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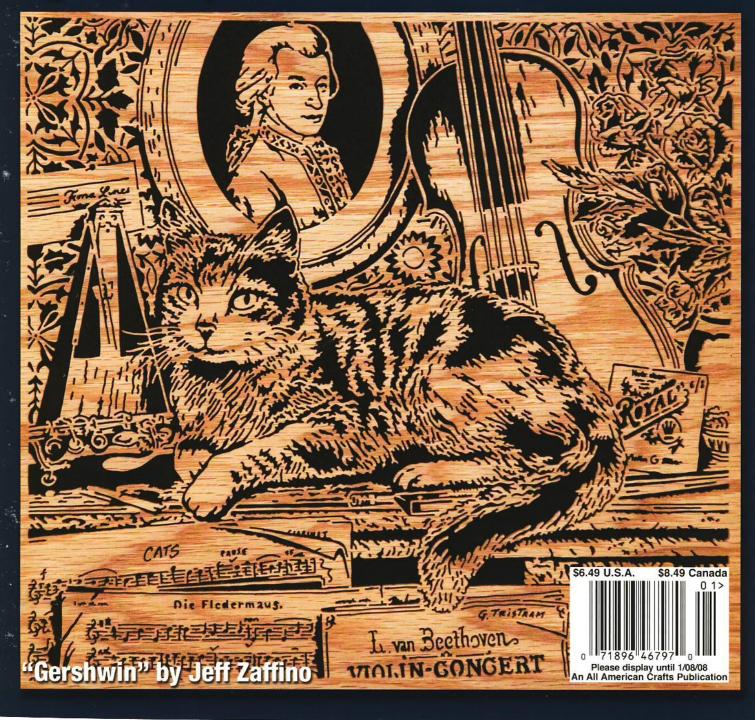
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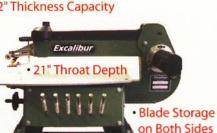
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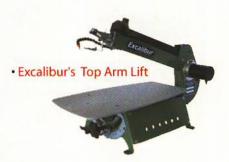
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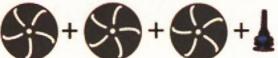




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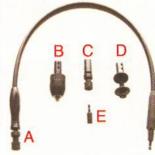
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### Projects in Full Size Pattern Section No. 1 shown on this page.



Moose Segmentation



**Hummingbirds** Melody



Sports-Themed Switchplates



Napkin Holder

a Butterfly

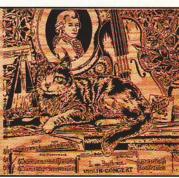


### **Scrolling Projects:**

Taking Flight: To the Stars!	5
Give Thanks10	0
Golden Retriever Puppy14	
Sports-Themed Switchplates1	
Variations on a Butterfly22	2
Cobra	
Santa Box	)
Gershwin	4
Hummingbirds Melody4	4
The Glasgow Clock4	6
Running Horses Hat Holder4	9
Majestic Eagle55	2
Napkin Holder54	
Sleigh Candy Tray56	
Divine Dragon	

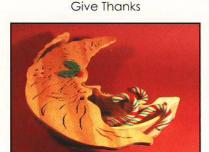






Golden Retriever Puppy

Gershwin



Santa Box

CREATIVE WOODWORKS & CRAFTS® January 2008, No.129

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Projects in Full Size Pattern Section No. 2 shown on this page.

### **Intarsia Projects:**

Moose Segmentation	•		٠	0.00	•		•		•	•		•		٠	•	٠		7	0
A Touch of the Tropics			·			٠					٠		•		•			7.	4

#### **Features:**

The Glasgow

rcaturcs.	
Coming Next Issue	)
Cutting a Name for Yourself as a	
Scroll Saw Artist: Custom Work	)
Basics of Wood Preparation	
and Dimensioning, Part 2	3
Antique Applique Reproduction 62	)
Reader's Gallery65	)



Clock

Taking Flight: To the Stars!



Sleigh Candy Tray



Majestic Eagle

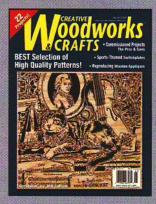


Cobra



A Touch of the Tropics





On the cover: This January issue's cover features Gershwin by Jeff Zaffino.





### **Taking Flight: To the Stars!**

pattern by Jacob Fowler, cut and finished by Wayne Fowler





Wood: light- to medium-brown hardwood with interesting character lines, such as cherry, hawthorne, maple, or oak—one piece 1/2" to 3/4" x 8" x 7-1/4"; wood in contrasting or complementary color—one piece 3/4" x 5" x 3" (for optional base)

Tools: scroll saw with No. 2R and/or 5R blades; drill with assorted bits; fixed disc or belt sander with fine or extra-fine (120/220) disc or belt; router

Temporary-bond spray adhesive
1/4 sheet of 220-grit sandpaper
Clear packing tape

Finishing oil of choice, such as tung, walnut, or Danish

#### Introduction

Jacob and I decided to create a design based on the classic science fiction theme of a rocket ship taking flight from the moon of a large, Saturn-like planet. We are hoping it will be a popular item in our fantasy and science fiction convention art show line. I cut a few versions of the piece using maple that was left over from an earlier project, and it worked very well at the size provided in the pattern section. I will be cutting a larger version of this design for our next show in Atlanta.

I cut our first "taking flight" piece from a 1/2"-thick quilted maple board with a dark patch on the bottom of it. I had bought a large amount of the maple from my supplier, Edger Werner, for a large zodiac project. Several of the boards had the dark patches on the end that didn't work with that zodiac design, so I kept them around for just the right project.

This pattern should be cut from very hard wood because the rocket appears best when positioned against the grain, and you'll notice it is only attached to the finished piece at the bottom of the exhaust cloud. The two that I have cut so far have sanded and finished with no problem, but I did take extra care around the rocket. The piece was cut on an Excalibur EX21

#### INSTRUCTIONS

**Step 1.** Photocopy the patterns, saving the originals for future use. I recommend applying a layer of clear packing tape to the surface of the wood, and then applying the pattern to the tape using spray adhesive. (The tape seems to reduce the burn from the tight turns you will have to make while cutting, and it also makes the piece easier to handle.) Set the base piece aside.

**Step 2.** Drill all the guide holes, and make all the cuts. To reduce chipping on the bottom of the piece, I recommend using a No. 5R blade to cut the larger features, and a No. 2R blade to cut the smaller details.

**Step 3.** Remove the pattern by peeling off the packing tape. (If you did not use the packing tape, remove the pattern by applying a solvent such as paint thinner to the paper pattern. After removing the pattern, let the piece dry.)

**Step 4.** Use a disc or belt sander to sand the two faces of the piece and to smooth the outside of the oval. Use a 1/4 sheet of 220-grit sandpaper to remove any remaining burrs. With oval pieces such as this, I give the piece a more finished look by rounding over the oval edges using coarse sandpaper, then smoothing the edges using 220-grit sandpaper.

**Step 5.** Clean the piece using a clean paintbrush or other tool of choice. Finish by applying a thin oil, such as tung or walnut oil, to seal the inner edges. Let dry.

Step 6. I often display oval pieces in a slotted base. The base can be cut from the same type of wood used for the rocket ship design, or from a complementary wood. It should be a minimum of 3/4" thick. Cut along the perimeter of the oval. Re-size the slot opening to match the thickness of the wood used for the rocket ship, and fret cut the opening from the oval. (It is better to err on the side of caution and cut the slot too small, rather than too big, because the rocket ship should fit snugly in the slot.) Test fit the rocket ship piece, and sand the slot a bit wider if needed. When fitted properly, the rocket ship piece should fit 1/4" to 1/2" into the slot and stand erect. Also, it should not separate from the base when lifted. When you are satisfied with the fit, use a router to finish the outside of the oval. Apply your finishing oil of choice, and let dry.

Send questions concerning this project to: Wayne Fowler, 33 Longmeadow Cres., Markham, Ontario, Canada L3R 3J6, or email him at: fantasiesisaw@rogers.com.

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POPLAR	3/8"	.95	1.25	1.75	2.30	2.90	3.75
	1/2"	1.15	1.40	1.95	2.55	3.15	4.10
	450000000000000000000000000000000000000	3"	4"	5"	6"	7"	8"
	1/8"	1.00	1.35	1.90	2.50	3.15	4.15
ASH	1/4"	1.10	1.45	2.05	2.70	3.40	4.50
BASSWOOD	3/8"	1.25	1.60	2.25	2.95	3.70	4.85
HACKBERKT	1/2"	1.45	1.80	2.50	3.25	4.05	5.30
		3"	4"	5"	6"	7"	8"
0.41/	1/8"	1.35	1.80	2.55	3.30	4.20	5.55
BIRCH	1/4"	1.50	1.95	2.70	3.60	4.50	6.00
BUTTERNUT	3/8"	1.65	2.10	3.00	3.90	4.95	6.45
DOTTERNOT	1/2"	1.95	2.40	3.30	4.35	5.40	7.05
		3"	4"	5"	6"	7"	8"
SECRETARIO E	1/8"	1.70	2.25	3.20	4.15	5.25	6.95
MAPLE	1/4"	1.90	2.45	3.40	4.50	5.65	7.50
WALNUT	3/8"	2.15	2.65	3.75	4.90	6.20	8.05
PURPLEHEART	1/2"	2.45	3.00	4.15	5.45	6.75	8.80
		3"	4"	5"	6"	7"	8"
	1/8"	2.05	2.70	3.85	4.95	6.30	8.30
CHERRY	1/4"	2.25	2.90	4.05	5.40	7.00	9.00
SATINWOOD MAHOGANY	3/8"	2.50	3.15	4.50	5.85	7.45	9.90
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POPLAR	12"x16"	5.25	7.00	8.75
TOTEAK	12"x20"	6.60	8.75	11.00
BASSWOOD	12"x12"	5.00	6.75	8.45
ASH	12"x16"	6.75	9.00	11.25
HACKBERRY	12"x20"	8.45	11.25	14.10
AROMATIC CEDAR OAK	12"x12"	6.20	8.25	10.30
ELM	12"x16"	8.25	11.00	13.70
ALDER	12"x20"	10.35	13.75	17.20
BIRCH	12"x12"	8.45	11.25	14.00
MAPLE	12"x16"	11.25	15.00	18.65
WALNUT PURPLEHEART	12"x20"	14.10	18.75	23.40
CHERRY	12"x12"	10.70	14.85	17.80
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PADAUK	12"x20"	17.85	23.80	29.75

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Reader Service (973) 347-6900 ext.101 readersvc@allamericancrafts.com

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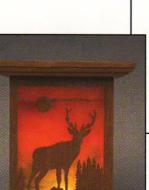
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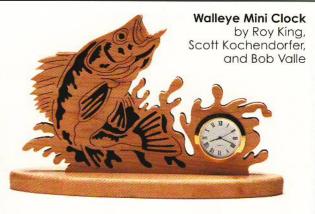
### A Sneak Peek From Our March Issue on sale January 8th!



**Happy Valentine's Day** by Sue Mey



**Tabletop Nightlight** by Sheila Bergner-Landry





**Too Far From Shore** by Wayne and Jacob Fowler



**Intarsia Nuthatches** by Bruce Worthington



Welcome

Door Knocker by Wayne Bosler III



African Plains by Sue Mey

...all this, and more! Don't miss it!

**Grey Wolf** by Wayne and Jacob Fowler

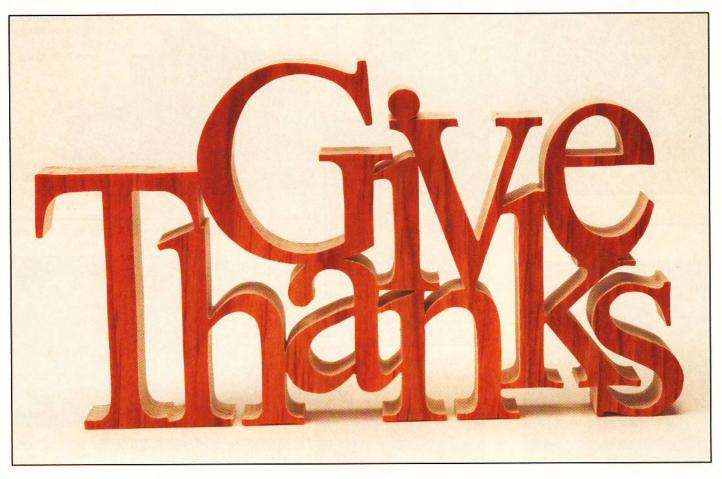
Don't miss these upcoming issues of Creative Woodworks & Crafts®! Issue No. 130 - on sale January 8th, 2008 Issue No. 131 - on sale February 19th, 2008 Issue No. 132 - on sale April 1st, 2008





### **Give Thanks**

by Toni Burghout and Sue Chrestensen



#### Introduction

"Give Thanks" is our first project for Creative Woodworks & Crafts, and we are indeed thankful for this opportunity to present one of our designs from our "Simply Words" collection. Just as each of us has a different preference in the food we eat, the clothes we wear, and vehicle we drive, we also have different preferences in our style of scroll sawing. For that reason, we try to come up with at least two variations on any one project so that you, as a scroller, can choose your favorite. Perhaps it will even encourage you to use the pattern in an imaginative and creative way.

The lead cutting of Give Thanks was done from a piece of clear pine that had been stained with leather dyes. This two-toned piece shows nicely when cut from a thicker piece of wood, allowing the difference between the stained/colored wood and the inside natural color. Another variation for the project was left uncolored, allowing the natural beauty of the pine to shine through.

Give Thanks can obviously be cut from a variety of materials and presented in a myriad of ways, with the choices limited only by your imagination, creativity, and purpose. If you haven't done word patterns before, we encourage you to look at each word, each letter, and each connection before cutting. There are always going to be areas that are a bit more fragile than others. When



you come across a delicate connection, slow down your speed a bit, and don't push or add pressure to the connection because it might break. With this small caution, we hope that the open-cut style of fretwork found in the Give Thanks pattern will be enjoyed by scrollers of all levels.

#### SUPPLIES

Wood: pine or wood of choice—one piece 3/4" x 8-1/2" x 5-1/4"

Tools: scroll saw with No. 5R blade; drill with small bit

to accommodate blade size Temporary-bond spray adhesive

Painter's tape

Sandpaper, assorted grits

Finish of choice (see sidebar on page 12 regarding use of leather dyes)

#### **INSTRUCTIONS**



**Step 1.** Photocopy the pattern, saving the original for future use. When selecting your wood for the project, pay special attention to the grain configuration. It is personal preference whether to have the grain run horizontally or vertically.



**Step 2.** Apply a layer of painter's tape to the surface of the wood.



**Step 3.** Using temporary-bond spray adhesive, attach the pattern to the tape. Allow the adhesive to dry thoroughly before proceeding.



Step 4. Drill pilot holes to access the interior lettering cuts.



**Step 5.** Sand the bottom of your board to remove any slivers created by drilling.

#### Leather Dyes on Wood

Leather dyes can add color to a project in a way that is quite different from most oil- or water-based wood stains. The colors are vibrant and rich, and they can be blended with other colors to add highlights. Using leather dye is one more way to make each of your projects unique.

On this project, we used Fiebling's British Tan leather dye, which can be purchased in many local craft stores, and through the Tandy Leather Company at www.tandyleatherfactory.com. The leather dye is applied using a wool dauber, rag, or brush. Because this dye has an alcohol base, it does not raise the grain of the wood as would a water-based dye, and it dries relatively quickly.



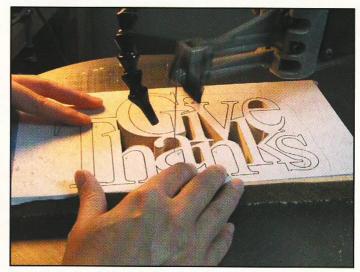
For Give Thanks, we colored the wood first, let it dry, and then attached the painter's tape and pattern to the wood. The natural color of the wood shows clean and precise along all of the inside edges of the project, an effect that would be just about impossible to achieve if trying to color the wood after it has been cut.

This project would also look nice if it was dipped into a stain or dye after it had been cut, immersing the entire piece. Depending upon the colors used, the grain of the wood would still be prominent.

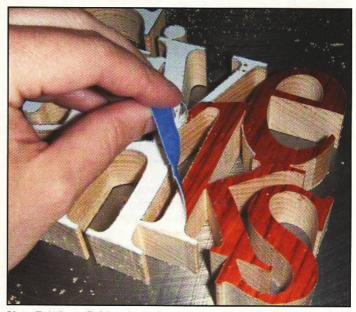
As with any solvent or coloring agent, it is very important to be aware of the manufacturer's warnings and recommendations for safe usage. Some solvents are very potent. Work in a well-ventilated area, and be sure to wear a protective mask designed to protect you from inhaling fumes.

#### Quick tip:

Black leather dye is a staple in our shop. It is by far the best way to give eyes the appearance of ebony when you don't have access to that particular species of wood. (The dye is also a much cheaper alternative!) To give eyes their shiny, watery look, apply the black leather dye, let it dry thoroughly, and apply at least two coats of clear nail polish over it.



**Step 6.** Cut out the design. We recommend cutting the smallest pieces first and removing the wood from the area before continuing on to the next cut. Of course, there are many ways to successfully complete a fretwork project; do it your way, and have fun!

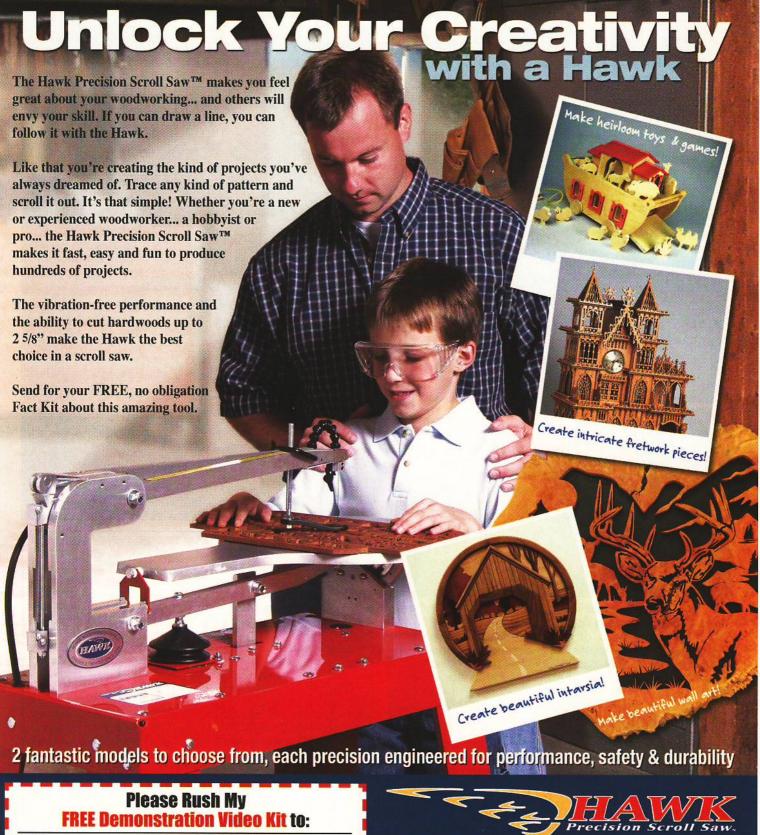


**Step 7.** When finished cutting, remove the pattern from the wood by simply peeling off the painter's tape.

**Step 8.** Apply your finish of choice to the project, and let dry. Don't forget to sign and date the back of your project!

Have fun with all of the possibilities!!

For questions concerning this project, please email Sue or Toni at: sue@chrestensenburghoutdesigns.com or toni@chrestensenburghoutdesigns.com, or send a SASE to Toni at: 3195 Bass Lake Side Road East, Orillia, Ontario, Canada L3V 7Y4.



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### **Golden Retriever Puppy**

by Roy King, Scott Kochendorfer, and Bob Valle of White Tail Designs, Ltd.

#### SUPPLIES

Wood: maple or wood of choice—one piece 1/4" x 6" wide x 7" high; Baltic birch plywood—one piece 1/8" x 6" wide x 7" high (for backboard)

Tools: scroll saw with No. 2/0 or No. 2 reversetooth blades; drill with 1/16" drill bit

Temporary-bond spray adhesive

Clear packing tape

Masking tape

Sandpaper in medium and fine grits

White craft glue

Heart-shaped mini-clock insert, requiring a 1-3/8"-diameter hole\*

Polyurethane spray in satin finish, or clear finish

rolydre marie spray in saim linish, or clear linis of choice

Flat black spray paint Hanger

\*Available from Wildwood Designs, Order No. 27097, 1-800-470-9090, www.wildwooddesigns.com.

#### INSTRUCTIONS

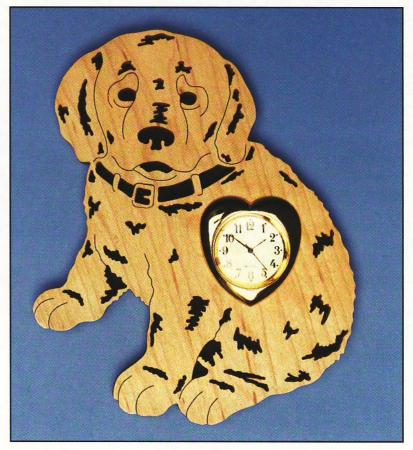
**Step 1.** Photocopy the pattern, saving the original for future use. Trim the pattern to fit the piece of maple. Apply a light coat of temporary-bond spray adhesive to the back of the pattern, and allow the adhesive to slightly dry until it feels tacky like masking tape. Attach the pattern to the wood. Cover the pattern area with clear packing tape. (The tape lubricates the blade, which helps prevent burning.)

**Step 2.** Drill for all entry holes. Cut out all internal portions of the design, but do not cut the perimeter lines yet.

**Step 3.** Using masking tape, attach the piece of plywood to the back of the maple, aligning the outer edges. Finish cutting the perimeter of the pattern, cutting through both thicknesses of wood at the same time. This will ensure that the backboard exactly matches the plaque outline. Separate the two pieces and remove the masking tape.

**Step 4.** Using flat black spray paint, paint both sides and all edges of the backboard. Let dry. Apply the clear finish to the plaque, being certain to cover all the surface areas and fret-cut holes. Using white craft glue, attach the backboard to the plaque, being sure to align the edges. Set the piece on the work surface, place a weight on top of it, and let dry. Insert the clock insert, and attach your hanger of choice to the back of the plaque.

For questions concerning this project, send a SASE to: White Tail Designs, LTD., 17713 South 66th Ct., Tinley Park, IL 60477, or email to: scrolled1@comcast.net.



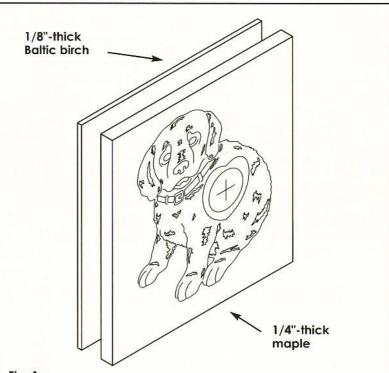


Fig. 1 Attach plywood to maple before cutting perimeter lines.

