: Kathy Wise

© 2017 Kathy Wise D
PO Box 60Yale, MI 4
kathywise@bignet
www.kathywise.c

B

B

Y

R

R

R

R

L

M

D

L

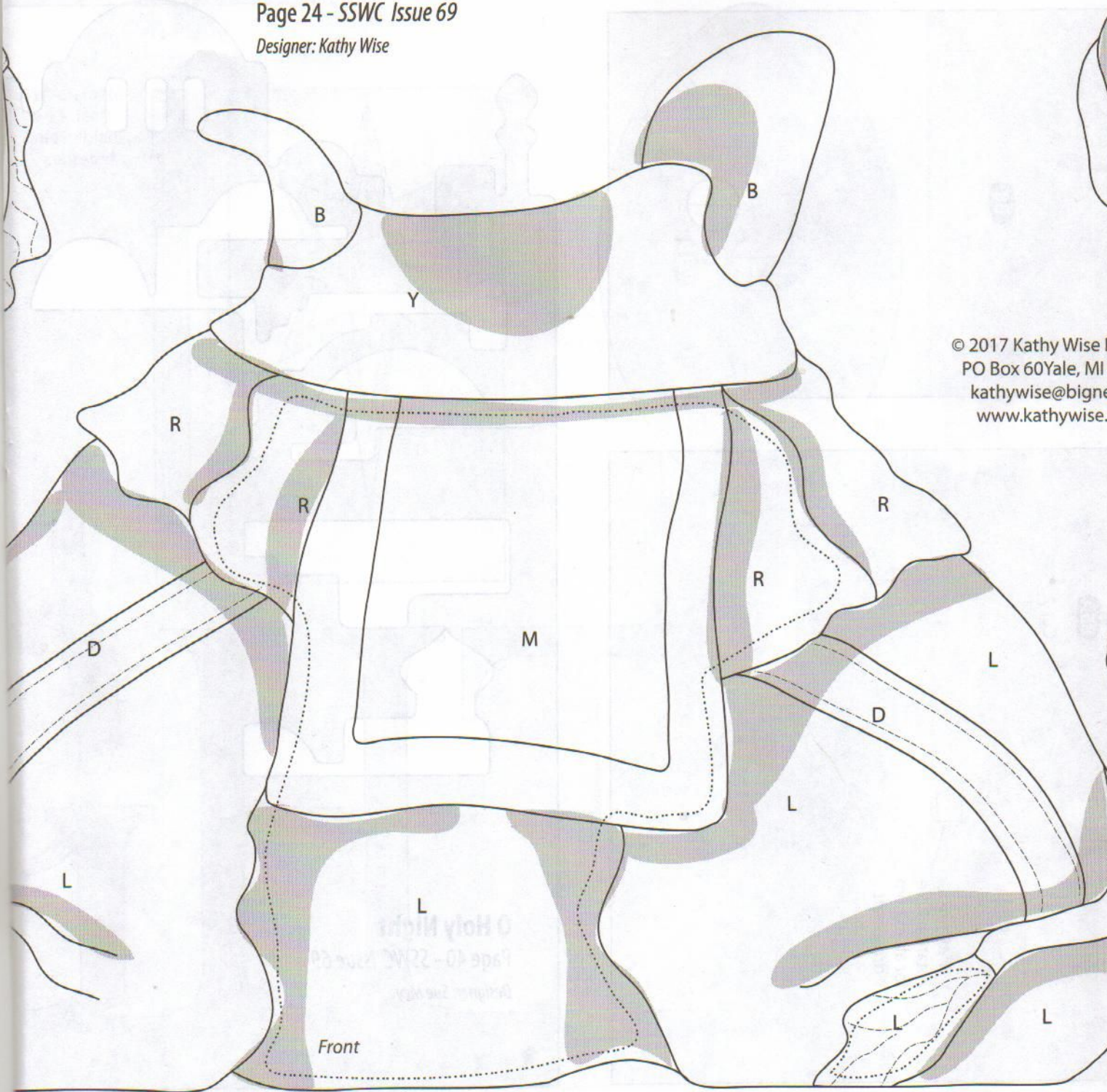