## teebai

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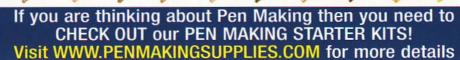


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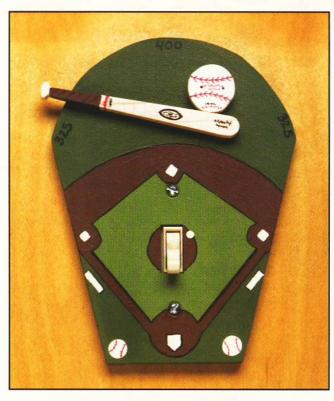
### **Sports-Themed Switchplates**

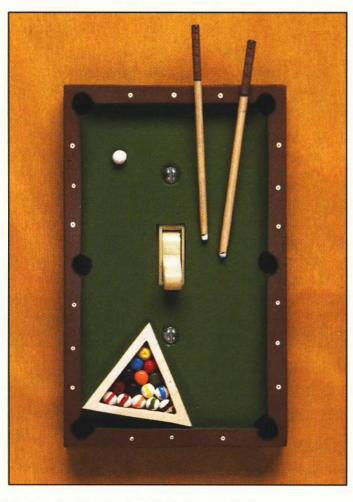
by Wayne L. Bosler III

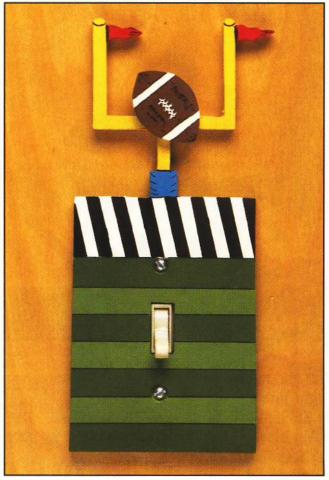
#### Introduction

This project is an offspring from an article of mine published in the April 2007 issue of Creative Woodworks & Crafts, in which I discussed how to modify patterns to create switchplates and outlet covers. For this project, I decided to design a series of original sports-themed patterns that could be used to liven up the switch-plates in playrooms, kids' bedrooms, or any other room of the house in which a sports fan spends time!

When decorating your switchplates, feel free to substitute the colors, numbers, or other details specific to your favorite athlete or team. One technique that I especially liked using when designing these switchplates was gluing items onto the base to create more depth. The basketball court, baseball field, football field, and race car track each have two levels, while the pool table has three. Try using this technique when working with other patterns to give your projects a more personal and realistic touch. It seems to work very well with bird and flower motif patterns.







16 • Creative Woodworks & Crafts January 2008

#### SUPPLIES

Wood: 1/4"-thick poplar—assorted 6"-wide pieces (length depends upon selected switchplate design); dowel—two pieces 1/8"-diameter x 3" long (for pool cues)

Tools: scroll saw with No. 3 double-skip tooth blades; drill with 5/32" and 3/8" bits, and 5/16" countersink bit; router

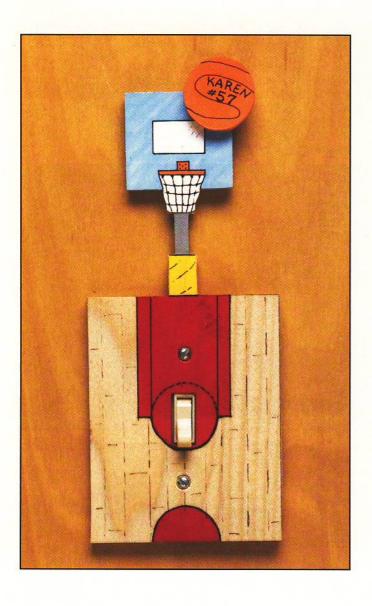
with 3/8" straight bit; random orbit sander with assorted grits sandpaper; metal straight edge; assorted clamps Carbon paper

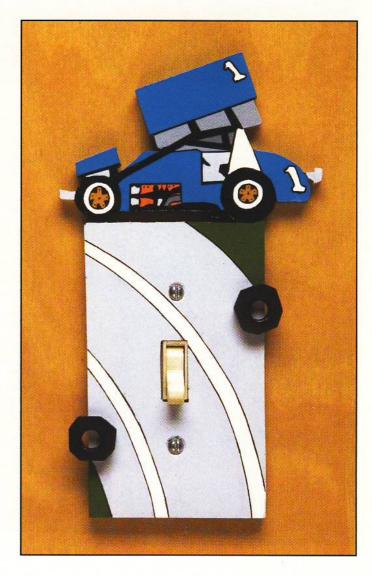
Cyanoacrylate gel-type glue, or CA glue of choice

15 wood beads, 5mm-diameter (for billiard balls)

Delta acrylic paints in No. 2002 antique gold, No. 2009 seminole green, No. 2015 purple, No. 2026 orange, No. 2027 bright yellow, No. 2037 blue heaven, No. 2042 pumpkin, No. 2067 leaf green, No. 2074 ocean reef blue, No. 2075 maroon, No. 2109 brown velvet, No. 2419 deep river green, No. 2503 bright red, No. 2505 white, and No. 2506 black, or acrylic paints of choice
Assorted paintbrushes, including 1/4" shader, 3/8" shader, and 0 liner
Sakura Color Corp. Pigma Micron .05 markers in black and red, or other quality markers of choice

Spray finish



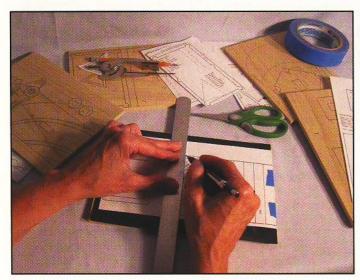


continued on page 18

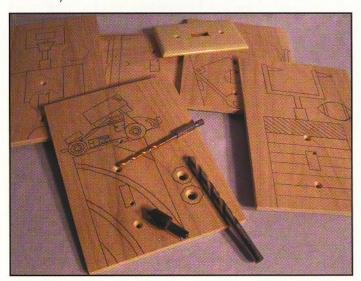
#### INSTRUCTIONS

Caution: Be sure to turn the circuit breaker off when installing your switchplate or checking it for fit.

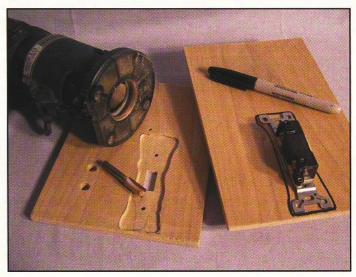
**Step 1.** Photocopy the patterns, saving the originals for future use. Cut the wood to the necessary lengths, and sand the surfaces smooth.



**Step 2.** Using a metal straight edge and carbon paper, transfer the patterns to the wood. (Notice that I cut the bottom of the pattern straight, and taped it to the straight edge of the wood. It is frustrating to remove the pattern, only to find that you have missed transferring a section of the design to the wood and are unable to realign the pattern lines with the traced lines. I try to always key the pattern to the wood so I can easily replace the pattern, if needed.)



**Step 3.** Drill the mounting screw holes, the blade access holes for the switch opening, and the blade access hole for the area under the race car using the 5/32" bit. Use the 3/8" bit to drill the center holes in the car lug nuts. Use the 3/8" countersink for the mounting screws and lug nuts.

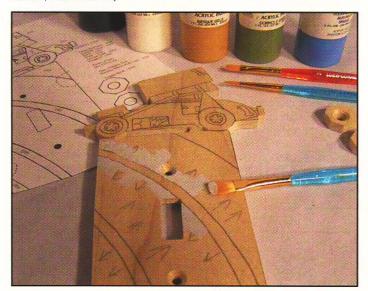


Step 4. It is necessary to rout the back of the switchplate to a depth of 1/16" to ensure a tight, safe fit against the wall. After using the scroll saw to cut the switch opening, insert the actual switch into the opening and trace the outline of the entire unit using a heavy marker. Use the router with a straight bit to remove the excess wood. (I recommend routing the back of the switchplate at this point, before doing any additional scrolling, because you will have a larger piece of wood to clamp to your bench, and the clamps won't interfere with the router.) Notice that the router line is very close to the bottom edge of the project, so use extra care when routing in that area. Test fit the switch unit with the switchplate, and make any necessary adjustments before proceeding.



**Step 5.** Complete the remaining scrolling on all pieces. Be sure to cut only the perimeters of the projects—all other pattern lines are painting lines. Also cut out the bat, baseball, football, basketball, lug nuts, and rack for the billiard balls. Apply wood filler or glue into the holes on the wood beads for the billiard balls, and let dry. Place the dowels for the pool cues into the drill chuck, and use sandpaper to taper the ends.

(Refer to the painting charts on pages 20-21 for suggested color placement.)

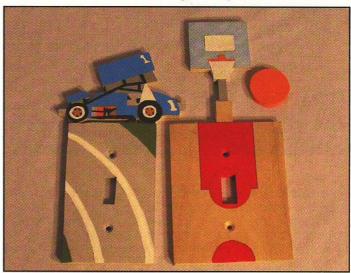


Step 6. When painting the switchplates, I like to use 1/4" and 3/8" shaders. Note that the shaders have a square, or flat, edge. Instead of trying to paint along the length of a curved line, I apply a small amount of paint to my shader, place the brush against the line, and move outward (as shown by the arrows in the photo). Next, I simply move a brush-width down the line and repeat. After you have painted along the entire length of the line, you can smooth the paint using the same brush. (Any curved area, including circles, can be painted using this technique. Just be careful not to use too much paint.) I use the liner brush to paint the very small detail areas, such as the number 1 on the car. (I tend to buy the least expensive brushes I can find that will hold their edge. Even if you are extra careful with expensive brushes, acrylic paints will eventually ruin the edges.)



**Step 7.** Paint all the pieces, referring to the photos and painting charts for suggested color placement. I like to use a plastic plate as a palette for mixing my colors. I lighten or darken shades by adding a little white or black to the original color. When painting the grey areas on the race track and car, I used five shades of gray. Start with enough

white paint to cover all the areas, then add a small amount of black paint to it to create a light gray shade. As you paint and need darker shades of gray, simply add small amounts of black paint to the mix. Shading the areas helps give your project more depth. To create a "wash," such as the glass backboard area on the basketball switchplate, first fold a paper towel into a 3" x 3" square. Thoroughly wet the towel with clean water, and put a drop or two of paint onto the towel. (I used white paint for the glass backboard.) Use your brush to mix the water and paint on the towel, creating a very light shade of the color. Slowly add more paint until you have achieved your desired shade. (You can always add more color to darken the shade, but it is difficult to lighten it.)



**Step 8.** When you have finished painting all the pieces, simply discard the plastic plate palette—no clean-up necessary! Let all paint dry completely.



**Step 9.** To give the painted areas of the switchplates crisp definition and to add thin detail lines such as the basketball netting on the hoop and the laces on the baseball, I use a Micron .05 black or red marker. Unlike my inexpensive brushes, I buy the best markers I can find. This type of

continued on page 20

pen has archival, fade-proof, waterproof ink. It has a very fine, strong tip, and if you take care of it by not pushing too hard, it will last a long time. It is available in various point sizes and several colors. (It is important to test your marker and paint with the finish you intend to use in order to ensure that they are compatible. It's frustrating to spend time on detail painting, only to apply a final finish and have your paint or marker lines run.) I use a clear, straight edge when using the marker in order that I can see exactly where I am working.

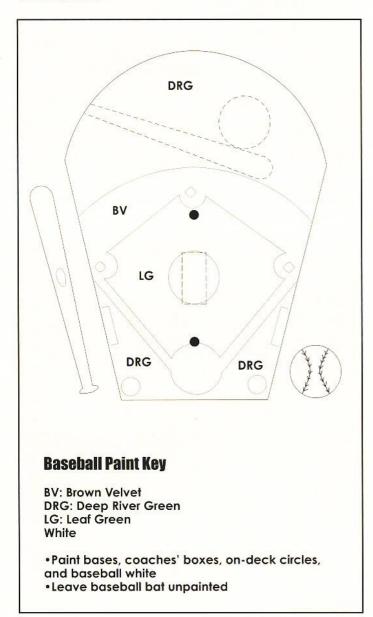
**Step 10.** Referring to the patterns and photos for placement, glue the baseball and bat to the baseball switch-plate base, glue the football to the football switchplate

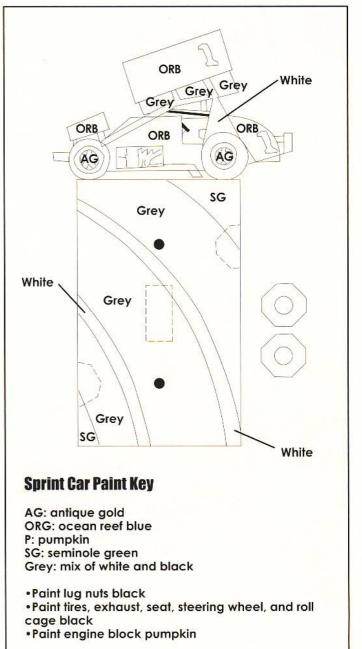
base, glue the basketball to the basketball switchplate base, and glue the lug nuts to the race care switchplate base. (Cyanoacrylate gel works well and is very quickdrying.) For the pool table switchplate, first glue the pool table sides to the pool table base. Glue the pool cues and rack in place, and glue the balls inside the rack.

**Step 11.** When all glue is dry, apply your finish of choice, following the manufacturer's instructions for application. I use clear aerosol lacquer because it dries in 30 minutes. Let the finish dry completely, then install your new switch-plates or give them to your favorite sports fan!

For questions or suggestions, please email Wayne at: k.wbosler@juno.com.

#### **Paint Charts**



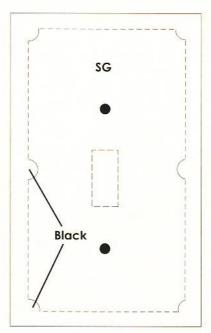


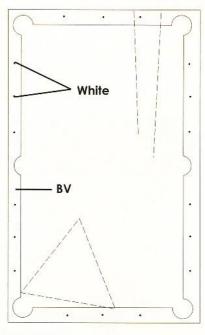
#### **Pool Table Paint Key**

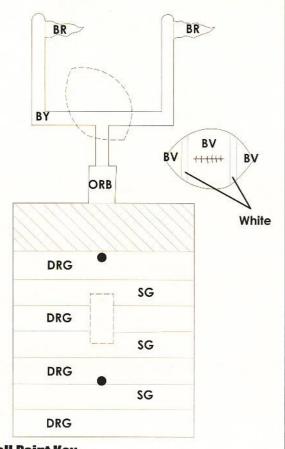
Paint pool table base seminole green (SG)
Paint pool table pocket areas black
Paint pool table sides brown velvet (BV)
Paint dots on table sides white
Paint cue handles brown velvet
Leave rack unpainted

#### **Billiard Balls Paint Key**

Cue ball: white
Balls 1 and 9: yellow
Balls 2 and 10: blue
Balls 3 and 11: red
Balls 4 and 12: maroon
Balls 5 and 13: orange
Balls 6 and 14: green
Balls 7 and 15: purple
8 ball: black





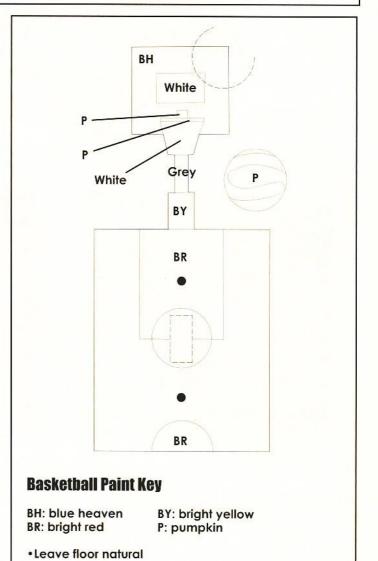


#### Football Paint Kev

BR: bright red
BV: brown velvet
BY: bright yellow

DRG: deep river green
ORB: ocean reef blue
SG: seminole green

Alternate black and white for end zone stripes.





### **Variations on a Butterfly**

by Dirk and Karen Boelman





Karen holding Plexiglas butterfly that was auctioned for fund raiser.

#### SUPPLIES

Wood: plywood—one piece 1/8" x 11" x 19" (for butterfly silhouette), two pieces 1/4" x 11" x 19" (for backer)
Plexiglas—one piece 1/8" x 11" x 19" (for butterfly silhouette)
Tools: scroll saw with No. 5 and No. 7 double-tooth blades; drill with assorted bits; needle files; artist's knife; awl
Temporary-bond spray adhesive
Clear packaging tape
Masking tape
Blue painter's tape
Sandpaper, assorted grits
Acrylic paint in black, orange, red, white, and yellow
Brass escutcheon pins (14 for each butterfly)
Small sawtooth hangers with mounting hardware (two for

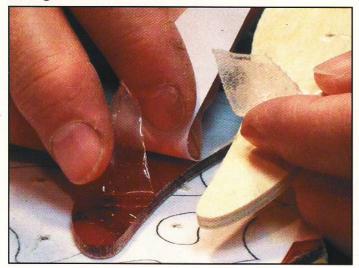
#### Introduction

Last July I participated in "Butterflyville," a promotion run by our local Chamber of Commerce. Butterflyville is an event in which area artists create butterfly-themed artwork that is displayed at local businesses, and is eventually auctioned off for a fund raiser. My original project used a piece of orange-mirrored Plexiglas for the butterfly silhouette, and black-painted plywood for the backer behind the cutouts.

Because the Plexiglas was only 1/8" thick, I stacked a piece of 1/8"-thick plywood with it to protect the back side of the mirror from being scratched during scrolling. This allowed me to make a plywood butterfly at the same time. I've provided directions for making both the plywood version and the Plexiglas one, but those are only two variations on the same pattern—there are always many more. So, put on your thinking caps, and get creative...we would love to see what other versions you come up with!

#### **INSTRUCTIONS**

Cutting



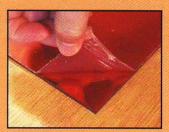
Step 1. Photocopy the pattern, saving the original for future use. Using temporary-bond spray adhesive, attach the pattern to the film covering on the Plexiglas. Adhere a layer of clear packaging tape over the pattern to help keep the blade cool while sawing. (I also applied a layer of clear packaging tape to the bottom side of the plywood to help keep the blade cool and prevent the plywood from splintering. I have since discovered, however, that blue painter's tape would have been a better choice than the packaging tape because it doesn't leave any sticky residue.)

**Step 2.** Place the piece of Plexiglas on top of the wood, and apply masking tape along the edges to secure the stack.

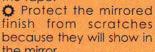
Step 3. Drill all blade entry holes, and make all interior cuts. Do not cut the perimeter of the design yet. (Be aware that, because I was cutting Plexiglas and plywood at the same time, I had to adjust some of the usual "rules" for cutting these products. For example, Plexiglas isn't normally stack-cut because that tends to create more heat, which causes more melting. To compensate for this, I applied the clear packaging tape on top of the pattern to cool the blade. Also, I don't normally use reverse-tooth blades to cut Plexiglas because of the heat build-up, but I like them when cutting plywood because they keep the back side from splintering out. My solution was to use double-tooth blades, which run cool enough for the Plexiglas, and also help keep the back side of the plywood from

#### Tips for Working with Plexiglas

• Leave the paper or plastic covering on the Plexiglas. It helps protect the surface from being scratched, as well as helps cool the blade while you are sawing.



Never apply tape to the back side of the mirrored finish because the thin layer of silvering can be easily pulled off with the tape.





Apply a layer of clear packaging tape to the top surface of the Plexiglas to help cool and lubricate the blade during scrolling. If the blade gets too hot, it can cause the Plexiglas to melt and weld back together in the saw kerf. Taping is especially important when stack-cutting.

© Use a medium to slow cutting speed to help keep the blade cooler.

© Use a large-sized blade. We usually use a No. 7 skip-tooth blade (although we used a No. 5 and a No. 7 double-tooth blade on the butterfly project because of the plywood layer).

Change blades frequently because the Plexiglas is less likely to melt when using a sharp blade. A sharp blade also gives a more polished edge to your project, and helps keep the mirrored finish from chip-



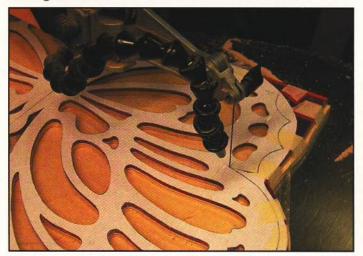
ping out at the edges. (When cutting the butterfly project, I used two No. 5 double-tooth blades for the smaller cut-outs in the wings, two No. 7 double-tooth blades for the larger wing cut-outs, and two No. 7 double-tooth blades to cut the perimeter.)

• Keep the burr side of the blade directed toward the waste area (the section of the piece that will be discarded when you're done cutting). The burr side of the blade is rough, and it will leave a rougher edge as it saws through the material.

splintering out. The layer of tape added to the bottom side of the plywood also helped limit the amount of splintering. Although there was still a significant amount of feathering, which is the fuzzy wood left on the edges, it was easily sanded off.)

continued on page 24

#### Making a backer



**Step 4.** Both the Plexiglas and plywood versions of the butterfly silhouette will need 1/4"-thick plywood backers. In order to ensure that the outlines match exactly, stack the two plywood backer pieces on the bottom of the Plexiglas/plywood stack, secure the pieces by wrapping lengths of masking tape around the edges, and cut along the perimeter of the pattern. You will be cutting through all four thicknesses at the same time.

Step 5. Remove the pattern and tape from the individual pieces. Using needle files, rasps, or sandpaper, touch up the edges and back side of the wooden pieces as needed. (While taping the bottom side of the plywood helps reduce splintering, there will most likely be some feathered edges. These can easily be corrected by sanding them.) After removing the pattern and protective film from the Plexiglas, wash it in warm, soapy water, and dry it using a soft, lint-free towel. (Window cleaner is not recommended for Plexiglas, and paper towels can scratch its surface.)

To finish Plexiglas version

Step 6. Paint the backer piece for the Plexiglas butterfly using black gloss acrylic paint. Be sure to paint all the edges. Apply three coats for complete coverage, lightly sanding between coats to achieve a smoother finish. Let the backer dry comwhich pletely.



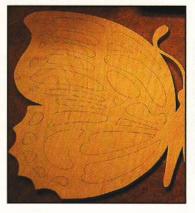
could take several days depending upon the humidity and temperature.

Step 7. The Plexiglas will be attached to the backer board using brass escutcheon pins. First, trim the lengths of the pins as needed to prevent them from protruding through the plywood backer. Next, using a drill bit sized to match the diameter of the escutcheon pins, pre-drill the mounting holes for the pins. Drill through the Plexiglas and into the plywood backer. Carefully tap the pins into place to

secure the two layers. Insert each pin far enough so that the base of its head is even with the surface of the Plexiglas.

**Step 8.** Attach one sawtooth hanger to the back of each wing so the butterfly can be mounted straight on to the wall.

To finish plywood version



Step 9. Place the backer for the plywood butterfly on a table top. Place the plywood butterfly silhouette on top of the backer, and align all edges. While holding the pieces in place, use a pencil to lightly trace the cutout openings onto the backer.

**Step 10.** Paint the top and edges of the silhouette piece using gloss black acrylic paint. Apply three coats, lightly sanding the top and outer edges between application of the second and third coats.



Step 11. Paint the butterfly's spots on the backer piece using your colors of choice, or refer to the photo for suggested color placement. I painted the smaller shapes along the outer edges of the wings white. For the larger inner shapes, I used a range of orange shades, moving from yellow-orange at the bottom of the wings to red-orange at the top. To do this, I mixed

yellow paint with a small amount of orange, and painted the bottom shapes. As I moved up the wings, I added more orange paint to the mix. To paint the top four openings on each side, I added a small amount of red paint to the mix. To finish, paint the edges of the backer using three coats of gloss black acrylic paint, sanding lightly between coats. Let all paint dry thoroughly.

**Step 12.** Align the edges of the two plywood layers, and secure them using glue or brass escutcheon pins. (Refer to the directions for finishing the Plexiglas version for inserting the pins.)

**Step 13.** Attach one sawtooth hanger to the back of each wing so the butterfly can be mounted straight on the wall.

For questions concerning this project, send a SASE to: Dirk and Karen Boelman, P.O. Box 701, Platteville, WI 53818; or email: dirkdraws@centurytel.net



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# Cutting a Name for Yourself as a Scroll Saw Artist:



by Jeff Zaffino

### **Custom Work**

any of you who participate in shows, or have even considered participating, have contemplated the idea of offering custom work when you exhibit. Offering custom work is a great way to expand your product line to ensure you have something the customers want; after all, you would be making the item just for them. However, it raises some potential problems and concerns. The purpose of this article is not to tell you whether or not to offer custom cuttings, but to shed some light on how to avoid potential pitfalls and illustrate how you might successfully integrate custom cuttings into your existing line of cuttings to help meet expenses. My hope is that, by using this information and your own intuition about your business, you will be able to arrive at an informed decision about how you want to approach adding or removing these types of cuttings from your sale offerings.

One common statement I hear in my booth at shows is: "You have some amazingly beautiful work, and I would love to buy one, but you just don't have a subject matter that I really love." Having the ability to create a cutting made specifically to your customer's wants and needs is a surefire way to rebut that argument. I have often told customers who make this type of comment that if they love the work that much, I would be happy to cut something at their request. Sometimes they think I am trying to talk them into something or giving them the hard sell, and they walk out. Often, though, they raise their eyebrows and ask me to tell them more. Although it doesn't always translate into a sale, it does happen at times. (Sometimes it happens more often than I would like!)

We offer cuttings made from our customers' photographs, and I can't tell you how many cuttings I have done based on a wrinkled and faded photo someone pulled from his wallet! We enjoy being able to offer to customers who truly appreciate the type of work we do a lasting memento of something they already treasure. In a sense, it is the best of both worlds for them. They admire our work, and they love the photograph, so we combine the two to create a special keepsake. Many of our custom-work customers come back year after year to purchase a gift for someone else in the family. By being

able to produce exactly what our customers are looking for, we have not only expanded our customer base, but we also have a very high repeat sales rate from those same customers. Of course, there are many other types of custom work that can be provided, but the photograph-based cuttings work well for our type of scrolling.

Be aware that while offering custom work can lead to more sales, it can also cause a few hiccups, as well. There are several things you will need to carefully consider as you determine whether or not to venture into this avenue.

Let's start by deciding if you will take orders and ship the completed goods, or if you will cut your customized products as your customers wait. As with anything, there are advantages and drawbacks to both types of service.

By being able to produce exactly what our customers are looking for, we have not only expanded our customer base, but we also have a very high repeat sales rate from those same customers.

If you decide to cut items as your customers wait, it obviously means that you need to carry along lots of additional materials and tools. An adequate supply of the material in which you are cutting will be necessary, as well as a means to produce a pattern on the spot, such as a laptop or stencil of some kind. My good friend, John Polhemus, has shared with me stories of his days on the show circuit. He told me about when he was cutting customized hammers at shows, and how he would have to buy every hammer he could find in all the hardware stores in town to keep up with his sales demands. While it is a nice problem to have, it is indeed still a problem.

You will also need to have your saw with you, and in most cases, you will have to be cutting in front of a crowd and often answering questions as you go. You have to decide if this is something you are comfortable doing. In

my case, I can't cut and converse at the same time. (Of course, people have said I can't walk and chew gum at the same time, either, but that is a whole other story!) I really can't concentrate on my cutting and a customer at the same time: one or the other suffers. Finally, depending upon what type of products you offer, you may also need to have assorted finishes on hand, some jigs or other assembly aids, and a reliable person to run things while you cut.

On the bright side, there are a few advantages to providing custom work as the customer waits. The work is completed before the customer leaves the show, so there is no log jam of custom work to get done by a certain day. Additionally, in every case I can imagine, the customer pays for his order in full as he receives it. That means the risk is very slim for not getting paid for a custom order. It also means you don't have to carry as much fully-completed inventory with you to a show, such as a bunch of hammers with "Fred" cut into the handle when your name is Bob! I guess the bottom line for this type of work is that if you can transport everything you need and you are comfortable cutting in front of a crowd, go for it.

We take orders for our custom work, which has its own set of advantages and problems. I believe the biggest advantage is that I don't have to completely pack up my shop to attend a show, or maintain two sets of tools. I also enjoy being able to focus my time at a show on my customers, rather than having to cut items.

A big drawback to taking orders is that I get swamped with requests for custom work around the holidays. In fact, in recent years, I have had to stop taking any more orders after mid-September just to be sure I could get them all done in time.

We have also had to repeatedly "tweak" the way we handled payments for custom work. When we first started doing custom work, we didn't ask our customers to pay for the work until they received and approved the completed cutting. Although this method was very popular with the customers, I have several reminders in the shop of why that payment policy didn't work so well for me! You would be amazed at the number of people who paid a deposit to have something cut, and then changed their mind about what they wanted. In most cases, they hadn't even seen the finished cutting.

After a few years of adjusting our policy, we finally settled on the payment policy we use now. Our customers pay a 50% deposit when they place their order. I then develop the pattern for their project, and send them a proof for their approval. Once they have approved the proof, we ask for the remainder of the balance due before we actually cut the project. By handling orders this way, we have never had a customer back out of his order. Of course, there is always the possibility that they will not approve the proof, and I will have to modify it for them or refund their money. However, while these modifications are fairly common, I have never had to issue a refund for

custom work. This policy seemed to allow the best balance between keeping the customers happy (because they didn't have to pay in full at the time they placed their order) and keeping me happy (because I didn't have to cut pictures of people I don't know, and then have to keep them in my shop!).

Be prepared that when you handle orders this way, you need to have a plan in place in case something unforeseen happens and you can't fulfill your customers' orders in time. When my Father-in-law passed away at the beginning of December a few years ago, I had several orders due for Christmas that I simply couldn't fill. Fortunately, my customers were all extremely understanding, but it is something you should plan for ahead of time, just in case.

Pricing a custom work is even more complex than pricing a regular project. The customized project will often require much more of your time than your customer will be willing to pay for, and it can take a few seasons before you are able to determine the correct price. Over the years, we have more than tripled what we charged for custom work when we first started, and we have finally found a nice balance between the number of pieces we agree to make and the amount of money we earn from them. While there is no magic price, I suggest that you consider raising your prices slightly each year until you see a noticeable effect on demand. When you have established a work load with which you are comfortable, you have likely found your individual price point.

As you can see, there is much to consider before taking the leap to add or remove custom work from your offerings at shows. I hope this material will assist you in making your decision.

Until next time, keep the dust blowing and the smile showing!

For questions concerning this article, contact Jeff Zaffino at 247 Lytle Road, Rossville, GA 30741, or email him at: jeff@advancedscrollsawpatterns.com.

This series of articles was originally planned to run for a year. However, due to the large amount of feedback we received about the articles, we decided the series would continue until I run out of things to write about! So, let me say "Thank you" to all of you for sharing your thoughts with us and letting us know you are reading these articles. Secondly, readers have provided us with some great suggestions for future article topics, but we are always looking for more. If you have a suggestion for a topic you would like me to cover, simply email it to: editors@woodworksandcrafts.com, and write "Jeff Zaffino articles" in the subject heading. Looking forward to hearing from you! - Jeff





### Cobra

pattern by Jacob Fowler, cut and finished by Wayne Fowler



#### Introduction

After the first few hundred designs, new ideas can become hard to come by! That is why we appreciate when we occasionally receive requests for specific items from customers and friends. One of my co-workers in my "other" full-time job had asked us for a cobra design as a gift for a friend whose nickname is "The Cobra." (I didn't ask why!) Jacob did a great job on the design, and I cut the piece in eastern cottonwood, which gave the finished snake a very interesting look.

#### SUPPLIES

Wood: light- to medium-brown hardwood with interesting character lines, such as hawthorne, mulberry, or oak—one piece 1/2" to 3/4" x 9" x 8" (for cobra); wood in contrasting or complementary color—one piece 3/4" x 5-1/2" x 3" (for optional base)

Tools: scroll saw with No. 2R and/or 5R blades; drill with assorted bits;

Tools: scroll saw with No. 2R and/or 5R blades; drill with assorted bits; fixed disc or belt sander with fine or extra-fine (120/220) disc or belt; router

Temporary-bond spray adhesive 1/4 sheet of 220-grit sandpaper Clear packing tape

Finishing oil of choice, such as tung, walnut, or Danish

Fortunately, we were able to cut the piece again for the magazine, and I think this one turned out even better than the first. This was also cut from a piece of 3/4"-thick eastern cottonwood crotch. (A few years ago, I had been fortunate enough to pick up most of a stump that had been cut into boards from my supplier, Edgar Werner, and I have been rationing it out for the right projects ever since.) I display the piece in a slotted oval base made from the same wood. The piece was cut on an Excalibur EX21 saw.

#### INSTRUCTIONS

Step 1. Photocopy the patterns, saving the originals for future use. I recommend applying a layer of clear packing tape to the surface of the wood, and then applying the pattern to the tape using spray adhesive. (The tape seems to reduce the burn from the tight turns you will have to make while cutting, and it also makes the piece easier to handle.) Set the base piece aside.

**Step 2.** Drill all the guide holes on the cobra piece, and make all the cuts. To reduce chipping on the bottom of the piece, I recommend using a No. 5R blade to cut the larger features, and a No. 2R blade to cut the face.

**Step 3.** Remove the pattern by peeling off the packing tape. (If you did not use the packing tape, remove the pattern by applying a solvent such as paint thinner to the paper pattern. After removing the pattern, let the piece dry.)

**Step 4.** Use a disc or belt sander to sand the two faces of the piece and to smooth the outside of the oval. Use a 1/4 sheet of 220-grit sandpaper to remove any remaining burrs. With oval pieces such as this, I give the piece a more finished look by rounding over the oval edges using coarse sandpaper, then smoothing the edges using 220-grit sandpaper.

**Step 5.** Clean the piece using a clean paintbrush or other tool of choice. Finish by applying a thin oil, such as tung or walnut oil, to seal the inner edges. Let dry.

**Step 6.** I often display oval pieces in a slotted base. The base can be cut from the same type of wood used for the cobra, or from a complementary wood. It should be a minimum of 3/4" thick. Cut along the perimeter of the oval. Re-size the slot opening to match the thickness of the wood used for the cobra, and fret cut the opening from the oval. (It is better to err on the side of caution and cut the slot too small, rather than too big, because the cobra should fit snugly in the slot.) Test fit the cobra, and sand the slot a bit wider if needed. When fitted properly, the cobra should fit 1/4" to 1/2" into the slot and stand erect. Also, the cobra should not separate from the base when lifted. When you are satisfied with the fit, use a router to finish the outside of the oval. Apply your finishing oil of choice, and let dry.

Send questions concerning this project to: Wayne Fowler, 33 Longmeadow Cres., Markham, Ontario, Canada L3R 3J6, or email him at: fantasiesisaw@rogers.com.



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### **Santa Box**

by Sue Mey



#### Introduction

The popular North American title of "Santa Claus" originated from a mispronunciation of the Dutch "Sinterklaas," which in turn is a contracted form of "Sint Nicolaas" (Saint Nicholas). Use this Santa box to carry on the tradition of Santa bearing gifts: simply insert some homemade candies, jewelry, or other small trinkets, and wrap with a bow!

#### INSTRUCTIONS

Step 1. Using the palm sander and 320-grit sandpaper, sand both sides of all the wood pieces to reduce the amount of hand sanding to be done later.



Step 2. Photocopy the patterns, saving the original for

#### SUPPLIES

Wood: pine or hardwood of choice—one piece 1-1/2" x 7-1/2" x 10-1/2" (for the box)\*; birch ply or plywood of choice—two pieces 1/4" x 7-1/2" x 10-1/2" (for base and lid); birch ply, plywood of choice, or MDF—one piece 1/8" x 7-1/4" x 10-1/4" (for inner lid); 1/8"-thick MDF scrap—one piece approx. 2" x 2" (for leaves and berries overlay)

Tools: scroll saw with No. 12 and No. 3 reverse-tooth

blades; drill press with 1/8" and 1/16" bits; palm sander and/or sanding block; clamps

Temporary-bond spray adhesive

Carbon paper and stylus

Masking tape

Sandpaper, assorted grits

Wood glue

Acrylic paint in red and green

Deep-penetrating furniture wax liquid, or Danish oil Medium-sized artist's brush

Small-sized artist's brush

Stiff-bristled paintbrush

Foam applicator

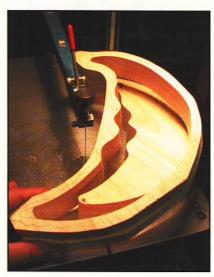
Lint-free cloth

Clear spray varnish

\*If you do not have 1-1/2"-thick wood, you can build up to that thickness using two thinner pieces. Simply glue them together using wood glue, and clamp until dry.

future use. You will need three copies of the Santa pattern: one for the box body; one for the lid; and one for the inner lid. Place one Santa pattern on the 1-1/2"-thick piece of pine. Using carbon paper and a stylus, transfer the box side lines (the two outer pattern lines) onto the wood.

Step 3. Drill the blade entry hole for the box using the 1/8" bit. Holding a scraper blade at a slight angle to the work, move it along the grain of the wood to remove any burrs created from drilling the hole. Thread the No. 12 reverse-tooth blade through the blade entry hole, and cut along the inner side of the box. Roughly cut out the outer side of the box, approximately 1/8" beyond the pattern line.



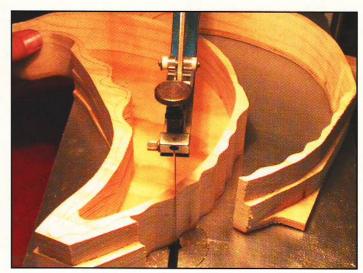


Step 4. Starting with 150-grit sandpaper, and progressing through 320- and 500-grit sandpaper, hand sand the inner surfaces of the box sides until you have achieved a smooth finish. Remove all sanding dust.

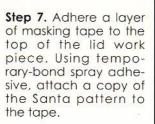


Step 5. Use wood glue to glue the box sides to the box

base piece, being sure to keep the wood grain pattern running in the same direction on both pieces. Clamp the pieces together. Use a toothpick to remove any glue seepage from the inside of the box. When dry, remove the clamps.



Step 6. Using the No. 12 reverse-tooth blade, cut along the perimeter of the pattern, cutting through the sides and base at the same time.



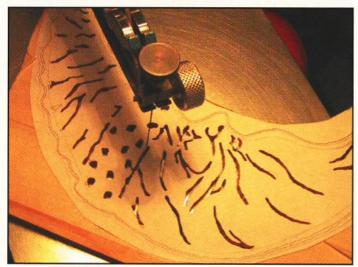




**Step 8.** Drill the blade entry holes for the lid using the 1/16"



**Step 9.** Use sandpaper or a scraper blade held at a slight angle to remove any burs created by drilling the holes. Be sure to follow the grain of the wood.



**Step 10.** Thread the No. 3 reverse-tooth blade through the blade entry holes, and make all the inside cuts of the lid pattern.



**Step 11.** Cut along the perimeter of the lid pattern. Remove the masking tape and pattern, and set the lid aside.

**Step 12.** Place a copy of the Santa pattern onto the 1/8"-thick work piece for the inner lid. Using carbon paper and a stylus, transfer the inner perimeter line to the wood. Cutting just to the inside of the traced line, cut out the lid inner piece.

**Step 13.** Using temporary-bond spray adhesive, attach the pattern for the leaves and berry overlay to the piece of MDF, and cut out. Remove the pattern.

**Step 14.** Sand all the pieces to a smooth finish by hand or sanding block, using first 320-grit sandpaper, then 500-grit sandpaper. Using 150-grit sandpaper, then 320-grit sandpaper, soften the inner and outer edges of the box and lid. Remove all sanding dust using a stiff-bristled paint brush and a lint-free cloth.

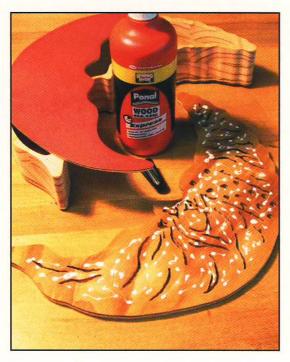
**Step 15.** Test fit the inner lid to the box. It should just fall into the box. Cut or sand as needed until you have achieved a proper fit.

**Step 16.** Use a medium-sized artist's brush to apply deeppenetrating furniture wax liquid or Danish oil to the box and lid. Wipe off excess wax or oil using a clean cloth, and place the items in the sun to dry. (If this is not possible, allow approximately two days for the finish to be completely absorbed.) Wipe all surfaces again using a dry, lint-free cloth.



**Step 17.** Using red acrylic paint and a foam applicator, paint the side of the inner lid that will show through the scrolled openings on the lid.

**Step 18.** Use a small-sized artist's brush to paint the top and side surfaces of the leaves and berries overlay with green and red paint. Let dry.



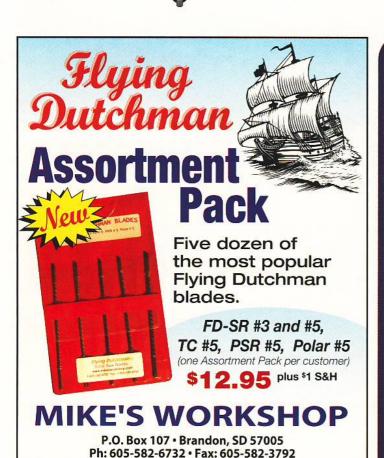
**Step 19.** Center and glue the painted side of the inner lid to the bottom of the lid.



**Step 20.** Attach clamps to secure the pieces, and let dry. Remove any glue seepage using a toothpick or a damp cloth. Glue the overlay in place.

**Step 21.** Apply several thin coats of clear spray varnish, allowing each coat to dry completely before applying the next.

I live in Pretoria, South Africa, and have been scrolling for about 12 years. I can be contacted at 27 82 492 5869 (cellular), or via email at: sue@scrollsawartist.com. To see more of my work or patterns available for purchase, visit www.scrollsawartist.com.



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### Gershwin

by Jeff Zaffino



Original Artwork © Geoff Tristram; Licensed by Porterfield's Fine Art Licensing

#### Introduction

For someone who develops patterns using the techniques I do, finding the right image for a project is often at least as big of a challenge as actually developing it into a pattern. I recently tried a different approach, and contacted an art licensing agency. I was curious to see how the agency operated, and if it would work with me for my purposes.

I was pleasantly surprised when Lance, the president of the company, sent me an e-mail explaining how he had spent the better part of the day educating himself on scroll sawing and getting a better idea as to what kind of work it was possible to create on the scroll saw. He had also spent some time looking at patterns I had developed in the past, and was intrigued to investigate further. After several conversations, we agreed to start with a small handful of images created by English artist Geoffrey Tristram and see how they worked. Gershwin is one of the images I selected.

I must say that I am not much of a cat person. (I much prefer BIG dogs, or, as comedian Tim Allen describes them, "power tools you feed!") However, Geoff Tristram did such a fantastic job portraying the incredible detail in the original

#### SUPPLIES

Wood: oak ply or wood of choice—one piece 1/8" to 1/4" x 11" x 14"

Tools: scroll saw with Flying Dutchman No. 1 and No. 2/0 spiral blades, or blades of choice; drill with No. 68 bit; palm sander or sanding block; Bernzomatic plumber's torch; assorted clamps

Temporary-bond spray adhesive

Masking tape

Blue painter's tape

220-grit sandpaper

Stack of paper (optional)

Boiled linseed oil or clear coat finish of choice

Lacquer

Paint thinner

Small container Oversized toothbrush

Black felt or backer of choice

painting that I just had to see what I could do with it. While some of the details in his original got a little lost in the development process, I was still blown away by the amount of detail that remained. The various musical instruments, accessories, and sheet music just begged to be cut, and then there was that adorable cat... I simply couldn't resist!

#### Meet Geoff Tristram

Before we go too much further into the process, I would be remiss if I didn't include a few words about Geoff here. After all, we wouldn't have this wonderful project to share with you were it not for his creativity.

Geoff's images of cats have almost made him a house-hold name in his native England. While only 46, Geoff has been a professional artist for more than half his life. His work is well known throughout the United Kingdom, having appeared on postage stamps, record sleeves, and numerous advertisements. His "stock in trade," so to speak, is his love of detail—sound familiar to anyone?!

His "affair" with cats started with a commission job to paint a cat, and he has since become a cat lover. He is always borrowing someone's cat to be the subject of his next work, with the promise to the kitty's owners that he will immortalize their precious pussycat on canvas.

#### INSTRUCTIONS

Let's get a few things out of the way. This project is one that will be sure to challenge most scrollers. There are lots of areas that are very weak, and there are lots of hanging pieces that require a mountain of TLC. Even more importantly, though, is the fact that there are a lot of places where both your drilling and cutting have to be extremely precise, such as the musical notes at the bottom of the piece and the strings of the violin. These areas must be approached with great precision to avoid blow outs and failure to complete the cutting. This is one of very few pieces that actually put a little tremor in my hands while I was cutting! It doesn't happen to me often, but this piece definitely made me a little nervous.

As long as you keep those things in mind, the 1056 cuts this project features are quite "doable." I learned a few things as I went through the process of cutting this piece, and I will share those tips with you throughout the article. Hopefully, you will feel the same way that I did when I saw the original design, and know that you just have to cut it!

Begin by selecting your wood. I chose 1/8"-thick, grade a-4 oak plywood. Because I plan to add this design to my line of pieces for sale, I stacked three pieces of oak and inserted five pieces of No. 67 card stock, a heavy weight paper, between the pieces of wood. (For more detail on cutting paper, refer to my butterfly project in the September 2007 issue of Creative Woodworks & Crafts.) I placed a spring clamp on the edge of the wood to hold the stack tight while I applied blue painter's tape to the edges. (When applying the tape in this manner, bear in mind that the throat of the clamp must be big enough in order to feed the tape through.) To secure the remainder of the stack, simply repeat the process on the other three sides.

Next, apply a very heavy coat of spray adhesive to the back of the pattern, and apply it to the wood. While it is true that the heavy coat of adhesive can make pattern removal quite difficult, a light coat of glue can make cutting the project impossible. If the pattern lifts, especially while making one of the extremely critical cuts, you can be left trying to decide where to stop the cut without the benefit of the guideline on the pattern.

I recommend studying the pattern to map out how you will go about the cutting. This extra step in the process is often the difference between successfully completing a project, and an explosion of sawdust and splintered wood lying in the scrap pile. By studying the cutting ahead of time, you can identify areas of the project that need a little extra care or may need to be cut in a specific way. It is much better to identify these areas and make mental notes now than it will be as your saw blade is making 1400 strokes a minute along the cut line.

Drilling

The first step in ensuring precise drilling is to square your drill bit before you drill. Using a protractor, move the bit up and down, making sure it stays on the 90° line (both side to side, and front to back).



As you can see from the photo, there is no room for error when drilling and cutting these holes. It can be hard to get a feel for them by looking at an image of the completed project, so to provide a little perspective, I placed a dime on one of the unfinished cuttings (notice the fuzz in the cuts).

I recommend drilling your holes in the widest area you can, and close to where you want to start the cut. Because I knew I was going to use No. 2/0 and No. 1 Flying Dutchman spirals, I used a No. 68 bit for my drilling. For the sheet music, I drilled the notes wherever possible, and cut

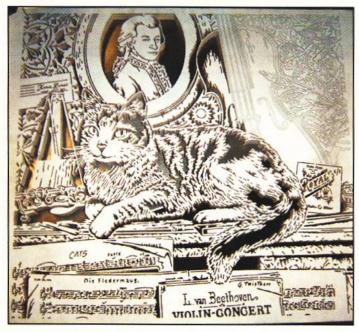
continued on page 36

out from there. I like to drill all my entry holes at one time, but feel free to use whatever method works for you.