L

L

Front

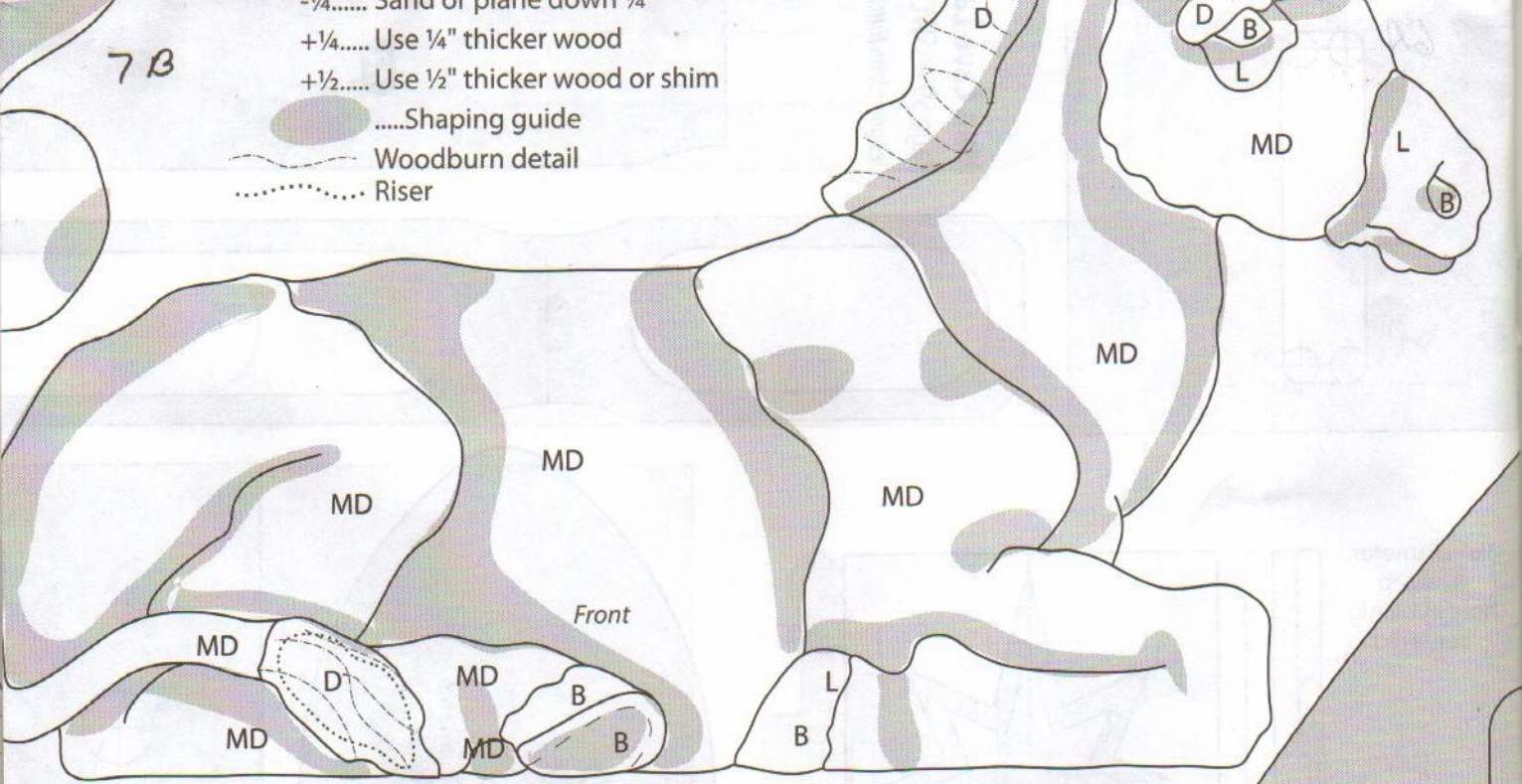
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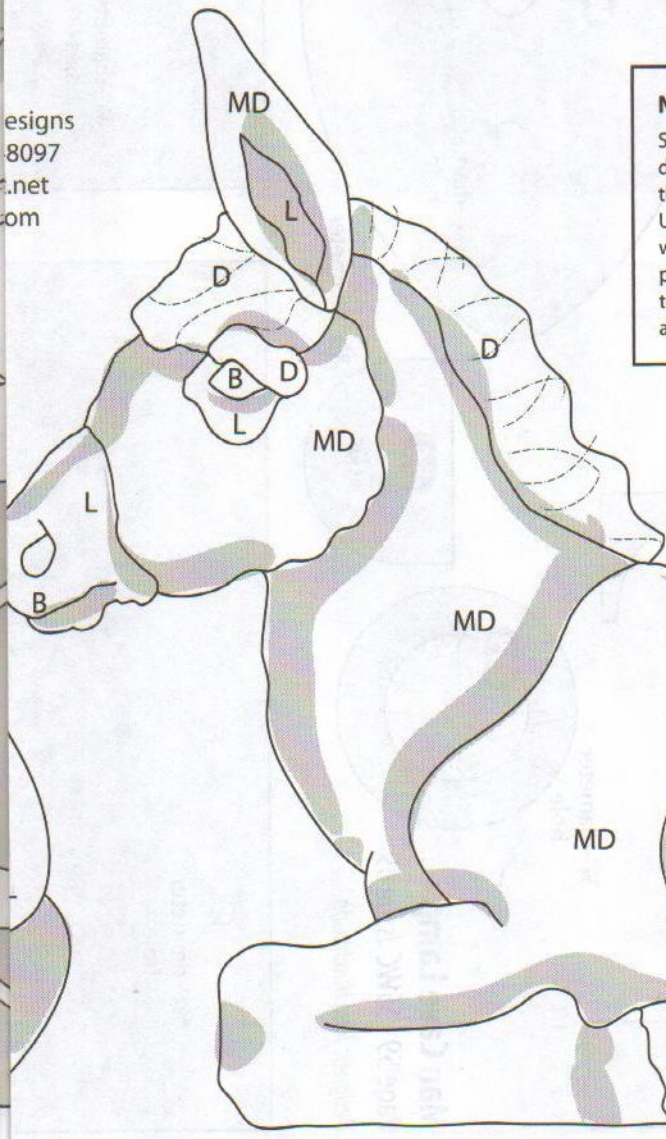