Cutting

With the exception of a few tricky areas, the actual cutting of the project is fairly straightforward. I started with the cat's face, proceeded through the rest of the cat, and cut the top of the piano. At that point, I had a decision to make: either cut the violin next, or save it for last. Cutting it at this early stage offered the advantage of having less time invested in the cutting if I was unable to successfully cut the strings. However, the disadvantage was that the area would be very delicate once cut, and I risked breaking it while handling the piece as I made the numerous cuts left. My faith in my cutting abilities won out, mainly because I was concerned that I would forget to grab the piece in a "safe" area and, instead, end up damaging the cut strings while lifting the piece off the saw. So, I worked down through the sheet music across the bottom of the piece.

I tend to cut my projects using the same size blade all the way through because I don't like to change back and forth. However, this piece proved to be the exception. I found that, although it was easier for me to cut the straight lines using the No. 1 blade, it can be very tight coming through the entry hole drilled using a No. 68 bit. The No. 2/0 blade was much easier to insert and less likely to jump if the entry hole was drilled slightly crooked. For those reasons, I decided to use the No. 2/0 blade to cut the sheet music. There is not much room for sloppiness when working through this area. Go slow, and be extremely careful as you drill the holes, and you will get through just fine.



After taking a long deep breath when I completed the sheet music, I worked up the left hand side of the project and then across the top.

The next area requires some cutting in tight quarters. Just prepare yourself and jump right in! Work carefully, but steadily. Find the line, get the right feed angle, and cut until you have to reposition your hands. If you can reposition without turning off the saw, by all means, do so. If not, feel free to shut off the power, reposition, and resume.

First, I cut the main string. Working from left to right, I then cut the corresponding area below the main string. (That area is indicated by the dime in the photo.) If you have difficulty cutting the straight lines, you may want to experiment with speeding up your feed rate. I know it sounds like exactly the wrong thing to do, but think about it this way: try walking across the floor, placing your heel directly in front of your toes at a painfully slow pace. Now, compare the difficulty of walking like that with the comfort of your regular stride. Cutting will work the same



way, as long as you convince yourself you can do it.

After cutting the strings, I worked the outside of the violin, down to the package of strings. From there, I worked from left to right out to the edge and up, following the same procedure.

When you have finished all the cutting, I recommend using an air compressor to blow the dust out before you take the stack apart. This will help prevent any delicate areas from breaking off. I like to stand the cutting against an old window screen to help support fragile areas, as well as allow air to pass easily through the cutting.

Unpack the stack by peeling the tape from the back of the stack up to the pattern side. After carefully separating the pieces, blow the dust out again, this time from both the front and back. (Be aware that once unstacked, the cutting will be much more fragile. Do not blow the dust out without having something behind the piece for support, such as a window screen. It would be very unfortunate to have any "design modifications" at this point. Also, be sure to turn your pressure down to about 40 PSI.)

Now all that remains is a quick song and dance to wrap up this project!

Finishing up

If this is the first time you are reading instructions for one of my projects, you may be shocked by my upcoming suggestions. (Those of you who have been following my articles for a while know what is coming next!) After removing the dust and separating the stack, you now have a beautifully completed cutting...that is covered on the back side with all kinds of dangling little hairs! How in the world are we going to get them off? Easy...just grab hold of a propane torch. (Yes, I said torch, but before you decide I have lost my mind, just try it once.) I use a Bernzomatic plumber's torch, but any small, handheld torch will work well.

With the back side facing you, stand the completed cutting against something you don't mind scorching. (I use a two-foot-long piece of 1 x 12 yellow pine.) Turn the flame on the torch way down, and quickly wave it across the back of the cutting, staying a few inches above the surface of the wood. Take care to not move the torch too slowly, or to hold it in one place for any amount of time. We are waving an intensely hot flame over a thin piece of wood covered in "tiny hairs", which probably contain a bit of dust. It doesn't take long for a problem to arise that could potentially ruin a lot more than just your cutting.

Another note of caution: if you have used any solvent at all on your wood, or if you pre-finished it, DO NOT use this method to remove the fuzz. Solvents and finishes are all very flammable, and the combination could be devastating.

After charring all the fuzzies, lay the piece right-side down and very lightly rub the back using 220-grit sandpaper to remove the charred fuzzies. If you still see some fuzz that wasn't charred, fire the torch back up and repeat the process. When you are satisfied that you have removed all the fuzz, turn the piece over and take a good look at the front. If you see some minor scorch marks inside your cuts, simply fold a piece of the 220-grit sandpaper in half, and rub it lightly over the char mark. This will remove all but the most stubborn of marks with a minimum of effort.

So... are you ready to unveil your masterpiece and remove the pattern? It's time to deal with that heavy coat of adhesive we applied earlier. Fill a small container with low-odor mineral spirits or paint thinner, and grab an oversized toothbrush-type brush. Dip the brush into the thinner, and gently run it over the surface of the pattern. (The goal here is to apply the thinner, not scrub off the pattern.) Saturate the paper, and allow it to sit until the paper turns a grayish color. This usually takes less than 5 minutes. If, after 5 minutes, the paper hasn't taken on that gray color, reapply the thinner and wait 5 more minutes. When the paper turns gray, you should be able to grab a corner and peel the pattern off in almost one piece.

Just to be sure there is no residue left behind from the adhesive, dip the brush in the thinner once again, and this time lightly rub the surface of the wood with the bristles. Absorb any excess thinner by dabbing the surface of the wood with a dry cloth (clean cloth diapers work great!), and set the piece aside until it is dry.

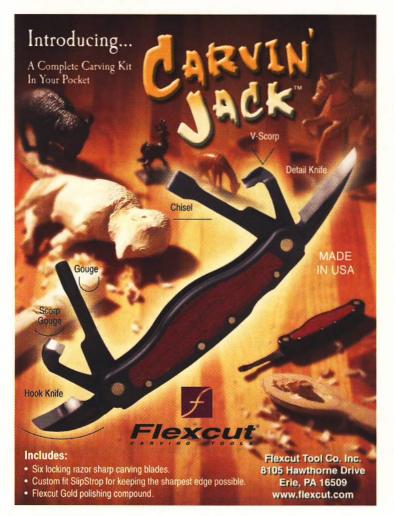
I use a 50/50 mix of boiled linseed oil (BLO) and paint thinner for my finish. Dip the piece into the mixture, being sure to cover all surfaces, and lift it out of the oil. Allow the excess to drip back into the container. Lay the wet cutting on some paper towels, and use a few more towels to blot the excess oil off the front. Allow the oil to fully penetrate the wood overnight. Apply two coats of spray lacquer for a final top coat.

I use black felt for my backers because its texture and color contrast beautifully with the oak. Due to the many very delicate areas in the cutting, I use spray adhesive to attach the backer. Spray a generous coat of the adhesive on the back of the cutting, spraying as close to straight on to the piece as possible to keep the adhesive out of the cuts. Lay the cutting down on the felt, and apply even pressure to make sure it is stuck. I like to run a rolling pin over the top to ensure all areas are secure.

I frame all of my pieces in professionally-made frames. It is easier than you think! If you can find a reasonable frame wholesaler in your area, I recommend giving it a try. It really adds that special finishing touch to something you have put so much of yourself into. Think about it—the cutting deserves it, and so do you!

Remember to enjoy the experience... Good Luck and Happy Scrolling! Until next time, keep the dust blowing and the smile showing.

Jeff has been scrolling for about five years, and designing for a little over four. He is an accomplished artist with scroll saw works hanging in galleries nationwide. To see more of Jeff's work, visit his website at www.advanced-scrollsawpatterns.com, or send a SASE to him at: 247 Lyle Road, Rossville, GA 30741.



# PS WOOD MACHINES



# Basics of Wood Preparation and Dimensioning - Part Two



by John Polhemus

n the first installment of this series (Creative Woodworks & Crafts, November, 2007), I listed the tools most commonly used in preparing and dimensioning wood at the non-commercial level. Those tools, in order of what I consider their importance to be, are: a jointer; a thickness planer; a band saw; a table saw; and a surface sander. I discussed the uses and importance of the jointer and planer in that first installment. This second installment deals with the band saw, which I consider to be the "third most important" tool for this task. As with the first segment, this article is geared toward those who are not familiar with how wood is prepared and dimensioned at the non-commercial level.

The job of the band saw, in the context of this article, is resawing, or cutting a thick piece of wood into two or more thinner ones. The task itself is simple. Clamp a fence to the band saw table, then stand the wood to be resawn on edge and hold it against the fence. Cut the wood by simply pushing it into the blade. Some factors that need to be considered in order to achieve the desired results include: band saw type, size and power; wood preparation; fence type; and blade selection. Following the manufacturer's instructions for proper setup and adjustments is also vital for successful resawing.

# Band Saw Type, Size and Power

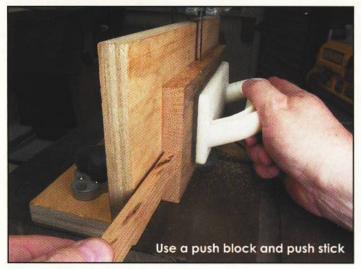
I mentioned in the previous article that bench-top jointers, planers, and table saws are worthy tools for a scroller. When it comes to resawing, however, a bench-top band saw is not a good choice because it just doesn't have the power or rigidity required for the job. At the other end of the spectrum, there are band saws specifically designed for resawing, ranging from ones meant for light industrial use to commercial use. The price and shop space they take up is considerable, making it hard for most scrollers to justify purchasing them unless they plan on doing lots and lots of resawing.

This article focuses on a general-purpose, 14" wood-cutting band saw, with an optional riser kit to raise the standard 6" depth-of-cut capacity to 12". This will suit the needs of most scrollers. (If the band saw manufacturer offers a model with a riser kit they have installed, the motor size will be powerful enough to handle the load of the increased depth-of-cut capacity. If you are going to install the riser kit, confirm (preferably in writing) that the motor size supplied with the band saw is powerful enough.)

Buying a used band saw is also a viable option. They turn up quite frequently in the want ads, sometimes with a riser kit already installed. Before buying a used band saw, check the model number with a dealer who sells that brand to be sure a riser kit and replacement parts are available.

### **Wood Preparation**

It is important to correctly prepare the wood for resawing. Otherwise, the blade tracking, or path you want the band saw blade to cut, can be affected if there is pressure between the fence and the blade. Be sure to work with lenaths of wood that are easily handled. The surface of the wood that will be against the fence should be straight and flat, along with the edge of wood that will rest on the band saw table. That edge should also be square to the surface against the fence. (As discussed in the previous installment, a jointer and planer are used to prepare these surfaces.) If the surface of the wood against the fence is not straight and flat, irregularities in the surface will force the wood away from the fence, creating pressure between the fence and blade. If the edge resting on the band saw table is not square to the surface against the fence, the wood could rock side to side, again creating pressure between the fence and blade.



In addition to tracking problems, the pressure can also cause the blade to distort or bow within the wood as it cuts, resulting in a piece of wood that is unusable. If the distortion or bowing is severe enough, it could also cause the blade to unexpectedly exit the side of the wood, possibly causing injury. To be safe, always use a push block against the side of the wood and a push stick on the end of the wood.

Fence Type

Two types of fences are commonly used on a band saw: a finger fence, and a flat fence. Both fences are set a measured distance away from the blade that is equal to the desired thickness to be sawn. Each type of fence has its own advantages and disadvantages. Band saw manufacturers usually offer fences as an optional purchase. Tool dealers and band saw blade retailers may also have aftermarket fences available. Of course, there is always the popular alternative of making your own fence.

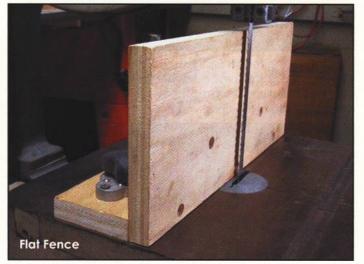


A finger fence derives its name from the narrow, finger-like point of contact against which the wood is firmly held to keep it standing straight and parallel to the blade. The narrow point of contact allows the wood to be pivoted against the finger as it is being cut, and this pivoting allows you to control the blade tracking. The edge of the finger is typically rounded or pointed to optimize the pivoting ability.



Prior to cutting, a line for the blade to follow has to be drawn or scribed onto the edge of the wood. (I prefer using a pencil line because I can see it better than a scribed line.) There are plenty of marking jigs and gauges you can buy or make for drawing or scribing the line. I use an *IncraJig* marking gauge. Because it requires two hands to use it, I have to clamp the wood in a bench vise to draw the line. Some marking jigs and gauges are designed to hold the pencil or scribe, leaving you with one hand free to hold the wood rather than having to use a clamp.

An advantage of a finger fence is being able to resaw a bowed piece of wood. (The edge should still be prepared as described previously to prevent it from rocking and creating pressure between the fence and blade.) However, a disadvantage to using the finger fence is that the cutting line must be followed accurately. If not, the surface will not be cut uniformly.



A flat fence provides a wide contact area against which the wood can be firmly held, keeping it standing straight and parallel to the blade. The wide contact area prevents the wood from pivoting, so good wood preparation is especially important when using a flat fence. One advantage of a flat fence is the uniformly even cut surface it produces. Also, because the wood can't be pivoted, there's no need to draw or scribe a line on the edge of the wood. Unfortunately, that also means you cannot

continued on page 40

continued from page 39

pivot the wood to correct a blade tracking problem.

Basically, one type of fence is not better than the other. Each is designed differently, with its own strengths and weaknesses. By having both types on hand, you will be prepared for just about anything you may want to resaw.

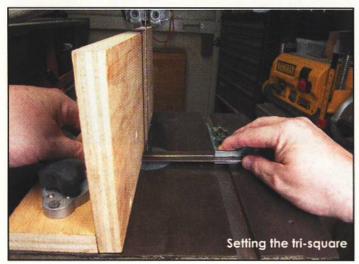
# Fence Set-Up

Purchased fences typically have a pair of rails attached to the front and back edges of the band saw table. The rails need to be set parallel to each other and square to the blade. The fence is then attached by sliding it onto the rails, adjusting it square to the rails, and clamping it in place. The fence can be moved anywhere along the rails, and it will be square to the blade.

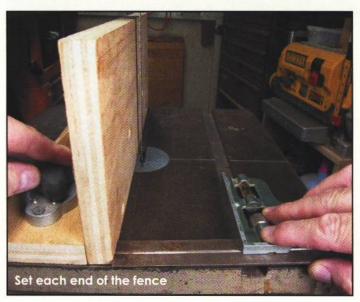
Homemade fences are usually clamped to the band saw table using a pair of C-clamps. Flat fences need to be squared to the blade each time they're set up, for which I use a tri-square.



First, place the fence on the band saw table. Measure the distance from the blade to the fence. Adjust the fence until the measurement matches the desired thickness of the wood you are cutting.

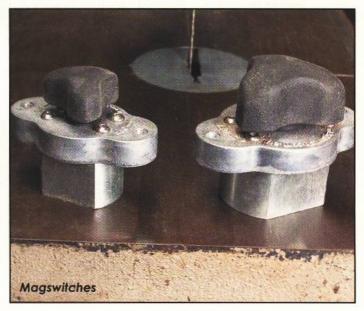


Next, measure the distance from the edge of the miter slot to the fence, right in front of the blade. Set the tri-square to that measurement.



Use the tri-square to measure from each end of the miter slot in order to set each end of the fence. When the measurements are equal, clamp the fence to the band saw table. (If your saw doesn't have a miter slot, measure from the edge of the table, instead.) Of course, the miter slot or table edge needs to be square to the blade in order for the fence to be square to the blade. If it is not, adjust it by loosening the mounting screws that hold the table to the saw, square the table to the blade, and re-tighten the mounting screws.

Setting up a finger fence is a bit different. The center of the edge of the finger needs to be set slightly before, or even with, the lead edge of the blade at the desired distance away from the blade.



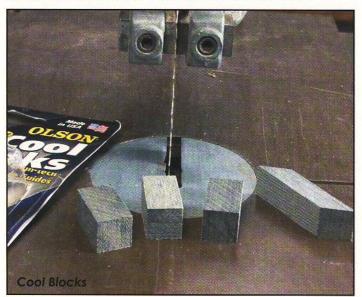
You may have noticed in the photos of the finger fence and flat fence that I don't use C-clamps to hold the fences on the band saw table. The ribs that are cast into the underside of the table to provide strength can make it difficult to use C-clamps. Instead, I use Magswitches. Set the fence in place, turn the knob on the Magswitches,

and the fence isn't going anywhere! I also use Magswitches to secure the jigs I use on my drill press for the same reason. (I need to have a piece of sheet metal cut to fit my router table so I can use the Magswitches with the fence and jigs I use on that, as well!) Magswitches are available in two sizes, 20mm (Order No. 21910) and 30mm (Order No. 28844), from Rockler Woodworking and Hardware, 1-800-279-4441.

### **Blade Selection**

Band saw blades have come a long way since the band saw was invented. Advances in blade design and metallurgy have yielded a wide range of choices. This is particularly true for the blades designed for resawing using general-purpose, 14" wood-cutting band saws.

Two popular brands that continually rank at the top of reviews are Wood Slicer, designed and sold exclusively by Highland Hardware (1-800-241-6748), and Timber Wolf, which is available through vendors including PS Wood (1-800-939-4414). I own and use both brands, although my preference leans towards the Wood Slicer because of its unique tooth configuration. It has a non-uniform spacing of the teeth that breaks up the harmonic resonance (vibration) created by evenly-spaced teeth. They are much quieter and produce a very smooth cut. (The harmonic resonance effect can be compared to the sound made by running a wet finger around the rim of a wineglass. The even speed and consistent friction of your finger sets up a harmonic resonance that makes the glass ring quite loudly. The evenly-spaced teeth of a band saw blade, combined with the consistent speed of the saw, create the same effect while cutting wood.) Just as with scroll saw blades, having a few different types of band saw blades on hand for various jobs is a good idea.



I recommend replacing the steel blade guides that typically come in a new band saw with Cool Blocks, in order to increase the longevity of the blades. Cool Blocks are made from a graphite-impregnated, phenolic-laminated material. They can be set closer to the blade than steel guide blocks because the graphite acts as a lubricant

and the phenolic-laminated material won't damage the blade. Nearly all band saw blade dealers sell Cool Blocks for a variety of band saw brands, including the two mentioned previously.

# Resawing with a Hand Saw

If your circumstances won't allow you to purchase a band saw, you can still reap the benefits of resawing by using a hand saw, instead. It does take more time and effort, but it's also strangely satisfying! (Compare it to using a scroll saw versus a laser to cut a project. It takes more time and effort to scroll saw a project, but it's personal, and a labor of love. It's faster and easier to put a piece of wood under a laser, but then it's just a job, and it isn't personal.) Being able to resaw by hand is also worthwhile for the times when the size of wood you want to resaw is too small to be comfortably handled by a band saw.

The shape of the saw teeth, spacing, and set are different between a crosscut saw and a ripsaw. A crosscut saw is used to cut across the grain of a piece of wood. A ripsaw is used to cut with the grain. Because resawing is cutting with the grain, a ripsaw should be used.

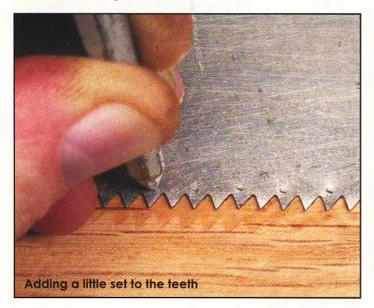
American hand saws cut on the forward, or push, stroke; Japanese hand saws cut on the backward, or pull, stroke. I've always wanted to try a Japanese hand saw, and thought this would be the perfect time to try it as long as I was writing this article. I acquired a 240mm Harima-Daizo Ryoba saw (Order No. MS-JS310.01) from Tools for Working Wood (1-800-426-4613), a company that specializes in fine hand tools.

Before using an American hand saw for resawing, I like to remove most of the set of the teeth. First, remove the handle from the blade, and lay the blade on a flat, hard surface, such as the cast iron top of a table saw or the base of a bench-top drill press.

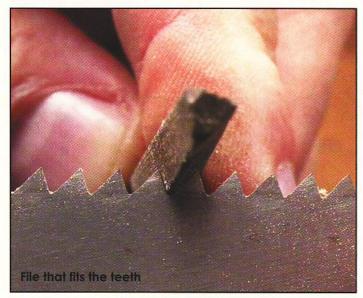




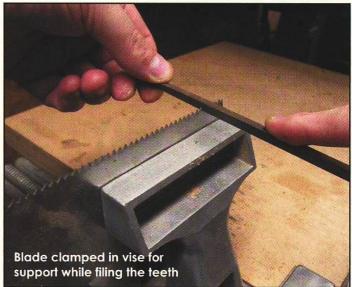
Lightly tap the teeth along the entire edge using a small hammer. Turn the blade over, and repeat on the other side to finish altering the set.



If too much set is removed, you may find the saw blade tries to bind in the wood as you're cutting. A little more set can be added to the teeth by using a center punch to make a small indentation on every other tooth on each side. (Before doing that, I recommend applying a good-quality paste wax that does not contain silicon to the blade to reduce friction. Silicon is difficult to remove from the wood, and causes problems with some finishes.)



Sharpen the teeth afterward, and on a regular basis from then on, because they become dull from use. To sharpen the teeth, use a small, triangular-shaped machinist's file that fits the profile of the teeth.

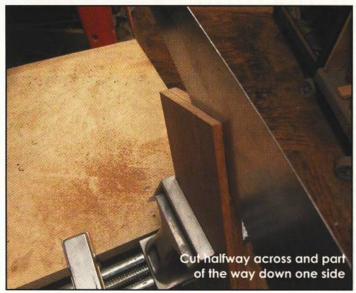


Clamp the blade in a bench vise, with the teeth close to the top of the jaws to provide rigid support. Orient the machinist's file to the angle of the first tooth, and make four or five strokes across the tooth. Move the file to the next tooth, and make the same number of strokes across that tooth. Repeat the process for each tooth along the entire length of the blade. (It goes pretty quickly once you get the feel of it.) After all the teeth have been sharpened, reattach the handle to the blade. When not in use, hang the saw so the blade does not come into contact with anything.

The wood needs to have a line drawn or scribed onto the ends and edges for the hand saw to follow. This can be done the same way as when using a finger fence. After the line is drawn, the resawing can begin.



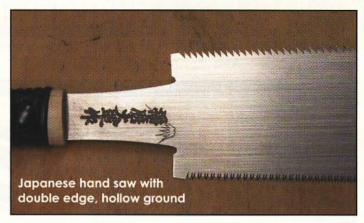
Clamp the wood in a bench vise at an angle that allows you to easily see both the line on the end and a side edge at the same time. Hold the saw parallel to the wood, and start cutting at the corner.



Follow the lines on the end and the edge of the wood until you've cut halfway across the end and part way down the side. Turn the wood around in the vise, and cut from the opposite corner in the same manner. Cut until you meet the first cut that was made halfway across the end.

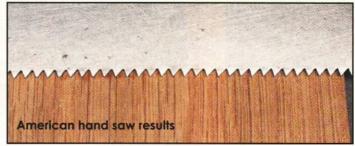


When the two cuts meet, reposition the wood in the bench vise, and cut straight down across the full width of the wood until you reach where you stopped cutting on the edges of the wood. Repeat this process to continue cutting the length of the wood. Cutting this way is easier, faster, and more accurate than trying to cut all the way across the width of the wood all at one time. When you get near the end of the wood, turn it over end for end in the bench vice so the cut can be completed. Fold up some paper, and place it in the kerf to keep it from closing up in the bench vise.



I must say, I was quite impressed with the Japanese hand saw! One thing I particularly liked about it is that it has teeth for crosscutting one edge and teeth for ripcutting on the opposite edge. I also liked that the blade is hollow ground to reduce friction, meaning the body of the blade is ground thinner than the edges. I'd always heard it takes less effort cutting with the pull stroke of a Japanese hand saw than it does with the push stroke of an American hand saw, but I wasn't sure I believed it. Well, I do now, and I highly recommend getting one if you want to do hand resawing!





As expected, the quality of the finished cut was also excellent.

It appears I've again pushed the limit of pages I'm allowed to use in one issue! I thought I could wrap up what I needed to say in this issue, but I was wrong. Alas, I tend to run off at the mouth (or keyboard!) too much. It's a good thing this article is only about the basics of wood preparation and dimensioning. Can you imagine how long it would be if I were qualified to write an *in-depth* article on the subject? I'll finish in the next installment with the table saw and surface sanders...I promise!

For questions concerning this article, send a SASE to John at: 3000 Charleton Ct., Waldorf, MD 20602; or email him at: fretsawyer@verizon.net.

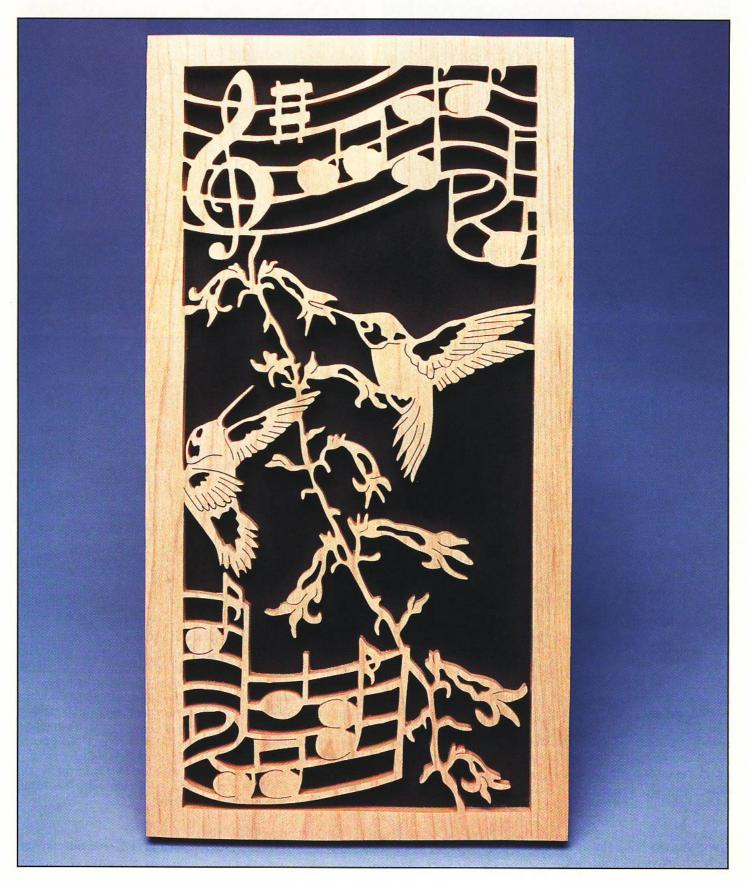






# **Hummingbirds Melody**

by Roy King, Scott Kochendorfer, and Bob Valle of White Tail Designs, Ltd.



# **SUPPLIES**

Wood: maple or wood of choice—one piece 1/4" x 5-1/2" wide x 10-1/2" high; Baltic birch plywood—one piece 1/8" x 5-1/2" wide x 10-1/2" high (for backboard)

Tools: scroll saw with No. 2/0 or No. 2 reverse-tooth blades; drill with 1/16" drill bit

Temporary-bond spray adhesive

Clear packing tape

Masking tape

Sandpaper in medium and fine grits

White craft glue

Polyurethane spray in satin finish, or clear finish of choice

Flat black spray paint

Hanger

## INSTRUCTIONS

Step 1. Photocopy the pattern, saving the original for future use. Trim the pattern to fit the piece of maple. Apply a light coat of temporary-bond spray adhesive to the back of the pattern, and allow the adhesive to slightly dry until it feels tacky like masking tape. Attach the pattern to the wood. Cover the pattern area with clear packing tape. (The tape lubricates the blade, which helps prevent burning.)

**Step 2.** Drill for all entry holes. Cut out all internal portions of the design, but do not cut the perimeter lines yet.

**Step 3.** Using masking tape, attach the piece of plywood to the back of the maple, aligning the outer edges. Finish cutting the perimeter of the pattern, cutting through both thicknesses of wood at the same time. This will ensure that the backboard exactly matches the plaque outline. Separate the two pieces and remove the masking tape.

Step 4. Using flat black spray paint, paint both sides and all edges of the backboard. Let dry. Apply the clear finish to the plaque, being certain to cover all the surface areas and fret-cut holes. Using white craft glue, attach the backboard to the plaque, being sure to align the edges. Set the piece on the work surface, place a weight on top of it, and let dry. Attach your hanger of choice to the back of the plaque.

For questions concerning this project, send a SASE to: White Tail Designs, LTD., 17713 South 66th Ct., Tinley Park, IL 60477, or email to: scrolled1@comcast.net.

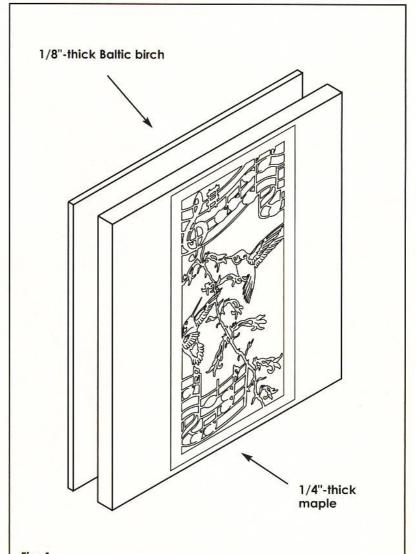
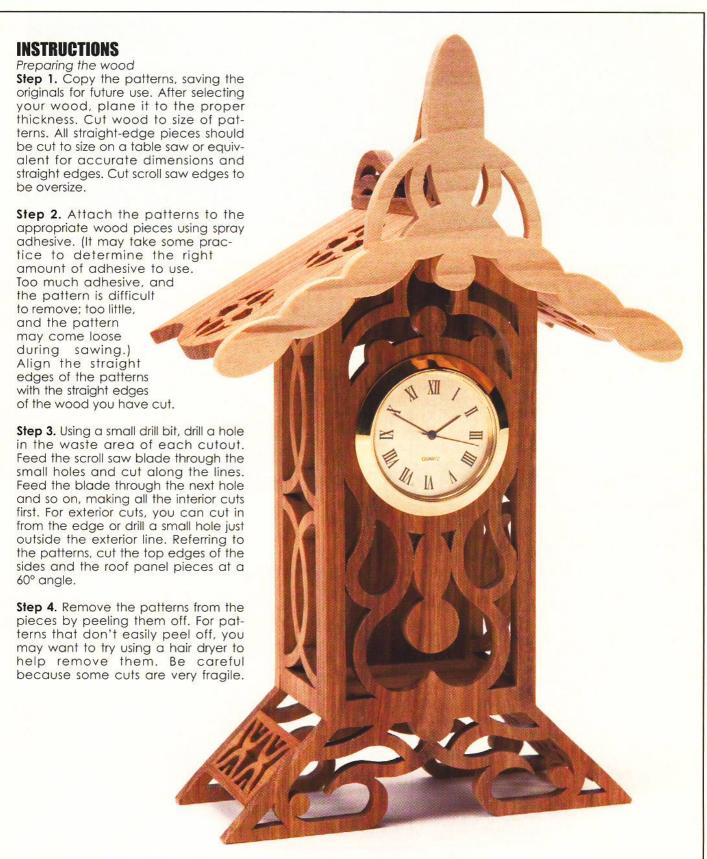


Fig. 1 Attach plywood to maple before cutting perimeter lines.



# **The Glasgow Clock**

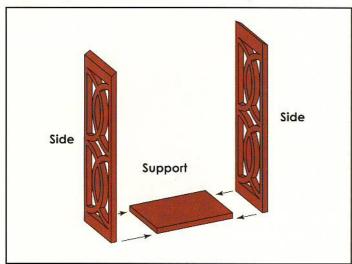
by Dan and Ray Wilckens



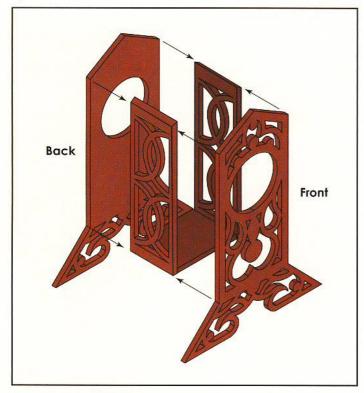
Sand the pieces using a belt sander or handheld sander. Remove any burrs and clean up any cuts using an X-Acto knife or a needle pick.

Assembling the clock

Note: On all seams, run a small bead of glue, and sand while the glue is still wet. This should fill any seams.



**Step 5.** Glue the sides to the support. These need to be flush to each other at the bottom, front, and back, and square to each other.



**Step 6.** Glue the front and back to the clock assembly. These need to be flush on the sides, and square to the assembly. (It is helpful to place a removable spacer in between the sides to keep them parallel to each other. Remove the spacer after the glue has dried.)

## SUPPLIES

Wood: 1/8"-thick wood of choice\*—two pieces 4-1/2" x 5-1/2" (for front and back), two pieces 1-1/4" x 4" (for sides), one piece 1-1/4" x 1-3/4" (for support), one piece 1-1/2" x 2-3/4" (for crown), two pieces 3/4" x 1-1/4" (for brace); 1/8"-thick wood of choice in contrasting color\*—two pieces 2-1/2" x 2-1/2" (for roof panels), one piece 3" x 4-1/2" (for pediment

(for roof panels), one piece 3" x 4-1/2" (for pediment)
Tools: scroll saw; drill press with very small drill bit for
starter holes; table saw or similar saw; planer for
proper wood thickness; belt sander or handheld
sander; assorted clamps; X-Acto knife and/or
needle pick

Temporary-bond spray adhesive

Masking tape

Double-sided tape

Sandpaper, assorted grits

Wood glue

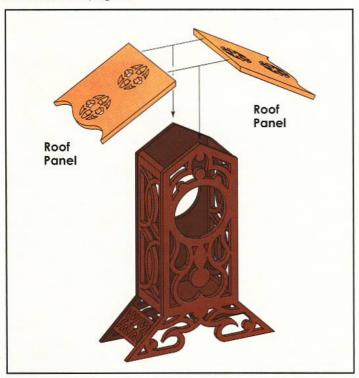
Oil finish of choice

- 2"-diameter mini clock insert, requiring 1-3/8"-diameter hole\*\*
- \*Available from Sloan's Woodshop, 888-615-9663; 3453 Callis Rd., Lebanon, TN 37090; www.sloanswoodshop.com.
- \*\*Available from Klockit, 800-556-2548, www.klockit.com, or Wildwood Designs, 800-470-9090, www.wildwooddesigns.com.

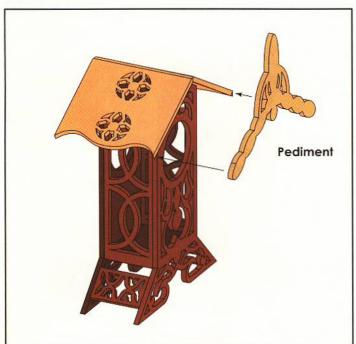


**Step 7.** Glue the braces to the clock assembly. These need to be centered on the angled sections, and flush with the edges.

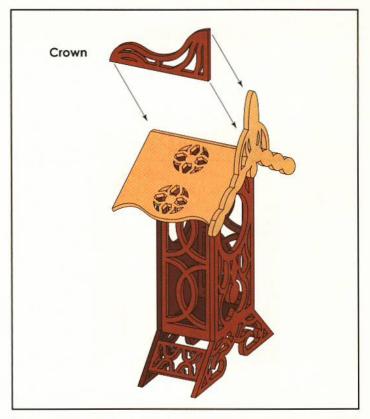
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**Step 8.** Glue the roof panels to the top of the clock assembly. They need to meet at the center point, and be flush with each other at the front and back of the clock assembly. Sand a 1/8"-wide flat section along the seam where the roof panels meet in order to accommodate the crown.

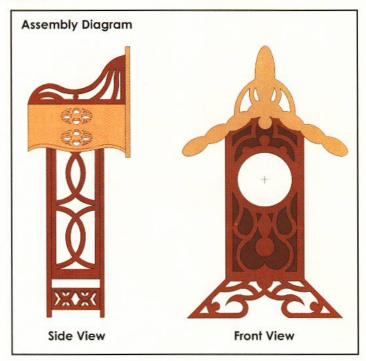


**Step 9.** Center the pediment on the front of the clock assembly, and glue in place.



**Step 10.** Glue the crown onto the flat section of the roof panels. It needs to be centered on the roof, and it also needs to be centered against the back of the pediment.

**Step 11.** Let glue dry for one hour. Apply oil finish following the manufacturer's instructions, and let dry completely. Install the clock insert, and sit back and enjoy your new clock!



For questions concerning this project, send a SASE to: Wilckens Woodworking, P.O. Box 520496, Independence, MO 64052, or email: wilkswood@aol.com.



# **Running Horses Hat Holder**

by Sheila Bergner-Landry and Tony Landry



# Introduction

This fun and simple project was inspired by my friend Brenda, who has loved horses all of her life. She has owned horses since she was a young girl, and I enjoy hearing her reminisce about how she would hurry home after school to ride her horse. She would spend hours riding across the Nova Scotia countryside—usually from dusk to dawn when there was no school!

Brenda lives about 15 minutes away from me, in the town of Doucetteville, on a beautiful piece of property with a barn, garden, pond, and several acres of hilly pastures. I never thought that there would be many horses in Nova Scotia, but since arriving here three years ago, I have learned that they are actually quite common.

An interesting piece of Nova Scotia history is Sable Island, which is a 42km long x 1.5km wide sand bar that is located approximately 160 km southeast of Canso, Nova Scotia, which is the nearest landfall. Shipwrecks, wild horses, seabirds, seals, and inaccessibility have endowed this narrow wind-swept sliver of sand with a special mystique for over 500 years. Extensive scientific research has been conducted about the island, and it is the subject of numerous definition.

# **SUPPLIES**

Wood: walnut or wood of choice—one piece 1/2" x 8" wide x 14" long (for hat); maple or wood of choice—one piece 1/8" x 2" wide x 10" long (for overlay pieces)

Tools: scroll saw with No. 2 reverse-tooth blades; drill press with assorted bits, including a 1/2" brad point drill bit and small bit to drill pilot hole for hanger hardware; planer (for proper wood thickness); handheld orbital sander with assorted grits (120-400) sandpaper; vacuum with soft-brush attachment

Temporary-bond spray adhesive Clear 2"-wide packaging tape

Clear-drying wood glue

Shaker peg with 1/2"-thick shank (one)

Delta interior/exterior brush-on varnish in satin finish, or varnish of choice

ducted about the island, and it is the subject of numerous documentary films, books, and magazine articles.

Sable Island's wild horses, which are perhaps its most famous wildlife, are now the only terrestrial mammals on the island (aside from the few human inhabitants). Although the romantic notion persists that Sable Island horses are descended from shipwreck survivors, the present-day horses are believed to be descendants of animals brought to Sable Island during the late 1700s. Introductions of small numbers of domestic horses occurred sporadically during the 1800s and early 1900s. (Visit www.greenhorsesociety.com for more information about this fascinating place.)

This hat holder project will be much appreciated by anyone who loves horses, and it makes a nice addition to a

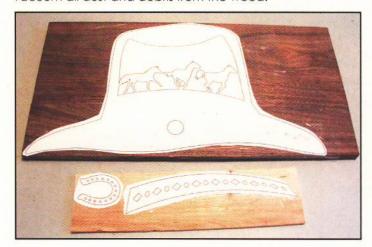
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home with a Western motif. The project can be modified to serve as a key hanger simply by substituting multiple small hooks for the larger shaker peg. Another idea would be to glue the horseshoe overlay to the top of the plaque, and decorate the brim with letters spelling the name of your favorite little cowboy or cowgirl. I would love to see what you come up with, so feel free to send me pictures of your finished projects!

# **INSTRUCTIONS**

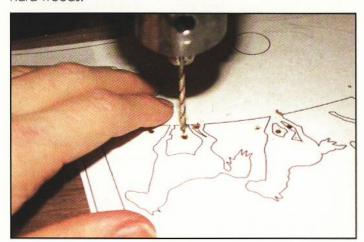
Preparing the wood

Step 1. If necessary, plane your boards to the proper thicknesses. Using the orbital sander and 120-grit sandpaper, sand both sides of the wood to remove the planer marks and smooth the surfaces. Graduate to 220-grit sandpaper, then 400-grit, until the surface of the wood is satin smooth. This will make it much easier to finish your project after cutting. Using the vacuum with the soft brush attachment, vacuum all dust and debris from the wood.



**Step 2.** Photocopy the patterns, saving the originals for future reference. Spray the backs of the patterns with a light misting of spray adhesive, and allow the adhesive to tack up for a few seconds until it feel as tacky as masking tape. Attach the patterns to the wood, paying attention to the grain direction.

**Step 3.** Apply a layer of clear packaging tape over the entire surface of the design to help prevent burning of hard woods.



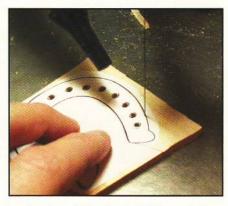
Step 4. Drill all the entry holes of the design. For the horse-

shoe overlay, drill each of the decorative holes the exact size shown on the pattern. Do not drill the hole for the shaker peg yet.

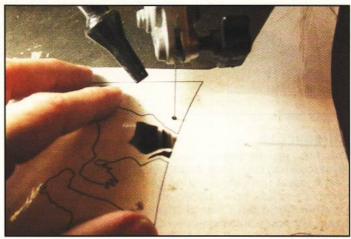
**Step 5.** Sand the backs of the pieces so they are perfectly flat. Use the soft brush attachment to vacuum excess dust from the pieces.

Cutting

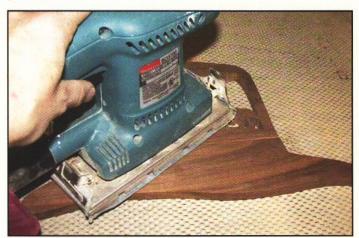
Step 6. Using the scroll saw with the No. 2 reverse-tooth blade, cut along the perimeter of the horseshoe overlay. Also cut the perimeter of the hatband after making all inside cuts. Set the overlay pieces aside.



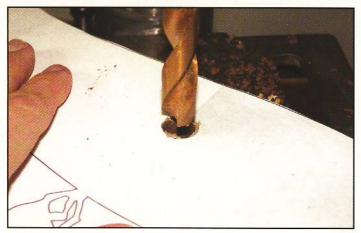
**Step 7.** Cut along the perimeter of the hat. (Although the inside cuts are usually made before cutting the perimeter, it is easier to maneuver the hat piece with the perimeter cut first. The hat piece is sturdy enough for this to be done safely.)



**Step 8.** Make the inside cuts of the design on the hat piece.



**Step 9.** Remove all patterns. Using the orbital sander and 120-grit sandpaper, sand all pieces. Progress to 220-grit, and finally 400-grit, until the surfaces are smooth.



**Step 10.** Reattach the hat pattern to the hat piece. Using the 1/2" drill bit, drill the hole for the shaker peg approximately 3/8" deep. (Set the depth of the drill press to ensure you do not drill through the back of the hat piece. This will give a neater appearance to the back of your project.)

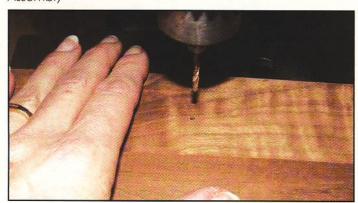


**Step 11.** Test fit the shaker peg in the hole to ensure it sits flat against the surface. If necessary, use the scroll saw to cut any excess from the length of the peg. (I needed to cut approximately 1/4" from my peg.)

**Finishing** 

**Step 12.** Thoroughly vacuum the pieces one final time to remove all dust and debris. Apply several coats of brushon satin varnish, sanding lightly between applications using 400-grit sandpaper to achieve a smooth and beautiful finish. (If you choose, you may also apply a satin spray varnish into the intricate cut-out areas.)

### Assembly



**Step 13.** Locate the center on the back of the hat piece, and mark the location for your hanger. Drill a small pilot hole to accept the hanger screw(s), making sure to first set

the depth of the drill so that you do not drill through to the front of the hat.



**Step 14.** Apply a generous amount of clear-drying wood glue to the back of the hatband overlay, and glue it in place on the hat.



Step 15. Glue the horseshoe overlay in place.



**Step 16.** Apply glue to the cavity for the shaker peg, and insert the peg into the hole. Let all glue dry. Attach the hanger to the back of the project.

For questions concerning this project, contact Sheila at 902-245-5865, or email her at: scrollgirl@comcast.net. You may also purchase other patterns by Sheila Bergner-Landry and download free brochures of her designs at her website, www.sheilalandrydesigns.com.



# **Majestic Eagle**

by Don Calhoun

## Introduction

Like many artists, I take my design inspiration from nature, in hopes to preserve its good fortune for generations to come. On a recent walk along the northwest coast, I noticed a pair of eagles soaring on the afternoon thermals. Their beauty and grace just "screamed" authority! As I watched them rule the sky on their seven-foot wingspans, another eagle started voicing his protest of some displeasure. I located him perched not far away on top of an old fir tree. He presented a cagey and classic image, perfect for a scrolling pattern, and thus I created this majestic eagle pattern.

The pattern is a bit of a challenge because the further you get into it, the more fragile it becomes. However, if you use care and take your time, you should not have any problems. I provide my recommendations for cutting this piece in the instructions, but feel free to use your own techniques.

# SUPPLIES

Wood: maple burl with natural edge—one piece 5/8" to 3/4" x 18" x 22" (size of piece shown is approximately 16" x 29"; size of pattern area is approximately 11" x 15")

Tools: scroll saw with No. 2/0 spiral (35 TPI) blades and No. 2/0 flat (27 TPI) blades; drill with 1/32" bit; belt sander and orbital palm sander with 80-, 220-, and 320-grit sandpaper; small butane torch

Carbon paper

Pencil or stylus

Quick-dry, permanent-bond glue stick Sander sealer

Clear brush-on and spray-on finish of choice

Natural bristle brush

3- to 4-ply mat board for backer, approx. 11" x 15

3- to 4-ply mat board for backer, approx. 11" x 15" to cover pattern area

# INSTRUCTIONS

**Step 1.** When selecting a piece of wood to complement this design, look for an irregularly-shaped piece of wood with a natural edge and the bark attached. I chose a piece of big-leaf maple burl. Make sure there are no mill marks or imperfections on the wood. Using a belt sander and 80-grit sandpaper, sand the surface of the wood. Work up to 320-grit sandpaper, being sure to remove all sanding dust between grit changes.

**Step 2.** Photocopy the pattern, saving the original for future use. Use carbon paper and a pencil or stylus to transfer the pattern to the wood.

**Step 3.** Drill blade entry holes for the interior cuts. (I recommend drilling only the holes for the areas that you will be cutting during that sitting.)