7B

- ¼..... Sand or plane down ¼
- +¼..... Use ¼" thicker wood
- +½..... Use ½" thicker wood or shim
-Shaping guide
- Woodburn detail
- Riser



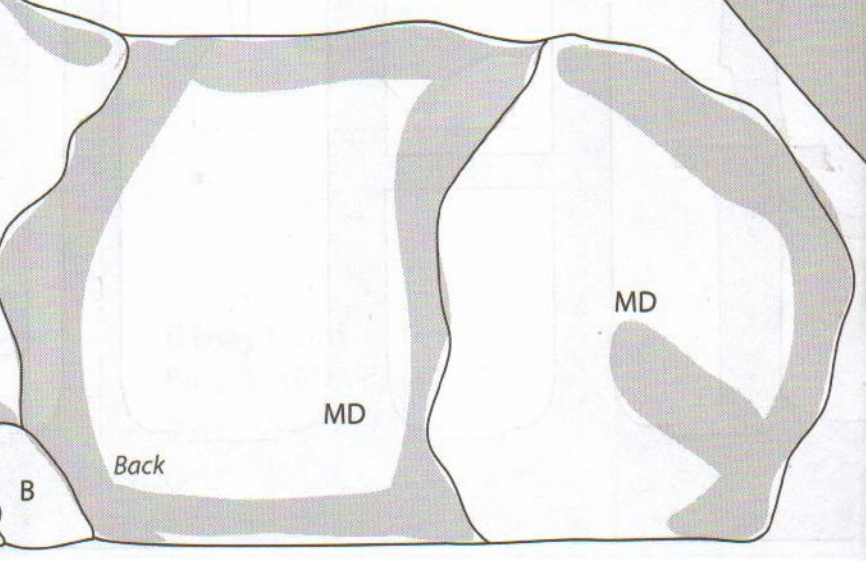
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Notice about photocopying patterns
 Some photocopiers and home printers can distort patterns when you print them, making them slightly off-size or stretching the image. Use the 1" bar printed below as a guide when copying the patterns and hold the photocopies of the pattern up to the original to check for any distortion.



One inch



8B

42