**Step 4.** Use a zero-clearance insert and a very slow feed rate when cutting this piece. There are some very delicate areas, so be sure to set the saw speed to slow. After completing a cut, do not remove the waste piece. Instead, place a piece of masking tape on the back of the cutting to hold the waste piece in place. (Keeping the waste pieces in place provides extra stability and prevents breakage.)

**Step 5.** After completing all cutting, and with the waste pieces still in place, sand the front of the piece to remove any marks or imperfections using the orbital sander and 320-grit sandpaper. Let the weight of the sander do all the work, allowing it to glide over the piece. Do not apply any downward pressure.

**Step 6.** Carefully remove the masking tape from the back of the piece, and very gently remove the waste pieces. Be aware that the piece will be very fragile at this point, and

you will need to exercise great care when handling the piece during the next few steps.

**Step 7.** A very effective way to remove burrs from the back side is to wave the flame of a small craft butane torch near the surface of the wood. While this method is useful because it doesn't create any vibration, and therefore reduces the chance of breakage, it is also dangerous. The torch burns very hot, so you must be certain to always keep it moving. (Note: if you have applied any finishes or solvents to the wood, do not use the torch.)

**Step 8.** After burning off the burrs, make any necessary final touch-ups to the surface by sanding the wood by hand using 320-grit sandpaper.

**Step 9.** Applying the finish is a three-step process. First, following the manufacturer's directions for application and drying time, apply sanding sealer to the wood using a natural bristle brush. When dry, lightly hand sand the piece using 320-grit sandpaper. Next, apply several coats of clear gloss using a natural bristle brush. Allow three days for the gloss to dry completely before again lightly hand sanding the piece using 320-grit sandpaper. For the final step, apply numerous coats of clear spray-on finish to achieve depth and a high gloss. Let dry completely, for approximately three to four days.

**Step 10.** Select a heavy-ply mat board for the backer to provide extra support to the cutting. Cut the mat board to size, making sure it backs the entire cut-out area of the design. Attach the backer to the wood using a permanent-bond glue stick. Display as desired.

For questions concerning this project, email Don at: donald\_c98503@comcast.net.





# **Napkin Holder**

by Gary MacKay



### Introduction

This napkin holder is an easy weekend project. The grill fretwork on each side is stack-cut using two 1/4"-thick pieces of wood. The completed fretwork is then glued onto a darker piece of wood, making the scrolled design easily visible.

### INSTRUCTIONS

Step 1. Photocopy the pattern, saving the original for future use. Cut out the pattern along the outer perimeter. Using temporary-bond spray adhesive, attach the pattern to one 1/4" x 5" x 7" piece of poplar. Stack this piece on top of the other 1/4" x 5" x 7" piece of poplar. Apply clear packaging tape over the pattern, wrapping the tape around the two pieces of wood to secure the stack.

### SUPPLIES

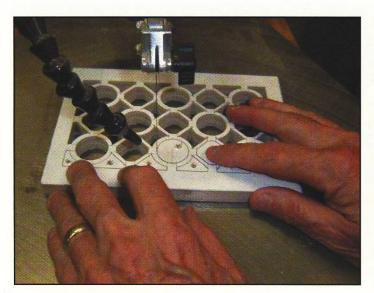
Wood: poplar or wood of choice—two pieces 1/4" x 5" x 7" (for front and back fretwork), two pieces 1/4" x 5" x 3" (for sides), one piece 1/4" x 3" x 8" (for bottom); walnut or wood of choice—two pieces 1/4" x 5" x 7" (for front and back), two pieces 1/4" x 5" x 3" (for sides), one piece 1/4" x 3" x 8" (for bottom)

Tools: scroll saw with No. 5 reverse-tooth blade; drill with

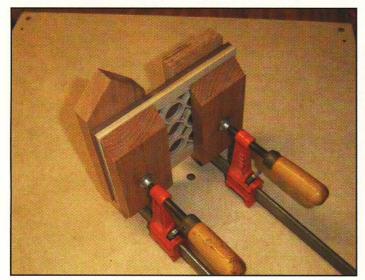
1/8" drill bit; two screw-type clamps; four scrap wood

clamping blocks; belt sander Temporary-bond spray adhesive Clear packaging tape Sandpaper, assorted grits Wood glue

Clear finish of choice



**Step 2.** Drill 1/8"-diameter holes where indicated on the pattern, and use a No. 5 scroll saw blade to cut out the frets.

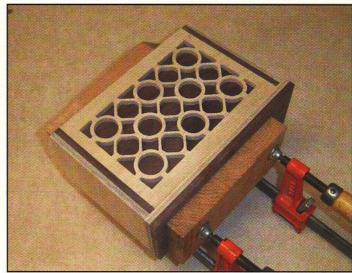


**Step 3.** Separate the two stacked pieces, and sand off any wood burrs. Glue one  $1/4" \times 5" \times 7"$  poplar fretwork piece to one  $1/4" \times 5" \times 7"$  walnut piece, being sure to align the edges, and clamp in place. Glue one  $1/4" \times 5" \times 3"$  poplar piece to one  $1/4" \times 5" \times 3"$  walnut piece, and clamp in place. Repeat for the remaining  $5" \times 7"$  and  $5" \times 3"$  pieces of poplar and walnut. Glue the  $1/4" \times 3" \times 8"$  poplar piece to the  $1/4" \times 3" \times 8"$  walnut piece, and clamp in place.



**Step 4.** Glue the two  $1/2" \times 5" \times 3"$  sides to the two  $1/2" \times 5" \times 7"$  front and back pieces. (The poplar layers should be on the outside.) Clamp in place.

**Step 5.** Using the belt sander, sand the top and bottom edges of the napkin holder level.



**Step 6.** Glue the  $1/2" \times 3" \times 8"$  bottom piece in place, and clamp to secure.

**Step 7.** When all glue is dry, apply your clear finish of choice.

For questions concerning this project, please send a SASE to: Gary MacKay, 2779 Canvasback Trail, Myrtle Beach, SC 29588.



# **Sleigh Candy Tray**

by Sue Mey



# Introduction

The idea of Santa flying in his reindeer-pulled sleigh to deliver toys to children around the world has always captured the hearts and imaginations of parents and children. (Of course, due to the time zones, Santa actually has 31 hours to deliver gifts!) This useful sleigh candy tray makes a lovely Christmas decoration when painted in the traditional red and green colors; however, it can also serve as an attractive winter season display if finished with iridescent white or silver paint.

Patterns are provided for making two versions of the sleigh—a 6-3/4"-wide model, and a narrower 4"-wide one.

# SUPPLIES

Wood: plywood, MDF, or hardwood of choice—two pieces 1/4" x 6-1/4" x 3-1/2" (for side panels), two pieces 1/4" x 4" x 1-1/4" (for front/back panels on narrow sleigh), two pieces 1/4" x 6-3/4" x 1-1/4" (for front/back panels on wide sleigh), one piece 1/4" x 3-3/4" x 4-1/2" (for narrow sleigh base), one piece 1/4" x 6-1/2" x 4-1/2" (for wide sleigh base)

Tools: scroll saw with No. 5 reverse-tooth blade; drill press with 3/32" bit; palm sander; medium-grit sanding sponge; clamps or rubber bands; ruler; square

Temporary-bond spray adhesive Masking tape
Thin double-sided tape Sandpaper, assorted grits Wood glue Pencil

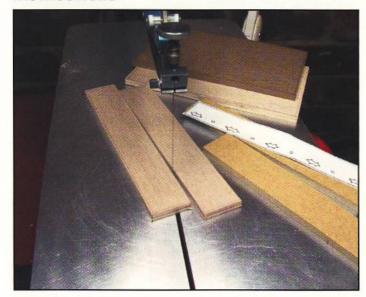
Hard-bristled paintbrush Spray paint in green, red, and white Light oak wood stain (optional)

Medium-sized artist's brush (optional) Lint-free cloth

Clear spray varnish (optional)

\*If using the finished piece to hold food, be sure any finishes or paints used are non-toxic.

# INSTRUCTIONS



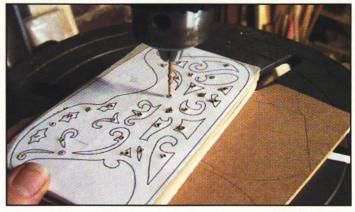
Step 1. Cut the wood to size using the scroll saw. Ensure that the grain of the wood runs in the same direction for the base and panels. Use a ruler, square, and sharp pencil to measure and mark the outlines for the base pieces. (Note that two sizes of bases are listed, depending upon whether you choose to make the narrow or wide sleigh.)



Step 2. Use small pieces of double-sided tape to join the work pieces for the side panels and those for the front/back panels.



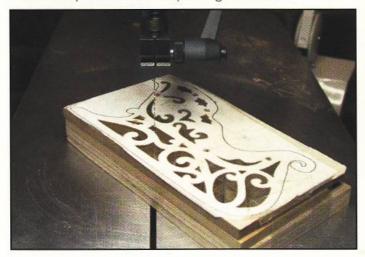
Step 3. Apply a layer of masking tape to the top of each stack. Photocopy the patterns, saving the originals for future use. Using temporary-bond spray adhesive, attach the patterns to the masking tape.



Step 4. Drill the blade entry holes using the 3/32" bit. Use

continued on page 58

sandpaper or a scraper blade held at a slight angle to remove any burns created by drilling the holes.



**Step 5.** Thread the No. 5 reverse-tooth blade through the blade entry holes, and make the inside cuts of the patterns.



**Step 6.** Use the disc sander to straight-sand the edges of all the rectangular work pieces up to the pattern lines or drawn pencil lines. Sand the bottom straight edge of the sleigh work pieces.



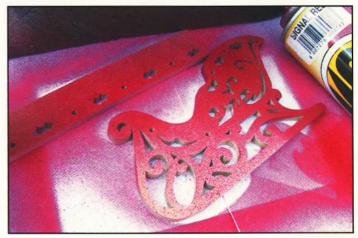
Step 7. Cut along the perimeter of the sleigh pattern.



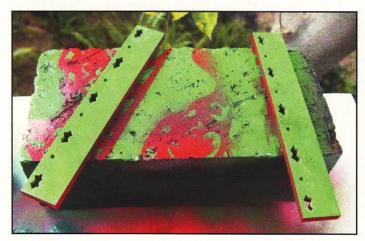
**Step 8.** Remove the patterns by peeling off the masking tape. Pry apart the work pieces by carefully inserting a scraper blade between the layers. Remove the double-sided tape.



**Step 9.** Use a medium-grit sanding sponge to remove any burrs from the work pieces. Sand the pieces, first using 150-grit sandpaper, then 320-grit, until you have achieved a smooth finish. Be careful not to catch and break any fragile pieces. Use a hard-bristled paintbrush and a lint-free cloth to remove all sanding dust.



**Step 10.** If making your tray from MDF, apply several coats of red spray paint to the outer surfaces of the work pieces, letting each coat dry before applying the next.



**Step 11.** In the same manner, paint the inner surfaces green.



**Step 12.** Lightly spatter the painted pieces with white paint.

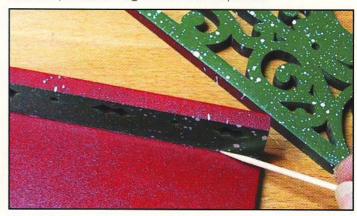
**Step 13.** If making your tray from plywood, you may choose to apply wood stain to all surfaces of the work pieces. Use a medium-size artist's brush to reach the inside surfaces of the piece cuts. Set the pieces aside to dry.



**Step 14.** Use wood glue to assemble the project. First, glue the front and back panels to the sides of the base. They should be flush at the ends.



**Step 15.** Referring to the photograph, position the sleigh side pieces against the base assembly. The ends of the sleigh should extend evenly from both sides. When satisfied with the placement, glue the sides in place.



**Step 16.** Remove excess glue using a toothpick, scraper blade, or a damp cloth.



**Step 17.** Apply clamps or wrap large rubber bands around the tray to secure the pieces until the glue is dry.

**Step 18.** Apply several thin coats of clear spray varnish if the tray is made from natural wood, allowing each coat to dry thoroughly before applying the next.

I live in Pretoria, South Africa, and have been scrolling for about 12 years. I can be contacted at 27 82 492 5869 (cellular), or via email at: sue@scrollsawartist.com. To see more of my work or patterns available for purchase, visit www.scrollsawartist.com.



# **Divine Dragon**

by Roy King, Scott Kochendorfer, and Bob Valle of White Tail Designs, Ltd.



# SUPPLIES

Wood: maple or wood of choice—one piece 1/4" x 9" wide x 10" high (for dragon); cherry or walnut—one piece 1/2" x 7-1/2" wide x 11" high (for plaque)
Tools: scroll saw with No. 2/0 or No. 2 reverse-tooth blades; drill with 1/16" bit; router with 1/4" roundover bit

Temporary-bond spray adhesive

Clear packaging tape

Sandpaper in medium and fine grits

White craft glue

Satin polyurethane spray or clear finish of choice

Plaque hanger

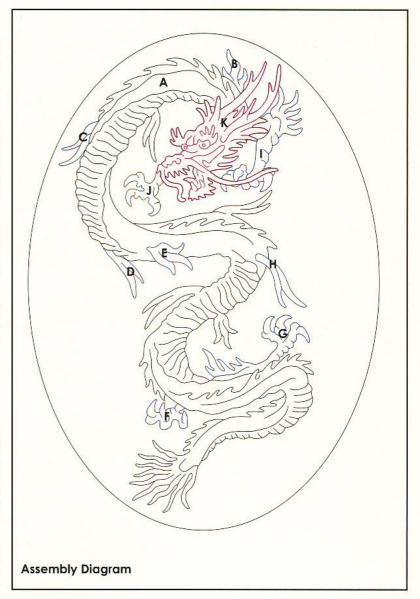
# INSTRUCTIONS

Cutting

- **Step 1.** Photocopy the patterns, saving the originals for future use. Apply a light coat of temporary-bond spray adhesive to the backs of the patterns, and allow the adhesive to tack up until it feels sticky like masking tape.
- Step 2. Attach the oval plaque pattern to the cherry or walnut, and attach the dragon patterns to the maple. Apply a layer of clear packaging tape over the pattern areas. (The tape is available at most office supply stores, and it helps lubricate the scroll saw blades to prevent burning of the wood.)
- Step 3. Drill all entry holes and make all internal cuts on the dragon pieces. Cut the perimeter of the pieces last. Remove the patterns and position them on an extra copy of the pattern to keep them in order.
- Step 4. Cut out the plaque, following the oval outline. Remove the pattern, and sand the surface smooth. Rout the top edges of the plaque using a 1/4" roundover bit.
- Step 5. Apply your finish of choice to all pieces, and let dry completely.

Assembly

- Step 6. Refer to the photo and assembly diagram when positioning the dragon pieces on the plague. Glue pieces B, C, D, F, G, and I to the back of the main dragon piece (A). Glue pieces E and H to the top of the main dragon piece. Glue piece J to the back of piece K. Glue the assembled J/K piece to the top of the main dragon piece. Let glue dry.
- Step 7. Center the dragon on the plaque, and glue in place. When dry, attach a wall plaque hanger to the back of the plaque.



For questions concerning this project, send a SASE to: White Tail Designs, LTD., 17713 South 66th Ct., Tinley Park, IL 60477, or email to: scrolled1@comcast.net.

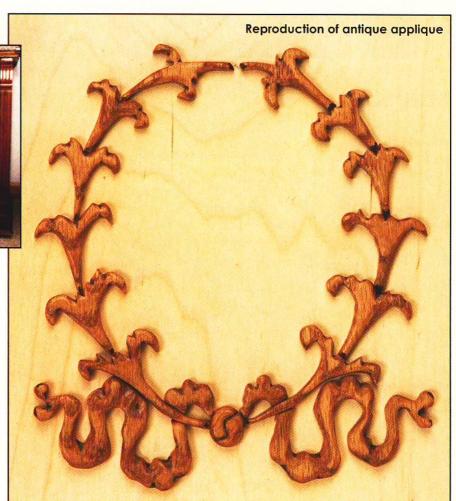
# Antique Applique Reproduction



Original sewing cabinet

# Introduction

Many years ago, my grandmother gave Karen, my wife, her antique Illinois sewing machine. Although I never thought much about the machine itself, I always admired its solid oak cabinet—especially the applique on its door. I have never investigated how it was made, but it almost looks as though a cakedecorating tool was used to create it. It is not made from wood, and I have heard this type of applique can be destroyed during the stripping and refinishing process. I believe I have developed a technique for creating pretty good reproductions of these great old designs, and I hope you'll find it useful.



# What You'll Need

1/4"-thick hardwood (I used oak for projects left natural or stained, poplar for painted pieces)

Scroll saw with No. 3 double-skip tooth blades

Moto tool with drum sanders

Orbital sander (optional)

Assorted-grits sandpaper

Carbon paper

Masking tape

Cyanoacrylate (CA) glue or two-part, quick-dry epoxy

Finish of choice

Stain or paint of choice

# Making your applique pattern

Take several photos of the original applique. The camera must be head-on to the subject, because angle shots will distort the image. Fill the camera's viewfinder to the max, and take several shots. Review each of the shots (easier with a digital camera!), and select the best. Order an 8 x 10 print of that shot, which cost me \$3.00.

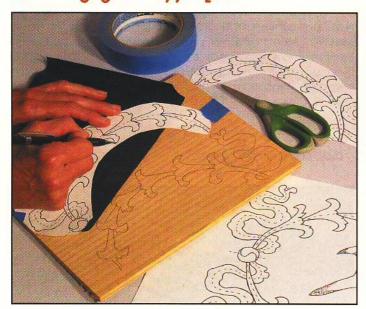
Tape together a piece of blank paper, a sheet of carbon paper, the print, and a piece of waxed paper. Transfer the image to the paper by tracing over the lines of the print. (The waxed paper is used because your pencil will glide along it. If you tried to trace directly on the print, your pencil would dig into it and ruin it.)

The next step is to size the pattern correctly to the original by enlarging or reducing it as needed. In my example, my pattern was 7" high, but the original applique measures 8-1/4" tall. Therefore, my pattern needed to be enlarged 120%, which can be done at a copy center. (I use a printer's wheel to determine the correct percentage increase or decrease. If you need help determining the correct percentage for your pattern, send me an email with your project's measurements. I'll put them on the wheel, and respond to you.)

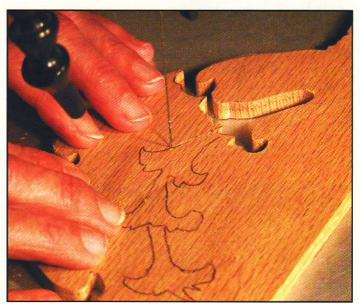
Finally, transfer any markings to the pattern that you will need for reference when shaping the pieces. Also, you may want to add a dotted line to the center of your pattern to assist you in positioning your applique when it is time to glue it in place.



# Creating your applique



Sand both sides of all the wood. Copy your original pattern, saving the original for future use. Using carbon paper, transfer the design to the wood. (Notice that I cut the pattern into sections to avoid wasting wood.)



Using the scroll saw, cut out each piece. (Although it is possible to cut the entire design either as one piece or in two sections, it will be difficult to achieve good detail during the shaping and sanding stage.) Because each piece has a slightly different size and shape, be sure to keep them in order as you cut.

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Use the moto tool to shape each piece. To make deeper grooves, hold the tool at a 45° angle. After shaping, slightly round all remaining edges, and hand sand the pieces to the desired smoothness.



Stain or paint your applique pieces as desired, and let dry. Position your pattern on the wood or other item onto which your applique will be mounted, and use carbon paper to transfer the dotted line. This will aid in placing the

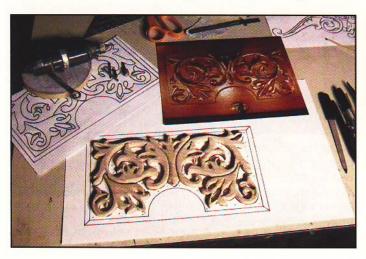
applique pieces. (For demonstration purposes, I stained my applique piece golden oak and mounted it onto a piece of 1/8"-thick plywood that had been stained pickled oak.) Using the dotted lines as reference guides, glue the applique pieces in place using your glue of choice. I like to use cyanoacrylate gel.



Finally, apply your finish of choice to your project. (Be aware that many old finishes will not mix with today's lacquers and polyurethanes. If you have any doubt as to how your finish will react with that on your existing project, I recommend applying finish to the applique pieces prior to gluing them in place.) I like to use clear semi-gloss lacquer because of its 30 minute drying time. Let all finish dry completely.

Now I'm off to some antique shops, camera in hand. Maybe I'll find another project to share with you soon! Let me know how your applique projects turn out, or if you have any questions, by emailing me at: k.wbosler@juno.com.

# £xamples of other applique projects





# Reader's Gallery







**Barbara Wilson** of Vancouver, WA drew the design for her owl after studying various books on them at the library. The eagle is based on a picture in an old drawing book of hers. She combined two projects for the box with the boot intarsia overlay. The pattern for the box portion is from The Texas Treasure Chest by Dirk Boelman, featured in the November, 2000 issue of *Creative Woodworks & Crafts*, and the intarsia boot is a pattern from the Wooden Teddy Bear collection.

Your artistry is lovely, Barbara. Thank you for letting us see your beautiful designs.







Oscar "Junior" Bradley of West Union, OH sent these pictures of his original intarsia designs. The cardinals are made from aromatic cedar, aspen, walnut, poplar, and western red cedar. The piece won "Best of Show" out of approximately 200 entries at the Senior Art Fair. The Biblical scene, entitled "In the Garden," is made from aspen, cherry, poplar, walnut, and western red cedar. The cat piece is entitled "All Tied Up." Junior has made it both in a painted version, and in a natural wood version. Junior has been doing intarsia for about eight years, and has had work exhibited in several galleries in the Ohio valley. He tells us that he hopes people get as much enjoyment from his work as he gets from producing it. Well, we certainly enjoyed seeing your work, Junior—thanks for sharing!

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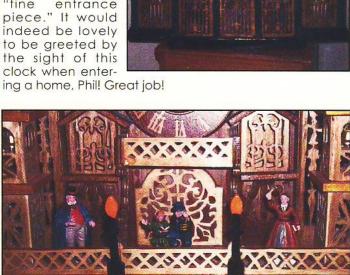
# Reader'

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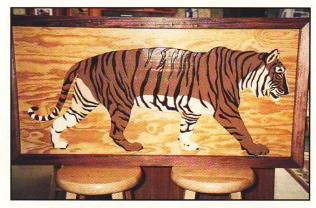
Phil Freeman of San Antonio, TX has been scrolling for nine years, and he says that this Chimes of Normandy Clock by Wildwood Designs was "by far his greatest challenge." The clock stands 48" high, 20" wide, and 11" deep. It is made from walnut, maple, and cherry plywood, with additional features such as bells in each tower, and a concert in progress on the lower level.

Phil displays this piece in his hallway, where he says it makes a "fine entrance











Raymond Lipps of Brighton, CO shared these photos of some of his intarsia work, including Walking Tiger and Eagle Landing, both based on patterns by Judy Gale Roberts. Well done, Raymond!









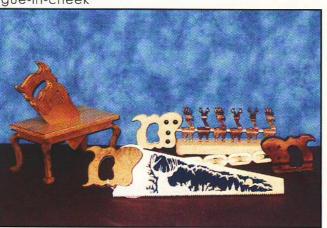
Martin Sass of Weldon, CA spent 50 years as a tool maker. He retired at age 65, and started Scroll Saw Artistry. He sent these pictures of some of his pieces, which demonstrate his excellent workmanship.

The Roman Cathedral Clock by Wildwood Designs is made out of an old red oak and walnut church pew that was 20 feet long. Martin cut five of Dirk Boelman's Scheherazade Clocks. two of which are shown here. They were reduced 75% from the pattern size. He cut the full-size and half-size Ferris Wheels by Wildwood Designs, and he gave a third one, cut at 75% of the regular pattern size, to his daughter. The patterns for the German Chalet Clock and the Workshop Clock are also by Wildwood Designs. The Chalet Clock is cut from white oak with walnut overlays, and the Workshop Clock is cut from birch and black cherry. (The sander, grinder, and table saw are all motorized.) The "tongue-in-cheek"

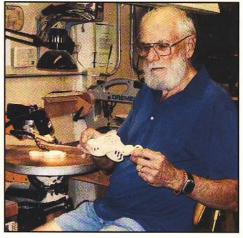
table saw, buck saw, and chain saw were all designed by John Polhemus and featured in previous issues of Creative Woodworks & Crafts. Whitetail Designs' hand saw was also featured in the magazine.

Martin mentions that he is teaching scroll sawing techniques to students ages 15 and up. Judging from the









quality of work shown here, they are lucky to have such a talented teacher!

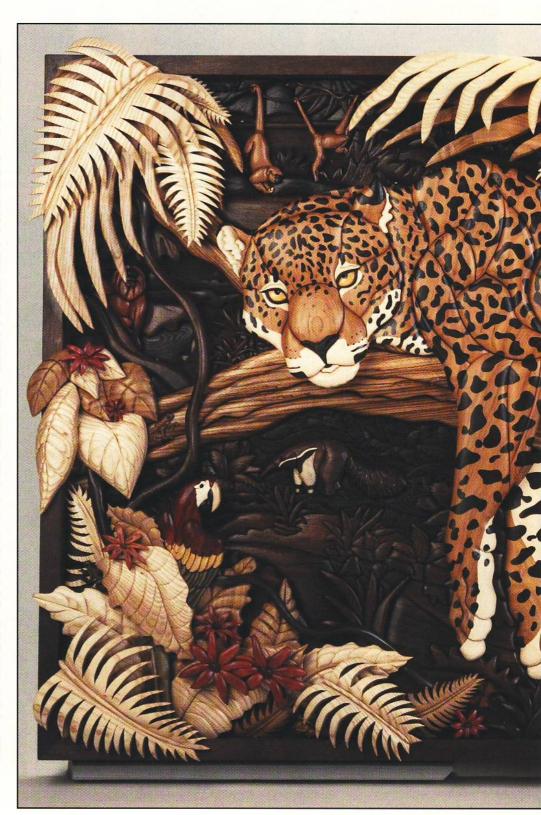
athy Wise of Yale, MI shared this photo of Jaguar Jungle, her original design and creation that won 1st Place in Intarsia, Best in Scroll Saw, and 2nd Place in People's Choice at the June, 2007 "Design in Wood" show in San Diego.

The 2072-piece, 3D intarsia mural measures 56" x 35" x 5". It is comprised of over 20 different types of wood, including: ash and white oak for the leaves; wenge and black walnut for the background; bloodwood, satinwood, lignum vitae, poplar, and bird's eye maple for the parrot; and snakewood and wenge for the boa. The jaguar consists of 667 pieces, and is cut from Australian cypress, wenge, aspen, ebony, yellowheart, and beech. The branch is zebrawood. Other woods used include bubinga, jatoba, Brazilian ebony, pink ivory, and blue pine.

See if you can find the many South American animals hiding in the jungle foliage. There is a boa, a toucan, two tapirs, two sloths, a caiman, four spider monkeys, a golden lion tamarin, two parrots, two jaguars, an anteater, a sloth bear, three hummingbirds, four poison dart frogs, and three butterflies. (Some of the 2" x 2" hummingbirds have as many as 30 pieces!)

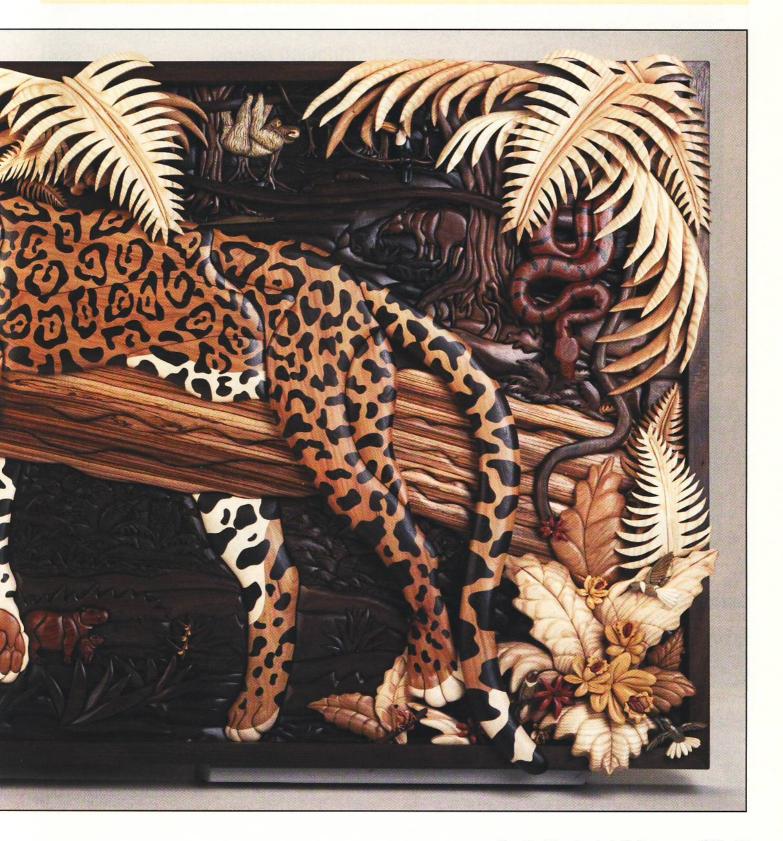
Clearly, the high praise and awards that Kathy has received for Jaguar Jungle are well-deserved. This masterful piece of artwork has, yet again, "raised the bar" for intarsia design, and it is truly an inspiration to all woodworkers. Kathy recently released Intarsia Woodworking Projects, published by Fox Chapel. It contains 21 of her beautiful patterns, and they range from beginner to advanced level. For more information, and to see more of Kathy's work, visit her website, www.kathywise.com.

Thank you so much for sharing with us, Kathy. Your work is truly magnificent!



### **Attention readers!**

We invite you to send us photos of your work, whether original or not, to be included in our Reader's Gallery feature. If it is not of your own design, please tell us whose design it is and, if possible, add a few sentences about the piece(s) being shown. Good, clear, flat photos (or slides) are desirable. Please do NOT send the item itself. Send to *Creative Woodworks & Crafts*, 7 Waterloo Road, Stanhope, NJ 07874, Attn: Robert Becker. Please include your mailing address, and feel free to include a photo of yourself! Digital photographs are also acceptable with a resolution of 300 dpi, at approximately 3" x 4", preferably in jpeg or tiff format. They may be emailed to editors@woodworksandcrafts.com.







# **Moose Segmentation**

by Sheila Bergner-Landry and Tony Landry



# Introduction

This is another project from my line of patterns called "Simple Segmentation." Although I love the look of intarsia pieces, the expense and tremendous amount of time involved in making them is somewhat prohibitive for woodworkers who make projects to sell. I have had many requests from my customers for this type of work, and I saw a need to simplify the process and reduce the cost without losing the elegance or integrity of the design.

My Simple Segmentation designs do just that. These projects are "segmented," (or cut from a single piece of wood), rather than true intarsia, in which each piece is cut individually from a separate piece of wood. This eliminates the tedious task of fitting side-by-side pieces and allows a little more forgiveness in cutting. Because adjacent pieces are all cut from a single piece, they will naturally fit per-

fectly together when refitted after sanding and contouring.

The cost in producing these designs is much more palatable, also. Instead of finding several types of hard wood (which is very difficult for me here in Nova Scotia, as well as in many rural areas), and then having to plane each individual piece to the correct thickness, the design is cut from a single piece of wood which has been planed to a single thickness. If there is any adjustment necessary in depth, it is done later in the process on a piece-by-piece basis. For this moose project, I used poplar, which is a nice wood with some interesting grain patterns that will show through the stains.

To color the pieces, I used a water-based stain that I recently discovered called "SamaN" stains. I realize that

# SUPPLIES

Wood: poplar or wood of choice—one piece 1/4" x

7" wide x 5-1/2" long, with grain running horizontally (for moose design); Baltic birch plywood—one piece 1/8" x 11" x 14" (for backboard) ols: scroll saw with No. 2 reverse-tooth blades; drill press with 3/32" brad point drill bit (for drilling the eye hole) and 1/16" drill bit (for drilling the nose hole); handhald apart Brandley handhald rotate. (120-400) sandpaper; Dremel or handheld rotary tool of choice with assorted sanding and polishing bits; planer (for proper wood thickness); vacuum

Temporary-bond spray adhesive
Clear 2"-wide packing tape
Clear-drying wood glue
SamaN\* water-based stains in No. 106 azure, No. 116
whitewash, No. 201 olive, No. 204 hop, No. 205
colonial, No. 207 cognac, and No. 209 prune (or
stains of choice)

SamaN\* interior-grade brush-on varnish in satin finish (or finish of choice)

Eyedropper (for mixing stain color)

Assorted paintbrushes

11" x 14" frame with picture mat opening of 8" x 10"

\*Visit www.dtep.com/saman.27.htm to purchase or read more about Saman stains and other environmentally-friendly products that are not harmful to our environment. The site also provides color charts of the stains and the many colors that can be created by mixing them.

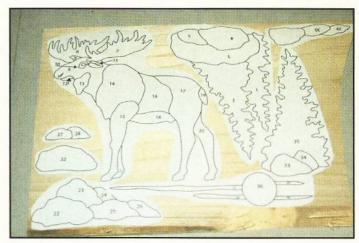
they have been around for several years, but I had not heard of them until I stumbled upon them while looking through one of my painting supply catalogs. The SamaN stains are made here in Canada, but are readily available in the United States through mail order and in many stores.

I have been extremely impressed with these stains for several reasons: they clean up with soap and water; they are safe for the environment and completely odorless: they do NOT raise the grain of your wood; they need no conditioner; they do not leave any overlapping marks when applying them; they need just one coat of application; and they come in 27 pre-mixed colors, which can easily be mixed to create more than 150 rich, beautiful shades. I think you will like these products as much as I do, and you will especially appreciate them if you are sensitive to smells or tend to have allergies. I really believe that using non-toxic options is one easy way for woodworkers to help our planet!

# INSTRUCTIONS

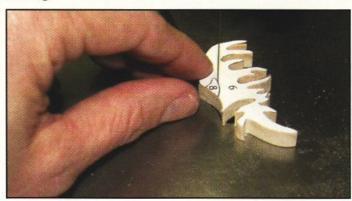
Preparing the wood

Step 1. Plane your board to the required thickness. Using the handheld orbital sander and 120-grit sandpaper, sand both sides of the wood to remove the planer marks and smooth the surface. Graduate to 220-grit sandpaper, then 400-grit, until the surface of the wood is satin smooth. (This will make it much easier to finish your project after you have cut out the design.) Using the vacuum with the softbrush attachment, vacuum all the dust and debris from the wood.

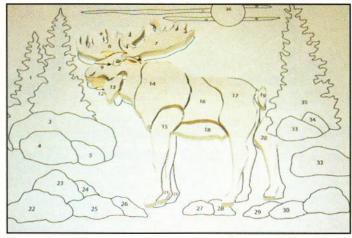


Step 2. Make two photocopies of the pattern, saving the original for future use. (You will need one copy for cutting out the design, and one for laying out the pieces.) Lightly mist the backs of one set of the pattern pieces with temporary-bond spray adhesive. Allow the spray to tack up for a few seconds, until it feels as tacky as masking tape. Attach the patterns to the wood, paying careful attention to the grain direction.

### Cutting



Step 3. Drill the entry holes for the eye and nose holes using the appropriate bits. Cut out all pieces using a No. 2 reverse-tooth blade.



Step 4. As you cut each piece, leave the pattern attached to it and set it in place on top of the reference

continued on page 72

pattern. This will keep your pieces organized and help prevent you from losing or accidentally throwing away any necessary pieces.



**Step 5.** To shape each piece, remove the pattern, and round the edges using the rotary tool. (Be sure to place the piece back in position on the reference pattern before starting to work the next piece.) Because this is a beginner-level design, I merely rounded the edges of the moose pieces. If you wish to add more depth, you can adjust the thickness of some of the pieces, such as the back legs, the tummy, and the lower mouth (piece Nos. 12, 18, 20, and 21). Have some fun shaping the rocks and trees, and give them some added dimension. Experiment with shaping to see what different look you like best. When you have finished shaping and positioning each piece, check the overall look, and make any necessary adjustments.



**Step 6.** Ensure that your pattern fits inside the mat board that came with your frame. (If necessary, adjust the opening on the mat.)

**Step 7.** Trace the outer edge of the frame onto a piece of 1/8"-thick Baltic Birch plywood.

Step 8. Cut out the plywood backer along the traced line.



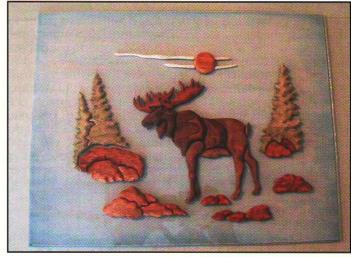
**Step 9.** Check the fit of the plywood backboard in the back of the frame. If necessary, sand the edges of the backer to ensure a perfect fit.

**Step 10.** Sand the backboard using your handheld sander. Remove all dust and debris from the wood using the vacuum with the soft-brush attachment.

Staining

**Step 11.** The only stain color I mixed was for the blue background, using an eyedropper to mix 10 drops of No. 116 whitewash with one drop of No. 106 azure blue. (When using these stains, be aware that a little goes a long way!) Use a 3/4"- to 1"-long paintbrush to streak the blue color from left to right on the backer. Wipe off any excess, and allow the stain to dry thoroughly.

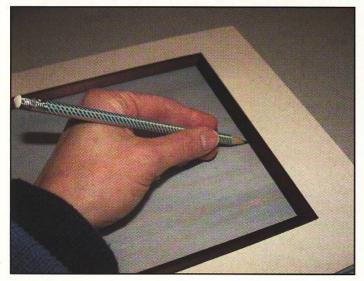
**Step 12.** When dry, place the glass piece that came with your frame over the painted backboard. As you stain the pieces, you can position them on the glass. (This will allow you to see whether you have stained them a deep enough color when compared with the blue background, and the glass will protect the backer from the wet pieces.)



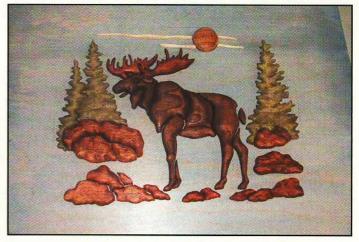
**Step 13.** When staining, apply the lightest colors first. I found it easiest to first brush on the stain, then wipe off the excess using a lint-free cloth or paper towel. Referring to the stain chart, color the pieces as follows: No. 116 whitewash (for the clouds); No. 204 hop (for the sun); No. 201 olive (for the trees); No. 205 colonial (for the rocks); No. 207 cognac (for the antlers); and No. 209 prune (for the moose). Let all pieces dry thoroughly.

**Step 14.** Use a paintbrush to apply several coats of water-based varnish to the project. It is important to varnish both sides of the pieces. Otherwise, they will tend to warp and bend out of shape due to uneven absorption of moisture from the air.

## Assembly



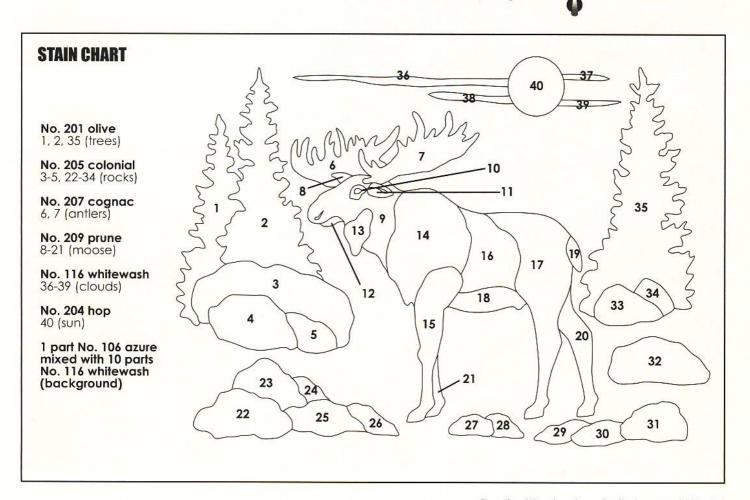
**Step 15.** Use a pencil to lightly trace the perimeter of the mat opening onto the front of backer



**Step 16.** Glue the pieces into place, being sure that they are within the traced area.

**Step 17.** Reassemble the frame. I prefer to leave off the glass, but if your frame is deep enough, you may choose to include it.

If you have any questions regarding this project, please contact Sheila at 902-245-5865, or email her at scrollgirl@comcast.net. You may also see and purchase other Simple Segmentation patterns by Sheila, as well as a variety of her woodworking patterns, and download free brochures of her designs at: www.sheilalandrydesigns.com.





# **A Touch of the Tropics**

by Deborah Nicholson



# Palm Trees

Instructions on page 76

# SUPPLIES

Wood: pine—one piece 1" x 9" x 20"; masonite—one piece 1/8" x 9" x 20"

Tools: scroll saw with No. 5 blade; drill with small bit; belt sander with 80-grit

Pencil Wood glue

Acrylic paint in burnt sienna, hunter green, and seminole green Assorted paintbrushes

Clear brush-on or spray acrylic finish

# MiNi MacaW

Instructions on page 78

# **SUPPLIES**

Wood: pine—one piece 1" x 9" x 18"; masonite—one piece 1/8" x 9" x 18", one piece 1/8" x 7" x 10-1/2" (for shim behind full macaw), one piece 1/8" x 6" x 7" (for shim behind body of macaw)
Tools: scroll saw with No. 5 blade; drill with small bit; belt sander with 80-grit belt; palm sander

Carbon paper Pencil

Wood glue Acrylic paint in black, blue, brown, green, red, white, and yellow

Assorted paintbrushes Clear brush-on or spray acrylic finish

Sawtooth hanger



continued on page 76

# **INSTRUCTIONS for Palm Trees**

**Step 1.** Photocopy the pattern, saving the original for future use. Using carbon paper and a pencil, trace the pattern onto the pine.

Step 2. Drill entry holes for the interior openings in the design. Using the No. 5 blade (or your blade of choice), cut along the perimeter of the piece. Also cut out the interior openings between the trees. (Do not cut any of the tree or frond sections apart yet.)



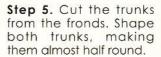
Step 3. Place the palms piece rightside down on the smooth side of the masonite. Using a pencil, trace the outline of the palms piece, including the openings between the trees. Remove the palms piece. Drill entry holes in the masonite for the interior openings in the design. Cutting 1/8" to 1/4" inside the traced lines, cut out the backer. When finished cutting, position the backer on the palms piece. A small border of pine should be visible around the entire edge of the backer, If not, cut



away more of the backer as needed.



**Step 4.** Cut the ground section from the trees. Begin shaping it as one whole piece, then cut apart the pieces, and shape and sand each piece individually. Shape the outer perimeter the most. Shape the pieces less where they join each other. I use the belt sander to do most of the shaping, then move on to the palm sander. I finish up shaping each piece by hand.







**Step 6.** Cut apart the lower two fronds on the larger tree. Shape and sand both pieces, tapering them toward the

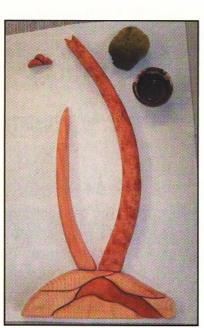
tips. Cut and shape the fronds on the larger tree that are split in the middle as one piece. Cut them apart, and sand them along the middle line. (There is no need to shape them along the middle cut.) Cut apart the coconuts, and sand them so they are slightly thinner than the fronds below them. Give the coconuts a rounded shape. Cut and shape the remaining fronds on the larger tree individually, tapering them toward the tips and also where they meet the coconuts.



**Step 7.** Cut and shape the fronds for the smaller tree. (As before, shape any fronds with a middle split as one piece, then cut the pieces apart and sand them along the middle cut.) Sand and shape the smaller tree's fronds more than those for the larger tree so that they will be set slightly back.

**Step 8.** Practice the painting technique on scrap wood pieces before applying paint to your actual project. For correct application, dampen the wood with clear water before applying the paint. Thin the acrylic paint with water, and apply a very light coat of this thinned mixture to the wood. You can always reapply the paint to darken the shade, if needed.

Step 9. When you are comfortable with the painting technique, apply the color to the project pieces, referring to the photo for suggested color placement. Stain the trunks, ground, and coconuts using thinned burnt sienna paint, and let dry. To give texture to the tree trunks, dip a sponge in the stain, blot off the excess on a newspaper, and lightly go back over the trunks.





**Step 10.** Stain the fronds using thinned seminole green paint. While the paint is still wet, apply thinned hunter green paint to the center of the fronds and blend it out toward the edges. Let dry.

**Step 11.** Position the pieces on the masonite backing, making sure that the backer is not visible when the project is viewed from the front. When satisfied with the placement, glue each piece to the backer, and let dry.

**Step 12.** Apply a clear finish of choice to the piece. When dry, attach a sawtooth hanger to the back of the piece.

For questions concerning this project, please send a SASE to Deborah at: 4017 Casa Ct., Hernando Beach, FL 34607.

# **INSTRUCTIONS for Mini Macaw**

Cutting

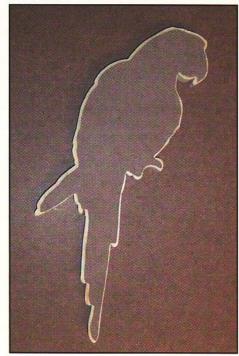
**Step 1.** Photocopy the pattern, saving the original for future use. Using the pencil and carbon paper, trace the pattern onto the pine.



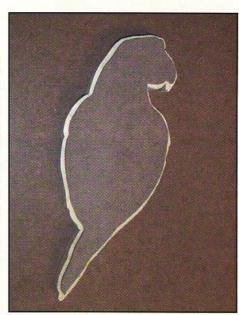
**Step 2.** Sand the edges and round the corners of the pine rectangle. (I think the front edge of the project is more interesting if it is a little uneven.) Simply run the edge along the belt sander, pressing harder at irregular intervals. Finish by sanding the edges using a palm sander.

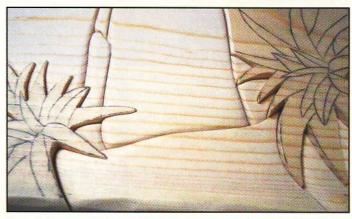
**Step 3.** Place the pine piece right-side down on the masonite backer piece, and trace the outline. Cut the backer just to the inside of the traced line so it will not be visible when the project is viewed from the front. Set the backer aside.

Step 4. Cut the macaw as one piece from the pine. (It is important to follow a cutting line from the outer edge of the pine into the center of the design.) Place the bird face down on the 7" x 10-1/2" piece of masonite for the full macaw shim. Trace the outline of the bird onto masonite. Cutting just inside the traced line. cut out the masonite shim. This shim will raise the bird above the background.



Step 5. Cut the tail section and foot from the pine macaw. Place the pine body of the macaw face down on the 6" x piece of masonite. Trace the outline of the pine piece onto the masonite, and cut just inside the traced line. This shim will raise the body above the tail feathers.





**Step 6.** Cut and shape the background pieces individually, starting from the top and working toward the bottom. For added dimension, slightly sand down the background pieces where they meet the plants. After cutting each piece, reposition the background pieces on the pattern.

**Step 7.** Cut, shape, and sand the bird and plant pieces. As you finish with each piece, position it on the pattern to help keep the pieces in order.

Painting

**Step 8.** Practice painting scrap wood pieces before applying paint to your project. For correct application, dampen the wood with clear water before applying the paint. Thin the acrylic paint with water, and apply a light coat of the thinned mixture to the wood. You can always reapply the paint to darken the shade, if needed.

**Step 9.** When you are comfortable with the technique for applying the paint to the scrap pieces, paint your actual project pieces, referring to the photo and paint chart for suggested color placement. (The colors on the macaw are accurate, but feel free to be creative and make him whatever colors you choose!) The browns for the background should graduate from a very light brown shade at the top of the piece down to a darker tan color at the bottom. Use a very light blue wash for the four blue sky pieces, and blend the upper edges of these pieces with a



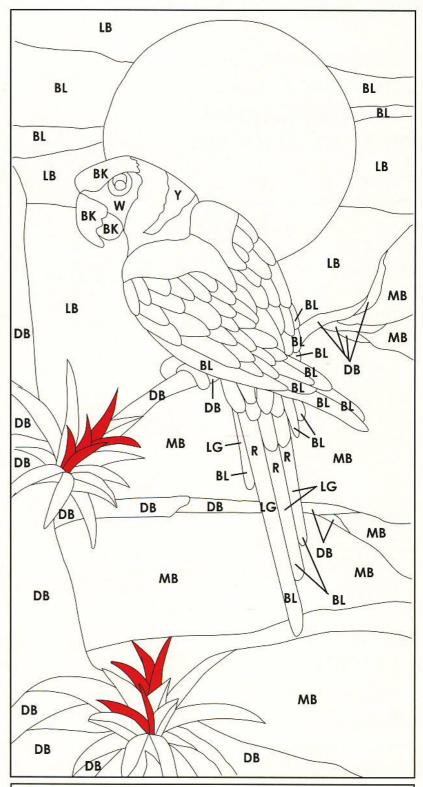
light brown wash. Shadow the yellow portion of the bird's neck using a very light wash of red, and shadow the green portion of his neck using a black wash. Paint the eyeball brown, the pupil black, and the highlight in the eye white. The sun, bird's feet, and background strip near the bottom should be left natural. The long tail feathers of the bird should graduate from a dark red to light green to dark blue. Blend the colors where they meet to avoid a sharp distinction in color change. All unmarked areas of the bird should be painted in a darker shade of green. The leaves should be painted with assorted shades of dark and light green. Paint the shaded areas of the plants red.

**Step 10.** When dry, glue the pieces for the body of the macaw to the smaller masonite shim, and let dry. Next, glue the body of the macaw (with shim), along with the tail and foot pieces, to the larger masonite shim. Let dry.

**Step 11.** Position all the pieces on the masonite backer, making sure that the backer is not visible from the front. When satisfied with the placement, glue all pieces to the backer. Let dry.

**Step 12.** Attach a sawtooth hanger to the back of the piece. Apply a clear brush-on or spray finish of choice, and let dry.

For questions concerning this project, please send a SASE to Deborah at: 4017 Casa Ct., Hernando Beach, FL 34607.



Paint Key

BL: Blue BK: Black R: Red DB: Dark Brown LB: Light Brown LG: Light Green MB: Medium Brown Y: Yellow

Paint the leaves assorted shades of Dark Green and Light Green.

W: White

Paint all unmarked areas of the bird Dark Green.

Paint shaded areas of plants red.

· Leave sun, feet, and background strip near bottom natural.

Eye: Brown for eyeball, Black for pupil, White for highlight.

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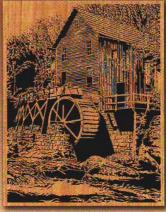
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3" pin end blades -2 sizes 5" pin end blades - 8 sizes 6" plain end blades - 4 sizes 5" Plain End Jewelers Blades

The Best Grade available: B/BB

2 inch

Precision

Machine

Square

A must

when stack

Squares

# SQ-2 - \$4.95

blade with the table.

#101 - 1/8"x12"x12" #107 - 1/8"x12"x24" #102 - 1/4"x12"x12" #108 - 1/4"x12"x24" #103 - 3/8"x12"x12" #109 - 3/8"x12"x24" #104 - 1/2"x12"x12" #110 - 1/2"x12"x24" #105 - 5/8"x12"x12" #111 - 5/8"x12"x24" #106 - 3/4"x12"x12" #112 - 3/4"x12"x24"

cutting.

It dries crystal clear & won't leave a yellow glue line in the joint. Sets up in 20 minutes, achieves strong bond in I hour & cures in 24 hours. It's Non Toxic, Weatherproof, Paintable, No Fumes, No Clamping required. We have used it for 15 years in our shop. Give it a try we think you will really like it.

> 4 ounce Bottle #WB-4 - \$4.50 8 ounce Bottle #WB-8 - \$5.95 21 ounce Bottle #WB-21 - \$10.95

WeldBond Adhesive

Visit our Web Site for our complete line of Scroll Sawing Supplies. We Stock: Acrylic Sheets, Olson Band Saw Blades, Forstner Bits, Hardwood, Finland Birch & Italian Poplar Plywood, Mini Drill Bits, Scroll Saw Patterns, Scroll Sanders & Files, Clock Inserts, Scroll Saw Pattern Books plus many other Scroll Sawing related items.

We Specialize in Thin Hardwoods. The complete list with pictures, sizes, & prices is located on our web site. We have Solid Hardwoods from 1/8" to 1/2" thick and 4" to 10" wide sometimes even wider. Species include: Red Oak, Maple, Cherry, Walnut, Purpleheart, Canarywood, Padauk, Mahogany, sometimes others.

www.SloansWoodshop.com





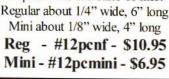
Silcon Brand - Mini Clock Inserts - 17/16". Glass Lens. Stainless Steel Back, with Battery. No Rubber Gaskets Requires a 1 3/8" Forstner Bit, Stock # FOR138 - \$9.95

#CK100 White Arabic **#CK103 Ivory Arabic** 

1+ \$4.75 each 10+ \$4.35 each

30+ \$3.95 each

Mix or match pricing !!! Other Styles & Sizes In Stock



Needle File Sets

12 piece sets in 2 sizes of files.

# **Blade Storage** Tubes

Clear plastic tubes 3/4" dia. 6" long, tops have hangtabs

\$4.95 dozen #TUBE





# Got A Question? - Give Us A Call !!!

When you call us you'll talk to more than just an order taker, We all Own & Use Scroll Saws !! - We Do Not Ship Outside of the US All Prices Subject to change at anytime without notice

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info@sloanswoodshop.com

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# FULL SIZE PATTERN SECTION NO. 1 JANUARY 2008

Side A	
Gershwinfrom page	34
Give Thanks from page	10
Golden Retriever Puppyfrom page	14
Moose Segmentationfrom page	70
Napkin Holder from page	54
Running Horses Hat Holderfrom page	49
Santa Boxfrom page	30
Side B	
Hummingbirds Melodyfrom page	44
Sports-Themed Switchplates from page	16
Variations on a Butterflyfrom page	22

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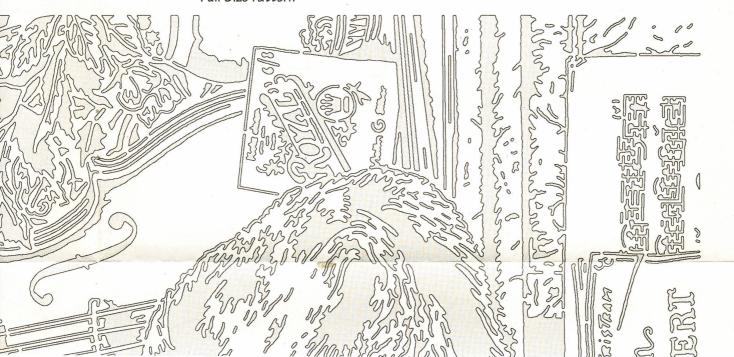
# Metric Conversions:

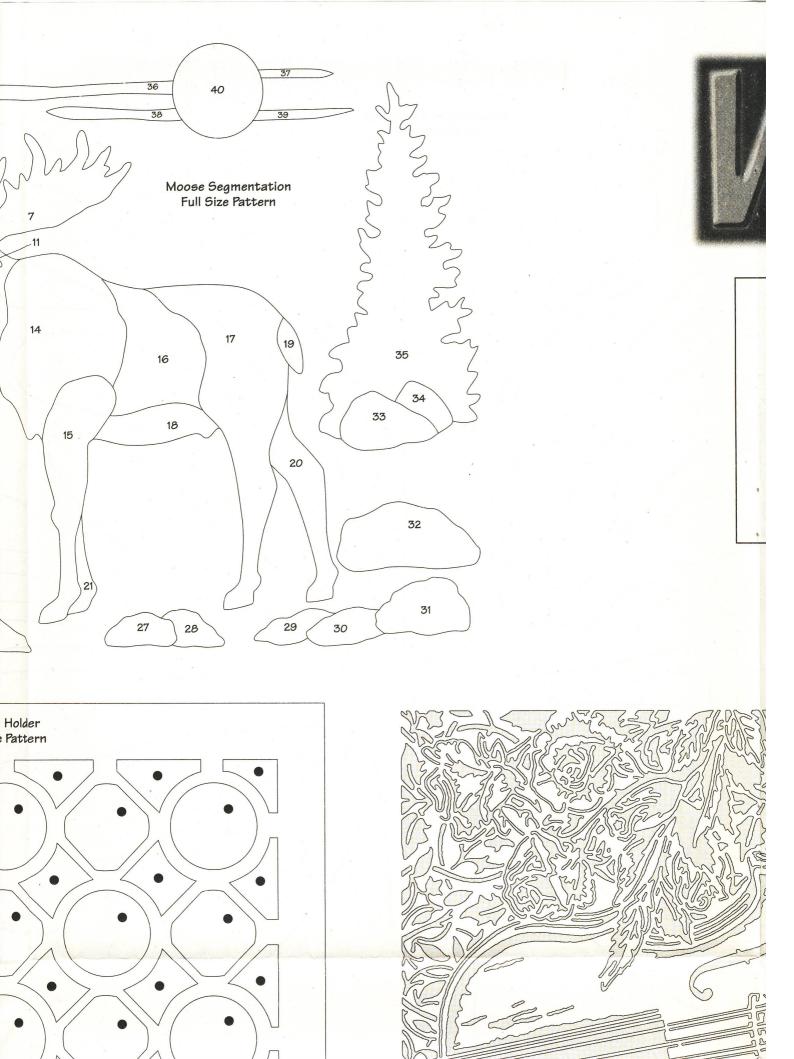
1 inch = 25.4 mm = 2.54 cm = 0.0254 m

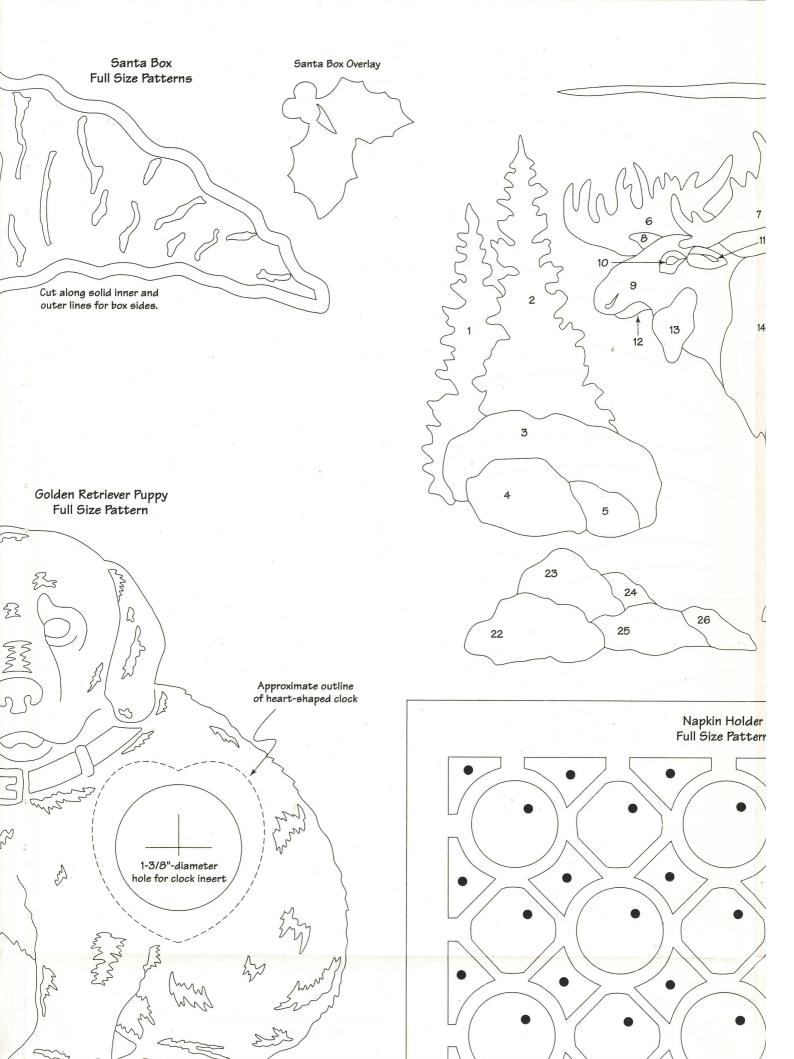
### Common Measurements:

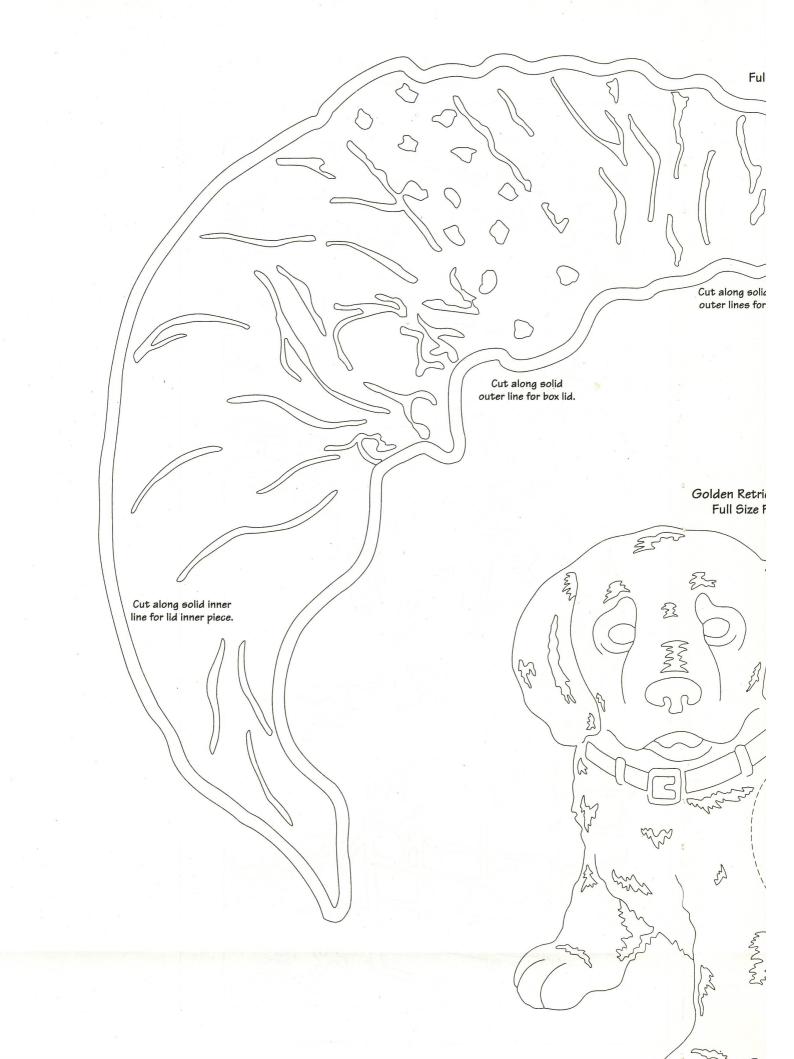
1/16" = 1.59mm 5" = 12.70cm1/8" = 3.18mm 6" = 15.24cm1/4" = 6.35mm 7'' = 17.78cm3/8" = 9.53mm 8" = 20.32cm1/2" = 1.27cm9'' = 22.86cm 5/8" = 1.59cm10" = 25.40cm3/4" = 1.91cm11'' = 27.94cm 7/8" = 2.22cm12" = 30.48cm1'' = 2.54cm24" = 60.96cm 2'' = 5.08cm36" = 91.44cm 45" = 1.14m 3'' = 7.62cm4" = 10.16cm 60" = 1.52m

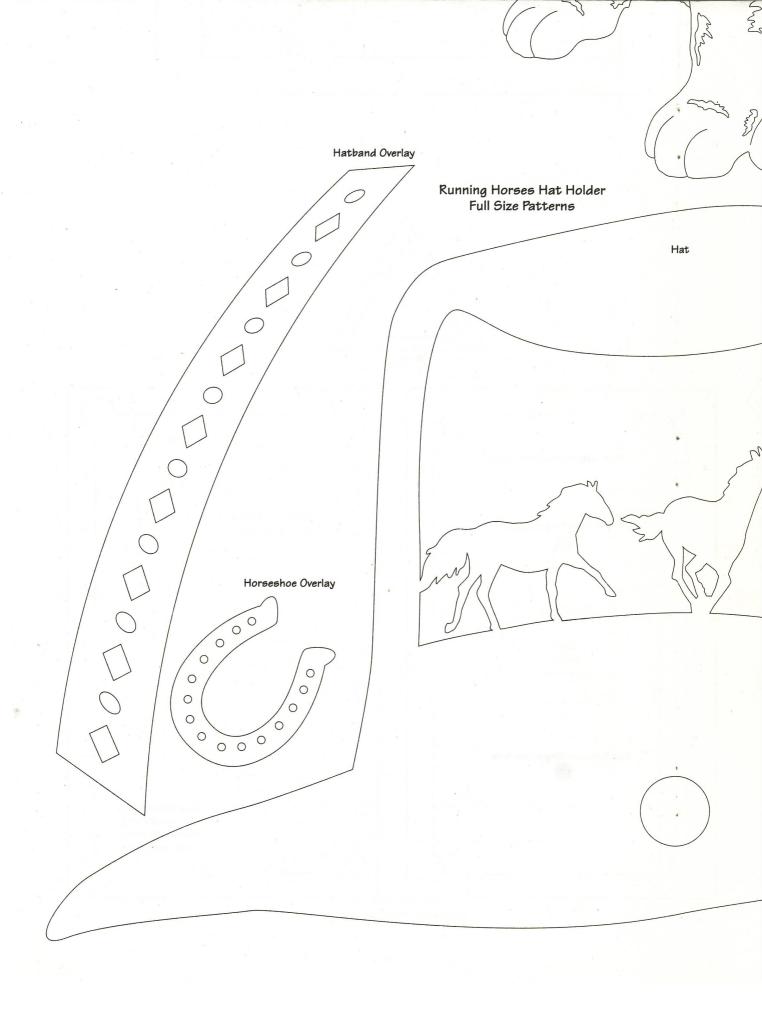
Gershwin Full Size Pattern

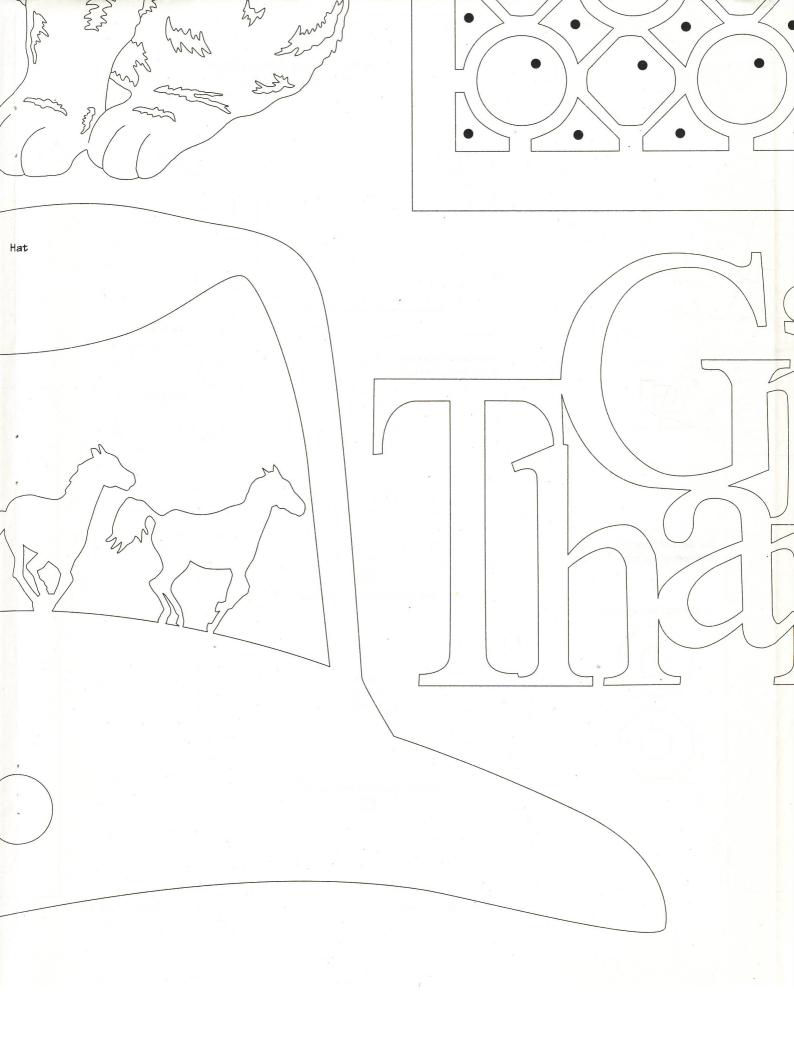


















# FULL SIZE PATTERN SECTION NO. 2 JANUARY 2008

Side A Divine Dragon The Glasgow Clock	. from	page	46	
Majestic Eagle Sleigh Candy Tray				
Side B A Touch of the Tropics Cobra Taking Flight: To the Stars!	from	page	28	

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1/16" = 1.59mm	5" = 12.70cm
1/8" = 3.18mm	6" = 15.24cm
1/4" = 6.35mm	7" = 17.78cm
3/8" = $9.53$ mm	8" = 20.32cm
1/2" = 1.27cm	9" = 22.86cm
5/8" = 1.59cm	10" = 25.40cm
3/4" = 1.91cm	11" = 27.94cm
7/8'' = 2.22cm	12" = 30.48cm
1'' = 2.54cm	24" = 60.96cm
2'' = 5.08cm	36" = 91.44cm
3'' = 7.62cm	45" = 1.14m
4'' = 10.16cm	60" = 1.52m





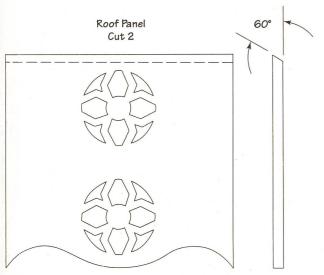
FL

SDTNS

SACT

Not sect ONL com pern to s

Divine [ Full Size I



Side view of roof panel

Divine Dragon Plaque

